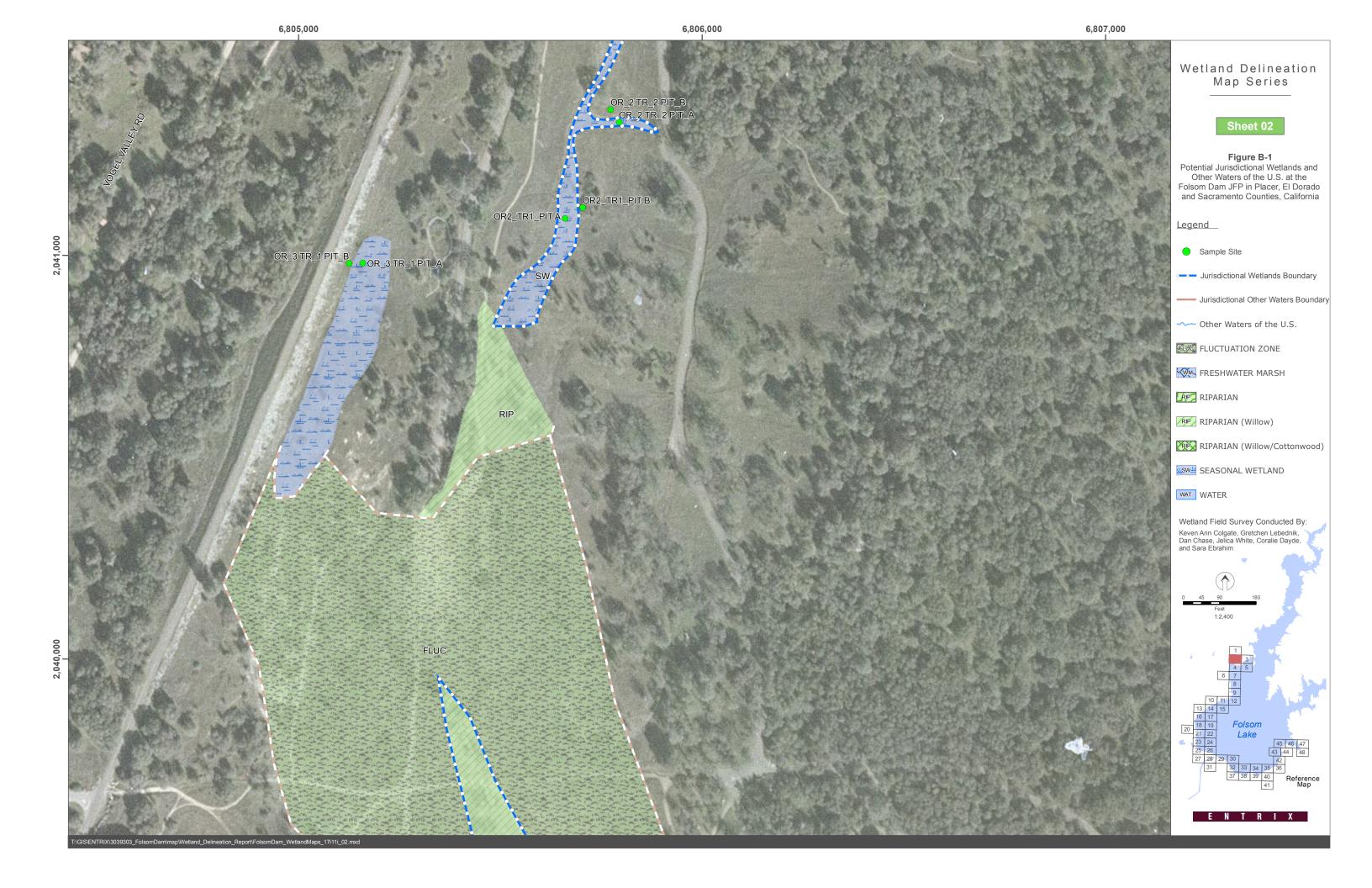
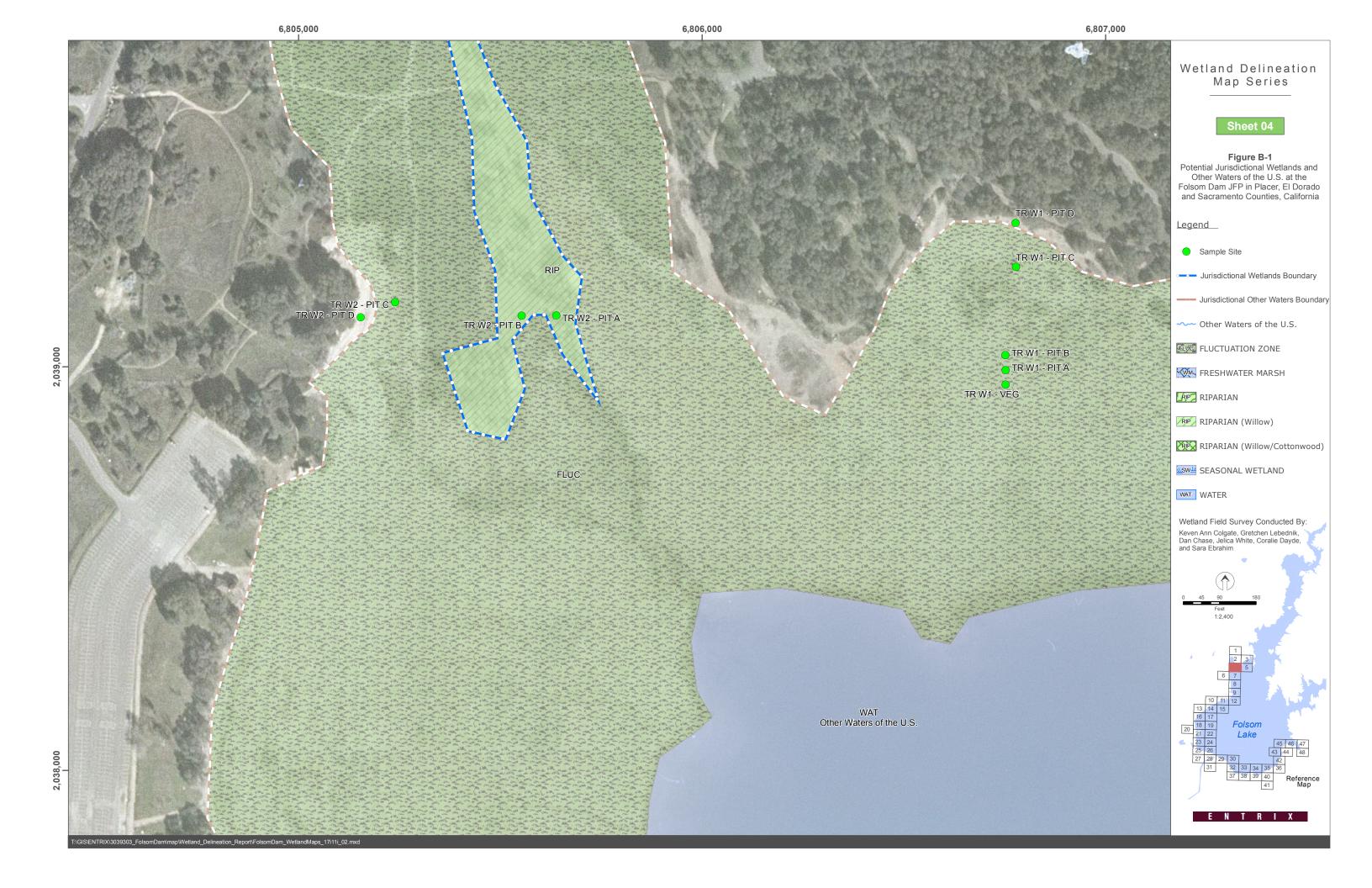
Folsom DS/FDR Action –Wetland De	Folsom DS/FDR Action –Wetland Delineation Report		
ATTACHMENT B. WETLAND DELINEATION MAPS			











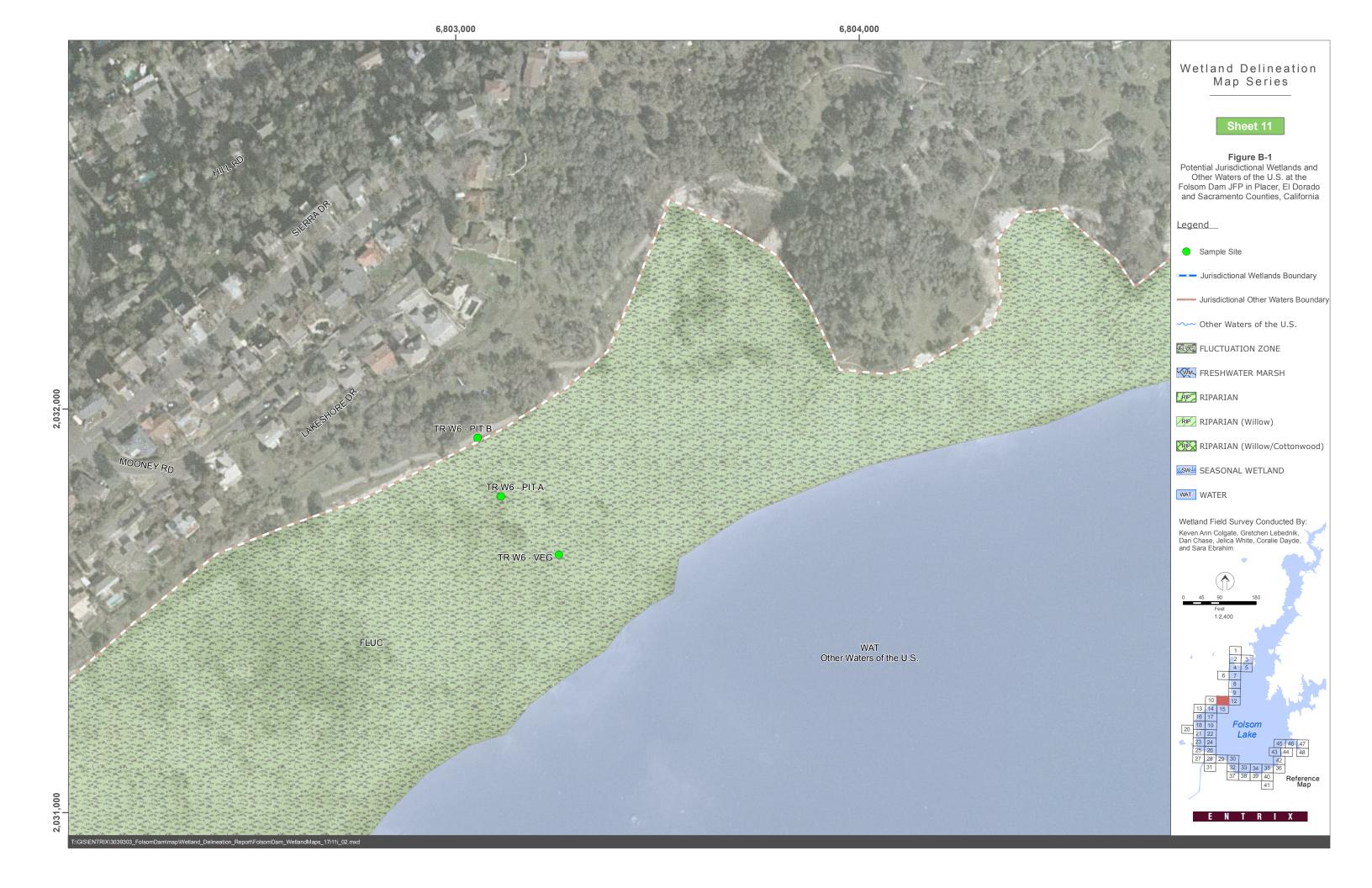


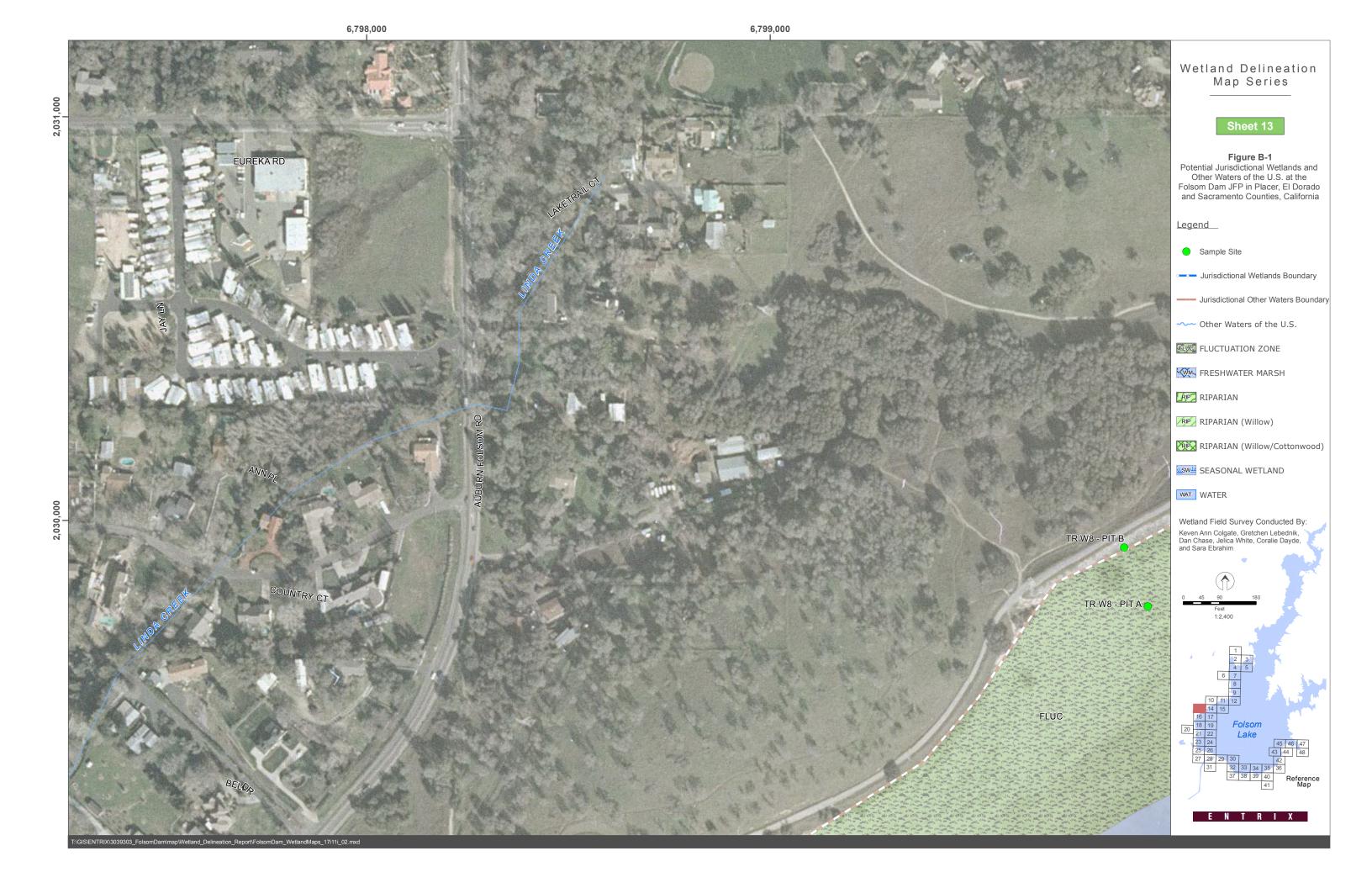




6,800,000 6,801,000 6,802,000 Wetland Delineation Map Series Sheet 10 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the Folsom Dam JFP in Placer, El Dorado and Sacramento Counties, California Legend Sample Site Jurisdictional Wetlands Boundary --- Jurisdictional Other Waters Boundary Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P

RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim FLUC



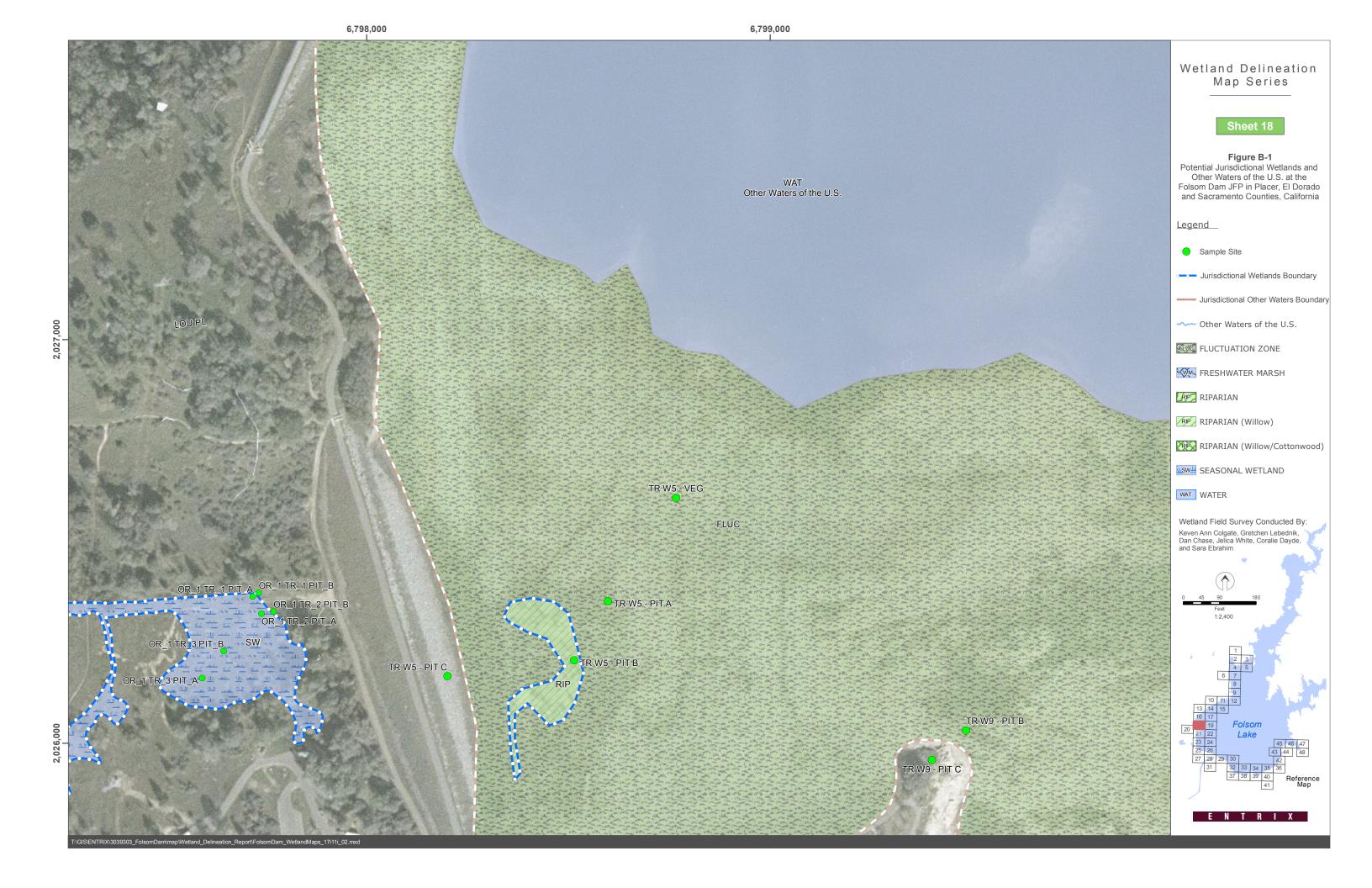








6,800,000 6,801,000 6,802,000 TR W8 - VEG FLUC Wetland Delineation Map Series Sheet 17 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the Folsom Dam JFP in Placer, El Dorado and Sacramento Counties, California Legend Sample Site Jurisdictional Wetlands Boundary —— Jurisdictional Other Waters Boundary Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH ŔP RIPARIAN RIPARIAN (Willow) WAT Other Waters of the U.S. RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim





6,795,000 6,796,000 6,797,000 Wetland Delineation Map Series Sheet 20 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the
Folsom Dam JFP in Placer, El Dorado
and Sacramento Counties, California Legend Sample Site Jurisdictional Wetlands Boundary --- Jurisdictional Other Waters Boundary OR_1 TR-3 PIT_A Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P♥ RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim





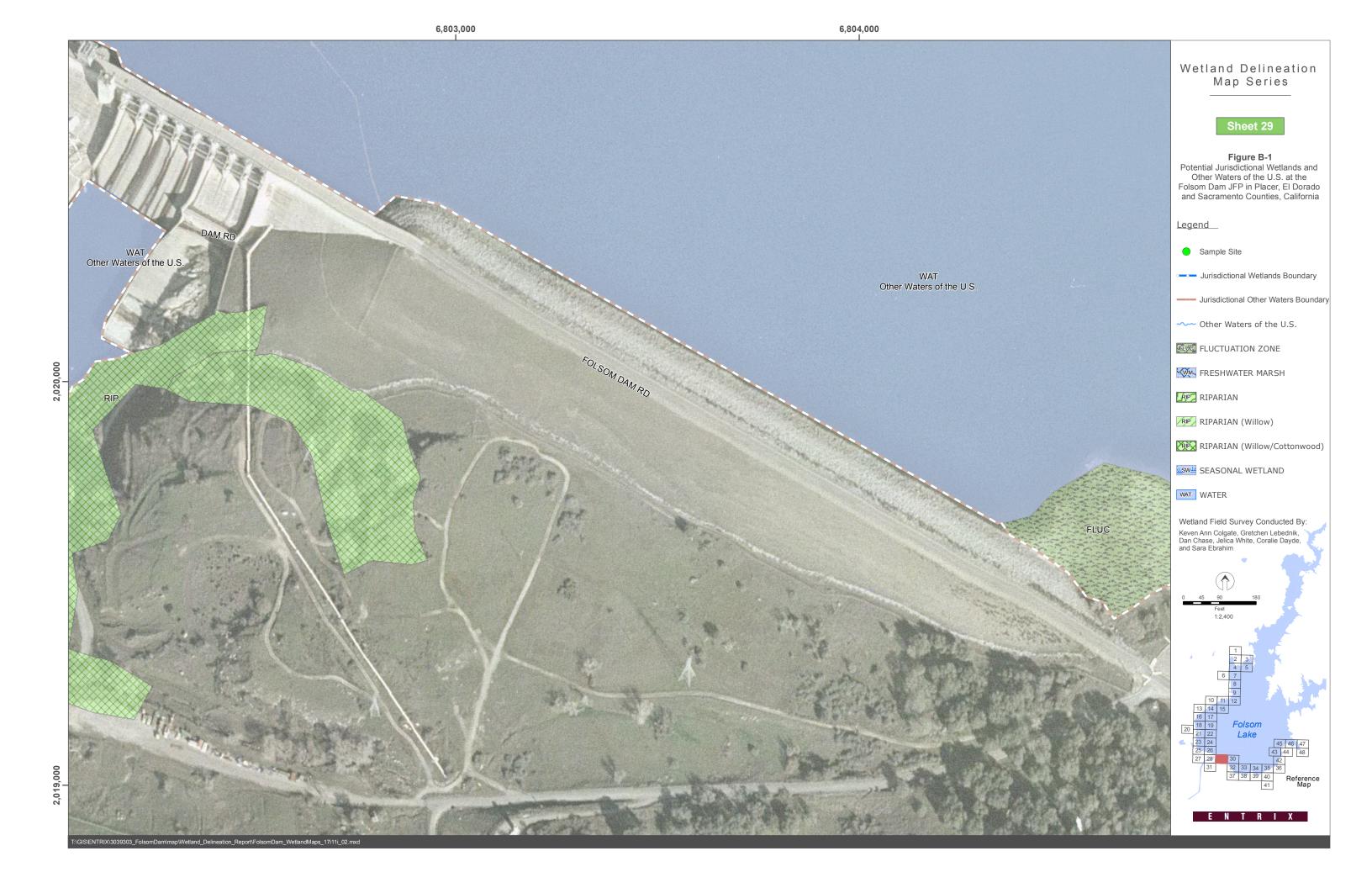


6,800,000 6,802,000 6,801,000 Wetland Delineation Map Series Sheet 26 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the
Folsom Dam JFP in Placer, El Dorado
and Sacramento Counties, California Legend Jurisdictional Wetlands Boundary WAT Other Waters of the U.S. --- Jurisdictional Other Waters Boundary Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P♥ RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim FOLSOM DAM RD

6,798,000 6,799,000 Wetland Delineation Map Series Sheet 27 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the
Folsom Dam JFP in Placer, El Dorado
and Sacramento Counties, California Legend Sample Site Jurisdictional Wetlands Boundary - Jurisdictional Other Waters Boundary FOLSOM DAM RD Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P

RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim BLUEBIRD LN





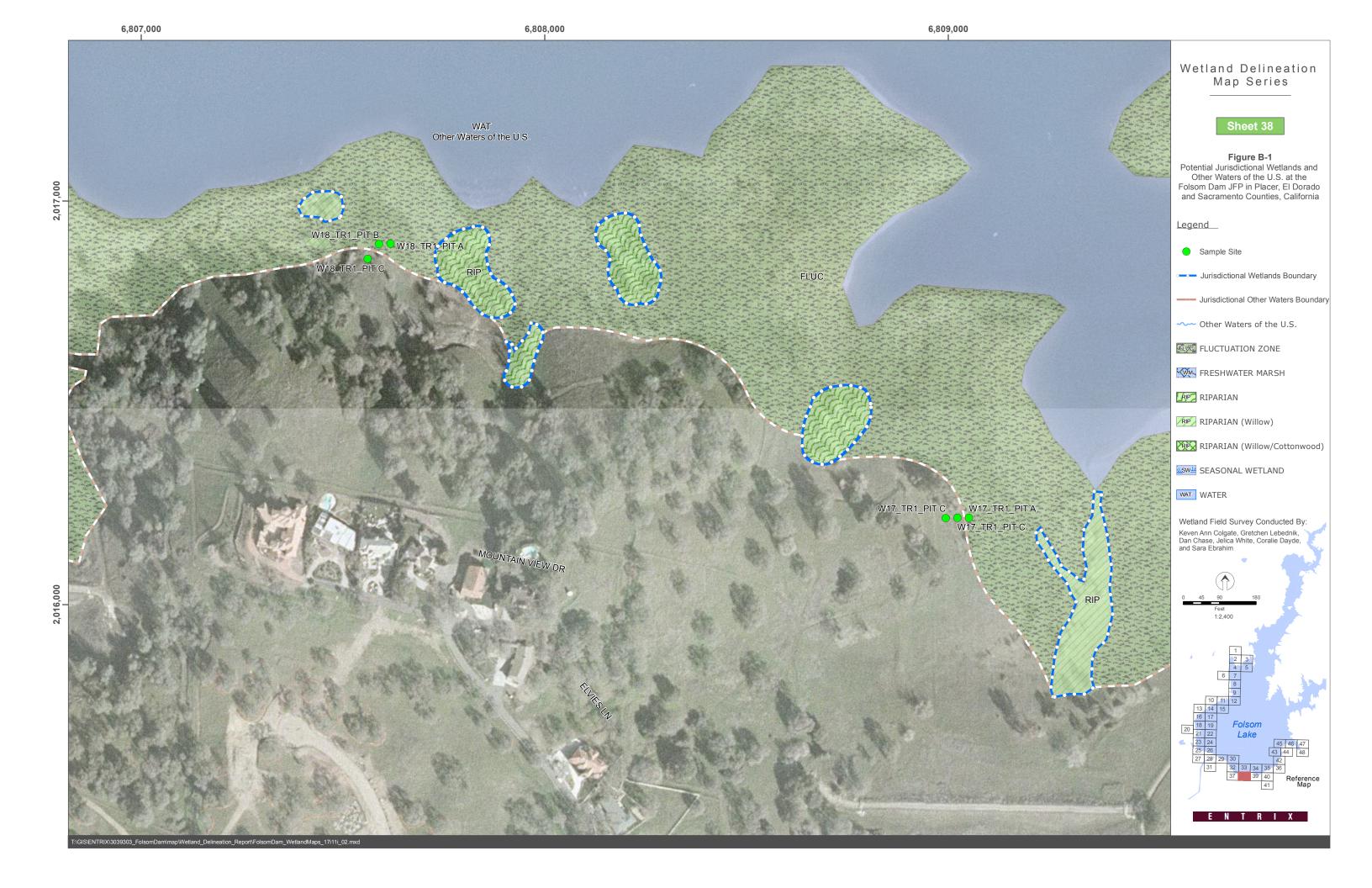




6,810,000 6,811,000 Wetland Delineation 2,019,000 Map Series Sheet 34 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the
Folsom Dam JFP in Placer, El Dorado
and Sacramento Counties, California Legend Sample Site Jurisdictional Wetlands Boundary Jurisdictional Other Waters Boundary WAT Other Waters of the U.S. Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH ŔP RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim FLUC



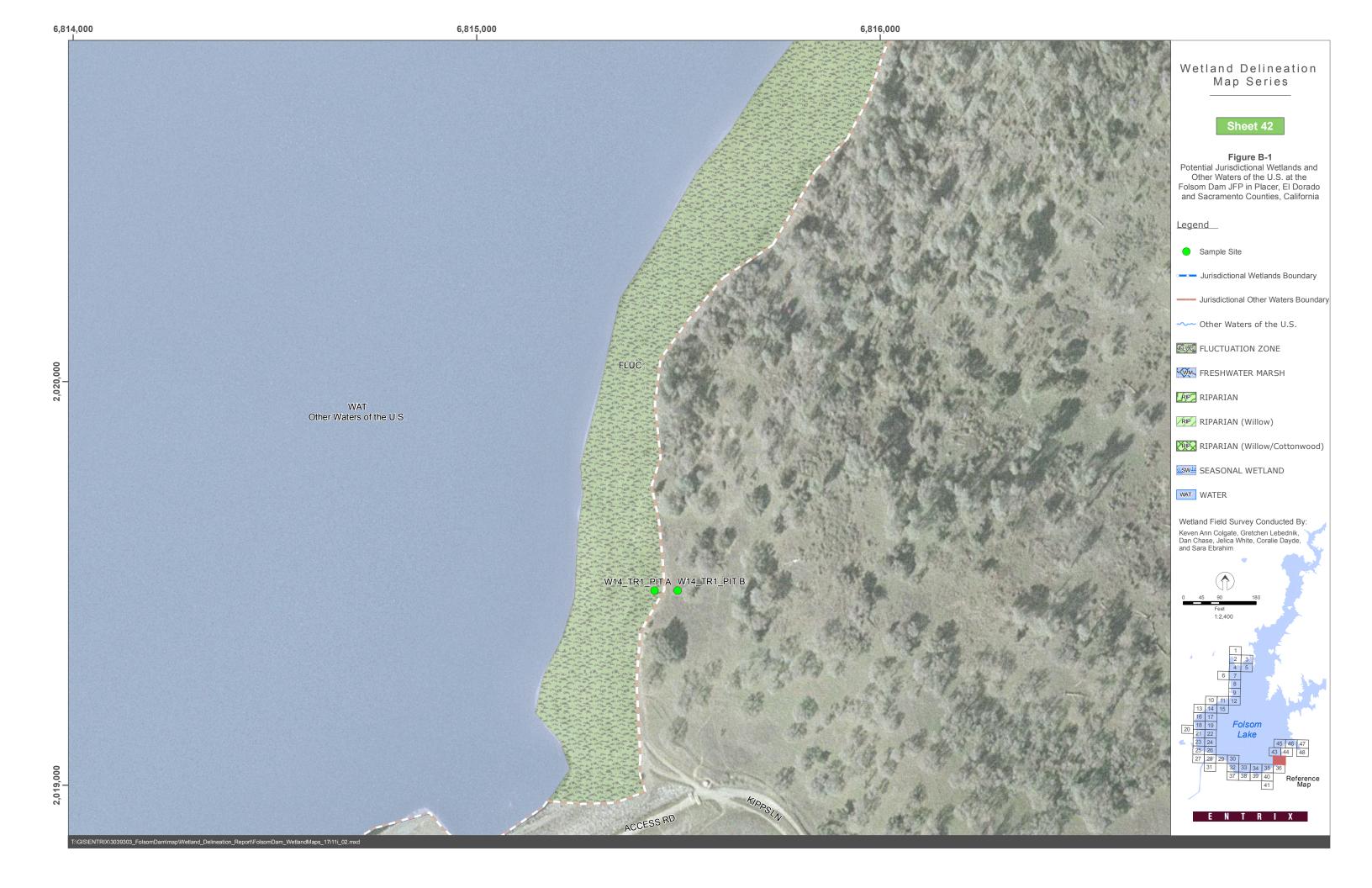




6,810,000 6,811,000 Wetland Delineation Map Series Sheet 39 Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the
Folsom Dam JFP in Placer, El Dorado
and Sacramento Counties, California Legend Sample Site WAT Other Waters of the U.S. Jurisdictional Wetlands Boundary ---- Jurisdictional Other Waters Boundary Other Waters of the U.S. FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P♥ RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) SEASONAL WETLAND FLUC WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim



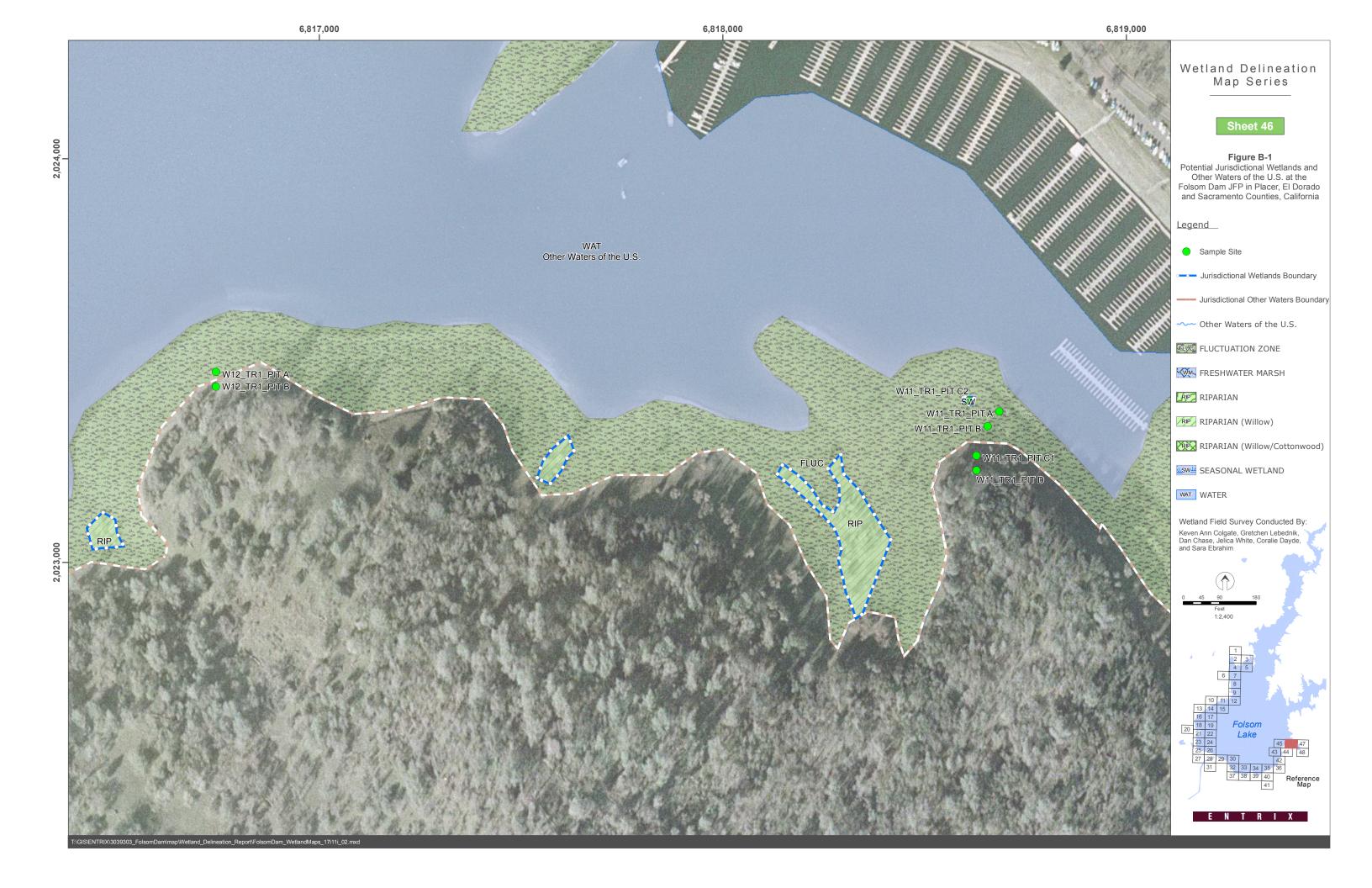














6,819,000 6,820,000 6,821,000 Wetland Delineation Map Series Sheet 48 W20_TR1_PIT B W20_TR1_PIT B W20 TR1 PITA W20_TR1_PITA Figure B-1
Potential Jurisdictional Wetlands and
Other Waters of the U.S. at the Folsom Dam JFP in Placer, El Dorado and Sacramento Counties, California Legend Sample Site W21_TR1_PIT B W21_TR1_PIT A
W21_TR1_PIT B Jurisdictional Wetlands Boundary ---- Jurisdictional Other Waters Boundary Other Waters of the U.S. FLUG FLUCTUATION ZONE FRESHWATER MARSH <u>Ŕ</u>P

RIPARIAN RIPARIAN (Willow) RIPARIAN (Willow/Cottonwood) LSW SEASONAL WETLAND WAT WATER Wetland Field Survey Conducted By: Keven Ann Colgate, Gretchen Lebednik, Dan Chase, Jelica White, Coralie Dayde, and Sara Ebrahim HILL VIEW DR

	Folsom DS/FDR Action –Wetland Delineation Report
ATTACHMENT C. WETT AND	DELINEATION FIELD DATA FORMS
ATTACHMENT C. WEILAND	DELINEATION FIELD DATA FORMS

Project/Site:	Folsom Dam JFI	P		Date:	1/12/0)6			
Applicant/Owner:	Bureau of Reclar	mation		County:	Placer	r County			
Investigator:	Keven Ann Colg	Keven Ann Colgate, Daniel Chase State: California							
Do Normal Circums	tances exist on the	e site?	Yes No	Community	ID:	Seasonal	wetland		
Is the site significantly dis	sturbed (Atypical Situa	ation)?	Yes ⊠No	Plot ID:		OR1			
Is the area a potentia			Yes ⊠No	Transect ID) :	TR1 PIT	A		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spec	cies	Stratum	Indicator	Dominant P	lant Sp	ecies	Stratum	Indicator	
1. Rorippa nasturtii	ım-aquaticum	Н	OBL	9.					
2. Typha latifolia		Н	OBL	10.					
3. Mimulus guttatus	•	Н	OBL	11.					
4. Cyperus eragrost	is	Н	FACW	12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	t Species that are	OBL, FACW	or FAC (excludi	ng FAC-):	100%				
Remarks: Pit A	is a channel forme	ed by a flow c	oming out of an	approximately	y 8-10-	foot pipe/c	ulvert. Poss	sibility leak	
from I	Dike 6.							-	
HYDROLOGY									
_	(Describe in Rem	parke):	WETLAND HY	DDOLOGY IN	DICAT	ODG•			
Stream, Lake, o	`	iai K5).	Primary Indi		DICAT	OKS.			
Aerial Photogra	C		Inundated						
Other	·P15		=	in upper 12 ii	nches				
☐ No Recorded Da	ata Available		Water Ma						
_			Drift Line	es					
				Deposits					
FIELD OBSERVATIO	NS:		☐ Drainage	Patterns in W	etlands	S			
			Secondary In	dicators (2 or	r more	required)	:		
Depth of Surface Wa	ater:	_0 (in.)	☐ Oxidized	root channels	in upp	er 12 inche	es		
			☐ Water-sta	ined Leaves					
Depth to Free Water	in Pit:	_0 (in.)	Local Soi	l Survey Data	l				
			FAC-Neu	ıtral Test					
Depth to Saturated S	Soil	_0 (in.)	Other (ex	xplain in Rem	arks)				
Remarks: Adit /	leak channel- No	nit duo – area	inundated						

SOILS Plot ID: OR1 PIT A

		_Xerothents, cut and		Drainage Class: _W Field Observations Confirm Mapped Ty	Vell/Excessively Drained_	
					Commin wapped 1 y	pe! les 140
Profile Desc Depth (inches)	ription: Horizon	Matrix Colors (Munsell Moist)	Mottle Co		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
						-
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-0	Regime tions	- - - - -	Organi Listed Listed	tions organic Content in Surface It c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils L Explain in Remarks)	
Remarks:						
No pit excav	rated. Site is inund	ated w/ OBL vegetation	on.			
WETLAND	DETERMINATIO)N				
Wetland Hy	Vegetation Presendrology Present?	Yes No	(Circle)	T : 1 := C==	" D' Wakin Wad	(Circle)
Hydric Soils	Present?	Yes No		is this San	npling Point Within a Wetl	and? Yes No
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of Reclamation					County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	rnia		
Do Normal Circums	stances exist o	on the site?	⊠Y	es]No	Community	ID:	Interior live woodland/a grassland		
Is the site significantly di	sturbed (Atypica	l Situation)?	\square Y	es 🗵]No	Plot ID:		OR1		
Is the area a potentia (If needed, expla			_ Y	es 🗵]No	Transect ID) :	TR1 PIT B		
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant S _l	oecies		Stratum	Indicator
1. Bromus sp.		Н	N	IL	9.					
2. Eremocarpus setig	gerus	Н	N	IL .	10.					
3. Geranium molle		Н	N	IL	11.					
4. Baccharis pilulari	is	SH	N	IL	12.					
5. Quercus wislizeni	i	TR	N	IL	13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW o	r FAC (e	excludir	ng FAC-):	0%			
Remarks:										
HYDROLOGY	Ф 1 :	D 1.		117 ·	TT					
Recorded Data						DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_			Primar	•					
Aerial Photogra	apns			_	ındated					
Other						in upper 12 i	ncnes			
☐ No Recorded D	ata Avanable			_	ater Ma ift Line					
				_		s Deposits				
FIELD OBSERVATION	MC.					Patterns in W	Iatlanda	,		
TIELD OBSERVATIO	MS.					dicators (2 o				
Depth of Surface W	ater:	NA	(in.)		•	root channels				
Depuir of Burrace W			_ ()			ined Leaves	, с.рр	12 11101100		
Depth to Free Water	r in Pit:	NA	(in.)			Survey Data	a			
1			、			tral Test				
Depth to Saturated S	Soil	10	(in.)	_		plain in Rem	arks)			
Ramarks: Photo	5 6 Dit R v	v/ adit in be	ekaroun	ud						

SOILS Plot ID: OR1 TR1 PIT B

Map Unit No (Series and I	Phase)Xer	rothents, cut and fill are		Field (age Class: _Exce Observations rm Mapped Type	essively/well drained
Profile Desc	eription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Color (Munsell Mo		ce/Contrast	Texture, Concretions, Structure, etc.
0-11		10 YR 4/3	2.5 YR 3/	/6 1	5%	Fine, med coarse
0-11	<u> </u>	10 YR 4/3	7.5 YR 4	/6 <	10%	
11-16		10 YR 4/3	10 YR 2.5	5/1 5	50%	Fine sand
Hydric Soil	Indicators:					
	Gleyed or Low-	e Regime litions -Chroma Colors Appears to be an old	borrow area fo	Concretions High Organic Conte Organic Streaking in Listed on Local Hyd Listed on National I Other (Explain in R or Dike 6. Uneven g	n Sandy Soils dric Soils List Hydric Soils List temarks)	
WETLAND) DETERMINATIO	ON	_			
	c Vegetation Preser drology Present? s Present?	nt? Yes No Yes No Yes No	(Circle)	this Sampling Point	Within a Wetland	(Circle)
Remarks:						

Project/Site:	Folsom Dam	ı JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	$\boxtimes Y$	es 🗌	No	Community	ID:	ID: Seasonal wetland		
Is the site significantly di	sturbed (Atypical	Situation)?	$\square Y$	es 🗵	No	Plot ID:		OR1		
Is the area a potentia	al Problem Are	ea?	□Ye	es 🗵	No	Transect ID	:	TR2 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
	oios	Ctuatum	Indiant		Domi	nant Dlant Cm			Ctuatum	Indicator
Dominant Plant Spe 1. Juncus oxymeris	cies	Stratum H	Indicate FA0		1	nant Plant Sp	ecies		Stratum	Indicator
2.			TAV	C **	9.					
3.					10.					
4.					11.					
5.					12.					
					13.					
6.					14. 15.					
7. 8.					16.					
					1					
Percent of Dominan	t Species that	are OBL, F	FACW 01	r FAC (e	excludir	ng FAC-): 1	100%			
Remarks: Juncu	s has flat blue	green leaf.								
HYDROLOGY	<i>(</i> D '1 ' 1	D 1 \		**/		_				
Recorded Data	`	,				DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_			Primar	•					
Aerial Photogra	npns				ındated		1			
☐ Other☐ No Recorded Da	oto Arrailabla			_	iuraied ater Ma	in upper 12 ir	icnes			
☐ No Recorded Da	ata Avallable			_	ift Line					
						S Deposits				
FIELD OBSERVATION	NS.					Patterns in W	etland	2		
TIELD OBSERVATIO	110.				-	dicators (2 or				
Depth of Surface Wa	ater:	NA	(in.)		•	root channels		_		
1			_ (')			ined Leaves	TT			
Depth to Free Water	in Pit:	12	(in.)			Survey Data				
•						tral Test				
Depth to Saturated S	Soil	0(in.)			plain in Rema	arks)			
Remarks: Water	flowed in &	equalized a	t approx	imately	10-12"	below surface	e.			

SOILS Plot ID: OR1 TR2 PIT A

	Phase)Xerot	hents, cut and fill areas			Drainage Class: _Ex Field Observations Confirm Mapped Ty	cessively/Well Drained_
Profile Descr	ription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colo (Munsell Mo		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	-	7.5 YR 4/3	NA		NA	Fine, med, coarse sand
4-14		7.5 YR 4/3	2.5 YR 4	4/8	35%	Fine sand
14-16	-	7.5 YR 4/3	2.5 YR 2.	.5/1	15%	Fine sand
Hydric Soil I	indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	Regime tions	<u>X</u>	Organic Listed of Listed of	ions ganic Content in Surface I Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Li Explain in Remarks)	
Remarks:						
Mottles and	organic streaking					
<u>I</u>						
WFTLAND	DETERMINATIO	ını				
						(31.1)
	Vegetation Present drology Present? Present?	t? Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetla	(Circle) and? Yes No
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0	06		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, D	aniel Cha	ase		State:	Califo	rnia		
Do Normal Circums	stances exist o	on the site?	⊠Y	es []No	Community	ID:	Ruderal / ar grassland	nnual	
Is the site significantly di	sturbed (Atypica	1 Situation)?	$\square Y$	es 🗵	No	Plot ID:		OR1		
Is the area a potentia (If needed, expla			□Y	es 🗵]No	Transect ID):	TR2 PIT B		
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Carduus pycnoce		Н	N	īL .	9.	•				
2. Hordeum murinu	ım	Н	N	IL	10.					
3. Bromus sp.		Н	N	IL	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW o	r FAC (e	excludii	ng FAC-): ()%			
Remarks:	•	,				<i>'</i>				
Temarks.										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge	;		Primar	y Indic	cators:				
Aerial Photogra	aphs			☐ Int	ındated					
Other				☐ Sat	turated	in upper 12 is	nches			
☐ No Recorded D	ata Available			☐ Wa	ater Ma	rks				
				☐ Dr	ift Line	s				
						Deposits				
FIELD OBSERVATION	ONS:			Dra	ainage	Patterns in W	etlands	3		
				Second	ary Ind	dicators (2 o	r more	required):		
Depth of Surface W	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
						ined Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)			l Survey Data	ı			
						tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	∐ Otl	her (ex	plain in Rem	arks)			
Remarks: Uplar	nd pit adjacent	t to inundat	ed area.	Pit is ap	proxim	ately 80 feet	from to	oe of Dike 6.		

SOILS Plot ID: OR1 TR2 PIT B

	Phase)X	Xerothents, cut and fill a			Drainage Class: _We Field Observations Confirm Mapped Typ	ell/Excessively Drained_
Profile Desc	erintion:					
Depth	лірион.	Matrix Colors	Mottle Co	alore	Mottle	Texture, Concretions,
(inches)	Horizon	(Munsell Moist)	(Munsell		Abundance/Contrast	Structure, etc.
0-16	<u> </u>	7.5 YR 4/4	N	Α	NA	Fine, med sand
Uvdrig Soil	Indicators					
Hydric Soil						
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime itions	 	Organi Listed Listed	etions Organic Content in Surface L organic Content in Surface L organic Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	
Remarks:						
No indicator	rs.					
WETI AND) DETERMINATIO	NA				
	c Vegetation Present drology Present? s Present?	rt? Yes No Yes No Yes No	(Circle)	Is this Sar	npling Point Within a Wetla	(Circle) and? Yes No
Remarks:			·			

Project/Site:	Folsom Dam JF	FP			Date:	1/12/0)6		
Applicant/Owner:	Bureau of Recla	amation			County:	Placer	County		
Investigator:	Keven Ann Col	State:	Califo	rnia		<u> </u>			
Do Normal Circums	tances exist on tl	ne site?	⊠Yes	□No	Community	ID:	Cotton ripariar	wood-willo n	w
Is the site significantly di	sturbed (Atypical Sit	uation)?	Yes	\boxtimes No	Plot ID:		OR1		
Is the area a potentia (If needed, expla			Yes	⊠No	Transect ID	: _	TR3 PI	TA	
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indica	tor	Dominant Plan	nt Spec	eies	Stratum	Indicator
1. Juncus balticus *	:	Н	C	BL	9.				
2. Populus fremonti	i ssp. fremontii	TR	FA	ACW	10.				
3. Salix sp.		SH	FAC	- OBL	11.				
4.					12.				
5.					13.				
6.					14.				
7.					15.				
8.					16.				
Percent of Dominan	t Species that are	OBL, FAC	CW or F.	AC (exclu	iding FAC-): 1	100%			
	nd leaved-rush da					ıs canr	not be ke	eved to spec	ies
<u></u>	100,00 10011 00	groom,			, 15 GCC1GG	, cum	100 00 110	jeu to spec	
HYDROLOGY									
☐ Recorded Data	(Describe in Re	marks):	W	ETLAND I	HYDROLOGY IN	DICATO	ORS:		
Stream, Lake, o	r Tide Gauge		Pı	imary In	dicators:				
Aerial Photogra	phs			Inundat	ted				
Other				Saturat	ed in upper 12 in	nches			
☐ No Recorded Da	ata Available			Water I	Marks				
				Drift Li					
			Ļ		nt Deposits				
FIELD OBSERVATIO	ons:		L	_	ge Patterns in W			-	
D 4 CC C W		NIA (_	_	Indicators (2 or		_		
Depth of Surface Wa	ater:	_NA (i	n.) ∟ ⊏		ed root channels stained Leaves	ın upp	er 12 inc	enes	
Depth to Free Water	in Dit	2 (in)			stamed Leaves Soil Survey Data				
Depui to Free water		_2 (in.)	, L		eutral Test				
Depth to Saturated S	Soil	_0 (in.)) [_	(explain in Rema	arks)			
Remarks:									

SOILS Plot ID: OR1 TR3 PIT A

	Phase)	_Xerothents, cut and fi			Drainage Class: _Wo Field Observations Confirm Mapped Typ	ell/Excessively Drained_
D61- D						
Profile Desc Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colo (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		2.5 YR 7/4	7.5 YR	5/6	10%	coarse sand
6-17		NA	NA		NA	bedrock
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions		Organic Listed o Listed o	ions ganic Content in Surface L Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)	
Remarks:						
Perched grou	undwater on hard pa	ack/bedrock				
WETLAND	DETERMINATIO	N				
Hydrophytic Wetland Hyd Hydric Soils	Vegetation Present drology Present? Present?	? Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetla	(Circle) and? Yes No
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	$\boxtimes Y$	es 🗌]No	Community	ID:	Ruderal		
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:		OR1		
Is the area a potentia (If needed, expla			□Ye	es 🗵	No	Transect ID	:	TR3 PIT B		
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Erodium cicutari	ium	Н	N	L	9.					
2. Bromus sp.		Н	N	L	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. I	FACW 01	r FAC (e	excludii	ng FAC-): ()%			
Remarks:				(
Kemarks.										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	•			Primar	y Indic	cators:				
Aerial Photogra	_				ındated					
Other	•			☐ Sat	turated	in upper 12 ii	nches			
☐ No Recorded Da	ata Available			☐ Wa	ater Ma	rks				
				☐ Dri	ift Line	s				
				☐ Sed	liment l	Deposits				
FIELD OBSERVATION	ONS:			☐ Dra	ainage	Patterns in W	etland	S		
				Second	ary Ind	dicators (2 or	r more	required):		
Depth of Surface W	ater:	NA	_ (in.)	Ox	idized	root channels	in upp	er 12 inches		
						ined Leaves				
Depth to Free Water	r in Pit:	NA _	_ (in.)			l Survey Data	l			
				_		tral Test				
Depth to Saturated S	Soil	NA _	_ (in.)	∐ Otl	her (ex	plain in Rem	arks)			
Remarks: No hy	/drology – site	e is damp fr	om recei	nt precip	itation.					

SOILS Plot ID: OR1 TR3 PIT B

	Phase)Xe	erothents, cut and full a	Drainage Class:W Field Observations Confirm Mapped Ty	/ell/Excessively Drained pe? Yes No							
Profile Desc	ription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell I		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-5		10 YR 4/4	5 YR	4/6	1%	Fine medium sand					
5-16		?	NA	Δ	NA	Bedrock					
Hydric Soil	Indicators:										
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions		Organic Listed o Listed o	ions Iganic Content in Surface L Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils Li Explain in Remarks)						
Remarks:											
Rock out cro	op within larger wet	land complex.									
WETLAND	DETERMINATIO:	N									
	Vegetation Present drology Present? Present?	Yes No Yes No Yes No	(Circle)	Is this Sam	pling Point Within a Wetla	(Circle)					
Remarks:			•								

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	ornia		
Do Normal Circums	tances exist o	on the site?	⊠Ye	s []No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Ye	s 🗵	No	Plot ID:		OR2		
Is the area a potentia	al Problem Ar	ea?	□Ye	s 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicato	r	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Rumex crispus		Н	FAC	W-	9.	*				
2. Juncus oxymeris		Н	FAC	W	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. E	FACW or	FAC (6	excludir	ng FAC-)· 5	50%			
Remarks:	t species that	ure obe, i	110 11 01	1110 (0	Meradir	151110). 2	7070			
Remarks:										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	`	,		Primar						
Aerial Photogra	_				ındated					
Other	1			☐ Sat	turated i	in upper 12 ii	nches			
☐ No Recorded Da	ata Available				ater Ma					
				☐ Dr	ift Lines	S				
				☐ Sed	liment I	Deposits				
FIELD OBSERVATIO	NS:			☐ Dr	ainage I	Patterns in W	etlands	S		
				Second	ary Ind	licators (2 or	more	required):		
Depth of Surface W	ater:	0(in.)	Ox	idized 1	root channels	in upp	er 12 inches		
				☐ Wa	ater-stai	ned Leaves				
Depth to Free Water	in Pit:	0(in.)	☐ Lo	cal Soil	Survey Data				
				=		tral Test				
Depth to Saturated S	Soil	0(in.)	☐ Otl	her (ex	plain in Rema	arks)			
Remarks:										

SOILS Plot ID: OR1 TR2 PIT A

	Phase)Andreg	gg coarse sandy loam,	_		_ Drainage Class: Field Observations Confirm Mapped Typ							
Profile Descri	ription:											
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.						
0-16		5 YR 2.5/1	N	Α	NA	silty sand						
Hydric Soil I	indicators:											
	Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List X Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks:												
Muck – chan	nel is fed from cul	vert @ road. No chann	el above ro	ad.								
WETLAND	DETERMINATIO	N										
	Vegetation Present drology Present? Present?	t? Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetla	(Circle) nd? Yes No						
Remarks:												

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	rnia		
Do Normal Circums	tances exist o	n the site?	⊠Y€	es 🗆]No	Community	ID:	Annual gra	ssland	
Is the site significantly di	sturbed (Atypica	l Situation)?	\Box Y ϵ	es 🗵	No	Plot ID:		OR2		
Is the area a potentia	al Problem Ar	ea?	\Box Y ϵ	es 🗵	No	Transect ID	:	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION					•					
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Hypericum perfo	ratum	Н	N	L	9.					
2. Bromus sp.		Н	N	L	10.					
3. Hordeum murinu	ım	Н	N	L	11.					
4. Eremocarpus set	igerus	Н	N	L	12.					
5. Baccharis pilular	ris	SH	N	L	13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. F	FACW or	· FAC (e	excludii	ng FAC-): ()%			
Remarks:	s Species than	<u> </u>	110 // 01	1110 (0			,,,			
Kemarks.										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	•	,		Primar			210.11	01101		
Aerial Photogra	_				ındated					
Other	1			_		in upper 12 ii	nches			
☐ No Recorded Da	ata Available				ater Ma					
_				Dri	ift Line	s				
				Sed	liment l	Deposits				
FIELD OBSERVATION	ONS:					Patterns in W	etlands	3		
				Second	ary Ind	dicators (2 o	more	required):		
Depth of Surface W	ater:	NA	_ (in.)	Ox	idized	root channels	in upp	er 12 inches		
				☐ Wa	ater-sta	ined Leaves				
Depth to Free Water	in Pit:	NA _	_ (in.)	☐ Lo	cal Soil	l Survey Data	l			
				☐ FA	.C-Neu	tral Test				
Depth to Saturated S	Soil	NA _	_ (in.)	Otl	her (ex	plain in Rem	arks)			
Remarks: Wet f	rom rain, othe	rwise no h	ydrology.							

SOILS Plot ID: OR2 TR1 PIT B

	Phase)	_Andregg coarse sandy		-	_ Drainage Class: Field Observations	
Taxonomy	(Subgroup):				Confirm Mapped Typ	pe? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colo (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		5 YR 3/2	0		0	Fine sandy loam
Hydric Soil Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	e Regime litions		Organic Listed or Listed or	ons ganic Content in Surface I Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Li xplain in Remarks)	
No flydric ii	Idicators					
WETLAND	DETERMINATION DETERMINATION	ON				
	c Vegetation Preser ydrology Present? s Present?	nt? Yes No Yes No Yes No	(Circle)	s this Sam _l	oling Point Within a Wetla	(Circle)
Remarks:			-			

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Chase	;		State:	Califo	ornia		
Do Normal Circums	tances exist o	on the site?	⊠Yes		No	Community	ID:	Seasonal w	etland	
Is the site significantly dis	sturbed (Atypica	l Situation)?	Yes	\boxtimes	No	Plot ID:		OR2		
Is the area a potentia	l Problem Ar	ea?	Yes	\boxtimes	No	Transect ID):	TR2 PIT A	-	
(If needed, expla	in on reverse	side.)								
VEGETATION										
	•	G	T 1' /	1	D .	. DI G			G, ,	T 1' '
Dominant Plant Spec	cies	Stratum	Indicator			nant Plant Sp	bec1es		Stratum	Indicator
1. Juncus balticus*		H	OBL		9.					
2. Rumex pulcher		Н	FAC+	+	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, I	FACW or F	AC (e	xcludin	ng FAC-):	100%			
Remarks: *Rour	nd leaf									
HYDROLOGY										
Recorded Data	(Describe in	Remarks):	W	ETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge	;	Pr	rimar	y Indic	ators:				
Aerial Photogra	phs			Inu	ndated					
Other				 Sat	urated i	in upper 12 in	nches			
☐ No Recorded Da	ıta Available				ter Mai					
				_	ft Lines					
				_		Deposits				
FIELD OBSERVATIO	NS:		L		•	Patterns in W				
			_	_	-	licators (2 or				
Depth of Surface Wa	ater:	1(in.)	_		oot channels	in upp	er 12 inches		
D. d. E. W.	. D.	0	L	_		ned Leaves				
Depth to Free Water	ın Pit:	0(in.) _			Survey Data	ı			
Donth to Cotymote & C	oil	0 (_ 			ral Test	orlea)			
Depth to Saturated S	OII	0(iii. <i>)</i>	_ Oth	ier (ex	plain in Rem	arks)			
Remarks: Fed by	y a culvert @	the road.	Culvert cros	sses ro	ad, no	channel abov	e road			

SOILS Plot ID: OR2 TR2 PIT A

	Phase)Andreg	gg coarse sandy loam,	Drainage Class: Field Observations Confirm Mapped Ty			
Profile Desc	ription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
	-	_	_		_	
Hydric Soil						
	_ Histosol Histic Epipedon		_	Concre High O	tions rganic Content in Surface I	Layer in Sandy Soils
_	Sulfidic Odor Aquic Moisture l		_	Organio	e Streaking in Sandy Soils on Local Hydric Soils List	
	Reducing Condit Gleyed or Low-C	tions	_	Listed of	on National Hydric Soils Li Explain in Remarks)	st
Remarks:	_ Gleyed of Lot.	Jilloma Colors			EAplain in Remarks,	
	2 TD 1 DIT A No.	-14 Aug				
Same as OK	2-TR1-PIT A. No j	pit aug.				
WETLAND	DETERMINATIO	N				
	Vegetation Present drology Present?	t? Yes No	(Circle)			(Circle)
Hydric Soils		Yes No		Is this San	npling Point Within a Wetla	and? Yes No
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0	06		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Y	es [No	 Community	ID:	Annual gras	ssland	
Is the site significantly di	sturbed (Atypica	1 Situation)?	$\square Y$	es 🗵	No	Plot ID:		OR2		
Is the area a potentia	al Problem Ar	rea?	$\square Y$	es 🔀	No	Transect ID	:	TR2 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION										
		Charter	T., 12 4		D		•		Ctoretore	T. 1
Dominant Plant Spe 1. Cynosurus echina		Stratum H	Indicat	or L		nant Plant Sp	ecies		Stratum	Indicator
2. Hordeum murinu		Н			9.					
3. Plantago lanceol		Н		L C-	10.					
4. Centaurea solstit		Н		L	11.					
5.	iaus	П	1	L	12.					
					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW o	r FAC (excludii	ng FAC-): ()%			
Remarks:										
THE POLOCE										
HYDROLOGY	Ø 11 :	D 1)		XX/						
Recorded Data	•					DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_	;			ry Indic undated					
✓ Aerial Photogra✓ Other	apns					in upper 12 ii	nchas			
☐ No Recorded Da	ata Available			_	ater Ma		iiches			
No Recorded Da	ata Avanabic			_	ift Line					
						Deposits				
FIELD OBSERVATION	ONS:					Patterns in W	etland	S		
					_	dicators (2 or				
Depth of Surface W	ater:	NA	_ (in.)	☐ O ₂	kidized	root channels	in upp	er 12 inches		
				\square W	ater-sta	ined Leaves				
Depth to Free Water	r in Pit:	NA _	_ (in.)		cal Soi	l Survey Data	l			
				☐ FA	AC-Neu	tral Test				
Depth to Saturated S	Soil	NA _	_ (in.)	Ot	her (ex	plain in Rema	arks)			
Remarks: Uplan	nd, no hydrolo	gy								

SOILS Plot ID: OR2 TR2 PIT B

1			,	oes	Field Observations	Well Drained					
Taxonomy ((Subgroup):		Confirm Mapped Typ	pe? Yes No							
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
Hydric Soil	Indicators:										
Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks: No pit dug.	Upland vegetation	and no hydrology.									
WETLAND	O DETERMINATIO)N									
	c Vegetation Presentydrology Present? s Present?	Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetla	(Circle) and? Yes No					
Remarks:											

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	niel Cha	se		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Ye	es 🗀	No	Community	y ID:	Willow rip	arian	
Is the site significantly d	isturbed (Atypica	1 Situation)?	□Ye	es 🖂	No	Plot ID:		OR3		
Is the area a potentia	al Problem Ar	ea?	□Ye	Yes \(\sum No		Transect II) :	TR1 PIT A	L	
(If needed, expla	ain on reverse	side.)								
VEGETATION										
Dominant Plant Spe	ecies	Stratum	Indicato	r	Domi	nant Plant S	pecies		Stratum	Indicator
1. Salix sp.		SH	FAC -	OBL	9.					
2. Rumex crispus		Н	FAC	W-	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. F	ACW or	FAC (e	excludir	ng FAC-)·	50%			
Remarks:	species unu	<u> </u>	110 () 01	1110 (0		. <u>g 1110).</u>	2070			
Kemarks.										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	DROLOGY IN	NDICAT	ORS:		
Stream, Lake, o	`			Primar			,210,11	01101		
Aerial Photogra	_				ndated					
Other						in upper 12 i	inches			
☐ No Recorded D	ata Available				iter Ma					
				☐ Dri	ft Line	S				
				☐ Sed	iment I	Deposits				
FIELD OBSERVATION	ONS:					Patterns in W	Vetland	S		
					_	licators (2 o				
Depth of Surface W	ater:	NA	_ (in.)	☐ Ox	idized 1	oot channels	s in upp	er 12 inches		
				☐ Wa	ıter-stai	ned Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)	☐ Loc	cal Soil	Survey Data	a			
				☐ FA	C-Neut	ral Test				
Depth to Saturated S	Soil	NA	_ (in.)	Oth	ner (ex	plain in Rem	narks)			
	ves overland just upslope o					ke 1. Also r	eceives	ground water	er from res	ervoir.

SOILS Plot ID: OR3 TR1 PIT A

	Phase)And	regg coarse sandy loan			Drainage Class: Field Observations						
Taxonomy ((Subgroup):			Confirm Mapped Type? Yes No							
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Mo		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-12		7.5 YR 3/2	5 YR 5/6	5	20%	Med-coarse sand					
12-16		Too hard to dig				Coarse sand					
Hydric Soil	Indicators:										
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks:											
2-3" organic	c layer – then miner	al									
WETLAND	DETERMINATIO)N									
Hydrophytic	C Vegetation Presendrology Present?		(Circle)	this Samp	oling Point Within a Wetl	(Circle) and? Yes No					
Remarks:											
Wetland box	undary is just down	slope within OHWM o	of reservoir. Drif	ft is heav	y.						

Project/Site:	Folsom Dan	n JFP				Date:	1/12/0	06		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums	tances exist o	on the site?	⊠Y€	es 🗌	No	Community	ID:	Annual gra	ssland	
Is the site significantly di	sturbed (Atypica	1 Situation)?	□Y€	es 🛚	No	Plot ID:		OR3		
Is the area a potentia	al Problem Ar	rea?	□Y€	es 🛚	No	Transect ID):	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION			_		_					
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Centaurea solstitia	lis	Н	NI	L	9.					
2. Hirschfeldia incana	а	Н	N	L	10.					
3. Bromus sp.		Н	N	L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	ara ORI I	EACW or	· FAC (e	veludir	ng FAC):				
	•		ACW 01	TAC (C	ACIUUII	ig PAC-).				
Remarks: Uplan	nd – on side of	f dike								
HVDDOL OCV										
HYDROLOGY Decorded Date	(Dagariha in	Damarla).		XX/E/DT A	ND HV	DROLOGY IN	DICAT	ODG.		
Recorded Data	•						DICAT	ORS:		
☐ Stream, Lake, o ☐ Aerial Photogra	_	;		Primar	y maic indated					
_	ipiis						mahaa			
☐ Other	. A '111			_		in upper 12 i	ncnes			
No Recorded Da	ata Available			_	iter Ma					
				_	ft Line					
						Deposits				
FIELD OBSERVATION	ONS:				_	Patterns in W				
					-	dicators (2 o		_		
Depth of Surface W	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
						ined Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data	ì			
						tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	∐ Otl	ner (ex	plain in Rem	arks)			
Remarks: No hy	drology, upla	ınd vegetati	on on rip	rap sloj	e.					

SOILS Plot ID: OR3 TR1 PIT B

Map Unit Name (Series and Phase)Andre	gg coarse sandy loam 2	2.0% slopes	Drainage Class:Well Drained						
			Field Observations						
Taxonomy (Subgroup):		Confirm Mapped Typ	e? Yes No						
Profile Description:									
Depth (inches) Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
Hydric Soil Indicators:									
Histosol		Concreti	ions						
Histic Epipedon			ons ganic Content in Surface L	ayer in Sandy Soils					
Sulfidic Odor)i	Organic	Streaking in Sandy Soils						
Aquic Moisture F Reducing Conditi			n Local Hydric Soils List n National Hydric Soils Lis	st					
Gleyed or Low-C	Chroma Colors	Other (E	Explain in Remarks)						
Remarks:									
No pit dug – site on rip rap slope	a								
Two pit dag — site oil rip rap slope									
WETLAND DETERMINATION	N			1					
Hydrophytic Vegetation Present	? Ye. No	(Circle)		(Circle)					
Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No	Is this Same	pling Point Within a Wetla	nd? Yes No					
Tryane Bons Hesent:	103 110	is this Sain	pinis i ome witum a wetta	165 140					
Remarks:		<u> </u>							

Project/Site:	Folsom Dan	n JFP			Date:	1/13/0	06		
Applicant/Owner:	Bureau of R	eclamation			County:	Sacra	mento Coun	ty	
Investigator:	Keven Ann	Colgate, Da	aniel Chase		State:	Califo	ornia	_	
Do Normal Circums	stances exist o	on the site?	⊠Yes	□No	— Community	y ID:	Seasonal w	vetland	
Is the site significantly di	sturbed (Atypica	1 Situation)?	Yes	⊠No	Plot ID:		OR4		
Is the area a potentia	al Problem Ar	rea?	Yes	⊠No	Transect ID) :	TR1 PIT A	1	
(If needed, expla	nin on reverse	side.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dom	inant Plant S _J	pecies		Stratum	Indicator
1. Typha latifolia		Н	OBL	9.					
2. Salix sp.		TR	FAC - OBL	10.					
3. Cyperus eragrosti	is	Н	FACW	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that	are ORI E	SACW or FAC	(evclud	ing FAC-)·	100%			
-	patches of <i>Jur</i> ation dominat		ue-green leaf).	Within	channel (wet	land po	rtion) Salix :	and annual	herbaceous
HYDROLOGY									
☐ Recorded Data	(Describe in	Remarks):	WET	LAND HY	DROLOGY IN	NDICAT	ORS:		
Stream, Lake, o	or Tide Gauge	;	Prim	ary Indi	cators:				
Aerial Photogra	aphs		I	nundate	d				
Other			\boxtimes s	Saturated	in upper 12 i	nches			
No Recorded Da	ata Available		\boxtimes v	Water M	arks				
			⊠ I	Orift Lin	es				
			\boxtimes S	ediment	Deposits				
FIELD OBSERVATION	ONS:		□ I	Orainage	Patterns in W	/etland	S		
			Secon	ndary In	dicators (2 o	r more	required):		
Depth of Surface W	ater:	NA	_ (in.)	Oxidized	root channels	s in upp	per 12 inches	S	
			\boxtimes '	Water-sta	nined Leaves				
Depth to Free Water	r in Pit:	6(il Survey Data	a			
					ıtral Test				
Depth to Saturated S	Soil	0(in.) 🔲 (Other (e	xplain in Rem	narks)			
			lam base @ pipoundary of con			de char	nnel. Channo	el runs sout	h then

SOILS Plot ID: OR4 TR1 PIT A

	l Phase)Andregg	g urban land complex, 2	-	Field Observation	
Profile Des	scription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moi		Texture, Concretions, Structure, etc.
0-16		10 YR 4/1	10YR 3/6	25%	Med sand
					_
				 -	_
- \frac{\frac{\frac{\chi}{\chi}}{\frac{\chi}{\chi}}	Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	e Regime		Concretions High Organic Content in Surfactory Organic Streaking in Sandy So Listed on Local Hydric Soils L Listed on National Hydric Soils Other (Explain in Remarks)	ils ist
Portions of	the channel are inu	undated with water and	host OBL vegeta	tion	
WETLAN	D DETERMINATION	ON			
	ic Vegetation Prese ydrology Present? ls Present?	ent? Yes No Yes No Yes No	(Circle)	his Sampling Point Within a W	(Circle)

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No Yes No	(Circle)	valida ii Diawidi waa ii	(Circle) N o
Remarks: Area is relatively disturbed. Channel	is man made and	d fed by a c	ulvert coming out of the base of the right wing dam.	

Project/Site:	Folsom Dan	n JFP				Date:	1/13/0	06		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	rnia		
Do Normal Circums	tances exist o	n the site?	$\boxtimes Y$	es]No	Community	ID:	Interior live woodland	e oak	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:	•	OR4		
Is the area a potentia (If needed, expla			$\square Y$	es 🗵]No	Transect ID	:	TR1 PIT B		<u> </u>
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Baccharis pilulari		SH	N	L	9.	•				
2. Aesculus californi	са	TR	N	L	10.					
3. Centaurea solstitio	alis	Н	N	L	11.					
4. Bromus sp.		Н	N	L	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW or	r FAC (e	excludii	ng FAC-): ()%			
-	ian area arour aaris pilularis		nosts Qu	ercus wi	slzenii,	Rubus califo	ornica,	Sambucus m	<i>exicana</i> an	d
HYDROLOGY Recorded Data Stream, Lake, o Aerial Photogra Other	r Tide Gauge			Primar	y Indic			ORS:		
No Recorded Da	ata Available			☐ Dr	ater Ma ift Line liment I					
FIELD OBSERVATIO	ons:			☐ Dr	ainage	Patterns in W	etlands	3		
				Second	ary Ind	dicators (2 or	more	required):		
Depth of Surface W	ater:	NA	_ (in.)	Ox	idized	root channels	in upp	er 12 inches		
						ined Leaves				
Depth to Free Water	in Pit:	NA _	_ (in.)			l Survey Data				
Depth to Saturated S	Soil	NA _	_ (in.)	_		tral Test plain in Rema	arks)			
Pamarke: No in	dicators of hy									

SOILS Plot ID: OR4 TR1 PIT B

Map Unit Name (Series and Phase)Andregg urban land complex 2-8% slopes Drainage Class:Well Drained Field Observations Taxonomy (Subgroup): Yes No												
Taxonomy (Subgroup):		Confirm Mapped Typ	pe? Yes No								
Profile Desc	cription:											
Depth (inches)	Texture, Concretions, Structure, etc.											
0-16	<u> </u>	10 YR 3/4	NA	NA NA	Loamy med sand							
Hydric Soil	Indicators:											
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	Organio Listed o	tions rganic Content in Surface L c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Lis Explain in Remarks)								
	1.1.	51 · 1 · 11 · 11	1									
Areas of the	bank are covered w	rith rip-rap piles and bro	oken concrete.									
WETLAND	WETLAND DETERMINATION											
	e Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	(Circle) Is this San	npling Point Within a Wetla	(Circle)							
Remarks:			•									
Pit located a	t top of bank of mar	n-made drainage										

Project/Site:	Folsom Dan	n JFP				Date:	1/13/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Sacra	mento Count	ty	
Investigator:	Keven Ann	Colgate, Da	aniel Ch	ase		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Y	es	No	Community	ID:	Cottonwoo riparian	d- willow	
Is the site significantly di	sturbed (Atypica	1 Situation)?	\square Y	es 🛭	No	Plot ID:		OR5		
Is the area a potentia (If needed, expla			\square Y	es 🛭	No	Transect ID) :	TR1 PIT A		
VEGETATION		side.)								
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Geranium molle		Н	N	IL	9.	•				
2. Populus fremontii fremontii	ssp.	TR	FA	CW	10.					
3. Epilobium ciliatur	n	Н	FA	CW	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW o	r FAC (excludii	ng FAC-):	67%			
Remarks: Some Annual grassland sp HYDROLOGY	portions of the									species.
Recorded Data	(Describe in	Remarks):		WETL	AND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	`	,		Prima	ry Indic	cators:				
Aerial Photogra	aphs			☐ In	undated					
Other				\boxtimes Sa	turated	in upper 12 i	nches			
☐ No Recorded Da	ata Available			$\boxtimes W$	ater Ma	rks				
				□ D ₁	ift Line	s				
					diment l	Deposits				
FIELD OBSERVATION	ONS:			□ D ₁	ainage	Patterns in W	etland	S		
				Second	lary Ind	dicators (2 o	r more	required):		
Depth of Surface W	ater:	NA	_ (in.)	☐ O:	kidized 1	root channels	in upp	er 12 inches		
				\boxtimes W	ater-sta	ined Leaves				
Depth to Free Water	in Pit:	4(in.)		cal Soil	l Survey Data	ı			
				☐ FA	AC-Neu	tral Test				
Depth to Saturated S	Soil	0(in.)	☐ Ot	her (ex	plain in Rem	arks)			
	made ditch @ O dam downsl			-	-	•			rom base o	f

SOILS Plot ID: OR5 TR1 PIT A

	Phase)Auburn-	-argonaut rock outcrop		Drainage Class: Field Observations Confirm Mapped Ty		
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colo (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		5 Y 4/2	10YR 4	1/6	5-10%	Silty clay w/ gravel and cobble
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	Regime tions		Organic Listed or Listed or	ons ganic Content in Surface I Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Li explain in Remarks)	
Remarks:						
Lots of cobl	ble and gravel from	dam material.				
WETLAND) DETERMINATIO)N				
	c Vegetation Present/drology Present?	t? Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetla	(Circle) and? Yes No
Remarks:			-			

Project/Site:	Folsom Dan	ı JFP				Date:	1/13/0	6		
Applicant/Owner:	Bureau of R	eclamation				County:	Sacrai	nento Count	у	
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	rnia		
Do Normal Circums	tances exist o	n the site?	⊠Y€	es 🗌	No	Community	ID:	Annual grassland/ ruderal		
Is the site significantly dis	sturbed (Atypica	l Situation)?	□Ye	es 🖂	No	Plot ID:	•	OR5		
Is the area a potentia (If needed, expla			□Y€	es 🛚	No	Transect ID	: _	TR1 PIT B		
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Geranium molle		Н	NI	L	9.	•				
2. Carduus pycnocep	halus	Н	NI	L	10.					
3. Centaurea solstitio	ılis	Н	NI	Ĺ	11.					
4. Bromus sp.		Н	NI	L	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, I	FACW or	FAC (e	xcludir	ng FAC-): ()%			
	d ruderal gras					<u> </u>				
remarks. Opian	a raderar gra.	ssiana.								
HYDROLOGY										
Recorded Data	`	,		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_			Primar;						
Aerial Photogra	phs			_	ndated					
Other						in upper 12 ii	nches			
☐ No Recorded Da	ıta Available				ter Ma					
					ft Line:					
- 0						Deposits				
FIELD OBSERVATIO	NS:				-	Patterns in W				
D 4 CC C W		NTA			•	licators (2 or		_		
Depth of Surface Wa	ater:	NA	_ (1n.)			root channels ned Leaves	ın upp	er 12 inches		
Depth to Free Water	in Dit:	NΙΛ	(in.)			Survey Data				
Depui to Free water	111 I II.	INA _	(111.)			tral Test	ı			
Depth to Saturated S	oil	NA	_ (in.)	=		plain in Rem	arks)			
Remarks:										

SOILS Plot ID: OR5 TR1 PIT B

Map Unit Na (Series and F		rgonaut-rock outcrop o	0% slopes_	_ Drainage Class: Field Observations	_Well drained	
Taxonomy (S	Subgroup):		Confirm Mapped Ty	pe? Yes No		
Profile Desc	ription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Col (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		10 YR 4/4	10 R 4	1/6	<1%	Fine, silty sand/clay w/ gravel
Hydric Soil I	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	ions		Organic Listed or Listed or	ons ganic Content in Surface I Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	
Remarks:						
None						
WETLAND	DETERMINATIO	N				
	Vegetation Present drology Present? Present?	Yes No Yes No Yes No	(Circle)	Is this Samp	oling Point Within a Wetl	(Circle) and? Yes No
Remarks:			<u> </u>			

Project/Site:	Folsom Dar	n JFP				Date:	1/13/0	06		
Applicant/Owner:	Bureau of R	Reclamation				County:	Sacra	mento Count	у	
Investigator:	Keven Ann	Colgate, Da	aniel Chase	2		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Yes		No	Community	ID:	Freshwater	marsh	
Is the site significantly di	sturbed (Atypica	al Situation)?	□Yes	\boxtimes	No	Plot ID:		OR6		
Is the area a potentia	al Problem Ai	rea?	Yes	\boxtimes	No	Transect ID):	TR1 PIT A	•	
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicator		Dom	inant Plant Sp	ecies		Stratum	Indicator
1. Typha latifolia		Н	OBL	,	9.					
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. F	FACW or F	FAC (e	xcludi	ng FAC-):	100%			
			110 // 011	110 (0	11010101		10070			
Remarks: Area	dominated by	cattaiis								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):	W	Veti.a	ND HV	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o						cators:	ыслі	OKS.		
Aerial Photogra	_		_	_	ndated					
Other	. p.115			_		in upper 12 i	nches			
☐ No Recorded D	ata Available				iter Ma					
			Γ		ft Line					
			Ī	_		Deposits				
FIELD OBSERVATION	ONS:		Ī			Patterns in W	etland	S		
			S		·	dicators (2 o				
Depth of Surface W	ater:	6+	_		•	root channels		_		
•						ined Leaves				
Depth to Free Water	r in Pit:	0(in.)	Loc	cal Soi	l Survey Data	ì			
-						tral Test				
Depth to Saturated S	Soil	0(in.)			xplain in Rem	arks)			
Remarks: Ponde	ed water throu	igh much of	f the site.							

SOILS Plot ID: OR6 TR1 PIT A

Map Unit N (Series and					Drainage Class:	
Taxonomy	(Subgroup):			Field Observations Confirm Mapped Ty	pe? Yes No	
Profile Des	eription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	tions	- - - - -	Organic Listed of Listed of	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)	
Remarks: No pit dug.	Area is inundated a	and colonized with OB	L vegetatio	n.		
WETLANI	DETERMINATIO	N				
	c Vegetation Present drology Present? s Present?	t? Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetla	(Circle)
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	1/13/0)6		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Ye	es 🗆]No	Community	ID:	Ruderal/and grassland	nual	
Is the site significantly di	isturbed (Atypica	l Situation)?	□Ye	es 🗵	No	Plot ID:		OR6		
Is the area a potentia (If needed, expla			□Ye	es 🗵]No	Transect ID):	TR1 PIT B		
VEGETATION		_	_							_
Dominant Plant Spe	ecies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Bromus sp.		Н	NI		9.					
2. Rumex crispus		Н	FAC	W-	10.					
3. Carduus pycnocep	phalus	Н	NI		11.					
4. Hirschfeldia incar	па	Н	NI		12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	FACW or	FAC (e	excludir	ng FAC-): 2	25%			
	need species							ı, etc.		
III/DDOLOGY										
HYDROLOGY	(Dagariha in	D		West A	vid IIv	nnor ogy Iv	DIGAT	ODG.		
Recorded Data	•					DROLOGY IN	DICAT	ORS:		
☐ Stream, Lake, o	_			Primar	y maic indated					
Other	apiis			_		in upper 12 ii	nchos			
☐ No Recorded D	oto Avoiloblo			_	urateu iter Ma		nenes			
☐ No Recorded D	ala Avaliable			_	ift Line					
				=		Deposits				
FIELD OBSERVATION	NS.			_		Patterns in W	etlande	2		
TILLD OBSERVATIO), in the second of the second				_	dicators (2 or				
Depth of Surface W	ater:	NA			•	root channels		-		
Deput of Surface W			_ ()			ined Leaves	upp	12		
Depth to Free Water	r in Pit:	NA	(in.)			Survey Data	l			
1			_ 、			tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	_		plain in Rem	arks)			
Remarks: No hy	ydrology									

SOILS Plot ID: OR6 TR1 PIT B

Map Unit N (Series and				Drainage Class: Field Observations						
Taxonomy	(Subgroup):									
Profile Des	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
Hydric Soil	Indicators:									
——————————————————————————————————————	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime	_ _ _ _ _	Organic Listed of Listed of	etions Organic Content in Surface L c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Lis (Explain in Remarks)					
Remarks:										
No hydric v	vegetation, no hydro	logy. No pit dug								
WETLANI	D DETERMINATIO	ON								
	c Vegetation Presentydrology Present?	Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetla	(Circle)				
Remarks:										

Project/Site:	Folsom Dam JFI	2		Date:	8/2/2	006		
Applicant/Owner:	Bureau of Recla	mation		County:	Place	er		
Investigator:	Gretchen Lebedi	nik, Coralie	Dayde	State:	Calif	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Communi	ty ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situs	ation)?	∐Yes ⊠	No Plot ID:	•	Pit A		
Is the area a potentia	ıl Problem Area?	[⊠Yes □]No Transect I	D:	OR8 TR1		
(If needed, expla	in on reverse side	.) – Season	al wetland					
VEGETATION								
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant S	Species		Stratum	Indicator
1. Lythrum hyssopife	olia	Н	FACW	9.				
2. Rumex pulcher		Н	FAC+	10.				
3. grass, unidentifie	d			11.				
4.				12.				
5.				13.				
6.				14.				
7.				15.				
8.				16.				
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC-):	67 % (or more		
Remarks:			.,		. ,,			
Kemarks.								
HYDROLOGY								
	(Describe in Rem	narks):	WETLA	AND HYDROLOGY 1	NDICAT	TORS:		
Stream, Lake, o	*	,		y Indicators:				
☐ Aerial Photogra	•			ındated				
Other	•		☐ Sa	turated in upper 12	inches			
No Recorded Da	ata Available			ater Marks				
			Dr	ift Lines				
			⊠ Se	diment Deposits				
FIELD OBSERVATION	ons:			ainage Patterns in	Wetland	ls		
			Second	lary Indicators (2	or mor	e required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	□ Ox	xidized root channe	ls in up	per 12 inches		
				ater-stained Leaves	}			
Depth to Free Water	in Pit:	>12_ (in.)	☐ Lo	cal Soil Survey Da	ta			
			☐ FA	C-Neutral Test				
Depth to Saturated S	Soil	>12_ (in.)	Ot	her (explain in Re	marks)			
Remarks: Shallo	ow, ponded area at	t edge of pa	ıth					

SOILS Plot ID: OR8 TR1 Pit A

Map Unit Na (Series and I		coarse sandy loam, 2 to	o 9 percent	slopes	Drainage Class: <u>W</u>	ell drained						
Taxonomy (Subgroup): <u>Ultic</u>	: Haploxeroll	Field Observations Confirm Mapped Type? Yes No									
Profile Desc	ription:											
Depth (inches)	Horizon	Matrix Colors (Munsell Moist) 10YR 4/4	olors Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.							
Hydric Soil												
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	- - - - -	Organic Listed of Listed of	ions ganic Content in Surface I Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)							
WETLAND	DETERMINATIO	N										
	e Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	(Circle)	Is this San	pling Point Within a Wetla	(Circle)						
Remarks:												

Project/Site:	Folsom Dam JFI	•		Date:	8/2/20	006			
Applicant/Owner:	Bureau of Reclar	mation		County:	Place	r			
Investigator:	Gretchen Lebedr	nik, Coralie	Dayde	State:	Califo	ornia			
Do Normal Circums	stances exist on the	e site?	⊠Yes [No Communit	y ID:	ID: Seasonal wetland			
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot ID:		Pit A			
Is the area a potentia	al Problem Area?	[⊠Yes [No Transect II) :	OR9 TR1			
(If needed, expla	in on reverse side	.) seasona	l wetland						
VEGETATION									
Dominant Plant Spe	cias	Stratum	Indicator	Dominant Plant S	nacias		Stratum	Indicator	
1. Lythrum hyssopife		H	FACW	9.	pecies		Stratum	mulcator	
2. Vulpia sp.	ж	Н	FACW - UPL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are (OBL, FAC	W or FAC (excluding FAC-):	50 to 1	00%			
Remarks:	1	,	`	<i>C</i> /					
Temarks.									
HYDROLOGY									
☐ Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLOGY I	NDICAT	ORS:			
Stream, Lake, o	or Tide Gauge		Prima	ry Indicators:					
Aerial Photogra	aphs		☐ In	undated					
Other			☐ Sa	turated in upper 12	inches				
No Recorded Da	ata Available		\square W	ater Marks					
			□ D ₁	rift Lines					
				ediment Deposits					
FIELD OBSERVATION	ONS:			rainage Patterns in V					
				lary Indicators (2 o					
Depth of Surface W	ater: _ <u>N</u>	<u>V/A_</u> (in.)		xidized root channel	s in upp	per 12 inches			
D 4 . D . W .	. D.	14 ()		ater-stained Leaves					
Depth to Free Water	: in Pit:	>14_ (in.)		ocal Soil Survey Dat	a				
Donth to Cotumber 1 9	Soil .	14 (:-)		AC-Neutral Test	aorlea)				
Depth to Saturated S	SOII	<u>>14_</u> (in.)		ther (explain in Ren	iarks)				
Remarks: At ed	ge of grassy area, j	partly unde	er adjacent o	ak canopy					

SOILS Plot ID: OR9 TR1 Pit A

Map Unit N (Series and		coarse sandy loam, 2 to	o 9 percent	slopes	Drainage Class: <u>W</u> Field Observations	Vell drained					
Taxonomy ((Subgroup): <u>Ultic</u>	: Haploxeroll		Confirm Mapped Type? Yes No							
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsel		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-8		10YR 4/4									
Hydria Cail	Indicators										
Hydric Soil				Concre	tions						
	Histosol Histic Epipedon		_	High O	rganic Content in Surface I	Layer in Sandy Soils					
	_ Sulfidic Odor _ Aquic Moisture l		_	Listed	e Streaking in Sandy Soils on Local Hydric Soils List						
	Reducing Condit Gleyed or Low-C		<u> </u>		on National Hydric Soils Li Explain in Remarks)	ist					
Remarks:											
WETLAND	DETERMINATIO	N									
Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No											
	Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No										
Remarks:											

Project/Site:	Folsom Dam JFI	•			Date:	8/2/20	006			
Applicant/Owner:	pplicant/Owner: Bureau of Reclamation					Place	r			
Investigator:	Gretchen Lebedi	nik, Coralie	Dayde State: California							
Do Normal Circums	stances exist on the	e site?	⊠Yes []No	No Community ID: Seasonal wetland					
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	∐No :	Plot ID:		Pit A			
Is the area a potentia	al Problem Area?		⊠Yes [□No ′	Transect ID	:	OR10 TR1			
(If needed, expla	in on reverse side	.)								
VEGETATION				+			<u> </u>			
Dominant Plant Spe	cies	Stratum	Indicator	Domina	ant Plant Sp	ecies		Stratum	Indicator	
1. Lythrum hyssopife	olia	Н	FACW	9.						
2. Vulpia sp.		Н	FACW - UPL	10.						
3. unidentified gras	s	Н		11.						
4.				12.						
5.				13.						
6.				14.						
7.				15.						
8.				16.						
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding	g FAC-): 3	33 to 1	00%			
Remarks:	•									
HYDROLOGY										
☐ Recorded Data	(Describe in Rem	narks):	WETLA	AND HYD	ROLOGY IN	DICAT	ORS:			
Stream, Lake, o	or Tide Gauge		Primai	ry Indica	tors:					
Aerial Photogra	aphs		☐ In	undated						
Other			☐ Sa	aturated in	upper 12 ii	nches				
No Recorded Da	ata Available		\square W	ater Mark	KS					
			☐ Dr	rift Lines						
			⊠ Se	ediment D	eposits					
FIELD OBSERVATION	ONS:		☐ Dr	rainage Pa	atterns in W	etland	S			
			Second	dary Indi	cators (2 or	r more	required):			
Depth of Surface W	ater: _ <u>N</u>	<u>V/A_</u> (in.)				in upp	er 12 inches			
			_		ed Leaves					
Depth to Free Water	in Pit:	<u>>14_</u> (in.)			Survey Data	l				
				AC-Neutra						
Depth to Saturated S	Soil>	<u>>14</u> (in.)	∐ Ot	ther (exp	lain in Rem	arks)				
Remarks: Shallo	ow, ponded area a	djacent to g	graded parkii	ng pad.						

SOILS Plot ID: OR10 TR1 Pit A

	Phase) Andregg	c coarse sandy loam, 2 n, rocky, 2 to 15 percer c Haploxeroll	Drainage Class: Field Observations _ Confirm Mapped T									
Profile Des	cription:											
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Colors Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.							
0-8	0-8 10YR 4/6 7.5YR 5/6 Frequent, but small Sandy, silt											
			-									
	<u> </u>											
				_								
	· -											
Hydric Soil	Indicators:											
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	tions	- - - - -	Organic Listed of Listed of	tions rganic Content in Surface c Streaking in Sandy Soils on Local Hydric Soils Lis on National Hydric Soils I Explain in Remarks)	s t						
Remarks:												
remarks.												
WETLANI	DETERMINATIO	N										
Wetland Hy	Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No (Circle) Yes No Yes No Is this Sampling Point Within a Wetland? Yes No											
Remarks:												

Project/Site:	Folsom Dam JFI	P		Date:	9/12/	2006		
Applicant/Owner:	Bureau of Recla	mation		County:	Sacramento			
Investigator:	Gretchen Lebedi	nik, Sara E	brahim	State:	Calif	ornia		
Do Normal Circums	stances exist on the	e site?	⊠Yes □	No Communit	y ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot ID:		Pit A		
Is the area a potentia			⊠Yes □	No Transect II) :	OR11 TR1		
(If needed, expla	in on reverse side	.)						
VEGETATION								
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant S	pecies		Stratum	Indicator
1. Eleocharis sp.		Н	OBL- FACW	9.				
2. Eryngium aristula	atum	Н	OBL	10.				
3. Cyperus sp.		Н	OBL-FAC	11.				
4.				12.				
5.				13.				
6.				14.				
7.				15.				
8.				16.				
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC-):	67 to 1	00%		
Remarks:								
HYDROLOGY								
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLOGY I	NDICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primar	ry Indicators:				
Aerial Photogra	aphs		☐ Int	undated				
Other			☐ Sa	turated in upper 12	inches			
No Recorded Da	ata Available			ater Marks				
			_	rift Lines				
				diment Deposits				
FIELD OBSERVATION	ONS:			rainage Patterns in V				
				lary Indicators (2 o		-		
Depth of Surface W	ater: <u>1</u>	<u>N/A_</u> (in.)		kidized root channel	s in up	per 12 inches		
D. d. E. W.	. D.	14 ()		ater-stained Leaves				
Depth to Free Water	n Pit:	>14_ (in.)		ocal Soil Survey Dat	a			
Donth to Cotumote 1 C	Soil S	.14 (in)		AC-Neutral Test	norles)			
Depth to Saturated S	SOII	>14_ (in.)	⊔ Ot	her (explain in Ren	iarks)			
Remarks: Shallo	ow, ponded area co	onnected to	culvert und	er Green Valley Ro	ad			

SOILS Plot ID: OR11 TR1 Pit A

Map Unit N (Series and		nt-Auburn complex, 3 to	8 percent	slopes	Drainage Class:	Vell drained					
Taxonomy (Subgroup): Mol	lic Haploxeralfs-Lithic	ots	Field Observations Confirm Mapped Typ	pe? Yes No						
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
8		10YR 3/3									
						-					
Hydric Soil	Indicators:										
	Histosol			Concret							
	Histic Epipedon Sulfidic Odor				rganic Content in Surface I Streaking in Sandy Soils	Layer in Sandy Soils					
-	Aquic Moisture	Regime			on Local Hydric Soils List						
	Reducing Condit	ions		Listed of	on National Hydric Soils Li	st					
	_ Gleyed or Low-0	Chroma Colors		Other ()	Explain in Remarks)						
Remarks:											
Disturbed so	oil may include fill										
Distance a se	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
WETLAND	DETERMINATIO	N									
Hydronhytid	Hydrophytic Vegetation Present? Yes No (Circle) (Circle)										
Wetland Hy	drology Present?	Yes No	(Chele)								
Hydric Soils	Iydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No										
Remarks:											
A swath had	A swath had recently been graded along the inside of the fence paralleling Green Valley Road.										
21 Swam nac	recently been grade	ed along the made of th	ic rence pai	ancing Of	cen vancy Road.						

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Y€	es [No	Community	ID:	Seasonal W	etland	
Is the site significantly di	isturbed (Atypica	l Situation)?	□Y€	es 🗵	No	Plot ID:		W1		
Is the area a potentia	al Problem Ar	rea?	□Y€	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	ain on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor		Н	FA	C	9.	*				
2. Gnaphalium palu		Н	FAC	ZW	10.					
3. Salix sp.		SH	FAC -	OBL	11.					
4. Xanthium struma	rium	Н	FAC	J +	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. I	FACW or	FAC (6	excludi	ng FAC-): 1	100%			
	amples, all sp									
remarks. <u>See se</u>	ampies, an sp	20	70 COVE	110 110	c layer.					
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge			Primar	y Indio	cators:				
Aerial Photogra	aphs			☐ Int	ındated					
Other				Sa Sa	turated	in upper 12 in	nches			
☐ No Recorded D	ata Available			⊠ Wa	ater Ma	rks				
				⊠ Dr	ift Line	s				
				⊠ Sed	liment l	Deposits				
FIELD OBSERVATION	ONS:				_	Patterns in W				
					•	dicators (2 or		_		
Depth of Surface W	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
						ined Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)			Survey Data				
B 4 . C	7 '1	374	<i>(</i> •)	=		tral Test	1 \			
Depth to Saturated S	Soil	NA	_ (in.)	☐ Oti	her (ex	plain in Rema	arks)			
Damarkar Dalam	u hoth tub ===	~								
Remarks: Below	v bath tub ring	<u> </u>								

SOILS Plot ID: W1 PIT A

Map Unit N (Series and		Water		Drainage Class: Field Observations	_NA
Taxonomy	(Subgroup):	Matrix Colors (Munsell Moist) Mottle Colors (Munsell Moist) No NA Fine sand 2.5 Y 4/2 NA NA NA Fine sand Concretions High Organic Content in Surface Layer in Sandy Soils Tutre Regime Organic Streaking in Sandy Soils Listed on National Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) ATION ATION Present? Yes No (Circle) Mottle Colors Mottle Abundance/Contrast Mottle Colors Mottle Colors Onceretions Mottle Colors Mottle Colors Onceretions Mottle Colors Onceretions Mottle Colors Onceretions I Extructure, etc. Texture, Concretions Fine sand On NA Fine sand Concretions High Organic Content in Surface Layer in Sandy Soils Listed on National Hydric Soils List Other (Explain in Remarks) ATION (Circle) (Circle)			
Profile Des	cription:			Field Observations Confirm Mapped Type? Yes Mottle Colors Munsell Moist) No NA NA Fine sa NA NA NA Fine sa NA NA NA Fine sa NA NA Fine sa NA NA NA Fine sa NA NA NA Fine sa NA NA NA NA Fine sa NA NA NA NA Salada S	
Depth (inches)	Horizon				Texture, Concretions, Structure, etc.
0-14	<u> </u>	10 YR 4/3	No	NA	Fine sand
14-17		2.5 Y 4/2	NA	NA NA	Fine sand
Hydric Soil	Indicators:				
	Histosol Histic Epipedo Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low	e Regime ditions	High Organ Listed	Organic Content in Surface : nic Streaking in Sandy Soils d on Local Hydric Soils List d on National Hydric Soils L	
Remarks:					
No mottles	but low chroma m	atrix @ ~14". Must be	chroma of 1 or $$	with mottles.	
WETLAND	DETERMINATI	ON			
	c Vegetation Prese drology Present? s Present?	Yes No		ampling Point Within a Wetl	(Circle)
Remarks:					

Photos 5/6/7 N 38° 45'28.33" W 121° 08'25.72"

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:				County:	Placer	County				
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	$\boxtimes Y$	es 🗆	No	Community	ID:	Seasonal W	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:		W1		
Is the area a potentia	al Problem Ar	ea?	$\square Y$	es 🗵	No	Transect ID	:	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domin	ant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor		Н	FA	AC	9.	•				
2. Xanthium strumai	rium	Н	FA	C +	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	t Species that	are OBL. I	FACW 01	r FAC (e	excludin	g FAC-): 1	100%			
	and vegetation					<u> </u>				
Kemarks. Wetta	inu vegetation	l.								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	AND HYD	ROLOGY IN	DICAT	ORS:		
Stream, Lake, o	`			Primar	ry Indica	ators:				
Aerial Photogra	nphs			☐ Inu	undated					
Other				☐ Sa	turated in	n upper 12 iı	nches			
☐ No Recorded Da	ata Available			⊠ Wa	ater Mar	ks				
				⊠ Dr	ift Lines					
				⊠ Sed	liment D	eposits				
FIELD OBSERVATIO	NS:			☐ Dr	ainage P	atterns in W	etland	S		
					•	icators (2 or				
Depth of Surface Wa	ater:	NA	_ (in.)				in upp	er 12 inches		
						ned Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data	L			
		_			C-Neuti					
Depth to Saturated S	Soil	NA	_ (in.)	∐ Otl	her (exp	olain in Rema	arks)			
Remarks: Within	n OHWM of 1	Folsom Lal	œ.							

SOILS Plot ID: W1 PIT B

Map Unit N (Series and		Water			Drainage Class:	NA
Taxonomy	(Subgroup):	NA			Field Observations Confirm Mapped Type? Ors Mottle Texture, Ostructure, NA Fin	pe? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsel			Texture, Concretions, Structure, etc.
0-8		10 YR 4/3	N	A	NA	Fine sand
8-17	<u> </u>	2.5 Y 4/2	5YF	2 4/6	40%	Fine sand
Hydric Soil	Indicators:					
	Histosol			Concre	etions	
	Histic Epipedo Sulfidic Odor	on	_			ayer in Sandy Soils
_	Aquic Moistur		_	Listed	on Local Hydric Soils List	
	Reducing Con Gleyed or Low	ditions v-Chroma Colors	_			st
	Gleyed of Low	v-Chroma Colors		Other	(Explain in Kelliarks)	
Remarks:						
Mottles are	layered streaks. S	ome clay in texture.				
<u>'</u>						
WETLAND	DETERMINAT	ION				
Hydrophyti	c Vegetation Prese	ent? Yes No	(Circle)			(Circle)
	drology Present?	Yes No Yes No	(energ)	Is this Sar	mpling Point Within a Wetla	
Remarks:						

Project/Site:	Folsom Dan	n JFP				Date:	11/16	5/05		
Applicant/Owner:				County:	Place	r County				
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	⊠Y	es 🗌]No	Community	ID:	Seasonal W	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:		W1		
Is the area a potentia	al Problem Ar	ea?	$\square Y$	es 🗵	No	Transect ID	:	TR1 PIT C		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FA	AC	9.	•				
2. Juncus sp.		Н	FAC -	- OBL	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW o	r FAC (e	excludin	ng FAC-):	100%			
Remarks: Can't	identify Junc	us to specie	s, no flo	wer.						
HYDROLOGY						_				
Recorded Data	`					DROLOGY IN	DICAT	ORS:		
☐ Stream, Lake, o	•			Primar	•	ators:				
Aerial Photogra	ipns			_	ındated	: 10 :.				
☐ Other☐ No Recorded Da	oto Avoiloblo				iuraied i ater Mai	in upper 12 ii	ncnes			
☐ No Recorded Da	ata Avanable			_	ift Lines					
						S Deposits				
FIELD OBSERVATION	NS.					Patterns in W	etland	\$		
TIEBO OBSERVITIO	110				_	licators (2 or				
Depth of Surface W	ater:	NA	_ (in.)		-	oot channels		_		
1			_ 、 /			ned Leaves	11			
Depth to Free Water	in Pit:	NA	_ (in.)	☐ Lo	cal Soil	Survey Data	l			
				☐ FA	C-Neut	ral Test				
Depth to Saturated S	Soil	NA	_ (in.)	Ot	her (ex	plain in Rem	arks)			
Pamarks:										

SOILS Plot ID: W1 PIT C

Map Unit N (Series and		Water_		Drainage Class: Field Observations	NA				
Taxonomy (Subgroup):	NA_		Confirm Mapped Ty	ype? Yes No				
Profile Desc	cription:								
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-17		7.5 YR 5/4	NA	NA	Fine- med sand w/ some gravel				
	-								
Hydric Soil	Indicators:								
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	High Org List List	ncretions th Organic Content in Surface ganic Streaking in Sandy Soils ted on Local Hydric Soils List ted on National Hydric Soils L ter (Explain in Remarks)					
Remarks:									
Pit is approx	cimately 150 feet fro	om edge of OHWM (ba	th tub ring). No hyo	dric soil indicators, but soil is	sand.				
WETLAND	DETERMINATIO	N							
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No (Circle) Yes No Yes No Is this Sampling Point Within a Wetland? Yes No									
Remarks:			ı						

Project/Site:	Folsom Dam	JFP				Date:	11/18	/05		
Applicant/Owner:	stigator: Keven Ann Colgate, Dan					County:	Placer	r County		
Investigator:	Keven Ann (Colgate, Da	niel Cha	ise		State:	Califo	ornia		
Do Normal Circums	tances exist or	n the site?	$\boxtimes Y$	es 🗆]No	Community	ID:	Seasonal W	etland	
Is the site significantly dis	sturbed (Atypical	Situation)?	\square Ye	es 🗵	No	Plot ID:		W1		
Is the area a potentia			□Ye	es 🗵	No	Transect ID	:	TR1 PIT D		
(If needed, expla	in on reverse s	side.)								
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus sp.		TR	N.	L	9.				n	
2. Pinus sabiniana		TR	N	L	10.					
3. Bromus sp.		Н	N	L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	t Species that	are OBL. F	ACW or	· FAC (e	excludir	ng FAC-): ()%			
	eus sp. likely Q			(-		-8				
Remarks. Quere	us sp. likely g	zuercus wi.)							
HYDROLOGY										
Recorded Data	(Describe in l	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge	ŕ		Primar	y Indic	eators:				
Aerial Photogra	phs			☐ Inu	ındated					
Other				☐ Sat	turated i	in upper 12 iı	nches			
☐ No Recorded Da	ata Available			☐ Wa	ater Ma	rks				
				☐ Dr	ift Lines	S				
				Sed	liment I	Deposits				
FIELD OBSERVATIO	NS:			☐ Dra	ainage I	Patterns in W	etland	s		
				Second	ary Ind	licators (2 or	r more	required):		
Depth of Surface Wa	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
						ned Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data	l			
		_				tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	∐ Otl	her (ex	plain in Rema	arks)			
Remarks: Appro	oximately 2 fee	et upslope	from OH	WM.						

SOILS Plot ID: W1 PIT D

Map Unit Name (Series and Phase)Andreg	gg Coarse Sandy Loam, 2-9%	% slopes						
Taxonomy (Subgroup): <u>Ulti</u>	c Haploxeroll		Field Observations Confirm Mapped Ty	pe? Yes No				
Profile Description:								
Depth (inches) Horizon		ottle Colors Junsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-6 Remarks: No pit dug – upland site. No hy	Regime tions Chroma Colors	Organic Listed of Listed of Other (1)	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)					
WETLAND DETERMINATIO)N							
Hydrophytic Vegetation Presen Wetland Hydrology Present? Hydric Soils Present?	t? Yes No (Cir Yes No Yes No		npling Point Within a Wetla	(Circle) and? Yes No				
Remarks:								

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	\boxtimes Y ϵ	es 🗆]No	Community	ID:	Seasonal W	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Y€	es 🗵	No	Plot ID:		W2		
Is the area a potentia	al Problem Ar	ea?	\Box Y ϵ	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Salix gooddingii		TR	OB	L	9.					
2. Gnaphalium palu.	stre	Н	FAC	CW	10.					
3. Xanthium strumar		Н	FAC	C +	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	FACW or	FAC (e	excludii	ng FAC-): 1	100%			
	<20% cover o									
remarks.	×2070 COVET 0	1 Cynedon,	Spui guit	ти вр.,	1 oiyge					
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge			Primar	y Indic	eators:				
Aerial Photogra	nphs			☐ Int	ındated					
Other				☐ Sa	turated	in upper 12 ii	nches			
☐ No Recorded Da	ata Available			_	ater Ma					
				_	ift Line					
						Deposits				
FIELD OBSERVATIO	ons:				-	Patterns in W				
					•	dicators (2 or		-		
Depth of Surface Wa	ater:	NA	_ (in.)			root channels	in upp	per 12 inches		
D 4 (E W)	. D.	NTA	<i>(</i> :)	_		ined Leaves				
Depth to Free Water	in Pit:	NA	_ (1n.)			Survey Data	l			
Donth to Caturated S	loi1	NI A	(in)			tral Test	orka)			
Depth to Saturated S	0011	NA	_ (111.)	☐ Oti	nei (ex	plain in Rema	aiks)			
Remarks: Damp	, but not satu	rated. Uppe	er layer (clay) is	much v	vetter than mi	iddle sa	and layer		

SOILS Plot ID: W2 PIT A

34 77 1.37					
Map Unit Na		Water		Drainage Class:	NA
(Series and F		water		Field Observations	NA
Taxonomy (S	Subgroup):	NA		Confirm Mapped Ty	rpe? Yes No
, ,	<i>C</i> 17			11 3	,)
Profile Desc	ription:				
Depth		Matrix Colors	Mottle Colors	Mottle	Texture, Concretions,
(inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.
(menes)	HOHZOH	(Muliscii Moist)	(Munsen Moist)	Abundance/Contrast	Structure, etc.
0-2		10 YR 4/2	10 R 3/3	6%	clay/silt
0-2		10 1K 4/2	10 K 3/3	U70	<u>Ciay/siit</u>
2.2		0.51.50	0.57.57.6	2007	
2-3		2.5 Y 5/3	2.5 Y 5/6	30%	silty clay
3-7		10 YR 4/2	10 R 3/3	40%	silty clay
7-17		2.5 Y 5/4	NA	NA	medium sand
Hydric Soil l	Indicators:				
	_ Histosol		Concre		
	Histic Epipedor	1		Organic Content in Surface	Layer in Sandy Soils
	_ Sulfidic Odor			ic Streaking in Sandy Soils	
	_ Aquic Moisture			on Local Hydric Soils List	
<u>X</u>				on National Hydric Soils L	ist
	Gleyed or Low-	-Chroma Colors	Other	(Explain in Remarks)	
D 1					
Remarks:					
No hydric in	dicators balow 7 i	nchas Dit is annrovime	ataly 5 fact from adga	of drainage/creek within rip	arian carridar
ivo flydfic fil	dicators below 7-1	menes. Tit is approxima	atery 5 feet from edge (or dramage/creek within rip	arian corridor.
WETLAND	DETERMINATION	ON			
Hydrophytic	Vegetation Preser	nt? Yes No	(Circle)		(Circle)
	drology Present?	Yes No	` '		
Hydric Soils		Yes No	Is this Sa	mpling Point Within a Wetl	and? Yes (No)
Remarks:			<u>I</u>		
Tomarks.					

Project/Site: Applicant/Owner:	Folsom Dan Bureau of R					_ Date: _ County:	11/16	/05 r County		
Investigator:	Keven Ann					_ County State:	Califo	•		
Do Normal Circums			⊠Ye		No	Community		Seasonal W	/etland	
Is the site significantly dis			□Ye]No	Plot ID:	ID.	W2	Ctiana	
Is the area a potentia			□Ye		No	Transect ID		TR1 PIT B		
(If needed, expla			ште	, 🔼	1110	Transect ID	•	TRITII D		
•										
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicato	r	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Xanthium strumar	ium	Н	FAC	+	9.					
2. Gnaphalium palus	stre	Н	FAC	W	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL. I	FACW or	FAC (e	excludin	ng FAC-):	100%			
	=20% cover						200,0			
Kemarks. Also v		by Eroaian	n sp and 1	Olygor	ит ѕр.					
HYDROLOGY										
Recorded Data	(Describe in	Remarks):	•	WETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge	, ;]	Primar	y Indic	ators:				
Aerial Photogra	phs			☐ Inu	ındated					
Other				☐ Sat	turated i	in upper 12 ii	nches			
☐ No Recorded Da	ıta Available			⊠ Wa	ater Mai	rks				
				Dri	ift Lines	s				
				⊠ Sed	liment [Deposits				
FIELD OBSERVATIO	NS:			☐ Dra	ainage I	Patterns in W	etland:	S		
				Second	ary Ind	licators (2 or	r more	required):		
Depth of Surface Wa	ater:	NA	_ (in.)	Oxi	dized ro	oot channels	in upp	er 12 inches		
				☐ Wa	ter-stair	ned Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data	ı			
				_		ral Test				
Depth to Saturated S	oil	NA	_ (in.)	∐ Otl	her (exp	plain in Rem	arks)			
Remarks: Damp	soil, but not	saturated.								

SOILS Plot ID: W2 PIT B

Map Unit N (Series and	Jame Phase)	Water		Drainage Class:	NA
Taxonomy	(Subgroup):	NA			ype? Yes No
Profile Des	cription:			Mottle Abundance/Contrast NA Fine san Prine san Structure, etc. NA Fine san Solar and sol	
Depth (inches)	Horizon	group):			Texture, Concretions, Structure, etc.
0-17	· <u></u>	10 YR 4/3	NA	NA NA	Fine sand
Hydric Soil	Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit	Regime	High Organ Listed	nic Streaking in Sandy Soils d on Local Hydric Soils List	
Remarks: Pit B is wit	Gleyed or Low-C			(Explain in Remarks) 60 feet west). Pit A is in ripar	ian area.
WETLANI	O DETERMINATIO	N .			
	c Vegetation Presen ydrology Present? s Present?	t? Yes No Yes No Yes No	(Circle) Is this Sa	ampling Point Within a Wetl	(Circle) and? Yes No
Remarks:					

Project/Site:	Folsom Dam	ı JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of Ro	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	niel Cha	se		State:	Califo	ornia		
Do Normal Circums	stances exist or	n the site?	\boxtimes Y ϵ	es 🗆]No	Community	ID:	Seasonal W	etland	
Is the site significantly di	sturbed (Atypical	Situation)?	□Y€	es 🛚	No	Plot ID:		W2		
Is the area a potentia	al Problem Are	ea?	\square Y ϵ	es 🛚	No	Transect ID	:	TR1 PIT C		
(If needed, expla	nin on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FA	.C	9.	_				
					10.					
					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	ACW or	FAC (e	xcludir	ng FAC-): 1	100%			
	species is Cyn					<u> </u>				
Temarks. Omy	species is cyn	ouon uuci y	ion.							
HYDROLOGY										
☐ Recorded Data	(Describe in l	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge			Primar	y Indic	cators:				
Aerial Photogra	aphs			☐ Inui	ndated					
Other				☐ Satu	ırated i	n upper 12 in	ches			
☐ No Recorded Da	ata Available			☐ Wa	ter Mar	ks				
				☐ Dri	ft Lines	3				
				☐ Sed	iment I	Deposits				
FIELD OBSERVATION	ONS:				-	Patterns in We				
					-	dicators (2 or		_		
Depth of Surface W	ater:	NA	_ (in.)			oot channels	in upp	er 12 inches		
						ned Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)			Survey Data				
D 4 4 5 4 5 5	7 '1	3.7.4	<i>(</i> ' \	_		ral Test	1 \			
Depth to Saturated S	S01l	NA	_ (1n.)	∐ Oth	er (exp	olain in Rema	ırks)			
Remarks: Appro	oximately 60 f	eet west of	road, and	d 100 fe	et soutl	neast (downsl	lope) o	f OHWM.		

SOILS Plot ID: W2 PIT C

Map Unit Name				
(Series and Phase)Water				
Taxonomy (Subgroup):	xonomy (Subgroup):NA		Field Observations Confirm Mapped Type? Yes No	
Profile Description:				
Depth (inches) Horizon		Mottle Colors Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-17 -	10 YR 5/3	NA	NA	Fine -medium sand
<u> </u>				
Hydric Soil Indicators:				
Histosol Concretions Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)				
Remarks:				
No indicators of hydrology				
WETLAND DETERMINATION				
Hydrophytic Vegetation Presen Wetland Hydrology Present? Hydric Soils Present?	t? Yes No (C Yes No Yes No	Is this Sam	npling Point Within a Wetla	(Circle)
Remarks:				

Project/Site:	Folsom Dan	n JFP				Date:	11/18/	05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Chas	e		State:	Califo	rnia		
Do Normal Circums	tances exist o	on the site?	⊠Yes	s 🗆	No	Community	/ ID:	Interior Liv woodland	e oak	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Yes	\boxtimes	No	Plot ID:	•	W2		
Is the area a potentia (If needed, expla			□Yes	s 🛚	No	Transect ID): _	TR1 PIT D		
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicator	r	Domi	nant Plant Sp	pecies		Stratum	Indicator
1. Quercus wislizeni	i	TR	NL	,	9.	•				
2. Quercus douglasi	i	SH	NL	,	10.					
3. Bromus sp.		Н	NL	,	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW or l	FAC (e	xcludir	ng FAC-):	0%			
Remarks: Oak v	voodland									
HYDROLOGY			_			_				
Recorded Data	`	· · · · · · · · · · · · · · · · · · ·				DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_		ŀ	Primary						
Aerial Photogra	ipns				ndated		1			
☐ Other☐ No Recorded Da	oto Arroiloblo				urated : ter Ma	in upper 12 i	ncnes			
☐ No Recorded Da	ata Avamable				ft Line					
						s Deposits				
FIELD OBSERVATION	MC•					Patterns in W	/etlands	,		
FIELD OBSERVATIO	113.		9			dicators (2 o				
Depth of Surface Wa	ater:	NA	_ (in.)		•	root channels				
Depuir of Surface W			_ (****)			ined Leaves	чрр	. 12		
Depth to Free Water	in Pit:	NA	(in.)			Survey Data	ì			
<u>.</u>			_ ` / !			tral Test				
Depth to Saturated S	Soil	NA	_ (in.)			plain in Rem	arks)			
Remarks: Pit D	located on top	of bench	above OH	WM.						

SOILS Plot ID: W2 PIT D

Map Unit Name (Series and Phase)Andregg Coarse Sandy Loam, 2-9% slopes Drainage Class:Well drained Field Observations											
Taxonomy ((Subgroup): <u>Ultic</u>	: Haploxeroll				ype? Yes No					
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
Hydric Soil Indicators:											
Hydric Soil Indicators: Histosol Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Other (Explain in Remarks)											
Remarks:											
Upland site-	no pit excavated										
WETLAND	DETERMINATIO	N									
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No Is this Sampling Point Within a Wetland? Yes No											
Remarks:											

Project/Site:	Folsom Dan	n JFP				Date:	11/16/	05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	rnia		
Do Normal Circums	tances exist o	on the site?	⊠Y6	es []No	Community	ID:	Cottonwood riparian	d willow	
Is the site significantly dis	sturbed (Atypica	l Situation)?	□Ye	es 🗵	No	Plot ID:		W3		
Is the area a potentia (If needed, expla			□Ye	es 🗵	No	Transect ID	: _	TR1 PIT A		<u> </u>
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylon	ļ	Н	FA	vC	9.					
2. Xanthium strumar	rium	Н	FAG	C +	10.					
3. Salix gooddingii		TR	OF	3L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, I	FACW or	FAC (e	xcludin	ng FAC-):	100%			
	in among will						is rela	tively dense	Cover ~9	5-100%
Trist	in uniong win	low deep	200 000	TOOLIVE	Of Tulli	p. vegetation	113 1014	divery delise.	COVEL 3.	7 10070
HYDROLOGY										
☐ Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	DROLOGY IN	DICATO	ORS:		
Stream, Lake, o	r Tide Gauge			Primar	y Indic	ators:				
Aerial Photogra	phs			☐ Inu	ndated					
Other				☐ Sat	urated i	in upper 12 ii	nches			
☐ No Recorded Da	nta Available			\boxtimes Wa	iter Mai	rks				
					ft Lines					
						Deposits				
FIELD OBSERVATIO	NS:				_	Patterns in W				
					•	licators (2 or		-		
Depth of Surface Wa	ater:	NA	_ (in.)			oot channels	in upp	er 12 inches		
D 4 (E W)	' D'	NTA	<i>(</i> ;)			ned Leaves				
Depth to Free Water	ın Pit:	NA	_ (1n.)			Survey Data	l			
Depth to Saturated S	oil	NA	_ (in.)	=		ral Test plain in Rem	arks)			
Remarks:										

SOILS Plot ID: W3 PIT A

Map Unit N (Series and	ame Phase)	Water		Drainage Class:NA Field Observations							
Taxonomy (Subgroup):	NA		Confirm Mapped Typ	pe? Yes No						
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.						
0-14		7.5 YR 3/2	NA	NA	Fine-med sand						
	-										
Hydria Coil Indiantara											
Hydric Soil Indicators:											
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks:				· •							
	dia mast 12 14 in aba	va Vary commented C	ome leam in texture	till rooms omsmobiles							
100 nard to	dig past 13-14 inche	es. Very compacted. S	ome ioam in texture, s	sun very crumbly.							
WETLAND	DETERMINATIO	N									
	e Vegetation Present drology Present? s Present?	? Yes No Yes No Yes No	(Circle) Is this Sar	npling Point Within a Wetla	(Circle) and? Yes No						
Remarks:											

Project/Site:	Folsom Dan	n JFP				Date:	11/16	05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Chas	se		State:	Califo	rnia		
Do Normal Circums	tances exist o	on the site?	⊠Ye:	s \Box]No	Community	ID:	Interior live woodland	e oak	
Is the site significantly dis	sturbed (Atypica	l Situation)?	☐Ye:	s 🗵	No	Plot ID:	•	W3		
Is the area a potentia (If needed, expla			☐Yes	s 🗵]No	Transect ID): _	TR1 PIT B		<u> </u>
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicato	r	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus sp.		TR	NL	,	9.					
2. Heterotheca grand	diflora	Н	NL	,	10.					
3. Centaurea solstiti	alis	Н	NL	,	11.					
4. Bromus sp.		Н	NL	,	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, I	FACW or	FAC (e	xcludii	ng FAC-): (0%			
Remarks: Uplan	d									
HYDROLOGY										
Recorded Data	•	· · · · · · · · · · · · · · · · · · ·				DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_		1	Primar _.	•					
Aerial Photogra	phs			=	ndated					
Other						in upper 12 i	nches			
☐ No Recorded Da	ita Available			=	iter Ma					
					ft Line					
Ever o Opgroviatio	NG.					Deposits	7 - 411 -			
FIELD OBSERVATIO	NS:					Patterns in Wilcators (2 or				
Depth of Surface Wa	ator:	NA	_ (in.)		•	root channels		_		
Depui of Surface wa	att.	NA	_ (III.)			ined Leaves	ти ирр	ci 12 menes		
Depth to Free Water	in Pit:	NA	(in.)			Survey Data	ı			
		* ``* *	_ (/			tral Test	-			
Depth to Saturated S	oil	NA	_ (in.)	_		plain in Rem	arks)			
Remarks: Above	e OHWM (ba	th tub ring)	ı .							

SOILS Plot ID: W3 PIT A

	Phase)And	regg Coarse Sandy Loar	Drainage Class: Field Observations Confirm Mapped Ty							
Profile Desc	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-17		7.5 YR 5/4	NA	NA	Fine-med-coarse sand					
Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks) Remarks:										
Upland – no	indicators									
WETLAND DETERMINATION										
	c Vegetation Presended videology Present?	nt? Yes No Yes No Yes No	(Circle)) Is this 5	Sampling Point Within a Wetl	(Circle) and? Yes No					
Remarks:										

Project/Site: Applicant/Owner: Investigator: Do Normal Circumst Is the site significantly dis Is the area a potentia (If needed, explain	sturbed (Atypical l Problem Are	eclamation Colgate, Da n the site? I Situation)?		es 🗆]No]No]No	Date: County: State: Community Plot ID: Transect ID	Califo ID:	County		_
VEGETATION	in on reverse	siuc.)								
Dominant Plant Spec	ries	Stratum	Indicate	or.	Domir	nant Plant Sp	necies		Stratum	Indicator
1. Salix sp.	2103	SH	FAC-		9.	iant i iant Sp	occies		Stratum	mulcator
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	ara ORI I	EACW or	· EAC (a		α EAC)·	100%			
							10070			
Remarks: Willow	w are juvenile	trees or sn	irubs; car	t identi	iry to sp	ecies.				
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	ROLOGY IN	DICAT	ORS:		
Stream, Lake, or	•	,		Primar			DICITI	01151		
Aerial Photogra	•				ındated					
Other	.					n upper 12 i	nches			
☐ No Recorded Da	ta Available				ater Mar					
_				☐ Dri	ift Lines	,				
				⊠ Sed	iment D	eposits				
FIELD OBSERVATION	NS:			☐ Dra	ainage F	atterns in W	etland	S		
				Second	ary Ind	icators (2 o	r more	required):		
Depth of Surface Wa	iter:	0(in.)	Oxi	dized ro	ot channels	in upp	er 12 inches		
				☐ Wa	ter-stain	ed Leaves				
Depth to Free Water	in Pit:	0(in.)	☐ Lo	cal Soil	Survey Data	ı			
				☐ FA	.C-Neut	ral Test				
Depth to Saturated S	oil	0(in.)	Otl	ner (exp	olain in Rem	arks)			
Remarks: No pit	dug. Standir	ng water								

SOILS Plot ID: W3 PIT C

Map Unit Nar (Series and Ph		Water_		Drainage Class:NA						
Taxonomy (St	ubgroup):	NA			Field Observations Confirm Mapped Typ	pe? Yes No				
Profile Descri	ption:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Col (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
Hydric Soil In	ndicators:									
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)										
Remarks:										
Area is inunda	ated with OBL veg	etation. No pit dug								
WETLAND I	DETERMINATIO	N								
	Vegetation Present rology Present?	? Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetla	(Circle) and? Yes No				
Remarks:										
Site located at	t the toe of the boa	t launch ramp.								

Project/Site:	Folsom Dar	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Y	es [No	Community	ID:	Seasonal W	retland	
Is the site significantly di	sturbed (Atypica	1 Situation)?	□Y	es 🗵	No	Plot ID:		W4		
Is the area a potentia	al Problem Ar	rea?	□Y	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	in on reverse	side.)								<u></u>
VEGETATION			1		1					
Dominant Plant Spe	cies	Stratum	Indicate		Domir	nant Plant Sp	ecies		Stratum	Indicator
1. Salix gooddingii		TR	OF		9.					
2. Juncus sp.		Н	FAC -	OBL	10.					
3. Xanthium struma	rium	Н	FA		11.					
4. Salix sp.		SH	FAC -	OBL	12.				<u> </u>	
5. Cynodon dactylor	ı	Н	FA	C	13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW 01	FAC (excludin	g FAC-): 1	100%			
Remarks:	•	, i		`		<u> </u>				
HYDROLOGY										
☐ Recorded Data	(Describe in	Remarks):		WETLA	AND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge	;		Primar	ry Indica	ators:				
Aerial Photogra	aphs			☐ Int	undated					
Other				☐ Sa	turated i	n upper 12 ii	nches			
No Recorded Da	ata Available			\boxtimes W	ater Mar	·ks				
				⊠ Dr	ift Lines	;				
				⊠ Sec	diment D	eposits				
FIELD OBSERVATION	ONS:			☐ Dr	ainage F	atterns in W	etland	S		
				Second	lary Ind	icators (2 or	more	required):		
Depth of Surface W	ater:	NA	_ (in.)	☐ Ox	kidized r	oot channels	in upp	er 12 inches		
				□ W	ater-staiı	ned Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)	☐ Lo	cal Soil	Survey Data	Į.			
					AC-Neut					
Depth to Saturated S	Soil	NA	_ (in.)	∐ Ot	her (exp	olain in Rema	arks)			
Remarks: Pit on	edge of swal	e/ depression	on.							

SOILS Plot ID: W4 PIT A

Map Unit N (Series and		Water	_	Drainage Class:NA Field Observations					
Taxonomy (Subgroup):	NA			Confirm Mapped Ty	rpe? Yes No			
Profile Desc	eription:								
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
0-17		10 YR 4/2	NA	<u> </u>	NA	Fine –med sand			
Hydric Soil	Indicators:								
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-o	Regime tions Chroma Colors		Organic Listed of	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils L Explain in Remarks)				
WETT AND	DETERMINATIO	a.							
	DETERMINATIO								
	c Vegetation Present drology Present? s Present?	t? Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetl	(Circle) and? Yes No			
Remarks:									

Project/Site:	Folsom Dan	n JFP				Date:	11/16/	05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Chas	se		State:	Califo	rnia		
Do Normal Circums	tances exist o	n the site?	⊠Ye	s 🔲	No	Community	ID:	Cottonwood riparian	d willow	
Is the site significantly dis	sturbed (Atypica	l Situation)?	□Ye	s 🖂	No	Plot ID:		W4		
Is the area a potentia (If needed, expla			□Ye	s 🔯	No	Transect ID): _	TR1 PIT B		
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicato	r	Domii	nant Plant Sp	ecies		Stratum	Indicator
1. Juncus sp.		Н	FAC -	OBL	9.					
2. Mimulus guttatus		Н	OB	L	10.					
3. Xanthium strumar	ium	Н	FAC	<u>'</u> +	11.					
4. Salix gooddingii		TR	OB	L	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, F	FACW or	FAC (e:	xcludin	ig FAC-):	100%			
Remarks: Pit in	swate/depress	sion. No inc	licators of	f flow						
HYDROLOGY										
Recorded Data	(Describe in	Remarks):	•	WETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge]	Primary	y Indic	ators:				
Aerial Photogra	phs			_	ndated					
Other						in upper 12 in	nches			
☐ No Recorded Da	ıta Available			_	ter Mar					
					ft Lines					
T 0						Deposits				
FIELD OBSERVATIO	NS:		4		-	Patterns in W				
Danth of Conform W	. 4	NTA			•	licators (2 or		_		
Depth of Surface Wa	ater:	NA	_ (1II.)			oot channels ned Leaves	ın upp	er 12 inches		
Depth to Free Water	in Pit·	NA	(in)	_		Survey Data	1			
Depui to Free water	111 1 11.	11/17	_ (111.)			ral Test	•			
Depth to Saturated S	oil	0(in.)	=		plain in Rem	arks)			
Remarks: See co	omment above	e								

SOILS Plot ID: W4 PIT B

Map Unit Na (Series and P	NA									
Taxonomy (S	Subgroup):	NA		Field Observations Confirm Mapped Typ	pe? Yes No					
Profile Desci	ription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-17		10 YR 3/1	NA	NA	Fine -med -coarse sand					
				_						
Hydric Soil I	Indicators:									
Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List X Gleyed or Low-Chroma Colors Other (Explain in Remarks)										
Remarks:										
Uniform prof	file. No other indica	ators.								
WETLAND	DETERMINATIO)N								
	Vegetation Present drology Present? Present?	t? Yes No Yes No Yes No	(Circle) Is this	Sampling Point Within a Wetla	(Circle)					
Remarks:										

Project/Site:	Folsom Dan	n JFP				Date:	11/18	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, D	aniel Chase	e		State:	Califo	ornia		
Do Normal Circums	tances exist o	on the site?	⊠Yes		No	Community	/ ID:	Interior live woodland	e oak	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Yes		No	Plot ID:	•	W4		
Is the area a potentia (If needed, expla			□Yes		No	Transect ID) :	TR1 PIT C		
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicator	•	Domi	nant Plant Sp	pecies		Stratum	Indicator
1. Quercus wislizen	ii	TR	NL		9.	•				
2. Bromus sp.		Н	NL		10.					
3. Epilobium brach	ycarpum	Н	NL		11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW or I	FAC (e	xcludir	ng FAC-): (0%			
Remarks: Uplan	d community									
HYDROLOGY										
Recorded Data	`	· · · · · · · · · · · · · · · · · · ·				DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	•		P	rimary —						
Aerial Photogra	phs		Į.	_	ndated					
☐ Other			Į.			in upper 12 i	nches			
☐ No Recorded Da	ata Available		l r		ter Ma					
			l T		ft Line					
FIELD OBSERVATIO	MC.		L [Deposits Patterns in W	/otlanda	,		
FIELD OBSERVATIO	IND.		L			dicators (2 o				
Depth of Surface Wa	ater:	NA	_		•	root channels				
Depui of Surface VV			_ () [ined Leaves	, iii upp	or 12 menes		
Depth to Free Water	in Pit:	NA	(in.)			Survey Data	ì			
•			[tral Test				
Depth to Saturated S	Soil	NA	_ (in.) [Oth	ner (ex	plain in Rem	arks)			
Remarks: Above	e OHWM – n	o indicators	s of hydrol	ogy.						

SOILS Plot ID: W4 PIT C

	Phase)X	Xerothents, cut and fill ar	Fie	Drainage Class: _Well/Excessively drained_ Field Observations Confirm Mapped Type? Yes No					
					шиш марреа т	ype: Tes Tvo			
Profile Desc Depth (inches)	eription: Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moi	Mottle	lance/Contrast	Texture, Concretions, Structure, etc.			
						- ,			
						_			
Hydric Soil	Indicators:								
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime itions	I	Organic Streakir isted on Local	ng in Sandy Soils Hydric Soils Lis aal Hydric Soils I	t			
Remarks:									
No pit dug									
WETLAND	DETERMINATIO	ON							
	c Vegetation Preser		(Circle)			(Circle)			
	drology Present?	Yes No Yes No		is Sampling Po	int Within a We				
Remarks:			<u> </u>						

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	⊠Ye	es 🗆	No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Ye	es 🗵	No	Plot ID:		W5		
Is the area a potentia	al Problem Ar	ea?	□Ye	es 🗵	No	Transect ID):	TR1 PIT A		
(If needed, expla	in on reverse	side.)					•			
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylo	n	Н	FA	vС	9.					
2. Xanthium struma	ırium	Н	FAG	C +	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are ORI E	EACW or	· FAC (e	veludir	ng FAC-)·	100%			
	t Species that	are ODL, I	ACW 01	TAC (C	ACIUUII	ig i AC-).	10070			
Remarks:										
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HVI	DROLOGY IN	DICAT	OPS:		
Stream, Lake, o	•	,		Primar			DICAL	OKS.		
Aerial Photogra	_				ındated					
Other	ipiis			=		in upper 12 i	nches			
☐ No Recorded Da	ata Available				iter Ma		iiciics			
No Recorded Di	ata 71 vanabie			_	ift Line					
						Deposits				
FIELD OBSERVATION	NS:					Patterns in W	etlands	s		
					_	licators (2 o				
Depth of Surface W	ater:	NA	_ (in.)		-	root channels		_		
1			_ 、 /			ined Leaves	11			
Depth to Free Water	in Pit:	NA	_ (in.)	Lo	cal Soil	Survey Data	ì			
-						tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	Otl	ner (ex	plain in Rem	arks)			
Remarks: Appro	oximately 150	feet from t	oe of dik	te 6.						

SOILS Plot ID: W5 PIT A

Map Unit Na (Series and P		Water		Drainage Class:	_NA
		NA		Field Observations Confirm Mapped Ty	
Profile Descr					
	<u>трион.</u>	Matrix Colors	Mottle Colors	Mottle	Taytura Congrations
Depth (inches)	Horizon	(Munsell Moist)	(Munsell Mois		Texture, Concretions, Structure, etc.
0-15		10 YR 4/3	NA	NA	Fine sand
15-17		7.5 YR 4/4	7.5 YR 5/6	25-30%	Fine sand
				<u> </u>	
			-		
Hydric Soil I	ndicators:				
	Histosol			oncretions	
	Histic Epipedon Sulfidic Odor			igh Organic Content in Surface I rganic Streaking in Sandy Soils	Layer in Sandy Soils
	Aquic Moisture		Li	sted on Local Hydric Soils List	
X	Reducing Condi Gleyed or Low-			sted on National Hydric Soils Lather (Explain in Remarks)	ist
	Gicycu of Lo.,	Cilionia Colors		шег (въргані ні контака)	
Remarks:					
Mottes at 15	inches.				
					1
WETLAND	DETERMINATIO)N			
Wetland Hyd	Vegetation Presen lrology Present?	Yes No	(Circle)		(Circle)
Hydric Soils	Present?	Yes No	Is thi	s Sampling Point Within a Wetl	and? Yes No
Remarks:					
I					

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums			⊠Ye		No	Community	ID:	Riparian		
Is the site significantly di	sturbed (Atypica	l Situation)?	□Ye	es 🛭	No	Plot ID:		W5		
Is the area a potentia	al Problem Ar	ea?	\square Y	es 🛭	No	Transect ID	:	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION			•							
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	inant Plant Sp	ecies		Stratum	Indicator
1. Xanthium struma	ırium	Н	FAC	C +	9.					
2. Euthamia occide	ntalis	SH	OF	3L	10.					
3. Gnaphalium pali	ıstre	SH	FAC	CW	11.					
4. Cynodon dactylo	n	Н	FA	С	12.					
5. Salix gooddingii		TR	OF	3L	13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. I	FACW or	FAC	excludi	ng FAC-)· 1	100%	•		
							10070			
Kemarks. Area	is in a slight d	epression a	issociated	ı willi v	viiiow i	olest/glove.				
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETL	AND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	•				ry Indi					
Aerial Photogra	•				undated					
Other	-T			_		in upper 12 ii	nches			
☐ No Recorded Da	ata Available				ater Ma					
	ata 11 tanao 10			_	rift Line					
						Deposits				
FIELD OBSERVATION	ons:					Patterns in W	etland	S		
					_	dicators (2 or				
Depth of Surface W	ater:	NA	_ (in.)		-	root channels		_		
•			_ , ,			ined Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)		ocal Soi	l Survey Data	ļ			
•						tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	□ o	ther (ex	plain in Rem	arks)			
Remarks: Very	wet – Not qui	te saturated	<u> </u>							

SOILS Plot ID: W5 PIT B

Map Unit N (Series and		Water	Drainage Cla	Drainage Class:NA Field Observations				
Taxonomy ((Subgroup):	NA						
Profile Desc	cription:							
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Color (Munsell Mo		Texture, Concretions, Structure, etc.			
0-2	<u>-</u>	5 YR 3/2	NA	NA	Fine loamy sand			
2-17	<u>-</u>	10 YR 4/2	7.5 YR 4	/4 45%	Med-coarse sand			
Hydric Soil	Indicators: Histosol Histic Epipedo	on.		Concretions High Organic Content in S	Surface Layer in Sandy Soils			
	Sulfidic Odor Aquic Moistur Reducing Con	re Regime		Organic Content in S Organic Streaking in Sand Listed on Local Hydric So Listed on National Hydric Other (Explain in Remarks	y Soils ils List Soils List			
Remarks:								
Mottles belo	ow 2 inches							
WETLANL	DETERMINAT	ION						
	c Vegetation Presordrology Present? s Present?		(Circle)	this Sampling Point Within	(Circle) n a Wetland? Yes No			
Remarks:								

Project/Site: Applicant/Owner:	Folsom Dan Bureau of R					Date: County:	11/18 Places	/05 r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	□Y€	es 🗵	No	Community	ID:	Ruderal/de	veloped	
Is the site significantly dis	sturbed (Atypica	l Situation)?	$\boxtimes Y \epsilon$	es 🗀]No	Plot ID:		W5		
Is the area a potentia	l Problem Ar	ea?	$\boxtimes Y\epsilon$	es 🗀]No	Transect ID):	TR1 PIT C		
(If needed, expla	in on reverse	side.)								
VEGETATION			_							
Dominant Plant Spec	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. no vegetation					9.				ļ	
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.				-	
7.					15.				·	
8.					16.					
Percent of Dominant	Species that	are ORI I	EACW or	FAC (e	veludin	ng FΔC-): ()%			
	•									
Remarks: Point	is just above	wnere Bern	nuda (Cyi	noaon a	actylon) grass is don	ninant.			
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		Weti.a	ND HVI	DROLOGY IN	DICAT	ORS.		
Stream, Lake, o	•			Primar			DICAL	OKS.		
Aerial Photogra	_				ındated					
Other	PIIS					in upper 12 ii	nches			
☐ No Recorded Da	nta Available				ater	in upper 12 ii	iciics			
	ita 71vanaoie			_	ift Lines	S				
						Deposits				
FIELD OBSERVATIO	NS:					Patterns in W	etland:	S		
1122 0221111110	1100				_	licators (2 o				
Depth of Surface Wa	ater:	NA			-	root channels		_		
1			_ 、			ned Leaves	- 11			
Depth to Free Water	in Pit:	NA	(in.)	_		Survey Data	l			
1			_ ` ´			tral Test				
Depth to Saturated S	oil	NA	_ (in.)	Otl	her (exp	plain in Rem	arks)			
Remarks: Man-r	nade rip rap s	slope.								

SOILS Plot ID: W5 PIT C

Map Unit Na (Series and I		Water		Drainage Class:NA						
Taxonomy (Subgroup):	NA		Field Observations Confirm Mapped Type? Yes No						
Profile Desc	ription:									
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
Hydric Soil										
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-O	tions	Organio Listed o	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)						
Remarks: Site is on sic	le of dike. Man mad	de rip rap rock slope. No	pit excavated.							
WETLAND	DETERMINATIO	N								
	Vegetation Present drology Present? Present?	t? Yes No (Ves No Yes No Yes No Yes No	Circle) Is this San	npling Point Within a Wetla	(Circle) and? Yes No					
Remarks:										

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums			⊠Y		No	Community	ID:	Grassland /	Ruderal	
Is the site significantly di	isturbed (Atypica	l Situation)?	\Box Y	es 🗵	No	Plot ID:		W6		
Is the area a potentia	al Problem Ar	ea?	\square Y	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla							•			
VEGETATION										
Dominant Plant Spe	ecies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylo	pn	Н	FA	AC	9.					
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
	. 0	ODI I		E. C.		ELG) 1	1.000/			
Percent of Dominan				r FAC (e	excludii	ng FAC-):	100%			
Remarks: Thick	cover, health	y green col	or.							

HYDROLOGY	(D. "1."	D 1)		***	TT	_				
Recorded Data	`					DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	_			Primar	•					
Aerial Photogra	aphs				ındated		,			
☐ Other						in upper 12 ii	nches			
☐ No Recorded D	ata Available				ater Ma					
				_	ift Line					
Ever o Ongress and	and.					Deposits	7.411			
FIELD OBSERVATION	DNS:				-	Patterns in W dicators (2 or				
Donth of Curfosa W	otom.	NIA	(in)		•					
Depth of Surface W	ater.	NA	_ (III.)			root channels ined Leaves	ш ирр	er 12 menes		
Donth to Frag Water	r in Dit:	NI A	(in)							
Depth to Free Water	i iii Fit.	NA	_ (111.)			l Survey Data tral Test	ı			
Depth to Saturated S	Soil	NA	(in)	_		rai Test plain in Rema	arke)			
Depin to Saturated S	JOII	1 N A	_ (111.)	Ou	iici (EX	piam in Kelli	ai KS)			
D C': '	. 11	3.4								
Remarks: Site is	s below OHW	M.								

SOILS Plot ID: W6 PIT A

Map Unit N (Series and		Water			Drainage Class:	NA
Taxonomy	(Subgroup):	NA			Field Observations Confirm Mapped Ty	rpe? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Col (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-17		10 YR 4/3	NA		NA	Fine /med sand
Hydric Soil	Indicators:					
	Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime itions		Organic Listed of Listed of	ons ganic Content in Surface I Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	
Remarks: Very sandy	, dry					
WETLANI	DETERMINATIO	ON				
	c Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetl	(Circle) and? Yes No
Remarks:						
Sandy soil						

Project/Site:	Folsom Dan	n JFP				Date:	11/17/	05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	se		State:	Califo	rnia		
Do Normal Circums	tances exist o	n the site?	⊠Y€	es 🗌	No	Community	ID:	Interior live woodland	e oak	
Is the site significantly dis	sturbed (Atypica	l Situation)?	□Y€	es 🖂	No	Plot ID:		W6		
Is the area a potentia (If needed, expla			□Y€	es 🛚	No	Transect ID): _	TR1 PIT B		
VEGETATION										
Dominant Plant Spec	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus sp.		TR	N	L	9.					
2. Centaurea solstit	ialis	Н	NI	L	10.					
3. Bromus sp.		Н	NI	L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, I	FACW or	FAC (e	xcludir	ng FAC-): ()%			
Remarks: Uplan	d vegetation									
HYDROLOGY										
Recorded Data	•	,				DROLOGY IN	DICATO	ORS:		
Stream, Lake, o	_			Primar;						
Aerial Photogra	phs			_	ndated		,			
☐ Other	. 4 A 1 . 1 . 1 .					in upper 12 i	nches			
☐ No Recorded Da	ita Available			_	ter Ma					
					ft Line	s Deposits				
FIELD OBSERVATIO	NC•					Patterns in W	atlanda	,		
TIELD OBSERVATIO	113.					dicators (2 o				
Depth of Surface Wa	ater:	NA			•	root channels		_		
Depui of Surface W	ator.	1171	_ (111.)			ined Leaves	т арр	ci 12 menes		
Depth to Free Water	in Pit:	NA	(in.)			Survey Data	1			
. P		'*	_ (•/			tral Test -	-			
Depth to Saturated S	oil	NA	_ (in.)			plain in Rem	arks)			
Remarks: Above	e OHWM. Po	oint is appro	oximately	4 feet u	ıpslope	of bath tub r	ring.			

SOILS Plot ID: W6 PIT B

Map Unit Name (Series and Phase)Andr	egg Coarse Sandy Loam, r	ocky, 15-30% slopes_	Drainage Class:	Well drained
Taxonomy (Subgroup):			Field Observations Confirm Mapped Ty	
Profile Description:				
Depth (inches) Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
	-			
Hydric Soil Indicators:				
Histosol Histic Epiped Sulfidic Odor Aquic Moistu Reducing Cor Gleyed or Lov	re Regime	Organic Listed of	ions rganic Content in Surface I Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils L Explain in Remarks)	
Remarks:				
No pit dig – upland site.				
WETLAND DETERMINAT	TON			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?	sent? Yes No Yes No Yes No	(Circle) Is this Sam	pling Point Within a Wetl	(Circle) and? Yes No
Remarks:		<u> </u>		

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ıse		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	$\boxtimes Y$	es 🗌	No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Ye	es 🗵	No	Plot ID:		W7		
Is the area a potentia	al Problem Ar	ea?	\square Ye	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor	n	Н	FA	vС	9.	•				
2. Xanthium struma	rium	Н	FAG	C +	10.					
3. Gnaphalium palu	istre	Н	FAC	CW	11.					
4. Salix gooddingii		TR	OE	3L	12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	t Species that	are OBL, I	FACW or	FAC (excludii	ng FAC-): 1	00%			
	nd vegetation					<i>'</i>				
Temarks. Veta	ina vegetation	•								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HY	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge			Primar	y Indic	cators:				
Aerial Photogra	nphs			☐ Int	ındated					
Other				☐ Sa	turated	in upper 12 ir	nches			
☐ No Recorded Da	ata Available			\boxtimes W	ater Ma	rks				
					ift Line					
						Deposits				
FIELD OBSERVATIO	ons:				_	Patterns in W				
					-	dicators (2 or		_		
Depth of Surface Wa	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
Donath to Free Water	. ' D'4	NTA	C \			ined Leaves				
Depth to Free Water	'in Pit:	NA	_ (1n.)			Survey Data				
Depth to Saturated S	Soil	NA	(in)			tral Test plain in Rema	arke)			
Depui to Saturated S	OUI	1 N A	_ (1111.)	Ot	nei (ex	piain in N elli	arks)			
Remarks: Slight	depression									

SOILS Plot ID: W7 PIT A

Map Unit N (Series and		Water			Drainage Class:NA					
Taxonomy ((Subgroup):	NA			Field Observations Confirm Mapped Type	pe? Yes No				
Profile Desc	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Cole (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
0-16	<u> </u>	10 YR 4/2	10 YR	5/8	<10%	Fine silty sand				
16-17		2.5 YR 4/2	NA NA		NA NA	Silt				
Hydric Soil Indicators: Concretions										
	Histosol Histic Epipedo Sulfidic Odor Aquic Moisture Reducing Cone Gleyed or Low	e Regime		Organic Listed o Listed o	ions ganic Content in Surface L Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)					
Remarks:										
From 16-17	inches lots of oxid	dized feeder roots. Fror	n 0-16 inches s	some oxid	ized roots and patches of n	nottling.				
WETLAND	DETERMINATI	ON								
	c Vegetation Preserdrology Present? s Present?	ent? Yes No Yes No Yes No	(Circle)	s this Sam	pling Point Within a Wetla	(Circle) and? Yes No				
Remarks:										

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R					County:		r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	•		
Do Normal Circums			⊠Y		No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:	W7			
Is the area a potentia	al Problem Ar	ea?	$\square Y$	es 🗵	No	Transect ID	:	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domin	ant Plant Sp	ecies		Stratum	Indicator
1. Juncus sp.		Н	FAC -	OBL	9.	•				
2. Cynodon dactylo	n	Н	FA	AC	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW or	r FAC (e	excludin	g FAC-): 1	100%			
Remarks: Wetla	and vegetation	l								
	<u> </u>									
HYDROLOGY										
Recorded Data	•					ROLOGY IN	DICAT	ORS:		
Stream, Lake, o	•			_	y Indica	ators:				
Aerial Photogra	aphs				ındated					
Other						n upper 12 ii	nches			
☐ No Recorded Da	ata Available			_	ater Mar					
				_	ift Lines					
Ever b Operby Arric	NIC.				liment D	_	atland	-		
FIELD OBSERVATION	DNS:				-	atterns in W icators (2 or				
Depth of Surface W	ater:	NA	(in)		-			er 12 inches		
Depuir of Burrace W	ater.	1\/A	_ (111.)			ned Leaves	m upp	ci 12 menes		
Depth to Free Water	· in Pit:	NA	(in.)			Survey Data				
. P		'*	_ (/		C-Neuti	=				
Depth to Saturated S	Soil	NA	_ (in.)			olain in Rema	arks)			
Pamarka: Ralay	TO LIWM									

SOILS Plot ID: W7 PIT B

Map Unit N (Series and l		_Water	. <u></u>	Drainage Class:NA Field Observations								
Taxonomy (Subgroup):	_NA		Confirm Mapped Type? Yes No								
Profile Desc	eription:											
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.							
0-14	<u>-</u>	7.5 YR 3/3	4.5 YR 5/8	15%	sand							
Hydric Soil	Indicators:											
Remarks: Below 14 in	Hydric Soil Indicators: Histosol Concretions High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks) Remarks: Below 14 inches too hard to dig. Mottling real spotty; concentrated from 2-6-inches.											
WETLAND	DETERMINATIO)N										
	v Vegetation Present drology Present? s Present?	Yes No (Yes No Yes No	Circle) Is this Sam	pling Point Within a Wetlan	(Circle) nd? Yes No							
Remarks:												
Sandy soil												

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, D	aniel Cha	ise		State:	Califo	rnia		
Do Normal Circums	stances exist o	on the site?	⊠Y€	es 🗆]No	Community	ID:	Interior live woodland	e oak	
Is the site significantly d	isturbed (Atypica	1 Situation)?	\Box Y ϵ	es 🗵	No	Plot ID:	•	W7		
Is the area a potentia (If needed, explain			□Y€	es 🗵]No	Transect ID	:	TR1 PIT C		
VEGETATION										
Dominant Plant Spe	ecies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus sp.		TR	N]	L	9.	•				
2. Pinus sabiniana		TR	N	L	10.					
3. Heterotheca gra	ndiflora	Н	N	L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, I	FACW or	FAC (e		ng FAC-): ()%			
	nd vegetation.	·								
<u>- Opini</u>	ia (egotationi									
HYDROLOGY										
Recorded Data	(Describe in	Remarks).		Weti.a	ND HV	DROLOGY IN	DICAT	ORS.		
Stream, Lake, o	•			Primar			DICAL	OKO.		
Aerial Photogra	_				ındated					
Other				=		in upper 12 in	nches			
☐ No Recorded D	ata Available				ater Ma					
				☐ Dr	ift Line	S				
				Sed	liment l	Deposits				
FIELD OBSERVATION	ONS:			☐ Dra	ainage	Patterns in W	etlands	S		
				Second	ary Ind	dicators (2 o	r more	required):		
Depth of Surface W	ater:	NA	_ (in.)	Ox	idized	root channels	in upp	er 12 inches		
				☐ Wa	ater-sta	ined Leaves				
Depth to Free Water	r in Pit:	NA	_ (in.)	☐ Lo	cal Soil	l Survey Data	l			
				☐ FA	C-Neu	tral Test				
Depth to Saturated S	Soil	NA	_ (in.)	Otl	her (ex	plain in Rem	arks)			
Remarks: Site is	s above OHW	M in oak w	oodland,	no indi	cators o	of hydrology.				

SOILS Plot ID: W7 PIT C

Map Unit Name (Series and Phase)Andregg Coarse Sandy Loam, rocky, 15-30% slopes Drainage Class:Well drained Field Observations												
Taxonomy (Subgroup):	Ultic Haploxeroll		Confirm Mapped Typ	pe? Yes No								
Profile Description:												
Depth (inches) Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.								
	_											
Hydric Soil Indicators:												
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)												
Remarks:												
No pit dug. Upland site												
WETLAND DETERMINA	TION											
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No Yes No Is this Sampling Point Within a Wetland? Yes No												
Remarks:		I										

Project/Site:	Folsom Dam	ı JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of Re	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	niel Cha	ase		State:	Califo	ornia		
Do Normal Circumst	ances exist o	n the site?	$\boxtimes Y$	es 🗌	No	Community	ID:	Seasonal w	etland	
Is the site significantly dis	turbed (Atypical	Situation)?	$\square Y$	es 🖂	No	Plot ID:		W8		
Is the area a potential			$\square Y$	es 🛚	No	Transect ID):	TR1 PIT A		
(If needed, explai	in on reverse	side.)								
VEGETATION										
Dominant Plant Spec		Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cephalanthus occ var. californicus		SH	OI		9.					
2. Cynodon dactylor	ı	Н	FA	AC	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are OBL, F	ACW o	r FAC (e	xcludir	ng FAC-):	100%			
Remarks:	_									
HYDROLOGY										
Recorded Data	`	Remarks):				DROLOGY IN	DICAT	ORS:		
Stream, Lake, or	_			Primar,	•					
Aerial Photogra	phs			=	ndated					
☐ Other	4 - A 21 - 1 - 1 - 1			_		in upper 12 ii	nches			
☐ No Recorded Da	ta Available			=	iter Ma					
				_	ft Line					
FIELD OBSERVATION	NIC.					Deposits Patterns in W	/otlanda			
TIELD OBSERVATION	ND•				_	licators (2 o				
Depth of Surface Wa	ıter•	NA	_ (in.)		•	root channels				
Depui of Surface wa	iter.	1171	_ (111.)			ned Leaves	in upp	ici 12 menes		
Depth to Free Water	in Pit:	NA	(in.)	_		Survey Data	ı			
r			_ (•)			tral Test				
Depth to Saturated Se	oil	NA	_ (in.)	_		plain in Rem	arks)			
Remarks: Very r	ocky site – lo	ts of drift.								

SOILS Plot ID: W8 PIT A

Map Unit N (Series and		Water		Drainage Class:NA Field Observations						
Taxonomy	(Subgroup):	NA			Confirm Mapped T	ype? Yes No				
Profile Des	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Co (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
0-2		7.5 YR 3/3	NA	<u> </u>	NA	Med-crs-sand w/ cobbles				
2-7		10 YR 3/4	10 YR	R 5/8	10%	Med-coarse sand				
7-14		7.5 YR 3/3	NA	Α	NA	Med-coarse sand				
	-									
		_								
Hydric Soil Indicators:										
Hydric Son				_						
	Histosol Histic Epiped	Ωn		Concret High O	tions rganic Content in Surface	Laver in Sandy Soils				
	Sulfidic Odor		_	Organic	Streaking in Sandy Soils	}				
	Aquic Moistu Reducing Cor				on Local Hydric Soils List on National Hydric Soils I					
		w-Chroma Colors	<u> </u>		Explain in Remarks)	.18t				
Remarks:										
			_							
Very rocky,	, can't dig below	14". Mottles from 2-7 in	iches.							
Ĭ										
WETLAND	DETERMINAT	ION								
Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No										
Hydric Soil	s Present?	Yes No		Is this Sam	npling Point Within a Wet	land? Yes No				
Remarks:										

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums	tances exist o	on the site?	$\boxtimes Y$	es 🗆]No	Community	ID:	Ruderal		
Is the site significantly di	sturbed (Atypica	l Situation)?	□Y€	es 🗵	No	Plot ID:		W8		
Is the area a potentia			□Y€	es 🗵	No	Transect ID	:	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Nicotiana glauca		SH	FA	.С	9.	•				
2. Foeniculum vulge	are	SH	FAG	CU	10.					
3. Centaurea solstit	ialis	Н	N.	L	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL. I	FACW or	· FAC (e	excludin	ng FAC-): 3	30%			
	al upland veg		110 // 01	1110 (2110104011	181110)	, , , ,			
Remarks. Ruder	ai upianu veg	ctation								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge			Primar	y Indic	ators:				
Aerial Photogra	nphs			☐ Int	indated					
Other				☐ Sa	turated i	in upper 12 ii	nches			
☐ No Recorded Da	ata Available			☐ Wa	ater Mai	rks				
				☐ Dr	ift Lines	S				
				Sed	liment I	Deposits				
FIELD OBSERVATIO	ons:			☐ Dr	ainage I	Patterns in W	etland	S		
					-	licators (2 or		_		
Depth of Surface Wa	ater:	NA	_ (in.)			root channels	in upp	er 12 inches		
						ned Leaves				
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data	l			
D 4 . C	,	3.7.4	<i>(</i> • ` `			tral Test				
Depth to Saturated S	501l	NA	_ (1n.)	∐ Otl	her (ex	plain in Rema	arks)			
Remarks: Site is	s approximate	ly 4 feet ab	ove OHV	VM on s	side slop	pe of rip rap o	dike. N	No indicators	of hydrolo	ogy.

SOILS Plot ID: W8 PIT B

Map Unit Na (Series and I		Coarse Sandy Loam,		Drainage Class:Well drained Field Observations							
Taxonomy (Subgroup): <u>Ult</u>	ic Haploxeroll			Confirm Mapped Type? Yes No						
Profile Desc	ription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moise	Mottle Abundance/Co		ture, Concretions, cture, etc.					
Hydric Soil Indicators:											
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-O	ions	Hi Oi Li Li	oncretions gh Organic Content in ganic Streaking in Sar sted on Local Hydric S sted on National Hydri her (Explain in Remar	ndy Soils Soils List ic Soils List	n Sandy Soils					
Remarks: No pit dug.	Site is on rip rap di	ke									
WETLAND DETERMINATION											
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No Is this Sampling Point Within a Wetland? Yes No											
Remarks:											

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Chase	e		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	⊠Yes	; 🔲]No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	1 Situation)?	Yes	; 🖂	No	Plot ID:		W9		
Is the area a potentia			Yes		No	Transect ID):	TR1 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicator		Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Juncus sp.		Н	FAC-C	BL	9.	•				
2. Cynodon dactylo	n	Н	FAC	3	10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	FACW or I	FAC (e	xcludin	g FAC-):	100%			
	and vegetation					,				
<u></u>	ing regetation	-								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):	V	VETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge	;	P	rimar	y Indic	ators:				
Aerial Photogra	aphs		[Inu	ndated					
Other				Sat	urated i	n upper 12 ii	nches			
☐ No Recorded Da	ata Available			_	iter Mai					
			[ft Lines					
			Į			Deposits				
FIELD OBSERVATION	ONS:		l		_	Patterns in W				
		37.4	_		-	licators (2 or		_		
Depth of Surface W	ater:	NA	_ (1n.) [oot channels	ın upp	er 12 inches		
Donth to Enga Water	ı in Dit.	NIA	[] (m)			ned Leaves				
Depth to Free Water	m ru:	NA	_ (III.) _ [Survey Data ral Test	ι			
Depth to Saturated S	Soil	NA	_ (in.) [rai Test olain in Rem	arks)			
•					` '	-	,			
Remarks: Site w	vithin OHWM	I of Folsom	Lake.							

SOILS Plot ID: W9 PIT A

	Phase)	Water	Drainage Class: Field Observations	NA							
Taxonomy (Subgroup):	NA		Confirm Mapped Typ	pe? Yes No						
Profile Desc	eription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.						
0-10		10 YR 5/3	10 YR 6/8	<10%	Fine- med sand						
10-17		NA	NA	NA	Boulder-bedrock						
Hydric Soil Indicators:											
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks:											
Sandy soil w	vith mottles. Chrom	a too high for hydric s	status.								
WETLAND	DETERMINATIO	N									
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No Is this Sampling Point Within a Wetland? Yes No											
Remarks:			,								

Project/Site:	Folsom Dan	n JFP				Date:	11/17	7/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Place	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	⊠Y	es 🗌	No	Community	· ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:		W9		
Is the area a potentia	al Problem Ar	ea?	$\square Y$	es 🗵	No	Transect ID):	TR1 PIT B		<u></u>
(If needed, expla	in on reverse	side.)								<u></u>
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor		Н	FA		9.	nanci nanci op	occies .		Buatam	mareator
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	FACW or	r FAC (e	excludin	ng FAC-): 1	100%			
	% cover in pl									
<u> </u>	70 CO (CI III pi	<u> </u>								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	AND HYI	DROLOGY IN	DICAT	ORS:		
☐ Stream, Lake, o	or Tide Gauge			Primar	y Indic	ators:				
Aerial Photogra	aphs			☐ Inu	ındated					
Other					turated i	in upper 12 ii	nches			
☐ No Recorded Da	ata Available			_	ater Mai					
					ift Lines					
						Deposits				
FIELD OBSERVATION	ons:				-	Patterns in W				
					-	licators (2 or		_		
Depth of Surface W	ater:	NA	_ (in.)			oot channels	in upp	per 12 inches		
D 4 C W	. D.,	NTA	<i>(</i> : \)			ned Leaves				
Depth to Free Water	in Pit:	NA	_ (1n.)			Survey Data	l			
Donth to Cotumoted C	loi1	NT A	(in)	_		ral Test	orles)			
Depth to Saturated S	OOH	NA	_ (III.)	☐ Ot	ner (ex	plain in Rema	arks)			
Pamarks: Sita is	annrovimate	ly 60 foot d	ownslos	a from h	nigh wet	tar mark				

SOILS Plot ID: W9 PIT B

Map Unit N (Series and		Water		Drainage Class:NA Field Observations				
Taxonomy	(Subgroup):	NA			Confirm Mapped Ty	pe? Yes No		
Profile Des	cription:							
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
0-17		10 YR 4/3	N	A	NA	Fine- med-coarse sand		
Hydric Soil	Indicators:							
	HistosolHistic Epipedon	1		Concre	etions Organic Content in Surface l	Laver in Sandy Soils		
	Sulfidic Odor			Organi	c Streaking in Sandy Soils	Layer in Sandy Sons		
	Aquic Moisture Reducing Condi				on Local Hydric Soils List on National Hydric Soils L	ist		
	Gleyed or Low-		_		(Explain in Remarks)	131		
Remarks:								
	.,							
Dry /sandy	soil							
WETLANI	DETERMINATIO	ON						
Wetland Hy	c Vegetation Preser	Yes No	(Circle)	T 11: 0	n Birmir wa	(Circle)		
Hydric Soil	s Present?	Yes No)	Is this Sai	mpling Point Within a Wetl	and? Yes No		
Remarks:				<u> </u>				

Project/Site:	Folsom Dar	n JFP					Date:	11/17	7/05		
Applicant/Owner:	Bureau of R	Reclamation					County:	Place	r County		
Investigator:	Keven Ann	Colgate, D	aniel Ch	ase			State:	Calif	ornia		
Do Normal Circums	stances exist o	on the site?	$\boxtimes Y$	es	□No	0 (Community	ID:	Interior live woodland	e oak	
Is the site significantly d	isturbed (Atypica	al Situation)?	\square Y	es	⊠No	o]	Plot ID:		W9		
Is the area a potenti (If needed, expla			□Y	es	⊠No	ο ΄	Transect ID) :	TR1 PIT C		
VEGETATION											
Dominant Plant Spe	ecies	Stratum	Indica	or	D	Oomina	ant Plant Sp	ecies		Stratum	Indicator
1. Quercus sp.		TR	N	IL .	9.		•				
2. Marrubium vulg	are	Н	F	AC		0.					
3. Hirschfeldia inco	ana	Н	N	IL.		1.					
4. Bromus sp.		Н	N	IL .		2.					
5.						3.					
6.					14	4.					
7.					1:	5.					
8.					10	6.					
Percent of Dominar	nt Species that	are OBL, I	FACW o	r FA	C (excl	luding	FAC-): 2	25%			
	nd vegetation	·			`		,				
remarks. <u>Opini</u>	id vegetation										
HYDROLOGY	(D	D 1		11 /		Hern			long.		
Recorded Data Stream, Lake, o	•	*					ROLOGY IN	DICAT	ORS:		
Aerial Photogr	_	5			mary I Inunda		1018.				
Other	apiis			H			upper 12 i	nches			
No Recorded D	ata Available				Water			iiciics			
					Sedime		eposits				
FIELD OBSERVATION	ONS:						atterns in W	etland	ls		
				Sec					e required):		
Depth of Surface W	ater:	NA	_ (in.)		Oxidiz	zed ro	ot channels	in up	per 12 inches		
					Water	r-stain	ed Leaves				
Depth to Free Wate	r in Pit:	NA	_ (in.)		Local	Soil S	Survey Data	ı			
					FAC-l	Neutra	al Test				
Depth to Saturated	Soil	NA	_ (in.)		Other	(expl	lain in Rem	arks)			
Remarks: No in	dicators of hy	drology									

SOILS Plot ID: W9 PIT C

Map Unit N (Series and		Xerothents, cut and fill		Drainage Class: _Well / Excessively Drained Field Observations							
Taxonomy ((Subgroup):				Confirm Mapped Type? Yes No						
Profile Desc	cription:										
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist	Mottle Abundance/Contras	Texture, Concretions, st Structure, etc.						
Hydric Soil	Indicators:										
Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)											
Remarks: No soil pit 6	excavated. Large bo	oulders.									
WETLAND) DETERMINATIO	N									
Hydrophytic	c Vegetation Presen drology Present?)(Circle)	s Sampling Point Within a	(Circle) Wetland? Yes No						
Remarks:			<u> </u>								

Project/Site:	Folsom Dan	n JFP				Date:	11/16	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	niel Cha	ise		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	⊠Ye	es 🗆	No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	□Ye	es 🛚	No	Plot ID:		W10		
Is the area a potentia	ıl Problem Ar	ea?	Y	es 🗵	No	Transect ID	:	TR1 PIT A		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domin	nant Plant Sp	ecies		Stratum	Indicator
1. Salix sp.		SH	FAC -	OBL	9.					
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	t Species that	ara ORI E	ACW or	· FAC (e	veludin	α FAC)· 1	100%			
	•							. 1 . 7.7	1 1.1	. 1
Remarks: Small	shrub variety	of willow.	Very re	silient aş	gainst ir	nundation for	long p	periods. Ver	y healthy p	atch.
HYDROLOGY										
Recorded Data	(Describe in	Pamarke):		Wetla	ND HVI	OROLOGY IN	DICAT	ODG•		
Stream, Lake, o	•			Primar			DICAT	OKS.		
Aerial Photogra	_				y Indica indated	ators.				
Other	tpiis			_		n upper 12 ii	nches			
☐ No Recorded Da	ata Available			_	ater Mar		iches			
No Recorded De	ita 7 i vanabie			_	ift Lines					
				_		eposits				
FIELD OBSERVATIO	NS:					Patterns in W	etland	3		
					_	icators (2 or				
Depth of Surface Wa	ater:	NA	(in.)		-	oot channels		_		
1			_ 、			ned Leaves	11			
Depth to Free Water	in Pit:	NA	(in.)			Survey Data	l			
1			_ ` ´			ral Test				
Depth to Saturated S	Soil	15	(in.)	_		olain in Rema	arks)			
Remarks: This p	oit is below th	e point of >	5% total	vegetati	ion cove	er.				

SOILS Plot ID: W10 PIT A

Map Unit Na (Series and I Taxonomy (NA pe? Yes No										
					Confirm Mapped Ty						
Profile Desc	ription:			_							
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
0-15		10 YR 5/6	N	A	NA	Med-coarse sand					
15-17		2.5 YR 3/1	N	A	NA	Med-coarse sand w/ some silty clay					
Hydric Soil	Indicators:										
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	tions	- - - -	Organic Listed C	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)						
Remarks:											
Very good d	rainage, saturated a	t about 10 inches.									
WETLAND	DETERMINATIO	N				1					
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No (Circle) Yes No Yes No Is this Sampling Point Within a Wetland? Yes No											
Remarks:											

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	r County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ise		State:	Califo	ornia		
Do Normal Circums	stances exist o	on the site?	$\boxtimes Y$	es 🗀]No	Community	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypica	l Situation)?	$\square Y$	es 🗵	No	Plot ID:		W10		
Is the area a potentia			□Ye	es 🗵	No	Transect ID):	TR1 PIT B		
(If needed, expla	in on reverse	side.)								
VEGETATION										
Dominant Plant Spe	cies	Stratum	Indicate	or	Domin	nant Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylo	n	Н	FA	vС	9.					
2. Juncus sp.		Н	FAC -	OBL	10.					
3. Xanthium struma	ırium	Н	FA	C +	11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominan	t Species that	are OBL, F	FACW 01	: FAC (e	excludin	g FAC-): 1	100%			
	and vegetation			·		<u> </u>				
	ing vegetation	•								
HYDROLOGY										
Recorded Data	(Describe in	Remarks):		WETLA	ND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge	;		Primar	y Indica	ators:				
Aerial Photogra	aphs			☐ Inu	ındated					
Other				☐ Sat	turated i	n upper 12 ii	nches			
No Recorded Da	ata Available			_	ater Mar					
					ift Lines					
					liment D					
FIELD OBSERVATION	ONS:				•	Patterns in W				
						icators (2 or				
Depth of Surface W	ater:	NA	_ (in.)			oot channels	in upp	per 12 inches		
D. d. E. W.	' D''	NTA	<i>(</i> ;)	_		ned Leaves				
Depth to Free Water	r in Pit:	NA	_ (1n.)			Survey Data	l			
Depth to Saturated S	Soil	NI A	(in)	_	C-Neut	rai Test olain in Rem	arka)			
Depui to Saturated S	3011	NA	_ (111.)	Ou	nei (ext	nam m Kelli	aiks)			
Remarks: Below	v OHWM									

SOILS Plot ID: W10 PIT B

Map Unit Na (Series and I				Drainage Class:				
Taxonomy (Subgroup):			Field Observations Confirm Mapped Ty	pe? Yes No			
Profile Desc	cription:							
Depth (inches)	Horizon		Mottle Colors Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
0-16		7.5 YR 4/3	10 YR 6/8	< 10 %	Silty sand			
Hydric Soil	Indicators:							
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-O	tions	Organi Listed Listed Other	etions Organic Content in Surface I ic Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li (Explain in Remarks)				
	·		J					
WETLAND	DETERMINATIO	N			1			
	e Vegetation Present drology Present? s Present?	t? Yes No (Yes No Yes No	Circle) Is this San	mpling Point Within a Wetla	(Circle) and? Yes No			
Remarks:			•					

Project/Site:	Folsom Dan	n JFP				Date:	11/17	/05		
Applicant/Owner:	Bureau of R	eclamation				County:	Placer	County		
Investigator:	Keven Ann	Colgate, Da	aniel Cha	ase		State:	Califo	ornia		
Do Normal Circums	tances exist o	n the site?	□Y	es 🗵	No	Community	ID:	Developed		
Is the site significantly dis	sturbed (Atypical	l Situation)?	$\boxtimes Y$	es 🗀]No	Plot ID:	•	W10		
Is the area a potentia	l Problem Ar	ea?	$\boxtimes Y$	es 🗀]No	Transect ID	:	TR1 PIT C		
(If needed, expla	in on reverse	side.)					•			
VEGETATION	_									
Dominant Plant Spec	cies	Stratum	Indicat	or	Domi	nant Plant Sp	ecies		Stratum	Indicator
1. Festuca sp.*		Н	FA	AC	9.					
2.					10.					
3.					11.					
4.					12.					
5.					13.					
6.					14.					
7.					15.					
8.					16.					
Percent of Dominant	Species that	are ORI E	EACW or	r FAC (e	veludir	ng FAC-): 1	00%	Į.		
							10070			
	within an irri n grass	igated park	with upl	and, ma	intained	i vegetation.				
iaw	ii giass									
HYDROLOGY										
Recorded Data	(Describe in	Domarka).		Wet	ND HV	DROLOGY IN	DICATA	ODC.		
Stream, Lake, o	•	,		Primar			DICAT	OKS.		
Aerial Photogra	_				y maic indated					
Other	piis					in upper 12 ir	nches			
☐ No Recorded Da	nta Available				iter Ma		iches			
	ita 7 i vanabie			_	ift Line					
				_		Deposits				
FIELD OBSERVATIO	NS:					Patterns in W	etlands	3		
	1100				_	dicators (2 or				
Depth of Surface Wa	ater:	NA	(in.)		-	root channels		_		
1			_ 、			ined Leaves	11			
Depth to Free Water	in Pit:	NA	_ (in.)			Survey Data				
•			, ,			tral Test				
Depth to Saturated S	oil	NA	_ (in.)	Otl	ner (ex	plain in Rema	arks)			
Remarks: No hy	drology from	lake – site	is irrigat	ed						

SOILS Plot ID: W10 PIT C

Map Unit Na (Series and I		thents, cut and fill areas		Drainage Class: _Well / Excessively Drained Field Observations				
Taxonomy (Subgroup):				Confirm Mapped Ty	ype? Yes No		
Profile Desc	ription:							
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colo (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
Hydric Soil	Indicators:							
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime		Organic Listed or Listed or	ions ganic Content in Surface l Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils L Explain in Remarks)			
Remarks: No pit dug.	Site is on a rip rap	slope above OHWM.						
WETLAND	DETERMINATIO	ON						
Hydrophytic	e Vegetation Presendrology Present?		(Circle)	s this Sam	pling Point Within a Wetl	(Circle) and? Yes No		
Remarks:								

Project/Site:	Folsom Dam JFI	•		Γ	Date:	11/16	/2006		
Applicant/Owner:	Bureau of Reclar	mation			County:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	S	tate:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Co	mmunity	ID:	Seasonal w	etland	
Is the site significantly dis	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plo	ot ID:		W11 TR1 F	Pit A	
Is the area a potentia	l Problem Area?		∐Yes ∑	No Tra	ansect ID):	W11 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION			•						
Dominant Plant Spec		Stratum	Indicator	Dominant	Plant Sp	ecies		Stratum	Indicator
1. Erodium moschati	um	Н	NL	9.					
2. Salix gooddingii		T	OBL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	Species that are 0	OBL FAC	W or FAC (excluding F.	AC-)· '	50%			
	•		•			3070			
Remarks: Lower	edge of vegetate	u zone, ma	ny seediings	beginning t	o grow				
HYDROLOGY									
	(Describe in Rem	arks).	WETL.	AND HYDRO	LOGY IN	DICAT	ORS.		
Stream, Lake, o	•	iarks).		ry Indicator		DICATI	OIG.		
Aerial Photogra	•			undated					
Other	F-10			turated in u	pper 12 i	nches			
☐ No Recorded Da	ıta Available			ater Marks	rr				
			_	rift Lines					
			_ □ Se	diment Dep	osits				
FIELD OBSERVATIO	NS:			rainage Patte		etland	S		
				lary Indicat					
Depth of Surface Wa	nter: <u>N</u>	<u>V/A</u> (in.)		kidized root	channels	in upp	er 12 inches		
			\square W	ater-stained	Leaves				
Depth to Free Water	in Pit:	<u>>15</u> _ (in.)	☐ Lo	cal Soil Sur	vey Data	ı			
			☐ FA	AC-Neutral 7	Гest				
Depth to Saturated S	oil>	<u>>15</u> (in.)	Ot	her (explain	n in Rem	arks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W11 TR1 Pit A

Map Unit Name (Series and Phase) _Auburn very rocky silt loam Drainage Class: _well-drained										
Taxonomy	(Subgroup): <u>Lit</u> l	hic Haploxerept		Field Observations Confirm Mapped Type? Yes No						
Profile Des	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
8		2.5YR 4/2	none	none						
	,									
Hydric Soil	To di coto con									
Hydric Soil										
	_ Histosol Histic Epipedon		Concre	tions rganic Content in Surface L	aver in Sandy Soils					
	Sulfidic Odor			c Streaking in Sandy Soils	ayer in Sandy Sons					
	Aquic Moisture			on Local Hydric Soils List						
	Reducing Condit Gleyed or Low-O			on National Hydric Soils Lis Explain in Remarks)	st					
				1						
Remarks:										
WETLAND	DETERMINATIO	N								
Hydrophyti	c Vegetation Present	t? Yes No	(Circle)		(Circle)					
	drology Present?	Yes No Yes No		npling Point Within a Wetla						
-		100 110	is this buil	grome within a world	105					
Remarks:										

Project/Site:	Folsom Dam JFI	P		D	ate:	11/16	/2006		
Applicant/Owner:	Bureau of Reclar	mation		C	ounty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	St	tate:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes □	No Cor	nmunity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot	t ID:		W11 TR1 F	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Tra	nsect ID) :	W11 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		i		•			-		
Dominant Plant Spe		Stratum	Indicator	Dominant 1	Plant Sp	ecies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FAC	9.					
2. Erodium moschat	um	Н	NL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are (OBL, FAC	W or FAC (excluding FA	AC-): :	50%			
Remarks:									
Kemarks.									
HYDROLOGY									
	(Describe in Rem	narks):	WETLA	AND HYDROI	LOGY IN	DICAT	ORS:		
Stream, Lake, o	*			ry Indicator					
Aerial Photogra	•			undated					
Other	1		□ Sa	turated in up	per 12 i	nches			
☐ No Recorded Da	ata Available			ater Marks	1				
_			☐ Dr	rift Lines					
			☐ Se	diment Depo	osits				
FIELD OBSERVATION	ons:			ainage Patter		etlands	S		
			Second	lary Indicate	ors (2 o	r more	required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	☐ O ₂	kidized root o	channels	in upp	er 12 inches		
			\square W	ater-stained l	Leaves				
Depth to Free Water	in Pit:	>14_ (in.)	☐ Lo	cal Soil Surv	vey Data	ì			
			☐ FA	AC-Neutral T	est				
Depth to Saturated S	Soil	<u>>14</u> (in.)	Ot	her (explain	in Rem	arks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W11 TR1 Pit B

Map Unit N (Series and	ame Phase) <u>Auburn ve</u>	rv rocky silt loam		Drainage Class: _we	ell-drained
	(Subgroup): Lit		Field Observations Confirm Mapped Typ		
Profile Des	<u>cription:</u>				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast Increases with depth	Texture, Concretions, Structure, etc. Silty, with some sand,
8		7.5YR 5/1	7.5YR 5/6	mercuses with depth	cobble, gravel
	-				
Hydric Soil	Indicators:				
			Concre	tions	
<u> </u>	_ Histosol _ Histic Epipedon		High O	rganic Content in Surface I	ayer in Sandy Soils
	_ Sulfidic Odor Aquic Moisture	Regime		c Streaking in Sandy Soils on Local Hydric Soils List	
_	Reducing Condit	tions	Listed of	on National Hydric Soils Li	st
	_ Gleyed or Low-0	Chroma Colors	Other (Explain in Remarks)	
Remarks:					
WETLANI	DETERMINATIO	N	<u> </u>		
	c Vegetation Present		(Circle)		(Circle)
Wetland Hy Hydric Soil	drology Present? s Present?	Yes No Yes No	Is this San	npling Point Within a Wetla	and? Yes No
Remarks:		_			
Kemarks.					

Project/Site:	Folsom Dam JFl	P		Dat	te:	11/16	/2006		
Applicant/Owner:	Bureau of Reclar	mation		Cor	unty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	Sta	ite:	Califo	rnia		
Do Normal Circums	tances exist on the	e site?	⊠Yes ☐	No Com	munity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ⊠	No Plot	ID:		W11 TR1 F	Pit C1	
Is the area a potentia	al Problem Area?		∐Yes ⊠	No Trans	sect ID	:	W11 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
		g, ,	T 1' '	D : . D	1 . 0			G	T 1' '
Dominant Plant Spe	cies	Stratum	Indicator	Dominant P	lant Sp	ecies		Stratum	Indicator
1. Spergularia sp.		**	FAC- to NL	9.					
2. Gnaphalium sp.		Н	varies	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-): ()% to 5	50%		
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLO	OGY IN	DICAT	ORS:		
Stream, Lake, o	•		Primar	ry Indicators:					
Aerial Photogra	phs			undated					
Other				turated in upp	er 12 iı	nches			
☐ No Recorded Da	ata Available			ater Marks					
			_	rift Lines					
				diment Depos					
FIELD OBSERVATIO	ons:			ainage Pattern					
D 1 60 6 W		T/A / >		lary Indicator			_		
Depth of Surface W	ater: <u>r</u>	<u>V/A</u> (in.)		kidized root ch		ın upp	er 12 inches		
Denth to Fee Weter	i. Die	16 (3.1)		ater-stained L					
Depth to Free Water	in Pit:	>16_ (in.)		cal Soil Surve	-	L			
Donth to Cotumnts 1 C	lail .	16 (in)		C-Neutral Te		orleg)			
Depth to Saturated S	OOII	>16_ (in.)	<u> </u>	her (explain i	ıı Kein	arks)			
Remarks: Below	v the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W11 TR1 Pit C1

Map Unit N (Series and	ame Phase) <u>Auburn ve</u>	ry rocky silt loam		Drainage Class: wel	l-drained
Taxonomy	(Subgroup): Litl	hic Haploxerept		Field Observations Confirm Mapped Typ	e? Yes No
Profile Des	cription:				
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5Y 5/2	7.5YR 5/6	Frequent, medium	
Hydric Soil	Indicators				
- - - - -	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	Organic Listed o Listed o	ions ganic Content in Surface La Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Lis Explain in Remarks)	
Remarks:					
WETLAND	DETERMINATIO	N			
	c Vegetation Present drology Present? s Present?	Yes No (Yes No Yes No		pling Point Within a Wetlan	(Circle) nd? Yes No
Remarks:			•		

Project/Site:	Folsom Dam JFl	2		Date:	11/16	5/2006		
Applicant/Owner:	Bureau of Reclar	mation		County:	El Do	orado		
Investigator:	Gretchen Lebedi	nik, Jelica `	White	State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes □	No Communit	y ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ⊠	No Plot ID:		W11 TR1 I	Pit C2	
Is the area a potentia			∐Yes ⊠	No Transect II) :	W11 TR1		
(If needed, expla	in on reverse side	.)						
VEGETATION								
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant S	pecies		Stratum	Indicator
1. Juncus sp.		Н	OBL to	9.				
2. Cynodon dactylor	ı	Н	FAC FAC	10.				
3.				11.				
4.				12.				
5.				13.				
6.				14.				
7.				15.				
8.				16.				
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC-):	100%			
Remarks:								
HYDROLOGY	(D. '1.' D.	1 \	XX/					
	(Describe in Rem	iarks):		AND HYDROLOGY I	NDICAT	ORS:		
☐ Stream, Lake, o ☐ Aerial Photogra	_			ry Indicators: undated				
Other	apns		_	turated in upper 12	inches			
No Recorded Da	ata Available			ater Marks	inches			
	and Trumusic			ift Lines				
				diment Deposits				
FIELD OBSERVATION	ONS:			ainage Patterns in V	Vetland	ls		
			Second	lary Indicators (2 o	r more	e required):		
Depth of Surface W	ater: <u>1</u>	<u>N/A_</u> (in.)	Ox	xidized root channel	s in upp	per 12 inches		
			☐ Wa	ater-stained Leaves				
Depth to Free Water	in Pit:	>14_ (in.)		cal Soil Survey Dat	a			
				C-Neutral Test				
Depth to Saturated S	Soil	>14_ (in.)	Ot	her (explain in Ren	narks)			
Remarks: Below	v the OHWL for F	olsom Res	ervoir					

SOILS Plot ID: W11 TR1 Pit C2

Map Unit N (Series and	ame Phase) <u>Auburn ver</u>	ry rocky silt loam			Drainage Class: _we	ell-drained
	(Subgroup): Litl			Field Observations Confirm Mapped Ty	pe? Yes No	
Profile Desc	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle (Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8	2.5YR 4/2	7.5YR 5/6				
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	tions	- - - - -	Organic Listed of Listed of	cions rganic Content in Surface I restreaking in Sandy Soils restreaking in Sandy Soils restreaking in Soils List restreaking in National Hydric Soils Li restreaking in Remarks)	
Remarks:						
WETLAND	DETERMINATIO	N				
	c Vegetation Present drology Present? s Present?	t? Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a Wetla	(Circle) and? Yes No
Remarks:						

Project/Site:	Folsom Dam JFI	P			Date:	11/16	/2006		
Applicant/Owner:	Bureau of Reclar	mation			County:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No	Community	ID:	Oak woodla	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No	Plot ID:		W11 TR1 F	Pit D	
Is the area a potentia	al Problem Area?		∐Yes ∑	No	Transect ID):	W11 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Domin	nant Plant Sp	ecies		Stratum	Indicator
1. Pinus sabiniana		Т	NL	9.	_				
2. Quercus wislizeni	i	Т	NL	10.					
3. Heteromeles arbu	tifolia	S	NL	11.					
4. Avena sp.		Н	NL	12.					
5. Trifolium hirtum		Н	NL	13.					
6. Quercus douglas	ii	T	NL	14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excludin	ng FAC-): ()%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge		Prima	ry Indic	ators:				
Aerial Photogra	phs		☐ In	undated					
Other			☐ Sa	turated i	in upper 12 in	nches			
☐ No Recorded Da	ata Available		_	ater Mai					
				rift Lines					
					Deposits				
FIELD OBSERVATIO	NS:			_	Patterns in W				
	-			-	licators (2 or		_		
Depth of Surface Wa	ater: <u>I</u>	<u>V/A</u> (in.)			oot channels	in upp	er 12 inches		
Donath to Free Water	i Die	(* · ·)			ned Leaves				
Depth to Free Water	'in Pit:	(in.)			Survey Data	l			
Depth to Saturated S	loil	(in.)	_	AC-Neut	rai Test plain in Rem	arka)			
Depui to Saturated S		(111.)		mei (ex	piani ili Kelli	ai KS)			
Remarks: Above	e the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W11 TR1 Pit D

Map Unit Name (Series and Phas		y rocky silt loam		Drainage Class:	well-drained			
			Field Observation	Field Observations				
Taxonomy (Sub	group): Lith	uc Haploxerept		Confirm Mapped	d Type? Yes No			
Profile Descript	ion:							
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contras	Texture, Concretions, Structure, etc.			
_			-					
					_			
				_				
Hydric Soil Indi	cators:							
i I	Iistosol		Cor	cretions				
H	listic Epipedon		Hig	h Organic Content in Surfa				
	ulfidic Odor Aquic Moisture R	Regime		anic Streaking in Sandy Se ed on Local Hydric Soils l				
	Reducing Conditi Bleyed or Low-C			ed on National Hydric Soi er (Explain in Remarks)	lls List			
	neyed of Low-C	ilionia Colors	Our	ei (Expiani in Remarks)				
Remarks:								
No hydric veget	ation, no pit dug							
WETLAND DE	TERMINATION	N	ı					
Hydrophytic Ve			(Circle)		(Circle)			
Wetland Hydrol Hydric Soils Pre		Yes No	Is this	Sampling Point Within a V	Wetland? Yes No			
Remarks:								

Project/Site:	Folsom Dam JFl	P		Date	e:	11/16	/2005		
Applicant/Owner:	Bureau of Reclar	mation		Cou	ınty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	Stat	te:	Califo	rnia		
Do Normal Circums	tances exist on the	e site?	⊠Yes ☐	No Comr	- munity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ⊠	No Plot I	D:		W12 TR1 P	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Trans	sect ID	:	W12 TR1		
(If needed, expla	in on reverse side	.)							<u></u>
VEGETATION									
		a	.	D			1	a	.
Dominant Plant Spe 1. Cynodon dactylor		Stratum H	Indicator FAC	Dominant Pl	ant Sp	ecies		Stratum	Indicator
· · ·				9.					
2. Spergularia sp.		Н	FAC- to NL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-): 5	50%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLO	GY IN	DICAT	ORS:		
Stream, Lake, o	•			ry Indicators:					
Aerial Photogra	phs			undated					
☐ Other			_	turated in uppe	er 12 iı	nches			
☐ No Recorded Da	ata Available			ater Marks					
			_	ift Lines	_				
- 0				diment Deposi					
FIELD OBSERVATIO	ons:			ainage Pattern					
Daniel of Conformity		T/A (')		lary Indicator			_		
Depth of Surface Wa	ater:	<u>V/A</u> (in.)		kidized root ch		ın upp	er 12 inches		
Donth to Free Water	in Dit	15 (in)		ater-stained Le					
Depth to Free Water	m PIU:2	>15_ (in.)		cal Soil Surve AC-Neutral Tes	-	Į.			
Depth to Saturated S	loil >	>15_ (in.)		her (explain in		arke)			
Depui to Saturated S		<u>-13</u> (III.)	Ot.	nei (expiaiii ii	ıı IXCIII	aiks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W12 TR1 Pit A

Map Unit N (Series and	lame Phase) <u>Auburn ve</u>	ery rocky silt loam			Drainage Class: _w	vell-drained
Taxonomy	(Subgroup): Lit	thic Haploxerept			Field Observations Confirm Mapped Ty	ype? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Cole (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 3/2	7.5YR 5	5/6	Infrequent, medium	Some cobbles
						-
Hydric Soil	Indicators:					
Remarks: Uniform the	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime itions		Organic Listed o Listed o	ons ganic Content in Surface Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	
WETLANI	DETERMINATIO	ON				
	c Vegetation Present/drology Present? s Present?	Yes No Yes No Yes No	Circle)	s this Sam	pling Point Within a Wetl	(Circle)
Remarks:			•			

Project/Site:	Folsom Dam JFI	P			Date:	11/16	/2005		
Applicant/Owner:	Bureau of Reclar	mation			County:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No	Community	ID:	Oak woodl	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No	Plot ID:		W12 TR1 I	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No	Transect ID):	W12 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		1	 	1					
Dominant Plant Spe	cies	Stratum	Indicator	Domin	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni	i	T	NL	9.					
2. Bromus diandrus		Н	NL	10.					
3. Trifolium hirtum		Н	NL	11.					
4. Bromus hordeace	us	Н	FACU-	12.					
5. Quercus wislizeni	i	S	NL	13.					
6. Baccharis pilular	is	S	NL	14.					
7. Toxicodendron di	versilobum	S	NL	15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excludin	ng FAC-): (0%			
Remarks:	•	•	`		,				
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Prima	ry Indic	ators:				
Aerial Photogra	aphs		☐ In	undated					
Other			☐ Sa	iturated i	in upper 12 i	nches			
☐ No Recorded Da	ata Available		\square W	ater Ma	rks				
			□ D₁	rift Lines	S				
			☐ Se	ediment l	Deposits				
FIELD OBSERVATIO	ons:		☐ Di	rainage I	Patterns in W	etland	s		
			Second	lary Ind	licators (2 o	r more	required):		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)			oot channels	in upp	er 12 inches		
					ned Leaves				
Depth to Free Water	in Pit:	>12_ (in.)			Survey Data	ı			
				AC-Neut					
Depth to Saturated S	Soil	>12_ (in.)	∐ Ot	ther (exp	plain in Rem	arks)			
Remarks: Above	e the OHWL for F	olsom Res	ervoir. Boul	der at 12	2-inch depth				

SOILS Plot ID: W12 TR1 Pit B

Map Unit N (Series and l	ame Phase) <u>Auburn ver</u>	ry rocky silt loam		Drainage Class: _wel	ll-drained
Taxonomy (Subgroup): Lith	nic Haploxerept		Field Observations Confirm Mapped Typ	oe? Yes No Similar
Profile Desc	ription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/4			Cobbles throughout
		-			
Hydric Soil	Indicators:				
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Condit Gleyed or Low-C	ions	Organic Listed of Listed of	tions rganic Content in Surface L c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Lis Explain in Remarks)	
Remarks:					
WETLAND	DETERMINATIO	N			
	e Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	(Circle) Is this San	npling Point Within a Wetla	(Circle) nd? Yes No
Remarks:			<u> </u>		

Project/Site:	Folsom Dam JFI	P		Date:		11/16	/2005		
Applicant/Owner:	Bureau of Reclar	mation		Count	ty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	State:	<u> </u>	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes ☐]No Commu	unity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ⊠]No Plot ID:	:		W13 TR1 F	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Transec	et ID:		W13 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
		a							T 11
Dominant Plant Spe 1. Cynodon dactylor		Stratum H	Indicator FAC	Dominant Plan	ıt Spe	ecies		Stratum	Indicator
	<u> </u>			9.					
2. Spergularia sp.		Н	FAC- to NL	10.				1	
3. Salix gooddingii		S	OBL	11.				1	
4.				12.				1	
5.				13.					
6.				14.					
7.				15.					
8.				16.				<u> </u>	
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC-)): 6	7%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	ND HYDROLOGY	Y INI	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge		Primar	y Indicators:					
Aerial Photogra	phs		☐ Int	ındated					
Other				turated in upper	12 in	ches			
☐ No Recorded Da	ata Available			ater Marks					
			_	ift Lines					
				diment Deposits					
FIELD OBSERVATIO	ons:			ainage Patterns i					
	_			ary Indicators (_		
Depth of Surface Wa	ater: <u> </u>	<u>N/A</u> (in.)		idized root chan		in upp	er 12 inches		
D 4 - D 10 -		16 (1)		ater-stained Leav					
Depth to Free Water	'in Pit:	<u>>16_</u> (in.)		cal Soil Survey I	Data				
Donth to Cotunets 1 C	tail -	16 (:)		C-Neutral Test	D a	اعدام			
Depth to Saturated S	OOII	>16_ (in.)	☐ Ot	her (explain in F	ĸema	uKS)			
Remarks: Below	v the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W13 TR1 Pit A

Map Unit N (Series and	ame Phase) <u>Auburn ver</u>	ry rocky silt loam			Drainage Class: _we	ell-drained				
	Subgroup): <u>Litl</u>			Field Observations Confirm Mapped Typ	_					
Profile Desc	cription:									
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
8		2.5YR 5/2	7.5Y	R 5/6						
Hydric Soil	Indicators:									
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)										
Remarks:										
WETLAND	DETERMINATIO	N								
	e Vegetation Present drology Present? s Present?	? Yes No Yes No Yes No	(Circle)	Is this Sam	pling Point Within a Wetla	(Circle) and? Yes No				
Remarks:										

Project/Site:	Folsom Dam JFI	P			Date:	11/16	/2005		
Applicant/Owner:	Bureau of Reclar	mation			County:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No	Community	ID:	Oak woodl	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	∐No	Plot ID:		W13 TR1 F	Pit B	
Is the area a potentia			∐Yes ∑	No	Transect ID):	W13 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Domir	nant Plant Sp	ecies		Stratum	Indicator
1. Pinus sabiniana		Т	NL	9.	_				
2. Quercus wislizeni	i	T	NL	10.					
3. Heteromeles arbu	ıtifolia	S	NL	11.					
4. Toxicodendron di	versilobum	S	NL	12.					
5. Bromus diandrus		Н	NL	13.					
6. Avena sp.		Н	NL	14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excludin	ig FAC-): (0%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETL	AND HYI	DROLOGY IN	DICAT	ORS:		
☐ Stream, Lake, o	or Tide Gauge		Primai	ry Indic	ators:				
Aerial Photogra	aphs			undated					
Other			☐ Sa	turated i	in upper 12 i	nches			
☐ No Recorded Da	ata Available		_	ater Mai					
			_	rift Lines					
					Deposits				
FIELD OBSERVATIO	ONS:			_	Patterns in W				
D 4 60 6 W		<i>(</i> ')		-	licators (2 o		_		
Depth of Surface Wa	ater:	(in.)				ın upp	per 12 inches		
Donth to Enga Water	in Dit.	(in)			ned Leaves				
Depth to Free Water	- III PIL:	(in.)		AC-Neut	Survey Data	ı			
Depth to Saturated S	Soil	(in.)			rai Test plain in Rem	arks)			
Remarks: Above	e the OHWL for F	Folsom Res	ervoir						

SOILS Plot ID: W13 TR1 Pit B

Map Unit N	ame Phase) <u>Auburn ver</u>	ry rocky silt loam		Drainage Class: <u>we</u>	ell-drained				
			Field Observations	Field Observations					
Taxonomy	(Subgroup): <u>Litl</u>	nic Haploxerept		Confirm Mapped Typ	pe? Yes No				
Profile Des	cription:								
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
				_					
				-					
				_					
İ									
Hydric Soil	Indicators:								
 	Histosol Histic Epipedon Sulfidic Odor		High Orga	cretions Organic Content in Surface I nic Streaking in Sandy Soils	ayer in Sandy Soils				
	 Aquic Moisture I Reducing Condit 			d on Local Hydric Soils List d on National Hydric Soils Li	st				
	Gleyed or Low-C			r (Explain in Remarks)					
Remarks:									
	vegetation, no soil p	vit dua							
No welland	vegetation, no son p	nt dug							
1									
WETLAND	DETERMINATIO	N	<u> </u>						
	Vegetation Present		(Circle)		(Circle)				
Wetland Hy Hydric Soil	drology Present? s Present?	Yes No Yes No	Is this S	ampling Point Within a Wetla	and? Yes No				
Remarks:									
Remarks.									

Project/Site:	Folsom Dam JFI	P		Date	: :	11/16	/2005		
Applicant/Owner:	Bureau of Reclar	mation		Cour	nty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	State	e:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Comm	nunity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ⊠]No Plot ID) :		W14 TR1 F	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ⊠	No Transe	ect ID:	:	W14 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		i					-		
Dominant Plant Spe		Stratum	Indicator	Dominant Pla	ınt Spe	ecies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FAC	9.					
2. Spergularia sp.		Н	FAC- to NL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are (OBL, FAC	W or FAC (6	excluding FAC-	-): 5	50%			
Remarks:					<i>)</i>				
Kemarks.									
HYDROLOGY									
	(Describe in Rem	narks):	WETLA	ND HYDROLOG	GY INI	DICAT	ORS:		
Stream, Lake, o	*			y Indicators:					
Aerial Photogra	•			ındated					
Other	1		☐ Sa	turated in upper	r 12 in	nches			
☐ No Recorded Da	ata Available		_	ater Marks					
_			— ⊠ Dr	ift Lines					
			☐ Se	diment Deposits	.s				
FIELD OBSERVATION	ons:			ainage Patterns		etlands	S		
			Second	ary Indicators	s (2 or	more	required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	⊠ Ox	idized root char	nnels	in upp	er 12 inches		
			☐ Wa	ater-stained Lea	aves				
Depth to Free Water	in Pit:	<u>>16_</u> (in.)	☐ Lo	cal Soil Survey	Data Data				
			☐ FA	.C-Neutral Test	t				
Depth to Saturated S	Soil	>16_ (in.)	Ot	her (explain in	Rema	arks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W14 TR1 Pit A

Map Unit N (Series and	ame Phase) <u>Auburn ve</u>	ry rocky silt loam		Drainage Class: _wel	l-drained
Taxonomy	(Subgroup): <u>Lit</u> l	hic Haploxerept		Field Observations Confirm Mapped Typ	e? Yes No
Profile Des	cription:				
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/2	7.5YR 5/6	Medium, frequent	
11 1: 0 :1	T. 12				
Hydric Soil	Indicators:				
	Histosol Histic Epipedon		Concreti	ions ganic Content in Surface La	over in Sandy Soils
<u></u>	Sulfidic Odor		Organic	Streaking in Sandy Soils	ayer in Sandy Sons
_	Aquic Moisture			n Local Hydric Soils List	
	Reducing Condit Gleyed or Low-O			n National Hydric Soils Lis Explain in Remarks)	ι
-	•				
Remarks:					
WETLAND	DETERMINATIO	N			
Hydrophytic	c Vegetation Present	t? Yes No ((Circle)		(Circle)
Wetland Hy Hydric Soil	drology Present? s Present?	Yes No Yes No	Is this Sam	pling Point Within a Wetlan	nd? Yes No
Remarks:					

Project/Site:	Folsom Dam JF	P		Dat	te:	11/16	/2005		
Applicant/Owner:	Bureau of Recla	mation		Cou	unty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	Stat	te:	Califo	rnia		
Do Normal Circums	stances exist on the	e site?	⊠Yes [No Comi	munity	ID:	Annual gra	ssland	
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ∑	No Plot I	ID:		W14 TR1 F	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Trans	sect ID	:	W14 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Pl	lant Sp	ecies		Stratum	Indicator
1. Bromus diandrus		Н	NL	9.	•				
2. Bromus hordeace	us	Н	FACU-	10.					
3. Centaurium solsti	itialis	Н	NL	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL FAC	W or FAC (excluding FAC	٦-)٠ ()%			
Remarks:	t species that are	002,1110	· · · · · · · · · · · · · · · · · · ·	energanig 1710	<u>, , </u>	770			
Remarks:									
HYDROLOGY									
	(Describe in Ren	narks):	WETLA	AND HYDROLO	GY IN	DICAT	ORS:		
Stream, Lake, o	•	/-		ry Indicators:					
Aerial Photogra	•			undated					
Other	1		□ Sa	turated in uppe	er 12 iı	nches			
☐ No Recorded Da	ata Available		_	ater Marks					
			☐ Dr	rift Lines					
			☐ Se	diment Deposi	its				
FIELD OBSERVATION	ONS:		☐ Dr	ainage Pattern	ıs in W	etlands	S		
			Second	lary Indicator	rs (2 oı	more	required):		
Depth of Surface W	ater: <u>1</u>	<u>N/A</u> (in.)	☐ O ₂	xidized root ch	annels	in upp	er 12 inches		
			\square W	ater-stained Le	eaves				
Depth to Free Water	in Pit:	(in.)	☐ Lo	ocal Soil Surve	y Data	Į.			
				AC-Neutral Tes					
Depth to Saturated S	Soil	(in.)	Ot	her (explain i	n Rem	arks)			
Remarks: Above	e the OHWL for F	Folsom Res	ervoir						

SOILS Plot ID: W14 TR1 Pit B

Map Unit Na (Series and F	ume Phase) <u>Auburn ver</u>	ry rocky silt loam		Drainage Class: _wel	ll-drained
Taxonomy (S	Subgroup): <u>Litl</u>	nic Haploxerept		Field Observations Confirm Mapped Typ	e? Yes No
Profile Desc	ription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil 1	Indiantors				
Hydric Soil I					
	Histosol Histic Epipedon			rganic Content in Surface L	ayer in Sandy Soils
	Sulfidic Odor Aquic Moisture I	Regime		c Streaking in Sandy Soils on Local Hydric Soils List	
	Reducing Condit			on National Hydric Soils List	st
	Gleyed or Low-C	Chroma Colors	Other (Explain in Remarks)	
Remarks:					
No hydric ve	getation, no soil pit	t dug			
110 119 0110 110	getation, no son pr	a dug			
WETLAND	DETERMINATIO:	N			
	Vegetation Present		(Circle)		(Circle)
Wetland Hyd	drology Present?	Yes No		l. D. Mart. M. 1	
Hydric Soils	Present?	Yes No	Is this San	npling Point Within a Wetla	nd? Yes No
Remarks:					

Project/Site:	Folsom Dam JFI	P		Date:	1	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation		County	y:	Sacrai	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	State:	(Califo	rnia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Commu	nity I	D:	Seasonal we	tland/riparia	n
Is the site significantly di	sturbed (Atypical Situs	ation)?	∐Yes ⊠	No Plot ID:		•	W15 TR1 F	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ⊠	No Transect	t ID:	•	W15 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		1					-		
Dominant Plant Spe		Stratum	Indicator	Dominant Plant	t Spe	cies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FAC	9.					
2. Spergularia sp.		Н	FAC- to NL	10.					
3. Salix gooddingii		Т	OBL	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (6	excluding FAC-):	: 67	7%			
Remarks:	1	,							
Temarks.									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	ND HYDROLOGY	Y IND	ICAT	ORS:		
Stream, Lake, o	*	,	Primar	y Indicators:					
Aerial Photogra	•			ındated					
Other			☐ Sa	turated in upper 1	12 inc	ches			
☐ No Recorded Da	ata Available		☐ Wa	ater Marks					
			⊠ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	ons:		☐ Dr	ainage Patterns ir	n We	tlands	S		
			Second	ary Indicators (2	2 or 1	more	required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	□ Ox	idized root chanr	nels i	n upp	er 12 inches		
			☐ Wa	ater-stained Leave	res				
Depth to Free Water	in Pit:	>15_ (in.)		cal Soil Survey D	Data				
				.C-Neutral Test					
Depth to Saturated S	Soil	>15_ (in.)	☐ Oti	her (explain in R	Remai	rks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W15 TR1 Pit A

Map Unit N											
(Series and Phase) Andregg coarse sandy loam Drainage Class: well-drained Field Observations											
Taxonomy (Subgroup): <u>Ultic Haploxeroll</u> Confirm Mapped Type? Yes No											
Profile Description:											
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
8		2.5YR 4/2	7.5Y	R 5/6	Large, frequent	More silt, less sand					
Hydric Soil	Indicators:										
	Histosol Histic Epipedon		_	Concreti	ons ganic Content in Surface L	aver in Sandy Soils					
	Sulfidic Odor				Streaking in Sandy Soils	ayer in Sandy Sons					
	Aquic Moisture F				n Local Hydric Soils List						
_	Reducing Condition Gleyed or Low-Co		_		n National Hydric Soils Lis Explain in Remarks)	St					
Remarks:											
110111411151											
WETLAND	DETERMINATIO	N									
	Vegetation Present		(Circle)			(Circle)					
Wetland Hy Hydric Soils	drology Present? s Present?	Yes No Yes No		Is this Sam	pling Point Within a Wetla	nd? Yes No					
Remarks:											

Project/Site:	Folsom Dam JFI	P			Date:	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation			County:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	stances exist on the	e site?	⊠Yes []No (Community	ID:	Oak woodla	and	
Is the site significantly di	sturbed (Atypical Situs	ation)?	∐Yes ∑	No l	Plot ID:		W15 TR1 F	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No ∑	Transect ID):	W15 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		1	 	1					
Dominant Plant Spe	cies	Stratum	Indicator	Domina	ant Plant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni	i	T	NL	9.					
2. Quercus wislizeni	i	S	NL	10.					
3. Bromus diandrus		Н	NL	11.					
4. Bromus hordeace	us	Н	FACU-	12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding	; FAC-): ()%			
Remarks:	•								
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDI	ROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primai	ry Indica	tors:				
Aerial Photogra	aphs		Int	undated					
Other			☐ Sa	turated in	upper 12 ii	nches			
☐ No Recorded Da	ata Available		\square W	ater Mark	XS.				
			☐ Dr	rift Lines					
			☐ Se	ediment D	eposits				
FIELD OBSERVATION	ONS:			_	atterns in W				
				-			required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)				in upp	er 12 inches		
					ed Leaves				
Depth to Free Water	in Pit:	(in.)			Survey Data	l			
D 4 4 6 4 4 5	1	<i>(</i> * \	_	AC-Neutra		1 \			
Depth to Saturated S	5011	(in.)	∐ Ot	tner (expl	ain in Rem	arks)			
D 1 41	4 0111111 6 7								
Remarks: Above	e the OHWL for F	oisom Res	ervoir						

SOILS Plot ID: W15 TR1 Pit B

Map Unit Name (Series and Phase) Andreg	g coarse sandy loam		Drainage Class: <u>we</u> Field Observations	ll-drained					
Taxonomy (Subgroup):	Ultic Haploxeroll		Confirm Mapped Typ	pe? Yes No					
Profile Description:									
Depth (inches) Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.					
	-								
Hydric Soil Indicators:									
Histosol		Concre	tions						
Histic Epiped Sulfidic Odor		High C	Organic Content in Surface L	ayer in Sandy Soils					
Aquic Moistu	re Regime	Listed	c Streaking in Sandy Soils on Local Hydric Soils List						
Reducing Cor Gleved or Lor	nditions w-Chroma Colors		on National Hydric Soils Lis Explain in Remarks)	st					
Remarks:			,						
No wetland vegetation; no so	oil pit dug								
WETLAND DETERMINAT	TION								
Hydrophytic Vegetation Pres		(Circle)		(Circle)					
Wetland Hydrology Present?	Yes No								
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No									
Remarks:									

Project/Site:	Folsom Dam JFI	•		Date:	1	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation		County	y: S	Sacrai	mento		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	State:		Califo	rnia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Commu	nity I	D:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situs	ation)?	∐Yes ⊠	No Plot ID:		•	W16 TR1 F	it A	
Is the area a potentia	al Problem Area?		∐Yes ⊠	No Transect	t ID:	•	W16 TR1		
(If needed, expla	in on reverse side	.)							<u></u>
VEGETATION							<u> </u>		
Dominant Plant Spe		Stratum	Indicator	Dominant Plant	t Spe	cies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FAC	9.					
2. Spergularia sp.		Н	FAC- to NL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are (OBL, FAC	W or FAC (6	excluding FAC-):	:				
Remarks:				g /.					
Kemarks.									
HYDROLOGY									
	(Describe in Rem	narks):	WETLA	AND HYDROLOGY	y Ind	ICAT	ORS:		
Stream, Lake, o	*			y Indicators:					
Aerial Photogra	•			ındated					
Other	1		☐ Sa	turated in upper 1	12 inc	ches			
☐ No Recorded Da	ata Available		_	ater Marks					
			⊠ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	ons:		☐ Dr	ainage Patterns ir	n We	tlands	3		
			Second	ary Indicators (2	2 or 1	more	required):		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)	⊠ Ox	idized root chann	nels i	n upp	er 12 inches		
			☐ Wa	ater-stained Leav	es				
Depth to Free Water	in Pit:	<u>>15</u> _ (in.)	☐ Lo	cal Soil Survey D	Oata				
			☐ FA	C-Neutral Test					
Depth to Saturated S	Soil	<u>>15</u> (in.)	Ot	her (explain in R	Remar	rks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W16 TR1 Pit A

Map Unit N (Series and	ame Phase) <u>Andregg c</u>	oarse sandy loam			ninage Class: <u>w</u> ld Observations	vell-drained
Taxonomy	(Subgroup): <u>Ul</u>	tic Haploxeroll			nfirm Mapped T	ype? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Color (Munsell Mo		ance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/2	7.5YR 5/6	6 Abund	ant throughout	More silt, less sand
Hydric Soil	To di coto una					
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime tions		Organic Streakin Listed on Local l	g in Sandy Soils Hydric Soils List al Hydric Soils I	
WETLANI) DETERMINATIO)N				
	c Vegetation Present drology Present? s Present?	t? Yes No Yes No Yes No	(Circle)	his Sampling Po	int Within a Wet	(Circle)
Remarks:						

Project/Site:	Folsom Dam JFI	P		Dat	te:	11/17	/2005		
Applicant/Owner:	Bureau of Reclar	mation		Cor	unty:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	Sta	te:	Califo	ornia		
Do Normal Circums	stances exist on the	e site?	⊠Yes □]No Com	munity	ID:	Oak woodla	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot l	ID:		W16 TR1 F	' it	
Is the area a potentia			∐Yes ∑	No Trans	sect ID) :	W16 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant P	lant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni	ii	Т	NL	9.					
2. Bromus diandrus		Н	NL	10.					
3. Avena sp.		Н	NL	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-): ()%			
Remarks:	•				·				
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLO	OGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primai	y Indicators:					
Aerial Photogra	aphs		☐ Int	undated					
Other			☐ Sa	turated in upp	er 12 iı	nches			
☐ No Recorded Da	ata Available		_	ater Marks					
				ift Lines					
				diment Depos					
FIELD OBSERVATION	ONS:			ainage Pattern					
				lary Indicator			_		
Depth of Surface W	ater:	(in.)		kidized root ch		in upp	er 12 inches		
D. d. E. W.	. D.	<i>(</i> ')		ater-stained Le					
Depth to Free Water	in Pit:	(in.)		cal Soil Surve	-	l			
Donth to Cotumber 1 9	Soil.	(in)		C-Neutral Te		orleg)			
Depth to Saturated S		(in.)		her (explain i	ii Keini	aiks)			
Remarks:									

SOILS Plot ID: W16 TR1 Pit

Map Unit Name (Series and Phase) _A	ndregg coarse sandy loam		Drainage Class: <u>we</u> Field Observations	ll-drained_
Taxonomy (Subgroup)	: <u>Ultic Haploxeroll</u>		Confirm Mapped Typ	pe? Yes No
Profile Description:				
Depth (inches) Horizo	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators:				
Histoso		Concre	ations	
Histic E	Epipedon	High C	Organic Content in Surface L	ayer in Sandy Soils
Sulfidic Aquic N	Odor Moisture Regime		c Streaking in Sandy Soils on Local Hydric Soils List	
Reducii	ng Conditions or Low-Chroma Colors	Listed	on National Hydric Soils Lis (Explain in Remarks)	st
	or Low-Chroma Colors	Other	(Explain in Remarks)	
Remarks:				
No wetland vegetation	, no pit dug			
<u> </u>				
WETLAND DETERM	IINATION	<u> </u>		
Hydrophytic Vegetatio		(Circle)		(Circle)
Wetland Hydrology Pr Hydric Soils Present?	esent? Yes No Yes No	Is this Sar	mpling Point Within a Wetla	and? Yes No
Remarks:				

Project/Site:	Folsom Dam JF	P			Date:	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation			County:	Sacra	mento		
Investigator:	Gretchen Lebed	nik, Jelica `	White		State:	Califo	ornia		
Do Normal Circums	stances exist on the	e site?	⊠Yes	No	Community	ID:	Seasonal wetland/ho	rticultural	
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ∑	√Nο	Plot ID:		W17 TR1 I	Pit A	
Is the area a potentia (If needed, expla	al Problem Area? nin on reverse side	e.)	□Yes ▷	∐No	Transect ID):	W17 TR1		
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Domin	ant Plant Sp	ecies		Stratum	Indicator
1. Populus fremonti	i ssp. fremontii	T	FAC+	9.	-				
2. Eucalyptus sp.		T	NL	10.					
3. Cynodon dactylor	ı	Н	FAC	11.					
4. Spergularia sp.		Н	FAC- to NL	12.					
5. Eremocarpus set	igerus	Н	NL	13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding	g FAC-): 2	20%			
Remarks: Include	des woody species	s that appea	r to be remn	ant hortic	cultural plan	tings			
HYDROLOGY									
	(Describe in Ren	narks):	WETL	AND HYD	ROLOGY IN	DICAT	ORS:		
Stream, Lake, o	`	,	Prima	ry Indica	ators:				
Aerial Photogra	aphs		☐ In	undated					
Other			☐ Sa	aturated in	n upper 12 ii	nches			
No Recorded D	ata Available		\square W	ater Mar	ks				
			⊠ Dı	rift Lines					
			☐ Se	ediment I	Deposits				
FIELD OBSERVATION	ONS:		□ D₁	rainage P	atterns in W	etland	S		
			Second	dary Indi	icators (2 or	r more	required):		
Depth of Surface W	ater: <u>l</u>	<u>N/A</u> (in.)				in upp	er 12 inches		
					ned Leaves				
Depth to Free Water	r in Pit:	>16_ (in.)			Survey Data	l			
	~			AC-Neutr					
Depth to Saturated S	Soil	>16_ (in.)	∐ Ot	ther (exp	olain in Rema	arks)			
Remarks: Relov	v the OHWI, for F	Folsom Res	ervoir						

SOILS Plot ID: W17 TR1 Pit A

Map Unit N (Series and	lame Phase) <u>Andregg</u> (coarse sandy loam			Drainage Class: _	
Taxonomy	(Subgroup): <u>Ul</u>	tic Haploxeroll			Field Observations Confirm Mapped	
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/2	7.5Y	R 5/6	Large, common	Silty, not much sand, gravel
	·					
						_
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condi Gleyed or Low-	Regime itions	 	Organic Listed C	tions organic Content in Surface c Streaking in Sandy Soil on Local Hydric Soils Lis on National Hydric Soils Explain in Remarks)	s
Remarks:						
WETLANI	DETERMINATION DETERMINATION)N				
	c Vegetation Preser ydrology Present? s Present?	Yes No Yes No Yes No	(Circle)	Is this San	npling Point Within a We	(Circle)
Remarks:						

Project/Site:	Folsom Dam JFl	2		Date:	11/17	7/2005		
Applicant/Owner:	Bureau of Recla			County:		amento		
Investigator:	Gretchen Lebedi	nik, Jelica V	White	State:	Calif	ornia		
Do Normal Circums				No Communit	y ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situs	ation)?	Yes	No Plot ID:	•	W17 TR1 I		
Is the area a potentia	ıl Problem Area?		∐Yes ⊠	No Transect II	D:	W17 TR1		
(If needed, expla	in on reverse side	.)						<u></u>
VEGETATION								
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant S	necies		Stratum	Indicator
1. Eremocarpus sett		Н	NL	9.	peeres		Strategili	Indiano
2. Spergularia sp.		Н	FAC- to NL	10.				
3.				11.				
4.				12.				
5.				13.				
6.				14.				
7.				15.				
8.				16.				
Percent of Dominant	t Species that are (OBL, FAC	W or FAC (6	excluding FAC-):	0%			
Remarks:	e species that are	022,1110	· · · · · · · · · · · · · · · · · · ·	merading 1710).	070			
Kemarks.								
HYDROLOGY								
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLOGY I	NDICAT	ORS:		
Stream, Lake, o	*	,	Primar	y Indicators:				
Aerial Photogra	phs		☐ Int	ındated				
Other			☐ Sa	turated in upper 12	inches			
☐ No Recorded Da	ata Available		☐ Wa	ater Marks				
			⊠ Dr	ift Lines				
			☐ Se	diment Deposits				
FIELD OBSERVATIO	ons:		☐ Dr	ainage Patterns in V	Vetland	ls		
			Second	ary Indicators (2	or more	e required):		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)		idized root channel	s in up	per 12 inches		
				ater-stained Leaves				
Depth to Free Water	in Pit:	>13.5_ (in.)		cal Soil Survey Dat	a			
			=	C-Neutral Test				
Depth to Saturated S	Soil	>13.5_ (in.)) \square Ot	her (explain in Rer	narks)			
Pamarka: Palau	the OHWI for F	olsom Pas	orvoir					

SOILS Plot ID: W17 TR1 Pit B

Map Unit N (Series and	ame Phase) <u>Andregg co</u>	parse sandy loam		Drainage Class: _we	ell-drained
Taxonomy	(Subgroup): <u>Ult</u>	ic Haploxeroll		Field Observations Confirm Mapped Typ	pe? Yes No
Profile Des	cription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast Few, small,	Texture, Concretions, Structure, etc.
8		10YR 3/2	7.5YR 5/6	infrequent	Silt & gravel
Hydric Soil	Indicators:				
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	Organic Listed of Listed of	tions rganic Content in Surface I c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)	
Remarks:					
WETLANI	DETERMINATIO	N	<u> </u>		
	c Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	(Circle) Is this San	npling Point Within a Wetla	(Circle)
Remarks:			<u> </u>		

Project/Site:	Folsom Dam JFI	P		D	ate:	11/17	/2005		
Applicant/Owner:	Bureau of Reclar	mation		C	ounty:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	St	tate:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes ☐	No Con	nmunity	/ ID:	Oak woodla	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot	t ID:		W17 TR1 F	Pit C	
Is the area a potentia	l Problem Area?		∐Yes ∑	No Trai	nsect ID):	W17 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spec	cies	Stratum	Indicator	Dominant 1	Plant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni		Т	NL	9.					
2. Bromus diandrus	•	Н	NL	10.					
3. Bromus hordeace	us	Н	FACU-	11.					
4. Centaurea solstiti		Н	NL	12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FA	AC-): (0%			
Remarks:	1	,	`						
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROI	LOGY IN	DICAT	ORS:		
Stream, Lake, o	r Tide Gauge		Primai	ry Indicators	s:				
Aerial Photogra	phs		In:	undated					
Other			☐ Sa	turated in up	per 12 i	nches			
☐ No Recorded Da	ata Available		\square W	ater Marks					
			_	ift Lines					
				diment Depo					
FIELD OBSERVATIO	NS:			ainage Patter					
	_			lary Indicate			_		
Depth of Surface Wa	ater: <u>N</u>	<u>V/A</u> (in.)		kidized root o		in upp	er 12 inches		
D 4 (E W)	' D'	<i>(</i> ')		ater-stained I					
Depth to Free Water	in Pit:	(in.)		cal Soil Surv C-Neutral T	•	l			
Depth to Saturated S	loil	(in.)	_	AC-Neutrai I her (explain		arke)			
Depui to Saturated S		(111.)	Oi	nei (expiaili	iii Keill	ai KS)			
Remarks: Above	e the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W17 TR1 Pit C

Map Unit N (Series and	ame Phase) <u>Andregg co</u>	oarse sandy loam		Drainage Class: wel	l-drained
Taxonomy ((Subgroup): <u>Ult</u>	ic Haploxeroll		Field Observations Confirm Mapped Typ	e? Yes No
Profile Desc	cription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil	Indicators:				
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	Organio Listed o	tions rganic Content in Surface La c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Lis Explain in Remarks)	
Remarks:					
No wetland	vegetation, no pit di	ug			
WETI AND	DETERMINATIO	N			
Hydrophytic Wetland Hy	c Vegetation Present drology Present?	Yes No (Yes No)	(Circle)		(Circle)
Hydric Soil	s Present?	Yes No	Is this San	npling Point Within a Wetlar	nd? Yes No
Remarks:					

Project/Site:	Folsom Dam Jl	F P		Date:	1	11/17	/2005		
Applicant/Owner:	Bureau of Recl	amation		County	y: <u> </u>	Sacra	mento		
Investigator:	Gretchen Lebe	dnik, Jelica	White	State:		Califo	ornia		
Do Normal Circums	tances exist on t	he site?	⊠Yes [No Commur	nity I	D:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Sit	cuation)?	∐Yes ⊠	No Plot ID:	-	•	W18 TR1 F	Pit A	
Is the area a potentia	al Problem Area?	•	∐Yes ⊠	No Transect	ID:	•	W18 TR1		<u></u>
(If needed, expla	in on reverse sid	le.)				•			<u></u>
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant	Spec	cies		Stratum	Indicator
1. Cynodon dactylor		Н	FAC	9.	Бре	CICS		Buatam	mareator
2. Spergularia sp.		Н	FAC- to NL	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	t Species that are	OBL FAC	W or FAC (6	excluding FAC-):					
Remarks:	species that are	0000,7770	011110 (merading 1710).					
Kemarks.									
HYDROLOGY									
	(Describe in Re	marks):	WETLA	AND HYDROLOGY	IND	ICAT	ORS:		
Stream, Lake, o	`	,	Primar	y Indicators:					
Aerial Photogra	•			ındated					
Other			☐ Sa	turated in upper 1	2 inc	ches			
☐ No Recorded Da	ata Available		☐ Wa	ater Marks					
			☐ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	NS:		☐ Dr	ainage Patterns in	ı We	tlands	S		
			Second	ary Indicators (2	2 or 1	more	required):		
Depth of Surface Wa	ater: N	<u>/A</u> (in.)		idized root chann		n upp	er 12 inches		
				ater-stained Leave					
Depth to Free Water	in Pit:	<u>>15</u> _ (in.)		cal Soil Survey D	D ata				
				C-Neutral Test					
Depth to Saturated S	Soil _	<u>>15</u> (in.)	∐ Ot	her (explain in R	emar	rks)			
Pamarka: Palau	the OUWL for	Folsom Pas	orvoir						

SOILS Plot ID: W18 TR1 Pit A

Map Unit N (Series and	ame Phase) <u>Andregg c</u>	oarse sandy loam			Drainage Class: _w	vell-drained
Taxonomy	(Subgroup): <u>Ult</u>	ic Haploxeroll			Field Observations Confirm Mapped T	ype? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Cole (Munsell M		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/2	7.5YR :	5/6	Small, infrequent	
Hydric Soil	Indicators					
Remarks:	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	tions		Organic S Listed on Listed on	ons ganic Content in Surface Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils I splain in Remarks)	
WETLAND) DETERMINATIO	N				
	c Vegetation Present drology Present? s Present?	Yes No Yes No Yes No	Circle)	s this Samp	ling Point Within a Wet	(Circle)
Remarks:						

Project/Site:	Folsom Dam JFI	P			Date:	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation			County:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [□No	Community	ID:	Oak woodl	and/riparia	n
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No	Plot ID:		W18 TR1 I	Pit B	
Is the area a potentia	l Problem Area?		∐Yes ∑	No	Transect ID	:	W18 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION		1	t .	+			-	_	
Dominant Plant Spe	cies	Stratum	Indicator	Domir	nant Plant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni	i	T	NL	9.					
2. Populus fremontii	ssp. fremontii	Т	FAC+	10.					
3. Quercus douglas	ii	Т	NL	11.					
4. Salix gooddingii		Т	OBL	12.					
5. Cynodon dactylon	ı	Н	FAC	13.					
6. Phyla nodiflora		Н	FACW	14.					
7. Kickxia elatine		Н	NI	15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excludin	ig FAC-): 6	57%			
Remarks:	1	,	`		,				
Temarks.									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYI	DROLOGY IN	DICAT	ORS:		
Stream, Lake, o	`	,	Primai	ry Indic	ators:				
Aerial Photogra	•			undated					
Other			☐ Sa	ıturated i	in upper 12 ii	nches			
☐ No Recorded Da	ata Available		\square W	ater Mar	rks				
			⊠ Dr	rift Lines	S				
			☐ Se	ediment I	Deposits				
FIELD OBSERVATIO	NS:		☐ Dr	rainage F	Patterns in W	etland	S		
			Second	dary Ind	licators (2 or	r more	required):		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)		xidized r	oot channels	in upp	er 12 inches		
			\square W	ater-stai	ned Leaves				
Depth to Free Water	in Pit:	>15_ (in.)		ocal Soil	Survey Data	l			
				AC-Neut					
Depth to Saturated S	Soil	>15_ (in.)	Ot	ther (exp	plain in Rem	arks)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W18 TR1 Pit B

Map Unit N (Series and	ame Phase) <u>Andregg co</u>	oarse sandy loam			Drainage Class: _we	ell-drained
Taxonomy	(Subgroup): <u>Ult</u>	ic Haploxeroll			Field Observations Confirm Mapped Typ	pe? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		2.5YR 4/2	7.5Y	R 5/6	Small, infrequent	silty
Hydric Soil	Indicators:					
— — —	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	- - - -	Organic Listed o Listed o	ions ganic Content in Surface L Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Li Explain in Remarks)	
Remarks:						
WET AND		N.				
	DETERMINATIO C Vegetation Present		(Circle)			(Circle)
	drology Present?	Yes No Yes No	(Chele)	Is this Sam	pling Point Within a Wetla	
Remarks:						

Project/Site:	Folsom Dam JFI	P		Date	e:	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation		Cou	inty:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White	Stat	te:	Califo	rnia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No Comm	- nunity	ID:	Oak woodla	and	
Is the site significantly di	sturbed (Atypical Situs	ation)?	∐Yes ∑	No Plot I	D:		W18 TR1 F	Pit C	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Trans	ect ID	:	W19 TR1		
(If needed, expla	in on reverse side	.)				•			
VEGETATION		1	 						
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Pla	ant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni	i	T	NL	9.					
2. Bromus hordeace	us	Н	FACU-	10.					
3. Trifolium hirtum		Н	NL	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-):				
Remarks:	•	•	`						
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLO	GY IN	DICAT	ORS:		
☐ Stream, Lake, o	or Tide Gauge		Primai	y Indicators:					
Aerial Photogra	aphs		☐ Int	ındated					
Other			☐ Sa	turated in uppe	er 12 iı	nches			
☐ No Recorded Da	ata Available		\square W	ater Marks					
			☐ Dr	ift Lines					
			☐ Se	diment Deposi	its				
FIELD OBSERVATION	ONS:		☐ Dr	ainage Patterns	s in W	etlands	3		
			Second	lary Indicator	s (2 or	more	required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	☐ O ₂	aidized root cha	annels	in upp	er 12 inches		
			\square W	ater-stained Le	eaves				
Depth to Free Water	in Pit:	(in.)		cal Soil Surve	-	Į.			
			_	C-Neutral Tes					
Depth to Saturated S	Soil	(in.)	☐ Ot	her (explain ir	n Rema	arks)			
Remarks: Above	e the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W18 TR1 Pit C

Map Unit N (Series and	ame Phase) <u>Andregg co</u>	oarse sandy loam		Drainage Class: _wel	l-drained_
Taxonomy	(Subgroup): <u>Ult</u>	ic Haploxeroll		Field Observations Confirm Mapped Typ	e? Yes No
Profile Des	cription:				
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil	Indicators:				
Tiyune Bon			~		
-	_ Histosol Histic Epipedon		Concret High Or	nons rganic Content in Surface La	aver in Sandy Soils
	Sulfidic Odor		Organic	Streaking in Sandy Soils	
	Aquic Moisture I			on Local Hydric Soils List	•
_	Reducing Condit Gleyed or Low-C			on National Hydric Soils Lis Explain in Remarks)	ı
Remarks:					
No wetland	vegetation, no pit du	ησ			
110 Welland	vegetation, no pit de	" 5			
WETLAND	DETERMINATIO	N			
Hydrophyti	c Vegetation Present		(Circle)		(Circle)
Wetland Hy Hydric Soil	drology Present? s Present?	Yes No	Is this Sam	npling Point Within a Wetlan	nd? Yes No
Remarks:			<u> </u>		

Project/Site:	Folsom Dam JF	P		Date:		11/17/	/2005		
Applicant/Owner:	Bureau of Recla			Count	_	Sacrai			
Investigator:	Gretchen Lebedi	nik, Jelica '	White	State:		Califo	rnia		
Do Normal Circums				No Commu	_	ID:	riparian		
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ⊠	No Plot ID:	:	•	W19 TR1 F	Pit A	
Is the area a potentia	l Problem Area?		∐Yes ⊠	No Transec	t ID:	•	W19 TR1		
(If needed, expla	in on reverse side	.)				-			
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plan	ıt Spe	ecies		Stratum	Indicator
1. Salix gooddingii		Т	OBL	9.					
2. Cynodon dactylor	ı	Н	FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	t Species that are	OBL, FAC	W or FAC (excluding FAC-):	: 1	00%			
Remarks:	.			<i>B</i> - <i>y</i>					
Kemarks.									
HYDROLOGY									
Recorded Data	(Describe in Ren	narks):	WETLA	AND HYDROLOGY	y Ini	DICATO	ORS:		
Stream, Lake, o	r Tide Gauge		Primar	y Indicators:					
Aerial Photogra	phs		☐ Int	ındated					
Other			☐ Sa	turated in upper	12 in	ches			
☐ No Recorded Da	ata Available		☐ Wa	ater Marks					
			⊠ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	NS:			ainage Patterns is					
				ary Indicators (
Depth of Surface Wa	ater:1	<u>V/A</u> (in.)		idized root chan		in upp	er 12 inches		
				ater-stained Leav					
Depth to Free Water	in Pit:	>17_ (in.)		cal Soil Survey I	Data				
D 4 . C		15 (1)		C-Neutral Test					
Depth to Saturated S	501l <u> </u>	>17_ (in.)	☐ Ot	her (explain in R	kema	rks)			
Pamarke: Ralay	the OUWL for E	olcom Doc	orvoir						

SOILS Plot ID: W19 TR1 Pit A

	Phase) Andregg co	•			Drainage Class: <u>we</u> Field Observations	
Taxonomy	(Subgroup): <u>Ulti</u>	ic Haploxeroll			Confirm Mapped Typ	pe? Yes No
Profile Des	cription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		10YR 3/2	7/5Y	R 5/6	few , infrequent	
	<u> </u>					
	<u> </u>					
	-					
Hydric Soi	I Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Condit Gleyed or Low-C	ions	- - - - -	Organic Listed of	ions rganic Content in Surface L Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Li Explain in Remarks)	
Remarks:						
WET AND		NI.				
	D DETERMINATION ic Vegetation Present		(Circle)			(Circle)
Wetland Hy Hydric Soi	ydrology Present?	Yes No Yes No	(2222)	Is this Sam	npling Point Within a Wetla	
Remarks: S	Site limited to 2 willo	w trees				

Project/Site:	Folsom Dam JFI	P			Date:	11/17	/2005		
Applicant/Owner:	Bureau of Recla	mation			County:	Sacra	mento		
Investigator:	Gretchen Lebedi	nik, Jelica '	White		State:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes [No (Community	ID:	Oak woodl	and	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No F	Plot ID:		W19 TR1 I	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No 7	Transect ID	:	W19 TR1		
(If needed, expla	in on reverse side	.)							
VECETATION									
VEGETATION				1					
Dominant Plant Spe		Stratum	Indicator		nt Plant Sp	ecies		Stratum	Indicator
1. Quercus wislizeni		T	NL	9.					
2. Toxicodendron di		S	NL	10.					
3. Mimulus aurantie		S	NL	11.					
4. Aira caryophylla		Н	NL	12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding	FAC-):				
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDR	ROLOGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primai	ry Indicat	tors:				
Aerial Photogra	aphs		☐ In	undated					
Other			☐ Sa	aturated in	upper 12 ii	nches			
☐ No Recorded Da	ata Available		\square W	ater Mark	S				
			Dr	rift Lines					
			☐ Se	ediment De	eposits				
FIELD OBSERVATIO	ONS:			_	tterns in W				
				-			required):		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)				in upp	er 12 inches		
				ater-staine					
Depth to Free Water	in Pit:	(in.)			urvey Data	l			
				AC-Neutra					
Depth to Saturated S	S01l	(in.)	∐ Ot	ther (expl	ain in Rem	arks)			
Remarks: Above	e the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W19 TR1 Pit B

Map Unit Name	Andreag coarse say	ndy loom		Drainaga Class: wall	drained						
(Series and Phase) Andregg coarse sandy loam Drainage Class: well-drained Field Observations Taxonomy (Subgroup): Ultic Haploxeroll Confirm Mapped Type? Yes No											
Taxonomy (Subgrou	p): <u>Ultic Haplo</u>	<u>oxeroll</u>	<u> </u>	Confirm Mapped Type	e? Yes No						
Profile Description:											
Depth (inches) Hori:			Mottle Colors Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.						
											
				· ·							
Hydric Soil Indicator	PO.										
Hydric Son indicator	18.										
Histor			Concretion		von in Condy Coile						
	Epipedon lic Odor			anic Content in Surface La Streaking in Sandy Soils	yer in Sandy Soils						
	Moisture Regime		Listed on	Local Hydric Soils List							
	cing Conditions ed or Low-Chroma	Colors		National Hydric Soils List splain in Remarks)							
Gicyc	d of Low-Chroma	Colors	Other (E/	xpiam in Kemarks)							
Remarks:	on no mit duo										
No wetland vegetation	on, no pit dug										
WETLAND DETER	MINATION										
Hadaahad V	Lina Danna (0	V (N //	2:1-)		(0: 1)						
Hydrophytic Vegetat Wetland Hydrology		Yes No (C	Circle)		(Circle)						
Hydric Soils Present		Yes No	Is this Samp	ling Point Within a Wetlan	d? Yes No						
Remarks:											
TOMMING.											

Project/Site:	Folsom Dam JF	P		Dat	te:	8/1/20	006		
Applicant/Owner:	Bureau of Recla	mation		Cor	unty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	Sta	te:	Califo	rnia		
Do Normal Circums	stances exist on the	e site?	⊠Yes [No Com	munity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ∑	No Plot	ID:		W20 TR1 F	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Trans	sect ID):	W20 TR1		
(If needed, expla	in on reverse side	.)				•			
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant P	lant Sp	ecies		Stratum	Indicator
1. Juncus balticus		Н	OBL	9.					
2. Cynodon dactylor	ı	Н	FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-):	100%			
		022,1110	W 011110 (-).	10070			
Remarks: Plants	are grazed								
HYDROLOGY									
	(Describe in Ren	narks)·	WETLA	AND HYDROLO	ogy In	DICAT	ORS:		
Stream, Lake, o	•	mino).		y Indicators:		DICITI			
Aerial Photogra	_			ındated					
Other	T		☐ Sa	turated in upp	er 12 i	nches			
☐ No Recorded Da	ata Available			ater Marks					
_			□ □ Dr	ift Lines					
			☐ Se	diment Depos	its				
FIELD OBSERVATION	ONS:			ainage Pattern		etland	S		
				ary Indicator					
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	□ Ox	xidized root ch	annels	in upp	er 12 inches		
				ater-stained L	eaves				
Depth to Free Water	in Pit:	<u>>16_</u> (in.)	☐ Lo	cal Soil Surve	y Data	ì			
			☐ FA	C-Neutral Te	st				
Depth to Saturated S	Soil	<u>>16</u> (in.)	Ot	her (explain i	n Rem	arks)			
Remarks: Belov	v the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W20 TR1 Pit A

Map Unit N						
(Series and I	ll-drained					
Taxonomy (Subgroup): <u>Lith</u>	nic Haploxerept			Field Observations Confirm Mapped Typ	pe? Yes No
Profile Desc	ription:					
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8		10YR 5/1	7.5Y	R 5/8	Bright, 80%	Silt, clay
Hydric Soil	Indicators:					
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Conditi Gleyed or Low-C	ions		Organic Listed o Listed o	ganic Content in Surface L Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Li explain in Remarks)	
Remarks:						
WETLAND	DETERMINATIO	N				
	Vegetation Present drology Present? Present?	? Yes No Yes No Yes No	(Circle)	Is this Sam	pling Point Within a Wetla	(Circle)
Remarks:						

Project/Site:	Folsom Dam JF	P		Date	e:	8/1/20	006		
Applicant/Owner:	Bureau of Recla	mation		Cou	inty:	El Do	rado		
Investigator:	Gretchen Lebed	nik, Coralie	e Dayde	Stat	e:	Califo	rnia	_	
Do Normal Circums	tances exist on th	e site?	⊠Yes □	No Comm	nunity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ∑	No Plot I	D:		W20 TR1 F	Pit B	
Is the area a potentia	al Problem Area?	ĺ	∐Yes ∑	No Trans	ect ID	:	W20 TR1		<u></u>
(If needed, expla	in on reverse side	.)				•			
VEGETATION									
			.	D			1	a	
Dominant Plant Spe 1. Cynodon dactylor		Stratum H	Indicator FAC	Dominant Pla	ant Sp	ecies		Stratum	Indicator
<u> </u>	<u> </u>	11	TAC	9.					
2.				10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-): 1	100%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Ren	narks):	WETLA	AND HYDROLO	GY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primai	ry Indicators:					
Aerial Photogra	aphs		Int	undated					
Other			☐ Sa	turated in uppe	er 12 in	nches			
☐ No Recorded Da	ata Available		\square W	ater Marks					
				rift Lines					
				diment Deposi					
FIELD OBSERVATION	ONS:			rainage Patterns					
				lary Indicator			_		
Depth of Surface W	ater:]	<u>N/A</u> (in.)		kidized root cha		in upp	er 12 inches		
				ater-stained Le					
Depth to Free Water	in Pit:	>16_ (in.)		ocal Soil Survey	-	Į.			
				AC-Neutral Tes					
Depth to Saturated S	Soil	>16_ (in.)	∐ Ot	her (explain in	n Rema	arks)			
Damanisa Dala	u the OHWI for I	Jolaan- Da							
Remarks: Belov	v the OHWL for F	oisom kes	CI AOII.						

SOILS Plot ID: W20 TR1 Pit B

Map Unit Na (Series and I	ame Phase) <u>Auburn ver</u>	ry rocky silt loam		Drainage Class: _wel	ll-drained
Taxonomy (Subgroup): <u>Litl</u>	nic Haploxerept		Field Observations Confirm Mapped Typ	e? <u>Yes</u> No
Profile Desc	ription:				
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR 4/3	5YR 5/8		
3-16		5YR 4/6			
Hydric Soil	Indicators:				
	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-O	ions	Organic Listed o Listed o	ions ganic Content in Surface L Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Lis Explain in Remarks)	
Remarks:					
WETLAND	DETERMINATIO	N			
	Vegetation Present drology Present? Present?	? Yes No Yes No Yes No	(Circle) Is this Sam	pling Point Within a Wetla	(Circle) nd? Yes No
Remarks:			<u> </u>		

Project/Site:	Folsom Dam JFI	P		Date	e:	8/1/20	006		
Applicant/Owner:	Bureau of Reclar	mation		Cou	inty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	Stat	e:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes []No Comm	nunity	ID:	riparian		
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot I	D:		W21 TR1 F	Pit A	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Trans	ect ID):	W21 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Pla	ant Sp	ecies		Stratum	Indicator
1. Xanthium strumai	rium	Н	FAC+	9.					
2. Cynodon dactylor	ı	Н	FAC	10.					
3. Salix gooddingii		Т	OBL	11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC	C-): 1	100%			
Remarks:	•		·						
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLO	GY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primar	y Indicators:					
Aerial Photogra	aphs		☐ Int	ındated					
Other			☐ Sa	turated in uppe	er 12 iı	nches			
☐ No Recorded Da	ata Available		_	ater Marks					
				ift Lines					
				diment Deposi					
FIELD OBSERVATION	ONS:			ainage Patterns					
D 4 CC C W		T/A /: \		ary Indicator			_		
Depth of Surface W	ater: <u>r</u>	<u>V/A</u> (in.)		kidized root cha		ın upp	er 12 inches		
Donth to Error Water	in Dit.	16 (in)		ater-stained Le					
Depth to Free Water	. m rit;2	>16_ (in.)		cal Soil Survey C-Neutral Tes	•	ι			
Depth to Saturated S	Soil	>16_ (in.)		her (explain ir		arke)			
Dopin to battifated t		(111.)		nei (expiaiii ii	i ixciii	ui Koj			
Remarks: Below	v the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W21 TR1 Pit A

	Map Unit Name								
(Series and	Phase) <u>Auburn ver</u>	y rocky silt loam	Drainage Class: <u>well-drained</u> Field Observations						
Taxonomy (Subgroup):Lith	nic Haploxerept			Confirm Mapped Typ	pe? Yes No			
Profile Desc	cription:								
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle C (Munsell		Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
8		10YR 4/1	5YR	5/8	abundant	Scattered cobble			
Hydric Soil	Indicators:								
	Histosol			Concreti	ons				
	Histic Epipedon			High Or	ganic Content in Surface L	ayer in Sandy Soils			
	_ Sulfidic Odor Aquic Moisture F	Regime			Streaking in Sandy Soils n Local Hydric Soils List				
	Reducing Conditi	ions		Listed or	n National Hydric Soils Li	st			
	_ Gleyed or Low-C	throma Colors		Other (E	(xplain in Remarks)				
Remarks:									
WETLAND	DETERMINATION	N							
	Vegetation Present		(Circle)			(Circle)			
Wetland Hy Hydric Soils	drology Present? s Present?	Yes No Yes No		Is this Sam	pling Point Within a Wetla	nd? Yes No			
-									
Remarks:									

Project/Site:	Folsom Dam JF	P		Da	ate:	8/1/20	006		
Applicant/Owner:	Bureau of Recla	mation		Co	ounty:	El Do	rado		
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	Sta	ate:	Califo	ornia		
Do Normal Circums	tances exist on the	e site?	⊠Yes □	No Com	nmunity	ID:	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situ	ation)?	∐Yes ∑	No Plot	ID:		W21 TR1 F	Pit B	
Is the area a potentia	al Problem Area?		∐Yes ∑	No Tran	nsect ID):	W21 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION			i	1			1		
Dominant Plant Spe		Stratum	Indicator	Dominant F	Plant Sp	ecies		Stratum	Indicator
1. Xanthium struma		Н	FAC+	9.					
2. Cynodon dactylor	ı	Н	FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FA	.C-):	100%			
Remarks:									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROL	OGY IN	DICAT	ORS:		
Stream, Lake, o	or Tide Gauge		Primar	ry Indicators	s:				
Aerial Photogra	aphs		☐ Int	undated					
Other			☐ Sa	turated in upp	per 12 i	nches			
No Recorded Da	ata Available		\square W	ater Marks					
			⊠ Dr	ift Lines					
			☐ Se	diment Depos	sits				
FIELD OBSERVATION	ONS:		☐ Dr	ainage Patter	ns in W	etland	S		
			Second	lary Indicato	ors (2 o	r more	required):		
Depth of Surface W	ater: <u>1</u>	<u>V/A</u> (in.)	☐ Ox	kidized root c	hannels	in upp	er 12 inches		
			\square W	ater-stained L	Leaves				
Depth to Free Water	in Pit:	>14_ (in.)		cal Soil Surv	-	ı			
				C-Neutral Te					
Depth to Saturated S	Soil	>14_ (in.)	☐ Ot	her (explain	in Rem	arks)			
Remarks: Belov	v the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W21 TR1 Pit B

Map Unit N							
(Series and	Phase) <u>Auburn ver</u>	y rocky silt loam	Drainage Class: _well-drained				
Taxonomy (Subgroup): Lith	nic Haploxerept		Field Observations Confirm Mapped Typ	e? Yes No		
Profile Desc	cription:						
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
8		10YR 5/3	10YR 4/6				
Hydric Soil	Indicators						
Hydric Soil	mulcators.						
	_ Histosol		Concreti				
	Histic Epipedon Sulfidic Odor			ganic Content in Surface La Streaking in Sandy Soils	ayer in Sandy Soils		
	Aquic Moisture I			Local Hydric Soils List			
	Reducing Condit			n National Hydric Soils Lis	t		
-	_ Gleyed or Low-C	Chroma Colors	Other (E	xplain in Remarks)			
Remarks:							
WETLAND	DETERMINATIO	N					
	Vegetation Present		Circle)		(Circle)		
Wetland Hy Hydric Soils	drology Present? s Present?	Yes No Yes No	Is this Sam	oling Point Within a Wetlan	nd? Yes No		
Remarks:							
Kemarks.							

Project/Site:	Folsom Dam JFl	P		Date:	8/1	/1/2006	5		
Applicant/Owner:	Bureau of Recla	mation		County	: Pla	lacer			
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	State:	Ca	aliforn	ia		
Do Normal Circums	tances exist on the	e site?	⊠Yes []No Commun	ity ID	D: <u>S</u>	Seasonal w	etland	
Is the site significantly di	sturbed (Atypical Situa	ation)?	∐Yes ∑	No Plot ID:		V	V22 TR1 F	Pit A	
Is the area a potentia			∐Yes ∑	No Transect	ID:		W22 TR1		
(If needed, expla	in on reverse side	.)							
VEGETATION									
Dominant Plant Spe	cies	Stratum	Indicator	Dominant Plant	Specie	ies		Stratum	Indicator
1. Cynodon dactylor	ı	Н	FAC	9.					
2. Juncus sp.		Н	OBL to FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominan	t Species that are	OBL, FAC	W or FAC (excluding FAC-):	100)%			
Remarks:	•		•	<u> </u>					
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLOGY	INDIC	CATOR	RS:		
Stream, Lake, o	r Tide Gauge		Primar	y Indicators:					
Aerial Photogra	phs		☐ Int	ındated					
Other			☐ Sa	turated in upper 12	2 inch	nes			
☐ No Recorded Da	ata Available			ater Marks					
			□ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	ons:		☐ Dr	ainage Patterns in	Wetla	ands			
			Second	lary Indicators (2	or m	iore re	equired):		
Depth of Surface W	ater: <u>N</u>	<u>V/A_</u> (in.)	□ Ox	xidized root channe	els in	upper	12 inches		
			\square W:	ater-stained Leave	es				
Depth to Free Water	in Pit:1	6_ (in.)	☐ Lo	cal Soil Survey D	ata				
			☐ FA	C-Neutral Test					
Depth to Saturated S	Soil1	<u>4</u> (in.)	Ot	her (explain in Re	emark	cs)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W22 TR1 Pit A

Map Unit N (Series and		g-rock outcrop complex	(Drainage Class:w	vell-drained				
Taxonomy	(Subgroup): <u>Ultic</u>	: Haploxeroll		Field Observations Confirm Mapped Typ					
Profile Des	cription:								
Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
8-12		10YR 4/2	none						
12-16		10YR 4/2	7.5YR 4/3	infrequent					
Hydric Soil	Indicators:								
— — — —	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Condit Gleyed or Low-C	ions	High Orgar Listed	etions Organic Content in Surface L ic Streaking in Sandy Soils I on Local Hydric Soils List I on National Hydric Soils Li (Explain in Remarks)					
Remarks:									
WETLAND	WETLAND DETERMINATION								
Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No									
Remarks:			I						

Project/Site:	Folsom Dam JF	P		Date:	8/1	1/2006			
Applicant/Owner: Bureau of Reclamati				County	: Pla	Placer			
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	State:	Ca	aliforni	a		
Do Normal Circums	tances exist on the	e site?	⊠Yes □	No Commun	ity ID:	: ri	parian		
Is the site significantly dis	sturbed (Atypical Situ	ation)?	Yes 🗵	No Plot ID:	J		/23 TR1 F	Pit B	
Is the area a potentia	l Problem Area?		— □Yes ×	No Transect	ID:	W	/23 TR1		
•	in on reverse side	.)		_					
VEGETATION		_							
Dominant Plant Spec	cies	Stratum	Indicator	Dominant Plant	Specie	es		Stratum	Indicator
1. Salix gooddingii		T	OBL	9.					
2. Cynodon dactylon	ı	Н	FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	t Species that are	OBL FAC	W or FAC (6	eveluding FAC-):	1009	10%			
	species that are	ODL, TAC	W OITHE (C	excidentific).	100	70			
Remarks:									
HYDROLOGY									
	(Describe in Rem	arke).	Weti	AND HYDROLOGY	INDIC	CATOD	Z•		
Stream, Lake, o	`	iaiks).		y Indicators:	INDIC	AIUK	3.		
Aerial Photogra	•			indated					
Other	ipiis			turated in upper 12) inche	AC			
☐ No Recorded Da	ata Available			ater Marks	2 mene	.03			
	ita i i vanaore			ift Lines					
			_	diment Deposits					
FIELD OBSERVATIO	NS:			ainage Patterns in	Wetla	ands			
	- 1.0-1			ary Indicators (2			auired):		
Depth of Surface Wa	ater:	<u>V/A</u> (in.)		idized root chann			-		
1		``		ater-stained Leave					
Depth to Free Water	in Pit:	>12_ (in.)	Lo	cal Soil Survey D	ata				
-				C-Neutral Test					
Depth to Saturated S	Soil	>12_ (in.)	Ot	her (explain in Re	emarks	s)			
Remarks: Below	the OHWL for F	olsom Res	ervoir						

SOILS Plot ID: W23 TR1 Pit B

Map Unit Name (Series and Phase) Andregg-rock outcrop complex Drainage Class: well-drained									
Taxonomy ((Subgroup): <u>Ultic</u>	: Haploxeroll		Field Observations Confirm Mapped Typ	oe? Yes No				
Profile Desc	cription:								
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
0-14		10YR 5/3	none		sandy				
Hydric Soil	Indicators:								
——————————————————————————————————————	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-O	ions	Organio Listed o	tions rganic Content in Surface L c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils Lis Explain in Remarks)					
Remarks:									
WETLAND	WETLAND DETERMINATION								
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No (Circle) Yes No Is this Sampling Point Within a Wetland? Yes No									
Remarks:			<u> </u>						

Project/Site:	Folsom Dam JFI	2		Date:	8/	/1/200	6		
Applicant/Owner:	Bureau of Reclar			County:	E	El Dora	ıdo		
Investigator:	Gretchen Lebedi	nik, Coralie	e Dayde	State:	C	Califor	nia		
Do Normal Circums				No Communi	ity II	D: 1	riparian		
Is the site significantly di	sturbed (Atypical Situs	ation)?	Yes	No Plot ID:	•		W23 TR1 F	it A	
Is the area a potentia	al Problem Area?	1	∐Yes ⊠	No Transect l	ID:		W23 TR1		
(If needed, expla	in on reverse side	.)							<u>_</u>
VEGETATION									
Dominant Plant Spec	cies	Stratum	Indicator	Dominant Plant S	Speci	ies		Stratum	Indicator
1. Salix gooddingii		Т	OBL	9.					
2. Cynodon dactylor	ı	Н	FAC	10.					
3.				11.					
4.				12.					
5.				13.					
6.				14.					
7.				15.					
8.				16.					
Percent of Dominant	t Species that are (OBL, FAC	W or FAC (6	excluding FAC-):	100	0%			
Remarks:				g /.		-			
Kemarks.									
HYDROLOGY									
Recorded Data	(Describe in Rem	narks):	WETLA	AND HYDROLOGY	Indi	[CATO]	RS:		
Stream, Lake, o	r Tide Gauge		Primar	y Indicators:					
Aerial Photogra	aphs		☐ Int	ındated					
Other			☐ Sa	turated in upper 12	e inch	hes			
☐ No Recorded Da	ata Available		☐ Wa	ater Marks					
			□ Dr	ift Lines					
			☐ Se	diment Deposits					
FIELD OBSERVATIO	NS:			ainage Patterns in					
				ary Indicators (2			_		
Depth of Surface Wa	ater: <u>1</u>	<u>V/A</u> (in.)		idized root channe		n uppe	r 12 inches		
				ater-stained Leaves					
Depth to Free Water	in Pit:	<u>>16_</u> (in.)		cal Soil Survey Da	ıta				
D 4 . C	,	16 (1)		C-Neutral Test					
Depth to Saturated S	501l	>16_ (in.)	∐ Oti	her (explain in Re	mark	ks)			
Pamarke: Ralay	the OUWL for F	olcom Pag	orvoir						

SOILS Plot ID: W23 TR1 Pit A

Map Unit Name (Series and Phase)Andregg-rock outcrop complex Drainage Class:well-drained									
Taxonomy	(Subgroup): <u>Ultic</u>			Field Observations Confirm Mapped Typ					
Profile Des	cription:								
Depth (inches)	Horizon		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.				
8		7.5YR 6/6	none		sandy				
Hydric Soil	Indicators:								
——————————————————————————————————————	Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condit Gleyed or Low-C	ions	Organic Listed of	ons ganic Content in Surface L Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils Lis explain in Remarks)					
Remarks: Boulders, ro	ocks, cobble. Uniform	m color to 18 inches or m	ore						
WETLAND DETERMINATION									
Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No									
Remarks:									

Appendix D CWA Section 404 (b)(1) Analysis

Appendix D CWA 404 (b)(1) Analysis

1.1 Project Description

The proposed Folsom Dam Safety/Flood Damage Reduction (DS/FDR) actions reflect a cooperative effort by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (Corps), along with the Corps non-federal sponsors, the State Reclamation Board (Reclamation Board)/Department of Water Resources (DWR) and the Sacramento Area Flood Control Agency (SAFCA). The alternatives address proposed measures for implementing Reclamation's dam safety and security obligations and the Corps' flood damage reduction structural modifications at Folsom Dam and appurtenant facilities (the Folsom Facility). These facilities impound waters of the American River forming Folsom Reservoir.

The improvements being considered for the Folsom Facility respond to varying degrees to certain objectives of each of the aforementioned agencies. Reclamation's Safety of Dams Program objectives focus on reducing the risk of failure under hydrologic (flood), seismic (earthquake), and static (seepage) loads. Folsom Dam has been designated as a National Critical Infrastructure Facility and any compromise of the facility could result in grave property damage and loss of life. Reclamation's Security Program objectives are to protect public safety by securing Folsom Dam and its appurtenant structures and other Reclamation facilities, including the Folsom power plant, from attack or damage. The Corps' flood damage reduction objective is to improve the annual recurrence level of flood protection provided to the lower American River corridor. Similarly, SAFCA and DWR seek to improve the level of flood protection for the Sacramento region.

The proposed action includes the modifications to several components of the Folsom Facility. Figure 2-3 in the Folsom DS/FDR EIS/EIR shows the potential borrow, staging, and construction areas of the proposed action.

Main Concrete Dam

- Dam reinforcement of existing parapet wall
- Post-tensioned tendons, shear key elements, and/or toe blocks
- Foundation drain enhancements
- Replace 3 emergency gates
- Modify/replace existing spillway bridge
- Gate and pier reinforcement
- Extend the Stilling Basin 50-75 ft

Auxiliary Spillway

- Joint (PMF/Flood control) fully-lined auxiliary spillway (referred to as the JFP spillway)
- 6 submerged tainter gates

Left and Right Wing Dams

- Crest protection and filters
- 3.5-ft parapet concrete wall

Mormon Island Auxiliary Dam (MIAD)

- 3.5-ft parapet concrete wall
- Toe drains
- Full-height filters
- Jet grouting downstream foundation
- Downstream overlay

Dikes 1, 2, 3, 7, and 8

• 3.5-ft parapet concrete wall

Dikes 4, 5 and 6

- 3.5-ft parapet concrete wall
- Toe drains
- Full-height filters
- Crest protection

Additional Actions

- Flood easements
- New embankments

Potential Borrow Sites

- Auxiliary Spillway
- Beal's Point
- MIAD D1 & D2

Material Processing and Concrete Batch Plants

- Main Dam Concrete
- Folsom Point Processing
- Beal's Point Processing
- MIAD Jet Grout Plant

Potential Disposal Sites

- Dike 7 (within reservoir)
- Folsom Point (within reservoir)
- MIAD (upland)
- MIAD D1 & D2 (upland)

• Beal's Point (within reservoir

Other Project Features

- Utility relocations
- Road relocations
- Haul road construction
- Underwater blasting and dredging

1.1.1 Location

The Folsom Facility is located approximately 23 miles northeast of Sacramento, near the City of Folsom, in the State of California.

1.1.2 General Description

There are 12 retention facilities (4 dams and 8 dikes) that make up the Folsom Facility. These retention structures impound the waters of the North and South Forks of the American River forming Folsom Reservoir. The Folsom Facility is a multi-purpose facility operated by law to provide flood control, irrigation water supply, municipal and industrial (M&I) water supply, and hydropower generation benefits. Additional purposes with notable associated benefits include recreation and maintenance of water quality for fish and wildlife.

Folsom Reservoir has a normal full pool storage capacity of 975,000 acre-feet with a minimum seasonally designated flood control storage space of 400,000 acre-feet. The reservoir provides flood damage reduction for the Sacramento area; water supply for irrigation, domestic, municipal, and industrial uses; and hydropower. The reservoir also provides extensive water-related recreational opportunities, water quality control in the Sacramento-San Joaquin Delta; and maintenance of flows stipulated to balance anadromous and resident fisheries, wildlife, and recreational considerations in and along the lower American River.

Modifying the dams, dikes, spillway, and stilling basin would reduce hydrologic risk of overtopping-related failure of any impoundment structure during a probably maximum flood (PMF) event, reduce the risk of structural failure of any impoundment structure during a potential seismic (earthquake) event, reduce the risk of structural failure of any impoundment structure during a potential static (seepage) event, and improve the flood management capacity of the facility above the 100-year recurrence level.

1.1.3 Background

In February 1986, major storms in northern California caused record floodflows in the American River basin. Outflows from Folsom Reservoir, together with high flows in the Sacramento River, caused water levels to rise above the design freeboard, or safety margin, of levees protecting the Sacramento area. The effects of the 1986 storms raised concerns over the adequacy of the existing flood control system, which led to a series of

investigations of the need to provide additional flood damage reduction to the Sacramento area.

In 1991, the Corps, Reclamation Board, and SAFCA completed the initial feasibility study for the main stem of the American River and the Natomas basin. Subsequent to completing the feasibility report, Congress provided guidance relating to the American River study in Section 9159 of the Department of Defense Appropriations Act for fiscal year 1993. This act authorized construction of much of the work identified in the Natomas area as described in the feasibility report. It also directed that additional studies be conducted to identify a project for increased flood damage reduction along the American River.

Section 566 of WRDA of 1999 (P.L. 106-53) directed the Corps to complete a study for increasing surcharge flood control storage space at the Folsom Dam and Reservoir, with the assumption that there would be no increase in water supply storage (Corps 2002). It also required the Corps to conduct a study of levees on the American and Sacramento Rivers to increase potential flood damage reduction through levee modification.

As part of their Safety of Dams program, Reclamation completed a Comprehensive Facility Review (CFR) and analysis of the Folsom Facility in 2000. Several hydrologic, seismic and static failure modes were identified during the review. Hydrologic issues at the Folsom Facility include the potential for a major flood to induce overtopping of the main dam, dikes, and MIAD, which could lead to failure of one or more of the structures. Seismic, or earthquake issues at the Folsom Facility include the instability of the main concrete dam because of sliding along upper concrete lift lines, sliding along the contact with the foundation at the base of the dam, instability at the concrete embankment interfaces, and failure of the spillway gates and piers. The instability of the foundation of MIAD is also a seismic concern because the foundation has been constructed on mine and dredge tailings and has the potential to liquefy during seismic activity. Static issues, which are those that occur during normal daily operations, include potential seepage and piping of the wing dams and dikes. The Reclamation Safety of Dams Corrective Action Study Draft Scoping Report, October 2005, provided an overview of the various hydrologic, seismic, and static failure modes identified at the Folsom Facility.

Results of Reclamation's CFR have determined that risks associated with the hydrologic, seismic, and static failure modes are sufficiently high to warrant expedited action. The greatest concern at the Folsom Facility is the potential for overtopping of the dam. Although the probability of dam failure is low, the consequences of failure are extremely high because of the large downstream population and the volume of water that would be released.

Reclamation began a corrective action study (CAS) in 2004 to develop corrective action alternatives to address all dam safety issues identified in the CFR and the concerns previously identified at MIAD. During development of the CAS, Reclamation worked with the Corps Folsom Dam Modification Project and Dam Raise Project to share information and develop actions to reduce hydrologic risk.

In response to the Energy and Water Development Act of 2006, Reclamation and the Corps have been working together to develop alternatives to address the issues at the Folsom Facility, while meeting each agency's objectives. These agencies determined that the proposed project would meet Reclamation's objectives to safely pass the probable maximum flood (PMF) and reduce hydrologic, static, and seismic issues, would meet the Corps objective to provide a minimum of 200-year flood protection, and would be technically feasible and constructible.

1.1.4 General Description and Quantity of Dredged or Fill Material General Characteristics of Material

Grading and construction of the access roads, staging areas, parking facilities, and associated infrastructure have the potential to increase stormwater runoff, transport sediment and other materials into the reservoir. In addition, in order to construct work platforms near several of the Folsom Facilities, fill derived from granitic material will be placed within the reservoir high water level at Folsom Point, near Dike 7, Observation Point parking lot, and at Beal's Point. Construction work to modify several of the Folsom dikes and wing dams will also place fill at four seasonal wetlands (4.3 acres) outside of Folsom Reservoir. A delineation of jurisdictional waters in the study area has been done and is included in the *Draft Fish and Wildlife Coordination Act Report for the Folsom Dam Safety and Flood Damage Reduction Project* (USFWS 2006). The potentially affected swale and isolated wetlands do not support year round water flow and are only wet during significant rain or flood events.

In addition, the excavation for the approach channel for the proposed Auxiliary Spillway would include involve 702,463 cubic yards by dragline or dozer, 101,841 cubic yards by drilling and blasting above the water, and 286,946 cubic yards by drilling and blasting underwater.

Source of Material

Fill materials would come from an existing on-site substrate excavated as part of construction of the new Auxiliary Spillway and borrow development at Beal's Point. Fill materials would be of granitic rock origin.

1.1.5 Description of the Proposed Discharge Site(s) *Location (map)*

The location of the potential within reservoir discharge sites would be the area directly downstream of Dike 7, at Folsom Point, the Observation Point parking lot, and at south Beal's Point. Construction on the upland sides of the reservoir at Dikes 4, 5, 6, the wing dams, and at MIAD has the potential for removal or filling of jurisdictional wetlands. These include six isolated seasonal wetlands, and six small seasonally ponded area.

Excavation would occur at several borrow sites around the Folsom Reservoir, as shown in Figure 2-3 in the Folsom DS/FDR EIS/EIR

Size

Within the project area, there would be adverse effects to up to 4.29 acres of seasonal wetlands and 40.99 acres of willow/cottonwood riparian that would be graded and or filled.

Type of Site

The fill needed for the staging area, dams, and dikes would take place in unconfined areas and open water areas.

Type(s) of Habitat

Generally, the area is grassland and oak woodland habitat, with some small areas of chaparral. There are a few scattered willows and cottonwoods in the area, mostly along the shoreline of the reservoir. There are scattered elderberry shrubs throughout the study area along the downstream portions of the facility.

Timing and Duration of Discharge

The project would be constructed in stages, beginning in with development of the Folsom Point staging area and excavation and construction of the auxiliary spillway in 2007 and continuing with construction at the LWD and RWD, MIAD, and Dikes 4, 5, and 6, ending with the completion of spillway construction and seismic upgrades to the main dam in 2014.

1.1.7 Description of Disposal Method

All of the fill work would be done with dozers, rollers, cement trucks, and draglines. Excavation would be done with dozers, draglines, and drilling and blasting.

2.1 Factual Determinations (Section 230.11)

2.1.1 Physical Substrate Determinations

2.1.1.1 Substrate Elevation and Slope

Elevation of staging areas, borrow sites, seasonal wetlands, and slopes are extend up to 480 feet above mean sea level and have slopes between 0 and 45 percent.

2.1.1.2 Sediment Type

Soils of the staging areas, borrow sites, and wetlands are mapped as Andregg, Argonaut, Auburn, Inks, Xerolls, and Xerorthents. Large areas of the project area have been graded and altered during the construction of Folsom Dam and its supporting infrastructure. The area directly downstream of the dam is composed of granite bedrock and boulders. The composition of fill proposed for placement would primarily be from excavated and processed granitic material.

2.1.1.3 Dredged/ Fill Material Movement

Dredge material excavated for construction of the auxiliary spillway will be moved outside of the reservoir and either contained within the MIAD overlay or placed at a permanent disposal site. The fill material needed for the staging areas, roads, dike, and auxiliary spillway construction will be stabilized and is not expected to move either during construction or after construction is completed. Fill material would be compacted and graded as appropriate, to prevent erosion. Fill material for the staging areas would be composed of excavated and process granitic rock. Fill material placed within the reservoir would consist of processed granite ranging size from cobble to pebble. Approximately 750,000 cubic yards of 2-6 inch diameter gravel and cobble could be placed within the reservoir.

2.1.1.4 Physical Effects on Benthos

Excavation at borrow sites and construction of roads and staging areas within the reservoir would occur at sites that are not inundated or that have been temporarily dewatered. Benthos would not be affected in the intermittently inundated areas. Benthos in the areas that are dewatered would be temporarily eliminated due to grading or excavation.

Other fill associated with the construction would placed in areas that receive water only in storm or flood events or would be placed on the exterior faces of the dikes and dams. Some areas proposed for fill exhibit wetlands characteristics. It is expected that the benthos of the wetland areas would be completely eliminated by the fill activity. Some wetland areas will be re-established. Benthos in these area are expected to re-colonize the existing surface area when inundated. Gravels and cobbles placed in the reservoir would form or contribute to new invertebrate habitat and fish spawning areas resulting in a net benefit.

2.1.1.5 Other Effects

Dewatering and jet grouting at MIAD would impact wetlands downstream of this facility. Monitoring of the wetlands is proposed to preclude this affect.

2.1.2 Actions Taken to Minimize Impacts

Fill material would only be placed where it is needed for road, staging area, dike, and dam modification. Fill material will be placed primarily when the reservoir water elevation is low and the area temporarily dry. During construction, disturbance outside of the project area would be kept to a minimum. Additionally, the following best management practices and mitigation measures from the draft EIS/EIR are included:

HWQ-1: An NPDES permit will be obtained prior to construction activities, commencing by filing a Notice of Intent (NOI) with the CVRWQCB and preparing a SWPPP. As required under the General Permit, the SWPPP will identify implementation measures necessary to mitigate potential water quality degradation as a result of construction. These measures will include BMPs and other standard pollution prevention actions such as erosion and sediment control measures, proper control of non-stormwater discharges,

and hazardous spill prevention and response. The SWPPP will also include requirements for BMP inspections, monitoring, and maintenance.

The NOI indicates the intent to comply with the General Permit which outlines conditions to minimize sediment and pollutant loading.

The following items are examples of BMPs that will be implemented during construction to avoid causing water quality degradation:

- Erosion control BMPs such as use of mulches or hydroseeding to prevent detachment
 of soil following guidance presented in the California BMP Handbooks –
 Construction (CASQA 2003). A detailed site map will be included in the SWPPP
 outlining specific areas where soil disturbance may occur, and drainage patterns
 associated with excavation and grading activities. In addition, the SWPPP will
 provide plans and details for the BMPs to be implemented prior, during and after
 construction to prevent erosion of exposed soils and to treat sediments before they are
 transported offsite.
- Sediment control BMPs such as silt fencing or detention basins that trap soil particles.
- Construction staging areas designed so that stormwater runoff during construction will be collected and treated in a BMP such as a detention basin.
- Management of hazardous material and wastes to prevent spills.
- Vehicle and equipment fueling BMPs so these activities occur only in designated staging areas with appropriate spill controls.
- Maintenance checks of equipment and vehicles to prevent spills or leaks of liquids of any kind.

As described in Chapter 2, specific staging areas for construction-related activities will be located near the Main Concrete Dam, Granite Bay, Beal's Point, Folsom Point, and MIAD. Haul roads will be constructed to connect Beal's Point with Granite Bay, and the LWD with MIAD. Only designated areas and roads will be used during construction processes to minimize water quality impacts.

HWQ-2: Measures to control on-site spills will be included in the SWPPP. In addition to the spill prevention and control BMPs presented above, the SWPPP will contain a visual monitoring program and a chemical monitoring program for pollutants that are non-visible to be implemented if there is a failure of BMPs. Proper storage and handling of materials and equipment servicing will only occur in designated areas. Should a spill occur, appropriate steps will be taken to inform local regulatory agencies as well as implementation of a spill response program as outlined in the SWPPP.

HWQ-3: Permits prepared by the responsible Federal agency will be obtained and abided by as stated in Section 401 and Section 404 of the CWA regarding dredging or filling of

waters of the United States, and activities involving discharging into those waters, which include wetlands, respectively. Construction activities related to temporary or permanent alteration of any water body within the construction area will be subject to regulation pursuant to these permits. Compliance under these permit provisions will serve to minimize construction activity impacts on water quality.

- HWQ-4: Prior to implementing the full jet grouting action, Reclamation will perform jet grouting tests at MIAD including the monitoring for any grout leakages as well as the testing of groundwater and surface water levels and quality. If Reclamation determines that leakages are expected to occur and could cause adverse water quality effects, they will construct a cutoff wall before they jet grout the foundation at MIAD that will eliminate the migration of the grout, metals released from sediments, and pH12 water impacts to surrounding waters.
- *HWQ-5:* Reclamation will monitor surface and groundwater levels and water quality prior to, during, and after jet grouting or excavation and replacement of MIAD.
- If any well or wetlands within 200 ft. of jet grout construction are found to have an elevated pH, then construction will cease until the pH returns to normal (as determined by pre-construction water quality monitoring).
- If the pH does not return to normal within 30 minutes, then a Reclamation biologist or hazardous materials specialist will be notified.
- *HWQ-6:* If jet grout daylights more than 50 ft. from the point of construction, then work will cease until it can be determined that the grout will remain localized.
- *HWQ-7:* During jet grout injection, all wetlands that could be impacted by construction will be visually inspected for the presence of grout every 15 to 30 minutes.
- HWQ-8: All temporary jet grout solidification areas will be lined with a material that does not allow the migration of any construction-related materials.
- HWQ-9: Guidance will be obtained from the CVRWQCB for testing earthen materials before constructing work area platforms within or adjacent to the reservoir to ensure any potentially associated pollutants will not be introduced into the reservoir that would violate water quality standards or substantially degrade existing water quality. Fill material will be placed in the reservoir during periods of lower water elevation, when possible. Best management practices will be adhered to in order to minimize water quality impacts during the placement of fill in the reservoir.
- *HWQ-10:* Reclamation will monitor groundwater and surface water levels in wetlands downstream of MIAD and within the Mormon Island Wetland Preserve during dewatering of the MIAD foundation for excavation and replacement. If water levels decrease because of dewatering, the water obtained from dewatering will be tested and treated to meet surface water standards prior to being pumped back into the wetlands.

HWQ-11: The Corps will obtain a dewatering permit from CVRWQCB and will implement applicable water quality monitoring during dewatering of the existing Stilling Basin.

HWQ-12: Mitigation measures to minimize water quality impacts due to construction within and along the reservoir shoreline will be developed in consultation with CVRWQCB staff. These measures may include placement of a silt curtain surrounding the construction zone or construction of coffer dams. If appropriate, routine water samples will be collected at the start and completion of each dredging and/or blasting period.

HWQ-13: During the process of dredging material to construct the approach channel for the Auxiliary Spillway, sediment containing mercury will be controlled using a variety of methods, including, but not limited to, silt curtains, silt fences, as well as other BMPs and construction methods approved by the CVRWQCB. Dredged material will be placed on the downstream side of the reservoir in a contained area for drying and processing. The dredged material will then be contained either in the MIAD overlay or transported to a permanent disposal site outside of the reservoir.

HWQ-14: A water quality monitoring plan will be developed for review by the CVRWQCB prior to any in reservoir construction work. The plan will address sampling requirements during dredging, blasting, excavation, and placement of fill within the reservoir. If turbidity readings exceed action level values established by the CVRWQCB, corrective actions will be implemented in accordance with the plan.

2.1.2 Water Circulation, Fluctuation, and Salinity Determinations

2.1.2.1 Water

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus affecting water quality. Construction of the project would result in the excavation of 3.5 million cubic yards of material to construct the auxiliary spillway. Similar activities would for other excavation activities, including the construction of earthen dike and new embankments near Granite Bay and the eastern shoreline. In addition, excavation activities would occur at either or both the D1 and D2 sites to develop borrow sites for use in constructing the overlay for MIAD. Water quality impacts could occur from haul road construction and use, storage and handling of construction materials, and operation and maintenance of equipment. Potential water quality impacts are presented in Section 3.1 of the Folsom DS/FDR EIS/EIR. Compliance with all applicable regulations and permits, as well as Mitigation Measures in Section 3.1.4 would reduce or eliminate any potential water quality impacts.

Salinity

The fill and grading occurring in the isolated wetlands are not in areas of permanent water. When they receive water, it is from rain or flood events. All waters affected are freshwater and therefore, filling these areas would not adversely affect salinity.

Water Chemistry

Sediment transport into local tributaries, directly into the reservoir, or into the stilling basin area could adversely affect water chemistry at these sites. Mitigation measures described in Section II.a.6 would also minimize impacts to water chemistry.

Clarity

Sediment transport into local tributaries, directly into the reservoir, or into the stilling basin area could adversely affect water clarity at these sites. Mitigation measures described in Section II.a.6 would also minimize impacts to water clarity.

Should filling occur in areas of permanent waters, the agencies would comply with all requirements of the CVRWQCB 401 certification.

Color

Sediment transport into local tributaries, directly into the reservoir, or into the stilling basin area could adversely affect water color at these sites. Mitigation measures described in Section II.a.6 would also minimize impacts to water color.

Odor

The proposed project is not expected to affect odor.

Taste

The proposed project is not expected to affect taste.

Dissolved Gas Level

Sediment transport into local tributaries or directly into the reservoir could adversely affect dissolved gas levels at these sites. Mitigation measures described in Section II.a.6 would also minimize impacts to dissolved gas levels.

Should filling occur in areas of permanent waters, the agencies would comply with all requirements of the CVRWQCB 401 certification.

Nutrients

None of the proposed project components would adversely affect nutrients in the water.

Eutrophication

No nutrients are expected to be added to the reservoir to increase eutrophication potential

Others as Appropriate

The proposed project is not expected to affect other water characteristics.

2.1.2.2 Current Patterns and Circulation, Current Flow and Water Circulation

Current Patterns and Flow

The proposed fill areas would not affect general current and flow patterns

Velocity

The fill within the reservoir is not expected to change flow velocities of streams and storm channels.

Stratification

The proposed project is not expected to significantly affect stratification.

Hydrologic Regime

The hydrologic regime of the stormwater runoff is not expected to change with the proposed project.

2.1.2.3 Normal Water Level Fluctuations

Fill within the reservoir will not change managed water level fluctuations per the Folsom Flood Control operations diagrams..

2.1.2.4 Salinity Gradients

Because the fill areas receive freshwater stormwater runoff, salinity gradients would not be affected.

2.1.2.5 Actions That Will Be Taken to Minimize Impacts

Effects to pattern or flow of stormwater runoff are not expected to be significant. Therefore, no additional minimization measures are needed beyond those defined in Section II.e.4.

2.1.3 Suspended Particulate/ Turbidity Determinations

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus affecting water quality.

2.1.3.1 Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of Excavation and Disposal Sites

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting turbidity levels and levels of suspended particulates. Effects on suspended particulates and turbidity levels would be short-term and would only last for the duration of the construction period. Mitigation measures described in Section II.a.6 would also minimize impacts to levels of suspended particulates and to turbidity levels. Water quality and water levels would continue to be monitored after the project to ensure no adverse effects would occur.

Because the fill occurring in isolated wetlands is not in areas of permanent water, there would be no changes in suspended particulates and turbidity in these areas. There would not be significant long-term changes in suspended particulates and turbidity. Drainage channels downstream from the Dike 7, Folsom Point, and south Beal's Point that are filled would be replaced by other drainage structures. There would not be significant long-term changes in suspended particulates and turbidity. Fill occurring in the area

downstream of the stilling basin would be solid or of substrate that is subject to increasing suspended particulates and turbidity.

2.1.3.2 Effects (degree and duration) on Chemical and Physical Properties of the Water Column)

Light Penetration

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting light penetration. Mitigation measures described in Section II.a.6 would also minimize impacts to light penetration.

Because the fill areas are not in areas of permanent water, or would be replaced by other drainage structures, or would occur as a solid of attached to the substrate or 2-6 inch diameter gravel/cobbles, there would not be adverse effects to light penetration.

Dissolved Oxygen

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting dissolved oxygen. Mitigation measures described in Section II.a.6 would also minimize impacts to dissolved oxygen.

Toxic Metals and Organics

The sediments in Folsom Reservoir may contain elemental mercury and metals from historic mining or naturally occurring within the bedrock of the American River drainage. Mercury is toxic to both aquatic life and human health.

Construction of the auxiliary spillway could lead to the mobilization of sediment into the water column or released into the American River downstream. Reclamation completed water quality sampling to determine if this sediment would be a hazard to downstream aquatic life if allowed to flow downstream. Results of the water quality investigation are presented in Appendix M. In 2006, Reclamation sampled a total of 18 sites and none of the samples exceeded the threshold for mercury of 0.2 mg/kg. Additionally, of all the samples analyzed for metals, no results met or exceeded any of the sediment standards and as a result would be suitable for unconfined aquatic disposal. With the implementation of appropriate mitigation measures, the proposed action is not expected to have any significant adverse effects related to toxic metals or organics.

Measures described in the SWPPP, prepared to RWQCB guidelines, and draft EIS/EIR would minimize the potential for contaminants to be introduced into the fill areas. Sediment mitigation measures would be implemented as suggested in Section 3.1.4 of the Folsom DS/FDR EIS/EIR to prevent the potential for the mobilization of mercury. Additional water quality testing would be performed as needed.

Pathogens

The proposed project would not introduce pathogens to the aquatic community.

Esthetics (of the Water Column)

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting the esthetics of the water column. These impacts would only last for the duration of the construction period and would therefore be temporary. Mitigation measures described in Section II.a.6 would also minimize impacts to esthetics.

The fill areas are not in areas of permanent water and would not occur in dewatered areas and therefore, esthetics of the water column would not be adversely affected.

Others as Appropriate

Leakages from jet grouting could occur and could possibly cause adverse water quality effects in the wetlands downstream of MIAD. However, if it is determined that such leakage is having an adverse effect, a cutoff wall would be constructed before jet grouting the foundation at MIAD to eliminate the migration of the grout. Water quality and levels will be monitored before, during, and after jet grouting.

There would be no other significant adverse effects to the chemical and physical properties of the water column.

2.1.3.3 Effects on Biota

Primary Production, Photosynthesis

The project would temporarily affect primary production and photosynthesis in those areas filled. However, the effect would be temporary and less than significant.

Suspension Filter Feeders

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting the suspension filter feeders. Mitigation measures described in Section II.a.6 would also minimize impacts to suspension filter feeders.

The project would temporarily affect suspension and filter feeders in those areas filled. However, the effect would be temporary and less than significant for the area downstream of the stilling basin. The effect would be a permanent adverse effect on the filled or graded wetlands, but would be mitigated off-site to a less than significant level.

Sight Feeders

Soil erosion associated with excavating material and re-grading may transport sediment into local tributaries or directly into the reservoir, thus adversely affecting the sight feeders. Mitigation measures described in Section II.a.6 would also minimize impacts to sight feeders.

The project would temporarily affect sight feeders in those areas filled. However, the effect would be temporary and less than significant for the area downstream of the stilling basin. The effect would be a permanent adverse effect in the direct area to be filled in the riffle/pool complex downstream of the stilling basin, but would be mitigated off-site to a

less than significant level. The effect would be a temporary or permanent adverse effect in seasonally ponded areas, but would be mitigated off-site to a less than significant level.

2.1.3.4 Actions Taken to Minimize Impacts

Mitigation measures described in Section II.a.6 would also minimize water quality effects on aquatic biota.

Effects to the aquatic biota would be temporary and not significant in the area downstream of the stilling basin. Therefore, no additional measures to minimize effects are needed for fill occurring there. Off-site mitigation would be completed for the wetlands and open water areas that are permanently filled.

If vernal pool fairy shrimp or vernal pool tadpole shrimp are found to be present during surveys being conducted 2006/2007, then avoidance and minimization measures are based on an existing USFWS Programmatic Consultation and Biological Opinion (BO) are proposed, subject to Section 7 consultation and USFWS approval.

2.1.4 Contaminant Determinations

The proposed project would not add contaminants to any nearby body of water. Best management practices to reduce the potential of accidental spills during construction are included in the draft EIS/EIR. The fill material for the sites would not be contaminated and would be tested for contaminants prior to placement. If jet grouting were determined to affect water quality, mitigation measures would be employed to minimize that effect.

2.1.5 Aquatic Ecosystem and Organism Determinations

2.1.5.1 Effects on Plankton

The proposed action would have short-term construction related effects to plankton but with the implementation of mitigation measures described in II.a.6, effects to plankton would be temporary and not significant. No additional measures to minimize effects are needed for fill occurring in the area downstream of the stilling basin. Off-site mitigation would be performed for the wetlands and open water areas that are permanently filled.

2.1.5.2 Effects on Benthos

The proposed action would have short-term construction related effects on benthos, but with the implementation of mitigation measures described in II.a.6, effects to the benthos would be temporary and not significant. No additional measures to minimize effects are needed for fill occurring in the area downstream of the stilling basin. Off-site mitigation would be performed for the wetlands and open waters that are permanently filled.

2.1.5.3 Effects on Nekton

The proposed action would have short-term construction related effects on nekton, but with the implementation of mitigation measures described in II.a.6, effects to the nekton would be temporary and not significant. No additional measures to minimize effects are

needed for fill occurring in the area downstream of the stilling basin. Off-site mitigation would be performed for the wetlands and open waters that are permanently filled.

2.1.5.4 Effects on Aquatic Food Web

The proposed action would have short-term construction related effects on the aquatic food web, but with the implementation of mitigation measures described in II.a.6, there would be no adverse effects to the aquatic food web. Additional fill at the dikes and MIAD would be placed on the outside faces of these facilities. The fill areas carry water only in rain and flood events except for filling action occurring downstream of the stilling basin. Conditions in the new drainage areas and overflow channel are expected to be similar to pre-project conditions. Due to the very intermittent nature of water in the fill areas, habitat for these aquatic resources is extremely marginal and any unexpected effects would not be significant.

2.1.5.5 Effects on Special Aquatic Sites

Sanctuaries and Refuges

There are no Sanctuaries or Refuges within the footprint of the Folsom Facilities. The Mormon Island Wetland Preserve is located downstream of MIAD. Mitigation measures are proposed to preclude adverse effects to the preserve.

Wetlands

Within the project area, there would be adverse effects to up to 4.29 acres of seasonal wetlands and 40.99 acres of willow/cottonwood riparian that would be graded and or filled.

Mud Flats

There would be no adverse effects to mud flats with the proposed project.

Vegetated Shallows

There would be no adverse effects to vegetated shallows with the proposed project.

Coral Reefs

There would be no adverse effects to coral reefs with the proposed project.

Riffle and Pool Complexes

There are no riffles are pools within the footprints of the Folsom Facilities.

Threatened and Endangered Species

There would be adverse effects to 135 elderberry shrubs that provide habitat for the valley elderberry longhorn beetle. There could be adverse effects to vernal pool fairy shrimp or vernal pool tadpole shrimp if these species are present in the project area. Mitigation measures proposed to minimize these effects include:

■ Include a copy of biological opinions in contractual documents and hold the prime contractor responsible for implementing obligations of the biological opinion that pertain to various contracts.

- Implement mitigation based on the U.S. Fish and Wildlife Service's Conservation Guidelines for the Valley Elderberry Longhorn Beetle dated July 9, 1999, for actions related to the proposed project. Establish elderberry and associated native plant seedlings between February 1, 2007 and February 15, 2008. Ensure that the elderberry and associated native plant seedlings are established on no less than 11.0 acres at a site approved by the U.S. Fish and Wildlife Service. This mitigation would reduce the significant effect on the elderberry shrubs to a less than significant level.
- If vernal pool fairy shrimp or vernal pool tadpole shrimp are found to be present during surveys being conducted 2006/2007, then avoidance and minimization measures are based on an existing USFWS Programmatic Consultation and Biological Opinion (BO) are proposed, subject to Section 7 consultation and USFWS approval.

Other Wildlife

Wildlife effects associated with the construction are expected to be temporary. Generally, wildlife species that use the areas around project area are mobile species that would leave the area during construction and return when construction is completed. Therefore, the proposed project would not have any significant adverse effects to wildlife over what was described in the draft EIS/EIR.

2.1.5.6 Actions to Minimize Impacts

The adverse effects to elderberry shrubs have already been documented and consultation with FWS is being conducted. There would be no additional significant adverse effects to wildlife due to the construction. Therefore, there would be no additional minimization measures needed.

If federally listed vernal pool fairy shrimp or vernal pool tadpole shrimp are present in the project area, avoidance and minimization measures would be implemented, based on an existing USFWS Programmatic Consultation and Biological Opinion (BO) and subject to Section 7 consultation and USFWS approval.

Wetland and open water habitats would be compensated to an amount according to consultation with the U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act.

2.1.6 Proposed Disposal Site Determinations

2.1.6.1 Mixing Zone Determination (consider factors in section 230.11(0(2)) Not applicable.

2.1.6.2 Determination of Compliance with Applicable Water Quality Standards

No water quality or effluent standards would be violated either during or after construction of the Auxiliary Spillway, dams, dikes, staging areas and borrow areas.

2.1.6.3 Potential Effects on Human Use Characteristics

The proposed project would not have any significant adverse effects to municipal and private water supply and commercial fisheries. Adverse effects to recreation, air quality, noise, transportation, and visual resources would occur for the duration of the construction period. Some visual resources would be permanently affected.

Folsom Lake State Recreational Area would be affected by the proposed action for the duration of the construction period. There would be no other national and historic monuments, parks, seashores, wilderness areas, research sites or similar preserves affected by the proposed action.

2.1.7 Determination of Cumulative Effects on the Aquatic Ecosystem

Project-related construction activities could potentially alter water quality by increasing the likelihood that runoff and debris enter receiving waters. When combined with construction of the New Folsom Bridge, Future Redundant Water Pipeline for Roseville, Folsom, and San Juan Water Districts, modifications to L.L. Anderson Dam. All work on L.L. Anderson Dam will be done as part of the FERC relicensing and is not part of the Folsom DS/FDR). Long-term Reoperation of Folsom Dam, the Sacramento Municipal Utility District Transmission Line Relocation, Folsom Dam Road Closure, and the Lower American River Common Features Project, there is a possibility that water quality would be affected. However, each project's associated SWPPPs, BMPs and pertinent permits would ensure that measures are implemented to avoid water quality degradation. This would result in effective mitigation of significant cumulative impacts.

The Folsom Bridge Project is expected to result in limited impacts to native vegetation, in part in areas also potentially affected by the project. Therefore, the cumulative effects of the Folsom Bridge Project and the Proposed Action would not be cumulatively considerable for fishery resources in general, or for vernal pool habitat and species. If additional water is impounded in an unusually high-precipitation year behind a raised dam, a zone along the reservoir shoreline would be temporarily flooded. Such an inundation is expected to be a rare event, affecting a narrow zone along the shore, and the impacts would not be cumulatively considerable.

The Folsom Bridge Project is expected to result in limited impacts to native vegetation, in part in areas also potentially affected by the Folsom DS/FDR action. These impacts include impacts to jurisdictional wetlands. The project provides mitigation to reduce these impacts to a less-than-significant level. The Sacramento Municipal Utility District Transmission Line Project will result in limited impacts to native vegetation, primarily in areas also potentially affected either by the Folsom Bridge Project or the Folsom DS/FDR area are not expected from this project. Potential alterations to stream flow due to modification of the spillway at French Meadows Reservoir would be attenuated in the long distance between L.L. Anderson Dam and the Folsom DS/FDR area and are not likely to affect vegetation in the Folsom DS/FDR area. Although work related to the Lower American River Common Features Project is on-going, it is close to completion and consists primarily of levee work outside the floodway. Therefore, the effects of these projects in

combination with the Folsom DS/FDR action would not be cumulatively considerable for vegetation in general, for riparian vegetation, or for wetland vegetation.

2.1.8 Determination of Secondary Effects on the Aquatic Ecosystem

The project would result in additional fill near Dike 7, at Folsom Point and at the Beal's Point recreational use area. If this fill is left in place and the parking or boat ramp areas are expanded, stormwater runoff from the expanded areas could result in secondary adverse effects to water quality. If construction of additional boat ramp areas is included in the project as mitigation for adverse effects on recreational use, then secondary adverse effects to water quality could also occur from stormwater runoff from those surfaces.

3.1 Findings of Compliance or Non-Compliance With the Restrictions on Discharge

3.1.1 Adaptation of the Section 404(b)(1) Guidelines to this Evaluation

No significant adaptations of the guidelines were made relative to this evaluation.

3.1.2 Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Impact on the Aquatic Ecosystem

Fill placement within the reservoir has been minimized to the amounts and locations necessary to affectively construct the modifications to the Folsom Facilities. Upland locations have been identified for excess material. Impacts have been minimized through this approach.

3.1.3 Compliance with Applicable State Water Quality Standards and

3.1.4 Compliance with Applicable Toxic Effluent Standard or Prohibition Under Section 307 of the Clean Water Act

State water quality standards would not be violated. The proposed action would not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

3.1.5 Compliance with Endangered Species Act (ESA) of 1973

Reclamation and the Corps have been participating in informal consultation with the United States Fish and Wildlife Service (USFWS). A Biological Assessment has been prepared for submittal to USFWS. A Draft Coordination Action Report has been prepared by the USFWS.

3.1.6 Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972

Not applicable.

3.1.7 Evaluation of Extent of Degradation of the Waters of the United States

Significant Adverse Effects on Human Health and Welfare

The proposed action would not cause significant adverse effect on human health and welfare, including municipal and private water supplies, recreational fishing, and commercial fishing. Construction activities would affect benthic communities and plankton. There would be temporary adverse effects to fish, shellfish, wildlife or special aquatic sites. Due to limited permanent water at wetland sites outside of the reservoir, there would be minimal, if any adverse effects to aquatic diversity during construction. Additionally all of the fill areas would be replaced by similar habitat as part of mitigation. Temporary adverse effects to recreational use at Beal's Point and Folsom Point would occur during construction. The proposed action would not significantly affect economic values. Temporary effects to esthetics would occur during construction.

3.1.8 Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of Excavation and Discharge on the Aquatic Ecosystem

Appropriate and practicable steps to minimize potential adverse effects of excavation, discharge and fill on the aquatic ecosystem include: implementing a SWPPP, dewatering during construction any permanent waters in which fill would occur, placing fill material only where it is needed for the proposed project, and confining it to the smallest practicable area. The areas disturbed by construction would be returned as close as possible to pre-proposed action conditions where practicable.

On the basis of the guidelines, the proposed action is specified as complying with the inclusion of appropriate and practical conditions to minimize pollution or adverse effect on the aquatic ecosystem.

Appendix E Air Quality Methodology and Assumptions

Appendix E Air Quality Methodology and Assumptions

This appendix presents detailed emissions and dispersion calculation results tables for Alternatives 1 and 3. These tables provide typical calculation results for the different source categories included in the analysis. Additional material is available in the administrative record.

The air dispersion modeling tables in this appendix provide the unmitigated and mitigated concentration results for NO_2 , PM_{10} , and $PM_{2.5}$ from Alternative 1 and 3 sources. The dispersion modeling output files will be available in the administrative record.

The emissions information includes the tables and data below in the following order:

Alternative 1 Data and Results

- Alternative 1 Unmitigated Emission Summaries by year for daily emissions and annual emissions
- Alternative 1 Mitigated Emission Summaries by year for daily emissions and annual emissions
- Alternative 1 Equipment Counts by Project Feature
- Offroad Construction Equipment Emission Factors (applicable to all alternatives)
- Onsite Construction Equipment NOx Unmitigated Emissions for Alternative 1
 - o Alt 1 Auxiliary Spillway NOx Unmitigated Emissions
 - o Alt 1 MIAD NOx Unmitigated Emissions
 - o Alt 1 RWD NOx Unmitigated Emissions
- Onsite Construction Equipment PM₁₀ Unmitigated Emissions for Alternative 1
 - o Alt 1 Auxiliary Spillway PM₁₀ Unmitigated Emissions
 - o Alt 1 MIAD PM₁₀ Unmitigated Emissions
 - o Alt 1 RWD PM₁₀ Unmitigated Emissions
- Onsite Construction Equipment CO Unmitigated Emissions for Alternative 1
- Onsite Construction Equipment ROG Unmitigated Emissions for Alternative 1
- Onsite Construction Equipment PM_{2.5} Unmitigated Emissions for Alternative 1
- Onsite Fugitive Dust Emissions from URBEMIS for Alternative 1
- Concrete Batch Plant Emissions (applicable to all alternatives)
- Materials Crushing/Processing Emissions (applicable to all alternatives)
- Blasting Emissions (applicable to all alternatives)
- Onsite Construction Equipment NOx Mitigated Emissions for Alternative 1

Alternative 3 Data and Results

- Alternative 3 Unmitigated Emission Summaries by year for daily emissions and annual emissions
- Alternative 3 Mitigated Emission Summaries by year for daily emissions and annual emissions
- Alternative 3 Equipment Counts by Project Feature
- Onsite Construction Equipment NOx Unmitigated Emissions for Alternative 3

- Onsite Construction Equipment PM₁₀ Unmitigated Emissions for Alternative 3
- Onsite Construction Equipment CO Unmitigated Emissions for Alternative 3
- Onsite Construction Equipment ROG Unmitigated Emissions for Alternative 3
- Onsite Construction Equipment PM_{2.5} Unmitigated Emissions for Alternative 3
- Onsite Fugitive Dust Emissions from URBEMIS for Alternative 3

*PM*_{2.5} *Modeling Approach*

NO₂-NO_x Ratio Graph

Alternative 1 Data and Results

Alternative 1 - Unmitigated Emissions Summary

Construction Equipment	176.90 0.00 0.00 0.00 0.00 0.76.90 0.27.85 0.29.74 0.206.64 PEAK 1636.97 0.00
Onsite Fugitive Dust 0.00<	0 0.00 0 0.00 0 0.00 0 176.90 0 27.85 0 29.74 0 206.64 PEAK 1636.97 0 0.00 0 0.00 0 1636.97 103.24 100.90 177.77 1809.13
Concrete Batching 0.00 <td>0 0.00 0 0.00 0 176.90 0 27.85 0 29.74 0 206.64 4 PEAK 0 1636.97 0 0.00 0 0.00 0 1636.97 0 103.24 0 10.90 0 177.77 1809.13</td>	0 0.00 0 0.00 0 176.90 0 27.85 0 29.74 0 206.64 4 PEAK 0 1636.97 0 0.00 0 0.00 0 1636.97 0 103.24 0 10.90 0 177.77 1809.13
Crushing/Processing 0.00 </td <td>0 0.00 0 176.90 1 27.85 0 29.74 0 206.64 2 PEAK 0 1636.97 0 0.00 0 0.00 0 1636.97 0 103.24 1 100.90 1 177.77 1 1809.13</td>	0 0.00 0 176.90 1 27.85 0 29.74 0 206.64 2 PEAK 0 1636.97 0 0.00 0 0.00 0 1636.97 0 103.24 1 100.90 1 177.77 1 1809.13
Onsite Subtotal 40.60 176.90 98.60 69.60 14.15 37.70 23.20 0.00 Offsite Haul Trucks 0.00 27.85 19.22 27.11 15.98 8.46 23.52 0.00 Worker Trips 0.69 1.89 2.96 2.26 0.80 0.80 0.53 0.00 Offsite Subtotal 0.69 29.74 22.18 29.38 16.78 9.26 24.05 0.00 Emissions of CO (lbs/day) Emissions of CO (lbs/day) Construction Equipment 166.36 1624.04 1636.97 960.49 577.05 577.05 102.83 0.00 Onsite Fugitive Dust 0.00	176.90 27.85 2.96 29.74 206.64 4 PEAK 1636.97 0.00 0.00 0.00 0.1636.97 0.103.24 0.177.77 0.1809.13
Offsite Haul Trucks 0.00 27.85 19.22 27.11 15.98 8.46 23.52 0.00 Worker Trips 0.69 1.89 2.96 2.26 0.80 0.80 0.53 0.00 Offsite Subtotal 0.69 29.74 22.18 29.38 16.78 9.26 24.05 0.00 Emissions of CO (lbs/day) Emissions of CO (lbs/day) Emissions of CO (lbs/day) Construction Equipment 166.36 1624.04 1636.97 960.49 577.05 577.05 102.83 0.00 Onsite Fugitive Dust 0.00	27.85 2.96 29.74 206.64 4 PEAK 1636.97 0.00 0.00 0.00 1636.97 103.24 100.90 177.77 1809.13
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2007 2008 2009 2010 2011 2012 2013 2013 2015	1636.97 0.00 0.00 0.00 0.1636.97 103.24 0.100.90 0.177.77 1809.13
Construction Equipment 166.36 1624.04 1636.97 960.49 577.05 577.05 102.83 0.00 Onsite Fugitive Dust 0.00	1636.97 0.00 0.00 0.00 0.1636.97 103.24 0.100.90 0.177.77 1809.13
Onsite Fugitive Dust 0.00<	0 0.00 0 0.00 0 0.00 0 1636.97 0 103.24 0 100.90 0 177.77 0 1809.13
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Crushing/Processing 0.00 </td <td>0.00 0.1636.97 0.103.24 0.100.90 0.177.77 0.1809.13</td>	0.00 0.1636.97 0.103.24 0.100.90 0.177.77 0.1809.13
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Worker Trips 23.63 64.54 100.90 77.27 27.27 27.27 18.18 0.00 Offsite Subtotal 23.63 167.78 172.16 177.77 86.52 58.65 105.37 0.00 Total 190.00 1791.82 1809.13 1138.27 663.57 635.70 208.20 0.00 Emissions of NOx (lbs/day) Construction Equipment 167.25 1268.86 1155.87 688.95 471.45 471.45 92.29 0.00 Onsite Fugitive Dust 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	100.90 177.77 1809.13
Offsite Subtotal 23.63 167.78 172.16 177.77 86.52 58.65 105.37 0.00 Total 190.00 1791.82 1809.13 1138.27 663.57 635.70 208.20 0.00 Emissions of NOx (lbs/day) Emissions of NOx (lbs/day) Construction Equipment 167.25 1268.86 1155.87 688.95 471.45 471.45 92.29 0.00 Onsite Fugitive Dust 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	177.77
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	1268.86
Concrete Batching 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
Crushing/Processing 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
Onsite Subtotal 167.25 1268.86 1155.87 688.95 471.45 471.45 92.29 0.00	
Offsite Haul Trucks 0.00 459.23 316.95 447.07 263.53 139.58 387.82 0.00	
Worker Trips 2.29 6.25 9.77 7.48 2.64 2.64 1.76 0.00	
Offsite Subtotal 2.29 465.48 326.72 454.55 266.17 142.22 389.58 0.00	
Total 169.54 1734.33 1482.59 1143.50 737.62 613.67 481.87 0.00	1734.33
Emissions of PM ₁₀ (lbs/day)	. 1
2007 2008 2009 2010 2011 2012 2013 201	
Construction Equipment 5.50 37.76 32.19 19.33 14.22 14.22 2.93 0.00 Onsite Fugitive Dust 560.36 1738.90 2039.05 2038.37 802.34 381.58 721.20 0.00	
Onsite Fugitive Dust 560.36 1738.90 2039.05 2038.37 802.34 381.58 721.20 0.00 Concrete Batching 165.41 165.41 165.41 165.41 165.41 165.41 165.41 0.00	
Crushing/Processing 27.22 27.22 27.22 27.22 27.22 27.22 27.22 20.00	
Onsite Subtotal 758.49 1969.28 2263.87 2250.33 1009.19 588.43 916.76 0.00	
Offsite Haul Trucks 0.00 100.64 69.46 97.98 57.76 30.59 85.00 0.00	
Worker Trips 3.88 10.61 16.59 12.70 4.48 4.48 2.99 0.00	
Offsite Subtotal 3.88 111.25 86.05 110.68 62.24 35.07 87.98 0.00	
Total 762.38 2080.54 2349.92 2361.01 1071.43 623.50 1004.74 0.00	
Emissions of PM _{2.5} (lbs/day)	
2007 2008 2009 2010 2011 2012 2013 201	4 PEAK
Construction Equipment 4.92 34.43 29.56 17.71 12.88 12.88 2.64 0.00	
Onsite Fugitive Dust 116.22 361.28 423.36 423.29 166.84 78.72 149.09 0.00	
Concrete Batching 111.47 111.47 111.47 111.47 111.47 111.47 0.00	
Crushing/Processing 2.33 2.33 2.33 2.33 2.33 2.33 0.00	
Onsite Subtotal 234.94 509.51 566.72 554.80 293.52 205.40 265.53 0.00	
Offsite Haul Trucks 0.00 26.35 18.19 25.65 15.12 8.01 22.25 0.00	
Worker Trips 0.73 1.99 3.11 2.38 0.84 0.84 0.56 0.00	
Offsite Subtotal 0.73 28.34 21.29 28.03 15.96 8.85 22.81 0.00	
Total 235.67 537.85 588.01 582.84 309.48 214.25 288.34 0.00	588.01

Notes

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Alternative 1 - Unmitigated Emissions Summary

			Emi	ssions of R	OG (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	1.66	15.46	19.72	15.93	1.77	3.22	0.14	0.00	19.72
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	1.66	15.46	19.72	15.93	1.77	3.22	0.14	0.00	19.72
Offsite Haul Trucks	0.00	0.14	0.35	0.72	0.65	0.04	0.17	0.00	0.72
Worker Trips	0.08	0.25	0.32	0.24	1.47	0.06	0.10	0.00	1.47
Offsite Subtotal	0.08	0.39	0.67	0.96	2.12	0.11	0.27	0.00	2.12
Total	1.75	15.85	20.39	16.89	3.89	3.33	0.40	0.00	20.39
					O (tons/ye				
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	6.82	190.90	280.95	234.01	72.13	51.64	0.62	0.00	280.95
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	6.82	190.90	280.95	234.01	72.13	51.64	0.62	0.00	280.95
Offsite Haul Trucks	0.00	0.52	1.30	2.68	2.41	0.16	0.63	0.00	2.68
Worker Trips	2.80	8.44	10.83	8.03	0.06	2.18	3.27	0.00	10.83
Offsite Subtotal	2.80	8.96	12.12	10.70	2.47	2.35	3.90	0.00	12.12
Total	9.62	199.86	293.07	244.71	74.60	53.99	4.52	0.00	293.07
					Ox (tons/ye				
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	6.86	137.77	203.05	169.47	58.93	41.73	0.55	0.00	203.05
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	6.86	137.77	203.05	169.47	58.93	41.73	0.55	0.00	203.05
Offsite Haul Trucks	0.00	2.33	5.77	11.91	10.74	0.73	2.80	0.00	11.91
Worker Trips	0.27	0.82	1.05	0.78	1.96	0.21	0.32	0.00	1.96
Offsite Subtotal	0.27	3.15	6.82	12.69	12.70	0.94	3.12	0.00	12.70
Total	7.13	140.91	209.87	182.15	71.63	42.67	3.67	0.00	209.87
					VI ₁₀ (tons/y				1
Construction Faultonent	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment Onsite Fugitive Dust	0.23 22.53	4.05 139.53	5.78 204.80	4.80 190.97	1.78 96.89	1.29 45.81	0.02 35.83	0.00	5.78 204.80
Concrete Batching	5.46	21.83	21.83	21.83	21.83	21.83	21.83	0.00	21.83
Crushing/Processing	0.90	3.59	3.59	3.59	3.59	3.59	3.59	0.00	3.59
Onsite Subtotal	29.11	169.01	236.00	221.20	124.09	72.52	61.27	0.00	236.00
Offsite Haul Trucks	0.00	0.51	1.26	2.61	2.35	0.16	0.61	0.00	2.61
Worker Trips	0.46	1.39	1.78	1.32	0.00	0.16	0.54	0.00	1.78
Offsite Subtotal	0.46	1.90	3.04	3.93	2.36	0.52	1.15	0.00	3.93
Total	29.57	170.91	239.04	225.13	126.45	73.04	62.43	0.00	239.04
Total	20.01	170.01			M _{2.5} (tons/ye		02.40	0.00	200.04
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	0.20	3.96	5.30	4.40	1.61	1.17	0.02	0.00	5.30
Onsite Fugitive Dust	4.67	29.01	42.56	39.69	20.15	9.52	7.43	0.00	42.56
Concrete Batching	3.68	14.71	14.71	14.71	14.71	14.71	14.71	0.00	14.71
Crushing/Processing	0.08	0.31	0.31	0.31	0.31	0.31	0.31	0.00	0.31
Onsite Subtotal	8.63	47.99	62.88	59.11	36.78	25.71	22.47	0.00	62.88
Offsite Haul Trucks	0.00	0.13	0.33	0.68	0.62	0.04	0.16	0.00	0.68
Olisile Haul Hucks			00						
	0.09	0.26	0.33	0.25	0.32	0.07	0.10	0.00	0.33
Worker Trips Offsite Subtotal	0.09 0.09	0.26 0.39	0.33 0.66	0.25 0.93	0.32 0.94	0.07 0.11	0.10 0.26	0.00	0.33 0.94

Notes

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Alternative 1 - Mitigated Emissions Summary

			Em	nissions of RC	G (lbs/day)				
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	40.60	176.90	98.60	69.60	14.15	37.70	23.20	0.00	176.90
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	40.60	176.90	98.60	69.60	14.15	37.70	23.20	0.00	176.90
Offsite Haul Trucks	0.00	27.85	19.22	27.11	15.98	8.46	23.52	0.00	27.85
Worker Trips	0.69	1.89	2.96	2.26	0.80	0.80	0.53	0.00	2.96
Offsite Subtotal	0.69	29.74	22.18	29.38	16.78	9.26	24.05	0.00	29.74
Total	41.29	206.64	120.78	98.98	30.93	46.96	47.25	0.00	206.64
			Er	nissions of C	O (lbs/day)				
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	166.36	1624.04	1636.97	960.49	577.05	577.05	102.83	0.00	1636.97
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	166.36	1624.04	1636.97	960.49	577.05	577.05	102.83	0.00	1636.97
Offsite Haul Trucks	0.00	103.24	71.25	100.51	59.25	31.38	87.19	0.00	103.24
Worker Trips	23.63	64.54	100.90	77.27	27.27	27.27	18.18	0.00	100.90
Offsite Subtotal	23.63	167.78	172.16	177.77	86.52	58.65	105.37	0.00	177.77
Total	190.00	1791.82	1809.13	1138.27	663.57	635.70	208.20	0.00	1809.13
			Em	nissions of NC	Ox (lbs/day)				
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	146.30	1042.60	929.70	556.16	389.67	389.67	78.83	0.00	1042.60
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	146.30	1042.60	929.70	556.16	389.67	389.67	78.83	0.00	1042.60
Offsite Haul Trucks	0.00	459.23	316.95	447.07	263.53	139.58	387.82	0.00	459.23
Worker Trips	2.29	6.25	9.77	7.48	2.64	2.64	1.76	0.00	9.77
Offsite Subtotal	2.29	465.48	326.72	454.55	266.17	142.22	389.58	0.00	465.48
Total	148.59	1508.07	1256.42	1010.71	655.84	531.88	468.42	0.00	1508.07
			Em	issions of PN	l₁₀ (lbs/day)				
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	5.50	37.76	32.19	19.33	14.22	14.22	2.93	0.00	37.76
Onsite Fugitive Dust	309.89	899.15	1049.23	1048.89	401.17	190.79	360.60	0.00	1049.23
Concrete Batching	165.41	165.41	165.41	165.41	165.41	165.41	165.41	0.00	165.41
Crushing/Processing	27.22	27.22	27.22	27.22	27.22	27.22	27.22	0.00	27.22
Onsite Subtotal	508.01	1129.54	1274.05	1260.85	608.02	397.64	556.16	0.00	1274.05
Offsite Haul Trucks	0.00	100.64	69.46	97.98	57.76	30.59	85.00	0.00	100.64
Worker Trips	3.88	10.61	16.59	12.70	4.48	4.48	2.99	0.00	16.59
Offsite Subtotal	3.88	111.25	86.05	110.68	62.24	35.07	87.98	0.00	111.25
Total	511.90	1240.79	1360.09	1371.53	670.26	432.71	644.14	0.00	1371.53
	2007	2000		issions of PM	2.0 -		2042	2014	DEAK
Construction Equipment	2007 4.92	2008 34.43	2009 29.56	2010 17.71	2011 12.88	2012 12.88	2013 2.64	0.00	PEAK 34.43
Onsite Fugitive Dust									34.43 218.24
Concrete Batching	64.46	187.02	218.24	218.17	83.44	39.68	75.00	0.00	
Crushing/Processing	111.47 2.33	111.47 2.33	111.47 2.33	111.47 2.33	111.47 2.33	111.47 2.33	111.47 2.33	0.00 0.00	111.47 2.33
Onsite Subtotal	183.18	335.26	361.60	349.68	2.33	166.37	191.44	0.00	361.60
Offsite Haul Trucks	0.00	26.35	18.19	25.65	15.12	8.01	22.25	0.00	26.35
Worker Trips Offsite Subtotal	0.73 0.73	1.99 28.34	3.11 21.29	2.38 28.03	0.84 15.96	0.84 8.85	0.56 22.81	0.00	3.11 28.34
Total	183.91	363.60	382.89	377.72	226.09	175.21	214.26	0.00	382.89

Notes:

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Alternative 1 - Mitigated Emissions Summary

ı			Emi	ssions of Ro	OG (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	1.66	15.46	19.72	15.93	1.77	3.22	0.14	0.00	19.72
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	1.66	15.46	19.72	15.93	1.77	3.22	0.14	0.00	19.72
Offsite Haul Trucks	0.00	0.14	0.35	0.72	0.65	0.04	0.17	0.00	0.72
Worker Trips	80.0	0.25	0.32	0.24	1.47	0.06	0.10	0.00	1.47
Offsite Subtotal	0.08	0.39	0.67	0.96	2.12	0.11	0.27	0.00	2.12
Total	1.75	15.85	20.39	16.89	3.89	3.33	0.40	0.00	20.39
			Em	issions of C	O (tons/ye	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	6.82	190.90	280.95	234.01	72.13	51.64	0.62	0.00	280.95
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	6.82	190.90	280.95	234.01	72.13	51.64	0.62	0.00	280.95
Offsite Haul Trucks	0.00	0.52	1.30	2.68	2.41	0.16	0.63	0.00	2.68
Worker Trips	2.80	8.44	10.83	8.03	0.06	2.18	3.27	0.00	10.83
Offsite Subtotal	2.80	8.96	12.12	10.70	2.47	2.35	3.90	0.00	12.12
Total	9.62	199.86	293.07	244.71	74.60	53.99	4.52	0.00	293.07
				ssions of N	Ox (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	6.00	111.96	163.94	137.19	48.71	34.67	0.47	0.00	163.94
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	6.00	111.96	163.94	137.19	48.71	34.67	0.47	0.00	163.94
Offsite Haul Trucks	0.00	2.33	5.77	11.91	10.74	0.73	2.80	0.00	11.91
Worker Trips	0.27	0.82	1.05	0.78	1.96	0.21	0.32	0.00	1.96
Offsite Subtotal	0.27	3.15	6.82	12.69	12.70	0.94	3.12	0.00	12.70
Total	6.27	115.10	170.76	149.87	61.41	35.61	3.59	0.00	170.76
			Emi	ssions of PN	/I ₁₀ (tons/y				1
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	0.23	4.05	5.78	4.80	1.78	1.29	0.02	0.00	5.78
Onsite Fugitive Dust	0.23 12.45	4.05 73.48	5.78 106.11	4.80 98.46	1.78 48.44	1.29 22.90	0.02 17.91	0.00 0.00	5.78 106.11
Onsite Fugitive Dust Concrete Batching	0.23 12.45 5.46	4.05 73.48 21.83	5.78 106.11 21.83	4.80 98.46 21.83	1.78 48.44 21.83	1.29 22.90 21.83	0.02 17.91 21.83	0.00 0.00 0.00	5.78 106.11 21.83
Onsite Fugitive Dust Concrete Batching Crushing/Processing	0.23 12.45 5.46 0.90	4.05 73.48 21.83 3.59	5.78 106.11 21.83 3.59	4.80 98.46 21.83 3.59	1.78 48.44 21.83 3.59	1.29 22.90 21.83 3.59	0.02 17.91 21.83 3.59	0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal	0.23 12.45 5.46 0.90 19.03	4.05 73.48 21.83 3.59 102.96	5.78 106.11 21.83 3.59 137.32	4.80 98.46 21.83 3.59 128.69	1.78 48.44 21.83 3.59 75.65	1.29 22.90 21.83 3.59 49.62	0.02 17.91 21.83 3.59 43.36	0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks	0.23 12.45 5.46 0.90 19.03 0.00	4.05 73.48 21.83 3.59 102.96	5.78 106.11 21.83 3.59 137.32	4.80 98.46 21.83 3.59 128.69 2.61	1.78 48.44 21.83 3.59 75.65 2.35	1.29 22.90 21.83 3.59 49.62 0.16	0.02 17.91 21.83 3.59 43.36 0.61	0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips	0.23 12.45 5.46 0.90 19.03 0.00 0.46	4.05 73.48 21.83 3.59 102.96 0.51 1.39	5.78 106.11 21.83 3.59 137.32 1.26 1.78	4.80 98.46 21.83 3.59 128.69 2.61 1.32	1.78 48.44 21.83 3.59 75.65 2.35 0.00	1.29 22.90 21.83 3.59 49.62 0.16 0.36	0.02 17.91 21.83 3.59 43.36 0.61 0.54	0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal	0.23 12.45 5.46 0.90 19.03 0.00 0.46	4.05 73.48 21.83 3.59 102.96 0.51 1.39	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15	0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips	0.23 12.45 5.46 0.90 19.03 0.00 0.46	4.05 73.48 21.83 3.59 102.96 0.51 1.39	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14	0.02 17.91 21.83 3.59 43.36 0.61 0.54	0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of PN	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 $h_{2.5}$ (tons/y	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear)	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of PN	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 $h_{2.5}$ (tons/y	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment Tu	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of PN 2010 5.30	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 $I_{2.5}$ (tons/y 2011 4.40	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Substance of	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of PN 2010 5.30 20.48	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 78.00 4.40 10.08	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Concrete Batching	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49 2007 Uction Equi 2.59 3.68	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86 2008 0.20 15.28 14.71	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07 14.71	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of Pl 2010 5.30 20.48 14.71	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 78.00 4.40 10.08 14.71	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76 14.71	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51 2013 1.17 3.73 14.71	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07 14.71
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Concrete Batching Crushing/Processing	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49 2007 Uuction Equi 2.59 3.68 0.08	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86 2008 0.20 15.28 14.71 0.31	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07 14.71 0.31	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of PN 2010 5.30 20.48 14.71 0.31	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 78.00 4.40 10.08 14.71 0.31	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76 14.71 0.31	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51 2013 1.17 3.73 14.71 0.31	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07 14.71 0.31
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Construction Equipment of the Concrete Batching Crushing/Processing Onsite Subtotal	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49 2007 Juction Equi 2.59 3.68 0.08 6.35	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86 2008 0.20 15.28 14.71 0.31 30.51	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07 14.71 0.31 41.05	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of Ph 2010 5.30 20.48 14.71 0.31 40.80	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 2.011 4.40 10.08 14.71 0.31 29.50	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76 14.71 0.31 21.40	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51 2013 1.17 3.73 14.71 0.31 19.92	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07 14.71 0.31 41.05
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Construction Equipment	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49 2007 Juction Equi 2.59 3.68 0.08 6.35 0.00	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86 2008 0.20 15.28 14.71 0.31 30.51	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07 14.71 0.31 41.05 0.33	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of Pi 2010 5.30 20.48 14.71 0.31 40.80 0.68	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 2.36 78.00 4.40 10.08 14.71 0.31 29.50 0.62	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76 14.71 0.31 21.40 0.04	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51 2013 1.17 3.73 14.71 0.31 19.92 0.16	0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07 14.71 0.31 41.05 0.68
Onsite Fugitive Dust Concrete Batching Crushing/Processing Onsite Subtotal Offsite Haul Trucks Worker Trips Offsite Subtotal Total Construction Equipment of the Construction Equipment of the Concrete Batching Crushing/Processing Onsite Subtotal	0.23 12.45 5.46 0.90 19.03 0.00 0.46 0.46 19.49 2007 Juction Equi 2.59 3.68 0.08 6.35	4.05 73.48 21.83 3.59 102.96 0.51 1.39 1.90 104.86 2008 0.20 15.28 14.71 0.31 30.51	5.78 106.11 21.83 3.59 137.32 1.26 1.78 3.04 140.36 Emi 2009 3.96 22.07 14.71 0.31 41.05	4.80 98.46 21.83 3.59 128.69 2.61 1.32 3.93 132.61 ssions of Ph 2010 5.30 20.48 14.71 0.31 40.80	1.78 48.44 21.83 3.59 75.65 2.35 0.00 2.36 78.00 2.011 4.40 10.08 14.71 0.31 29.50	1.29 22.90 21.83 3.59 49.62 0.16 0.36 0.52 50.14 ear) 2012 1.61 4.76 14.71 0.31 21.40	0.02 17.91 21.83 3.59 43.36 0.61 0.54 1.15 44.51 2013 1.17 3.73 14.71 0.31 19.92	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.78 106.11 21.83 3.59 137.32 2.61 1.78 3.93 140.36 Peak Yr 5.30 22.07 14.71 0.31 41.05

Notes

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Source: SMAQMD, "Guide to Air O					unty," July	2004, Table	3.2.
Construction Equipment Emission							
Note: Emissions rates in this table							
Assumption: As the original table				010, the em	ission rates	after that w	/ere
assumed equal to those of 2010 for							
PM2.5 Size Fraction Source:		http://www.	arb.ca.gov/	ei/speciate/s	speciate.htr	<u>n</u>	
	1	2	3	4	5	6	
Bore/Drill Rigs		ROG	CO	NOx	PM10	PM2.5	
20	07	1.57	13.37	10.85	0.25	0.23	
20	80	1.88	15.97	12.97	0.30	0.28	
20	09	2.38	20.21	16.41	0.38	0.35	
20		2.26	19.23	15.61	0.36		
20	_	2.26	19.23	15.61	0.36	0.33	
20		2.26	19.23	15.61	0.36		
20		2.26	19.23	15.61	0.36	0.33	
20			19.23				
20	14	2.26	19.23	15.61	0.36	0.33	
2							
Concrete/Industrial Saws							
20		1.08	7.97	7.84	0.29	0.27	
20		1.08	8.26	7.44	0.26	0.24	
20		1.08	8.56	7.04	0.23	0.21	
20	10	1.08	8.86	6.65	0.20	0.18	
20	11	1.08	8.86	6.65	0.20	0.18	
20	12	1.08	8.86	6.65	0.20	0.18	
20		1.08	8.86	6.65	0.20		
20		1.08	8.86	6.65	0.20	0.18	
			5.50	5.50	0.20	0.70	
Cranes	_						
20	07	1.44	12.27	8.37	0.23	0.21	
	_		12.27				
20	_	1.44		8.37	0.23	0.21	
20		1.44	12.27	8.37	0.23		
20		1.44	12.27	8.37	0.23	0.21	
20		1.44	12.27	8.37	0.23	0.21	
20		1.44	12.27	8.37	0.23	0.21	
20	13	1.44	12.27	8.37	0.23	0.21	
20	14	1.44	12.27	8.37	0.23	0.21	
Crawler Tractors							
20	07	1.45	10.75	10.58	0.39	0.36	
20		1.45	11.15	10.04	0.35		
20		1.45	11.55	9.50	0.31	0.29	
20		1.45	11.95	8.96	0.27	0.25	
20		1.45	11.95	8.96	0.27	0.25	
	_						
20		1.45	11.95	8.96	0.27	0.25	
20	_	1.45	11.95	8.96	0.27	0.25	
20	14	1.45	11.95	8.96	0.27	0.25	
Crushing Proc. Equipment							
20	07	2.12	15.69	15.45	0.57	0.52	
20	80	2.12	16.28	14.66	0.51	0.47	
20		2.12	16.86	13.88	0.45	0.41	
20		2.12	17.45	13.09	0.40		
20	_	2.12	17.45	13.09	0.40		
20		2.12	17.45		0.40		
20	_	2.12	17.45	13.09	0.40		
20	14	2.12	17.45	13.09	0.40	0.37	
=	_						
Excavators							
20		1.84	15.64	10.67	0.29	0.27	
20	_	1.84	15.64	10.67	0.29		
20		1.84	15.64	10.67	0.29		
20	10	1.84	15.64	10.67	0.29	0.27	
20	11	1.84	15.64	10.67	0.29	0.27	
	12	1.84	15.64	10.67	0.29		
20	_	1.84	15.64	10.67	0.29		
	14	1.84	15.64	10.67	0.29	0.27	
20		1.04	10.04	10.07	0.23	0.21	
Graders	+						
	07	4 70	44.00	40.00	0.00	0.00	
20		1.76		10.22	0.28		
20		1.76	14.98	10.22	0.28		
20	_	1.76		10.22	0.28		
20		1.76	14.98	10.22	0.28		
20	11	1.76		10.22	0.28	0.26	
20	12	1.76	14.98	10.22	0.28	0.26	
20		1.76	14.98	10.22	0.28		
20	_	1.76	14.98	10.22	0.28		
	- 1	0					1

					7	Quality Me
Off-Highway Tractors/Compactors						
2007	1.84	13.63	13.42	0.49	0.45	
2008	1.84	14.14	12.74	0.44	0.40	
2009 2010	1.84 1.84	14.65 15.16	12.05 11.37	0.39	0.36 0.31	
2011	1.84	15.16	11.37	0.34		
2012	1.84	15.16	11.37	0.34	0.31	
2013	1.84	15.16	11.37	0.34	0.31	
2014	1.84	15.16	11.37	0.34	0.31	
Off-Highway Trucks/Water Trucks						
2007	3.60	30.62	20.89	0.58	0.53	
2008	3.60	30.62	20.89	0.58	0.53	
2009	3.60	30.62	20.89	0.58	0.53	
2010	3.60	30.62	20.89	0.58	0.53	
2011	3.60	30.62	20.89	0.58	0.53	
2012 2013	3.60 3.60	30.62 30.62	20.89 20.89	0.58 0.58	0.53 0.53	
2014	3.60	30.62	20.89	0.58	0.53	
-						
Pavers						
2007	1.37	11.62	7.93	0.22	0.20	
2008 2009	1.37 1.37	11.62 11.62	7.93 7.93	0.22	0.20 0.20	
2009	1.37	11.62	7.93	0.22		
2011	1.37	11.62	7.93	0.22	0.20	
2012	1.37	11.62	7.93	0.22	0.20	
2013	1.37	11.62	7.93	0.22	0.20	
2014	1.37	11.62	7.93	0.22	0.20	
Paving Equipment						
2007	1.04	7.66	7.54	0.28	0.26	
2008	1.04	7.95	7.16	0.25	0.23	
2009	1.04	8.23	6.78	0.22	0.20	
2010	1.04	8.52	6.39	0.19	0.17	
2011	1.04	8.52	6.39	0.19	0.17	
2012 2013	1.04	8.52 8.52	6.39 6.39	0.19 0.19		
2014	1.04	8.52	6.39	0.19		
Rollers						
2007	0.86	7.34	5.01	0.14	0.13	
2008	0.86	7.34	5.01	0.14	0.13	
2009	0.86	7.34	5.01	0.14	0.13	
2010 2011	0.86 0.86	7.34 7.34	5.01 5.01	0.14 0.14		
2012	0.86	7.34	5.01	0.14		
2013	0.86	7.34	5.01	0.14	0.13	
2014	0.86	7.34	5.01	0.14	0.13	
Rough Terrain Forklifts						
2007	0.79	6.70	4.57	0.13		
2008	0.79	6.70	4.57	0.13		
2009 2010	0.79 0.79	6.70 6.70	4.57	0.13		
2010	0.79	6.70	4.57 4.57	0.13 0.13		
2012	0.79	6.70	4.57	0.13		
2013	0.79	6.70	4.57	0.13	0.12	
2014	0.79	6.70	4.57	0.13	0.12	
Rubber Tired Dozers						
2007	3.66	27.11	26.69	0.98	0.90	
2008	3.66	28.12	25.33	0.88	0.81	
2009	3.66	29.13	23.97	0.78		
2010	3.66	30.14	22.61	0.68		
2011 2012	3.66	30.14 30.14	22.61 22.61	0.68		
2012	3.66	30.14	22.61	0.68	0.63	
2014	3.66	30.14	22.61	0.68	0.63	
Rubber Tired Loaders		<u> </u>				
2007	1.35	11.52	7.86	0.22	0.20	
2008	1.35	11.52	7.86	0.22	0.20	
2009	1.35	11.52	7.86	0.22		
2010 2011	1.35 1.35	11.52 11.52	7.86 7.86	0.22		
2012	1.35	11.52	7.86	0.22	0.20	
2013	1.35	11.52	7.86	0.22		
2014	1.35	11.52	7.86	0.22	0.20	

					7 (1)	Quality Met
Scrapers						
200	7 3.64	30.96	21.12	0.58	0.53	
200	3.64	30.96	21.12	0.58	0.53	
200	9 3.64	30.96	21.12	0.58	0.53	
201		30.96	21.12	0.58	0.53	
201		30.96	21.12	0.58	0.53	
201:		30.96	21.12	0.58	0.53	
201		30.96	21.12	0.58	0.53	
201	4 3.64	30.96	21.12	0.58	0.53	
Signal Boards						
200	7 1.72	12.70	12.50	0.46	0.42	
200	8 1.72	13.18	11.87	0.41	0.38	
200	9 1.72	13.65	11.23	0.37	0.34	
201		14.12	10.60	0.32	0.29	
201		14.12	10.60	0.32	0.29	
201:		14.12	10.60	0.32	0.29	
201		14.12	10.60	0.32	0.29	
201	4 1.72	14.12	10.60	0.32	0.29	
Skid Steer Loaders						
200		4.78	3.26	0.09	0.08	
200		4.78	3.26	0.09	0.08	
200		4.78	3.26	0.09	0.08	
201		4.78	3.26	0.09	0.08	
201		4.78	3.26	0.09	0.08	
201.		4.78	3.26	0.09	0.08	
201		4.78	3.26	0.09	0.08	
201	4 0.56	4.78	3.26	0.09	0.08	
Surfacing Equipment						
200	7 3.77	27.91	27.48	1.01	0.93	
200		28.95	26.08	0.90	0.83	
200		29.99	24.68	0.80	0.74	
201		31.03	23.28	0.70	0.64	
201		31.03	23.28	0.70	0.64	
201:	2 3.77	31.03	23.28	0.70	0.64	
201	3 3.77	31.03	23.28	0.70	0.64	
201	4 3.77	31.03	23.28	0.70	0.64	
Tractors/Loaders/Backhoes						
200	7 0.65	4.82	4.74	0.17	0.16	
200		5.00	4.50	0.17	0.15	
200		5.18	4.26	0.14	0.13	
201		5.36	4.02	0.12	0.11	
201		5.36	4.02	0.12	0.11	
201:		5.36	4.02	0.12	0.11	
201:		5.36	4.02	0.12	0.11	
201	4 0.65	5.36	4.02	0.12	0.11	
- .						
Trenchers 200	7 1.00	9.53	5.92	0.16	0.15	
200		8.53 8.53	5.82 5.82	0.16 0.16	0.15 0.15	
200		8.53	5.82	0.16	0.15	
201		8.53	5.82	0.16	0.15	
201		8.53	5.82	0.16	0.15	
201:		8.53	5.82	0.16	0.15	
201		8.53	5.82	0.16	0.15	
201		8.53	5.82	0.16	0.15	
On Dond Houl Twists						
On-Road Haul Trucks 200	7 0.253	1.119	3.126	0.121	0.104	
200		1.119	3.126	0.121	0.104	
200		1.119	3.126	0.121	0.104	
201		1.119	3.126	0.121	0.104	
201		1.119	3.126	0.121	0.104	
201:		1.119	3.126	0.121	0.104	
201		1.119	3.126	0.121	0.104	
201	4 0.253	1.119	3.126	0.121	0.104	

Count Fire Manual Scy 1													Air Quality i		,,	приопо
Author Part																
Author Part				Estimate Summary of Ma	terials Required for	Alternative 1 - N	No Dam Raise/	Minimal Dike Ra	ise (Fuseplug A	ux Spillway, Jet	Grout MIAD)					
Property Confession Confe			Auviliana		1					, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Part																
Canada C				Mail: Barri												
Migrang & Economic to sign																
See			Construction	Construction Dike 1	Dike 2	Dike 3	Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
See																
See																
See		Stripping & Excavation (cu vd)	3152000	50000	0 0	0	0	11 757	70 984	26.311	306 640	97 075	0	0	235 300	3 950 067
For Pietra May 1 1990																
Description (Assemble of Manual Loss) 1500 15																
Supple Problem Vis Seed (any 6)					0 0	0	0						0	0		274,970
Section Sect		Coarse Filter Material (cu yd)	8500		0 0	0	0	2,200	6,900	6,300	28,020	8,820	0	0	163,000	223,740
Section Sect		Slope Protection U/S Face (cu vd)	1400		0 0	0	0			0	0		0	0		1,400
A Prince (Prince Prince) (1979)												-				
Control books																
September Sept						0	Ü	460	600	430	2,000	600	0	0	1,520	6,710
Manual Contents Product (197)		Concrete (cu yd)	124809	25000	0 0	0	0	0	0	0	0	0	0	0	0	149,809
Pre- and Concept Payor (print)		Reinforcement Steel (tons)	2050	4130												6,180
Manual Common Explanation		Pre-cast Concrete Panels (sq ft)														(
Regions Spitters Courties Order Spitters Courties Order Spitters Courties Order Spitters Courties 197500 920000 92000 920000 920000 920000 920000 920000 920000 9200000 9200000 9200000000		1 1 1		 											00.000	00.000
Common Financian 179000		Grout (cu ya)													82,000	82,000
Common Financian 179000																
Common Financian 179000		Fuseplug Spillway Quantities														
Dill Rifford Execution			1280500													
Street								1								
Description		Dring Didot Excavation						1								
Relescoed Courses 1000			3152000													
Relescoed Courses 1000				<u> </u>		<u></u>	<u> </u>	<u> </u>		<u></u>						
Relescoed Courses 1000		Shotcrete	1353													
Refer corregated converse Parapeals 160000					_			1								
Personal 155																
19409																
Reinforcing Bare		Parapets						<u> </u>								
Main Dam Fire warpo			124809													
Main Dam Fire warpo		Reinforcing Bars														
Man Dam Pier wing		remotering bars														
Man Dam Piew ways 77			2050													
Man Dam Piew ways 77																
Per traces			0													
Per traces		Main Dam Pier wran		77												
Cutoff					+	 		1		 						
Content																
Assumptions 1 All filter materials aggregate, and sexheat Variagiones to site from off-ser sources 2 All shed materials for the LVVD and MAIO To based from Fronting Post of Didgs of possessing or to		Gate Arms		340												
Assumptions		Cutoff		0												
Assumptions				503 1	188											
1 All filter material, aggregate, and asphalt transported to let from off-site sources					,00											
1 All filter material, aggregate, and asphalt transported to let from off-site sources																
1 All filter material, aggregate, and asphalt transported to let from off-site sources																
2 All shell material for the LWD and MIAD hauded from Festorn Point or DIDEs spoils location.		Assumptions														
2 All shell material for the LWD and MIAD hauded from Festorn Point or DIDEs spoils location.		1	All filter material.	aggregate, and asphalt trans	orted to site from	off-ste sources	3									
Appellment Application A																
Shell material for Dise 4, Dise 5, Dise and RIVD excurated at Beals Point borrow site.								ļ								
Stripperglevicexcented material from diskes to be stored locally at site will placed on facility or graded as pant of site restoration.								for storage.								
Auxiliary politically as excavated material used as borrow for LWD and MIAD, stored and processed at Folsom Point		4	Shell material for	Dike 4, Dike 5, Dike 6 and R	ND excavated at E	Beals Point bor	row site.									
Auxiliary politically as excavated material used as borrow for LWD and MIAD, stored and processed at Folsom Point		5	Stripped/excavat	ed material from dikes to be s	tored locally at site	until placed o	n facility or gra	aded as part of	site restoration	١.						
Telegrout batch plant at MIAD										 						
S Concrete batch plant at main days, and suppers are on-road whicles S Auxiliary Fusephug Spillway Construction Dike 1 Dike 2 Dike 3 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL					DOITOW TOT EVVD at	id MIAD, Stole	u anu process	eu at i disdili i	OIIIL							
Afficialized trucks, bottom dumps, and scrapers are on-road vehicles																
Auxillary Fusehug Spillways Main Dam Construction Dike 1 Dike 2 Dike 3 Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL		8	Concrete batch p	plant at main dam only.												
Auxillary Fusehug Spillways Main Dam Construction Dike 1 Dike 2 Dike 3 Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL		9	Articulated trucks	s, bottom dumps, and scraper	s are on-road vehi	cles										
Auxiliary Fuseplug Spilway Main Dam Dike 1 Dike 2 Dike 3 Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL																
Fuseplug Spillway		10	waarry nucks are	on road vehicles at 50 Cy Ca	ouoity.			1								
Fuseplug Spillway																
Fuseplug Spillway			Auxiliary													
Equipment Spillway Main Dam Dike 1 Dike 2 Dike 3 Moorey Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL																
Equipment Construction Construction Dike 1 Dike 2 Dike 3 Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD TOTAL				Main Dam			Moonov									
Carayler Tractors		F. Sana			D11 - 0	D'1 - 0		D1 - 4	D11 - 5	D'1 - 0	DIME	LIMP	D11 - 7	D11 - 0	14145	TOTAL
CrawlerTractors							Riage									TOTAL
CrawlerTractors			182	12 0	0	0		4	12	8	25	16	0	0	40	
CrawlerTractors	CrawlerTractors	CAT D7G Bulldozer		2		1		2	0	0		2				
CrawlerTractors			1					İ	2	2						
Scrapers CAT 657 Scraper CAT 956F Scries II Wheel Loader 2 2 2 0 2 4 4 4 4 4 4 4 4 4								1							0	
RubberTiredLoaders				+				1								
OffHighwayTrucksWaterTrucks CAT D350E Articulated Truck 10 4 4 4 4 4 4 4 4 8 OffHighwayTrucksWaterTrucks Quary Truck 771D 6 7 6 6 7 6 6 7																
OffHighwayTrucksWaterTrucks	RubberTiredLoaders	CAT 966F Series II Wheel Loader		2		1		2	2	2	0	2			4	
OffHighwayTrucksWaterTrucks	OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck	10	4				4	4	4		4			8	
Excavators					_			·			6				J	
CAT 160H Motor Grader with ripper					_											
OffHighwayTrucks Water Truck 1											2					
Shell Excavation Days 600 2 10 6 60 30 30 CrawlerTractors CAT D7G Bulldozer 2 1 0 0 2 CrawlerTractors CAT D9Bulldozer 2 2 2 1 CrawlerTractors CAT D1Bulldozer 1 2 2 2 CrawlerTractors CAT D1Bulldozer 1 2 2 2 CrawlerTractors CAT D11Bulldozer 2 2 CAT D11Bulldozer 2 2 2 3 CrawlerTractors CAT D11Bulldozer 3 3 3 CrawlerTractors CAT D11Bulldozer 3 3 CrawlerTractors 2 3 3 CrawlerTractors 3 CrawlerTractors 3 3 CrawlerTractor			1	<u> </u>		<u></u>	<u> </u>	1	1	1	1	1			1	
Shell Excavation Days 600 2 10 6 60 30 30 CrawlerTractors CAT D7G Bulldozer 2 1 0 0 2 CrawlerTractors CAT D9Bulldozer 2 2 2 1 CrawlerTractors CAT D1Bulldozer 1 2 2 2 CrawlerTractors CAT D1Bulldozer 1 2 2 2 CrawlerTractors CAT D11Bulldozer 2 2 CAT D11Bulldozer 2 2 2 3 CrawlerTractors CAT D11Bulldozer 3 3 3 CrawlerTractors CAT D11Bulldozer 3 3 CrawlerTractors 2 3 3 CrawlerTractors 3 CrawlerTractors 3 3 CrawlerTractor	OffHighwayTrucksWaterTrucks	Water Truck	1			-		1		-						-
CrawlerTractors CAT D7G Bulldozer 1 0 0 2 1 CrawlerTractors CAT D9 Bulldozer 2 2 2 1 CrawlerTractors CAT D11 Bulldozer 1 0 0 0 1 1 Excavators CAT 375 Excavator 2 2 1 2 5 1 2 5 4	<u> </u>							İ								
CrawlerTractors CAT D7G Bulldozer 1 0 0 2 1 CrawlerTractors CAT D9 Bulldozer 2 2 2 1 CrawlerTractors CAT D11 Bulldozer 1 0 0 0 1 1 Excavators CAT 375 Excavator 2 2 1 2 5 1 2 5 4		Oball Financial's Design	600		_			^	10	_	60	20			20	
CrawlerTractors CAT D9 Bulldozer 2 1 CrawlerTractors CAT D11 Bulldozer 1 0 0 1 Excavators CAT 375 Excavator 2 2 1 Scrapers CAT 687 Scraper 10 2 4 Graders 160H Motor Grader with ripper 4 1<	l		UUd					2	10		Ud				3 U	
CrawlerTractors CAT D11 Bulldozer 1 0 0 1 Excavators CAT 375 Excavator 2 2 Scrapers CAT 657 Scraper 10 5 4 Graders 160H Motor Grader with ripper 4 5 1	CrawlerTractors			<u> </u>		<u></u>	<u> </u>	1	0	0		2				
CrawlerTractors CAT D11 Bulldozer 1 0 0 1 Excavators CAT 375 Excavator 2 2 Scrapers CAT 657 Scraper 10 5 4 Graders 160H Motor Grader with ripper 4 5 1	CrawlerTractors		2						2	2					1	
Excavators					_					_					1	
Scrapers CAT 657 Scraper 10 4 Graders 160H Motor Grader with ripper 1 1 OffHighwayTrucksWaterTrucks CAT D350E Articulated Truck 1			1	+				1	0	U	-				1	
Graders 160H Motor Grader with ripper 1 1 1 OffHighwayTrucksWaterTrucks CAT D350E Articulated Truck 1											2					
Graders 160H Motor Grader with ripper 1 1 1 OffHighwayTrucksWaterTrucks CAT D350E Articulated Truck 1	Scrapers	CAT 657 Scraper	10												4	
OffHighwayTrucksWaterTrucks CAT D350E Articulated Truck								İ								
				 	-1			1							'	
OffHighwayTrucksWaterTrucks Quarry Truck 771D 3 10																
		Ouarry Truck 771D	3		1	l			1	l	10				1	
	OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck	3								10				1	

												7 til Quality	memodolog	y and Assur	приопо
Graders	Road Grader with Ripper 160H														
RubberTiredLoaders	CAT 966F Series II Wheel Loader	0					1	2	2		2			4 8	
OffHighwayTrucksWaterTrucks BoreDrillRigs	CAT D350E Articulated Truck Drill Rig	4					2	4	4		4			8	
OffHighwayTrucksWaterTrucks	Water Truck	2					-								
Sgiiway i ruokowatei i ruoko	TOTAL TIMEN			1			+						1		
	Embankment Placement Days						20	40	30	120	30			500	
CrawlerTractors	CAT D7G Bulldozer						2	0	0	0	2			0	
CrawlerTractors	CAT D9R Dozer							2	2	2				1	
CrawlerTractors	CAT D11 Dozer													1	
Scrapers	CAT 657 Scraper													4	
RubberTiredLoaders	CAT 966F Series II Wheel Loader						1	1	1	1	1			2	
Excavators	Excavator 375L									1					
OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck						2	2	2	_	2			4	
OffHighwayTrucksWaterTrucks	Quarry Truck 771D							_	_	5	_				
OffHighwayTrucksWaterTrucks	Belly Dump Truck C12 Engine						5	5	5	5	5			1	
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	CAT CB-534C Vibratory Compactor Water Truck						1	2	1	1	1			2	
Olir ligitway Fruckswater Frucks	Water Huck									'					
	Shell Placement Days						20	65	10	80	80			700	
CrawlerTractors	CAT D7G Bulldozer						1	0	0	00	2			700	
CrawlerTractors	CAT D9R Dozer						 	2	1	2				1	
CrawlerTractors	CAT D11 Dozer				1			-	1					1	
Scrapers	CAT 657 Scraper				1									4	
RubberTiredLoaders	CAT 966F Series II Wheel Loader						2	2	2	0	2				
Excavators	Excavator 375L														
OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck						4	4	4	0	4				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D									5					
OffHighwayTrucksWaterTrucks	Belly Dump Truck C12 Engine									5					
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor						1	1	1	2	1			1	
Cranes	All terrain 20-T crane														
OffHighwayTrucksWaterTrucks	Water Truck						1	1	1	1	1			2	
	0.0001 Brown 12							-	2	40					
Off liebour Translation Translation	Crest Pavement Days	3		1	1	1	3	5	3	10	3		1	6	
OffHighwayTrucksWaterTrucks Graders	Belly Dump Truck C12 Engine Motor Grader 160H	5		1			5	5	5	5	5		-	5	
		1			1	-	1	1	1	1	4			1	
Pavers PavingEquipment	CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	1		1	+	 	1	1	1	1	1		1	1	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	2		1	+	 	2	2	2	2	2		1	2	
gima, riacioiscompaciois	ob oo to vibratory companier	-			 	 		2					1		
	Spillway Construction Days	431					 								
	Concrete Transit Mixer	5		1	1	1	+								
	Concrete Pump Trucks	2			1										
Cranes	All terrain 20-T crane	1													
CrawlerTractors	CAT D7G Bulldozer	3													
Scrapers	CAT 657 Scraper	5													
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	1													
OffHighwayTrucksWaterTrucks	CAT D350E Articulating Truck	2							, i						
RubberTiredLoaders	Front End Loader 966F	2													
OffHighwayTrucksWaterTrucks	End Dump Trucks	6													
OffHighwayTrucksWaterTrucks	Water Truck	1			1	ļ									
				1											
		Auxiliary				1									
		Fuseplug Spillwov Main Dom				Mostari									
	Materials Hauling From Off Site Sources	Spillway Main Dam Construction Construction	Diko 1	Diko 3	Dilco 2	Mooney Ridge	Dike 4	Dike 5	Dike 6	DWD	LWD	Diko 7	Dika 9	MIAD	TOTAL
	Materials Hauling From Off-Site Sources Construction Schedule	CONSTRUCTION CONSTRUCTION	Dike 1	Dike 2	Dike 3	rauge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	IVIIAD	TOTAL
	55.Isti dottori Goriodalo		+	1	+	1	+		-				1		
	Filter Material Total				 	 	15,311	31,202	18,340	65,495	20,662		1	333,000	
	Work Days						20	40	30	120	30			250	
	Loads @ 20 cu yd per load			1			766	1560	917	3275	1033		1	16650	
	Estimated loads per work day						38	39	31	27	34			67	
	Crest Road Base Gravel														
	Work Days	30					2	3	2	6	2			5	
	Gravel total	22500					1,400	1,800	1,300	6,000	1,800			5,300	
·	Loads @ 20 cu yd per load	1125					70	90	65	300	90			265	
	Estimated loads per work day	38					35	30	33	50	45			53	
					1										
	Crest Road Asphalt														
	Work Days	3			1	ļ	1	2	1	4	1			1	
	Asphalt Total	1100			1	ļ	460	600	430	2,000	600			1,520	
	Loads @ 17 cu yd per load	65		1		I	27	35	25	118	35		1	89	
	Estimated loads per work day	22		1		-	27	18	25	29	35			30	
				1		-	—								
	Raw Materials for Concrete Mixing				1	 	+		-				1		
	Raw Materials for Concrete Mixing Work Days	431 60			1	 	+		-				1	720	
	vvork Davsi	401	1	1	1	1						1	1	120	

												Air Quality	Methodolog	y and Assun	nptions
Cement and Gravel Transport Total	124809	25000												82,000	
Loads @ 20 cu yd per load	6240	1250												4100	
Estimated loads per work day	14	21												6	
Reinforcement Steel Transport															
Work Days	100	60													
Steel Transport Total	2050	4130													
Loads @ 10 tons per load	205	413													
Estimated loads per work day	2	7													
	Auxiliary Fuseplug Spillway Construction	Main Dam Construction	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
Materials Hauling On-site															
Auxilliary Spillway Excavation															
Work Days	782														
Total Transported	3152000														
Loads @ 20 tons per load	157600														
Estimated Loads per work day	202														
Beals Point Excavation															
Work Days	240														
Total Transported/Processed	482,762														
Loads @ 20 tons per load	24138.1														
Estimated Loads per work day	101														
Folsom Point Processing															
Work Days	780														
Total Processed	1,359,579														
Loads @ 20 tons per load	67978.96														
Estimated Loads per work day	87														
Spillway Concrete Hauling															
Work Days	431														
Total Processed	124809														
Loads @ 10 cy per load	12480.9														
Estimated Loads per work day	29														
On-site Dike Reconstruction Hauling															
Work Days							20	105	40	200	110			700	
Materials Total							15,476	170,316	40,831	533,899	163,203			1,140,300	
Loads @ 20 cu yd per load							773.8	8516	2042					57015	
Loads @ 30 cu yd per load										17797	5440				
Estimated loads per work day							39	81	51	89	49			81	

							All Qu	ality Meth	
	NO.	Daily Emission ((lbs/dav)						
	NOX	2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	164	25	0	0	16	12	0
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9 Bulldozer	21.16	40.16 80.32	-	-	-	35.84	35.84	-
CrawlerTractors	CAT D9 Buildozer CAT D11 Dozer	- 21.10	40.16	-	-	-	-	-	-
Scrapers	CAT 657 Scraper	-	168.96	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader		157.20	-	-	-	31.44	31.44	-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	62.53	125.05	250.68	-	-	25.01	25.01	-
Excavators	CAT 375 Excavator	21.34	-	42.68	-	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	20.44	81.76	20.44	×	-	20.44	-	-
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	41.78 167.25	693.61	313.80	-	-	112.73	92.29	-
	Shell Excavation Days		198	310	200	0	30	0	0
CrawlerTractors	CAT D7G Bulldozer	-	20.08	-	-	-	35.84	-	-
CrawlerTractors	CAT D9 Bulldozer	-	140.56	38.00	35.84	-	-		
CrawlerTractors Excavators	CAT D11 Bulldozer CAT 375 Excavator	-	40.16	19.00 42.68	17.92	-	-	-	-
Scrapers	CAT 657 Scraper	-	591.36	422.40	422.40	-	-	-	-
Graders	160H Motor Grader with ripper	-	20.44	=	=	-	-		-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	-	125.34	543.14	125.34	-	-	-	-
Graders	Road Grader with Ripper 160H	-	123.34	545.14	120.04	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	141.48	-	¥	-	31.44	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	137.56	25.01	25.01	-	25.01	-	-
BoreDrillRigs OffHighwayTrucksWaterTrucks	Drill Rig Water Truck	-	51.88	65.64	62.44	-	-	-	-
Oli ligilway Fluckswater Flucks	Subtotal	-	1,268.86	1,155.87	688.95	-	92.29	-	-
	Embankment Placement Days	0	190	320	200	0	30	0	0
CrawlerTractors	CAT D7G Bulldozer	-	40.16	-	-	-	35.84	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	100.40 20.08	57.00 19.00	17.92 17.92	-	-	-	-
Scrapers Scrapers	CAT D11 Dozer CAT 657 Scraper	-	168.96	168.96	17.92	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	78.60	47.16	31.44	-	15.72	-	-
Excavators	Excavator 375L	-	-	21.34	-	-	-	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	-	62.53	25.01 208.90	25.01	-	12.51	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	93.79	31.26	-	-	31.26	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	178.36	72.30	22.74	-	45.48	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	208.90	125.34	83.56	-	41.78	-	-
	Subtotal Shell Placement Days	- 0	951.78 325	776.27 235	367.55 315	- 0	182.59 80	- 0	- 0
CrawlerTractors	CAT D7G Bulldozer	- 0	20.08	-	-	-	35.84	-	-
CrawlerTractors	CAT D9R Dozer	-	80.32	19.00	53.76	-	-	-	-
CrawlerTractors	CAT D11 Dozer	-	20.08	19.00	17.92	-	-		
Scrapers RubberTiredLoaders	CAT 657 Scraper CAT 966F Series II Wheel Loader	-	168.96 94.32	168.96	168.96	-	31.44	-	-
Excavators	Excavator 375L	-	-	-	-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	75.03		*	-	25.01	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul	Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	208.90 31.26	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	101.92	24.10	68.22	-	22.74	-	-
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	208.90	83.56	125.34	-	22.74	-	-
	Subtotal Crest Pavement Days	- 0	769.61 11	314.62 0	674.36 26	- 0	137.77	- 0	- 0
OnRoadHaul	Belly Dump Truck C12 Engine	-	93.79	-	62.53	-	62.53	-	-
Graders	Motor Grader 160H	-	61.32	-	20.44	-	-	-	-
Pavers	CAT AP-800C Asphalt Paver	-	47.58 42.96	-	31.72	-	31.72 25.56	-	-
PavingEquipment OffHighwayTractorsCompactors	CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	152.88	-	25.56 90.96	-	90.96	-	-
	Subtotal	-	398.53	-	231.21	-	210.77		-
	Spillway Construction Days	0	0	0	50	250	131	0	0
OnRoadHaul	Concrete Transit Mixer	-	-	-	31.26	31.26	31.26	-	-
OnRoadHaul Cranes	Concrete Pump Trucks All terrain 20-T crane	-	-	-	12.51 16.74	12.51 16.74	12.51 16.74	-	-
CrawlerTractors	CAT D7G Bulldozer	-	-	-	53.76	53.76	53.76	-	-
Scrapers	CAT 657 Scraper	-	-	-	211.20	211.20	211.20	-	-
OffHighwayTractorsCompactors OnRoadHaul	CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	22.74 12.51	22.74 12.51	22.74 12.51	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	31.44	31.44	31.44	-	-
OnRoadHaul	End Dump Trucks	-	-	-	37.52	37.52	37.52	-	-
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	-	-	-	41.78 471.45	41.78 471.45	41.78 471.45	-	-
	Parapet Wall Construction Days		- 0	- 0	4/1.45	4/1.45	471.45	- 0	
0		- 0	-	-	- 0	-	-	-	-
Cranes	All terrain 20-T crane				- 1				
OnRoadHaul	Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	-	-
	Flatbed Truck for Forms movement		- - 1,268.9	- - 1,155.9		- - 471.4	- - 471.4	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-
	Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	92.3	-

	Appur-1 F	ana (tr:)						
	Annual Emission 2007	ons (tpy) 2008	2009	2010	2011	2012	2013	2014
Stripping Days	2001	2000	2003	2010	2011	2012	2010	2014
CAT D7G Bulldozer	-	0.080	-	-	-	0.287	0.215	-
CAT D9 Bulldozer CAT D11 Dozer	0.868	0.402 0.803	-	-	-	-	-	-
CAT 657 Scraper	-	3.379			-	-	-	-
CAT 966F Series II Wheel Loader	-	1.635	•		-	0.252	0.189	-
CAT D350E Articulated Truck Quarry Truck 771D	2.564	1.301	3.134	-	-	0.200	0.150	-
CAT 375 Excavator	0.875	-	0.534	-	-	-	-	-
CAT 160H Motor Grader with ripper	0.838	0.654	0.256		-	0.164	-	-
Water Truck	1.713	-	ı		-	-	-	-
Subtotal	6.86	8.25	3.92	-	-	0.90	0.55	-
Shell Excavation Days CAT D7G Bulldozer	_	0.020	_		_	0.538	_	_
CAT D9 Bulldozer	-	3.634	4.750	3.584	-	-	-	-
CAT D11 Bulldozer	-	1.807	2.375	1.792	-	-	-	-
CAT 375 Excavator CAT 657 Scraper	-	34,214	1.280	42.240	-	-	-	-
160H Motor Grader with ripper	-	0.307	52.800	42.240	-	-	-	-
CAT D350E Articulated Truck	-	-	ı	·	-	-	-	-
Quarry Truck 771D	-	9.401	28.202	12.534	-	-	-	-
Road Grader with Ripper 160H CAT 966F Series II Wheel Loader	-	1.210		-	-	0.472	-	-
CAT D350E Articulated Truck	-	2.839	3.126	2.501	-	0.472	-	-
Drill Rig	-	3.891	8.205	6.244	-	-	-	-
Water Truck	-	-	ı		-	-	-	-
Subtotal Embankment Placement Days	-	57.32	100.74	68.90	-	1.38	-	-
Embankment Placement Days CAT D7G Bulldozer	-	0.402	-	-	-	0.538	-	-
CAT D7G Buildozei CAT D9R Dozer	-	2.410	4.180	1.792	-	- 0.556	-	-
CAT D11 Dozer	-	1.004	1.900	1.792	-	-	-	-
CAT 0665 Sorian II Wheel London	-	8.448	16.896	16.896	-	- 0.226	-	-
CAT 966F Series II Wheel Loader Excavator 375L	-	2.279	4.087 1.280	3.144	-	0.236	-	-
CAT D350E Articulated Truck	-	1.813	2.501	2.501	-	0.188	-	-
Quarry Truck 771D	-	-	12.534	-	-	-	-	-
Belly Dump Truck C12 Engine	-	1.407	1.876	2.274	-	0.469 0.682	-	-
CAT CB-534C Vibratory Compactor Water Truck	-	3.567 6.058	5.302 10.863	8.356	-	0.682	-	-
Subtotal	-	27.39	61.42	36.76	-	2.74	-	-
Shell Placement Days								
CAT D7G Bulldozer	-	0.201	- 0.000	- 0.500	-	1.434	-	-
CAT D9R Dozer CAT D11 Dozer	-	3.715 2.309	2.233 2.233	3.539 2.106	-	-	-	-
CAT 657 Scraper	-	19.430	19.853	19.853	-	-	-	-
CAT 966F Series II Wheel Loader	-	1.493			-	1.258	-	-
Excavator 375L	-	- 4 400	-	-	-	- 4.000	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	1.188	-	8.356	-	1.000	-	-
Belly Dump Truck C12 Engine	-	-	-	1.251	-	-	-	-
CAT CB-534C Vibratory Compactor	-	4.141	2.832	4.491	-	0.910	-	-
All terrain 20-T crane Water Truck	-	11.594	9.818	11.490	-	0.910	-	-
Subtotal	-	44.07	36.97	51.08	-	5.51	-	-
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	0.172		0.250	-	0.094	-	-
Motor Grader 160H CAT AP-800C Asphalt Paver	-	0.112	-	0.102	-	- 0.049	-	-
CAT BG-650 Windrow Elevator	-	0.087	-	0.127 0.102	-	0.048	-	-
CAT CB-534C Vibratory Compactor	-	0.280	ı	0.364	-	0.136	-	-
Subtotal	-	0.73	-	0.95		0.32	-	ē
Spillway Construction Days				0.700	0.000	0.040		
Concrete Transit Mixer Concrete Pump Trucks	-	-	-	0.782 0.313	3.908 1.563	2.048 0.819	-	-
All terrain 20-T crane	-	-	-	0.419	2.093	1.096	-	-
CAT D7G Bulldozer	-	-	-	1.344	6.720	3.521	-	-
CAT CR 534C Vibratory Composter	-	-	•	5.280	26.400	13.834	-	-
CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	0.569 0.313	2.843 1.563	1.489 0.819	-	-
Front End Loader 966F	-	-	-	0.786	3.930	2.059	-	-
End Dump Trucks	-	-	-	0.938	4.689	2.457	-	-
Water Truck	-	-		1.045	5.223	2.737	-	-
Subtotal Parapet Wall Construction Days	-	-	-	11.79	58.93	30.88	-	-
Parapet Wall Construction Days All terrain 20-T crane	-	-	-	-	-	-	-	-
Flatbed Truck for Forms movement	-	-			-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Annual Total	6.857	137.767	203.048	169.466	58.931	41.732	0.554	-
	Annual Emission	ons (tpv)						
	2007	2008	2009	2010	2011	2012	2013	2014
BoreDrillRigs	-	3.891	8.205	6.244	-	-	-	-
Cranes CrawlerTractors	0.868	16.787	17.670	0.419 15.949	2.093 6.720	1.096 6.317	0.215	-
Crawler I ractors Excavators	0.868	16.787	3.094	15.949	6.720	6.317	0.215	-
Graders	0.838	1.073	0.256	0.102	-	0.164	-	-
OffHighwayTractorsCompactors	-	7.988	8.134	7.697	2.843	3.218	-	-
OffHighwayTrucksWaterTrucks	1.713	27.053	64.550	41.780	5.223	4.273	- 0.150	-
OnRoadHaul Pavers	2.564	8.719 0.087	7.503	8.847 0.127	11.724	8.469 0.048	0.150	-
PavingEquipment	-	0.079		0.102	-	0.038	-	-
RubberTiredLoaders	-	6.618	4.087	3.930	3.930	4.276	0.189	-
Scrapers	-	65.472	89.549	84.269	26.400	13.834	-	-
	6.857	137.767	203.048	169.466	58.931	41.732	0.554	-
			22.2.70	2230				
	F 400	110.214	162.438	135.573	47.145	33.386	0.443	-
Mitigated Total	5.486	110.211						
Mitigated Total Potential ERC Cost (@\$43,000/ton)		\$ 4,739,183	\$ 6,984,845	\$ 5,829,644	\$ -	\$ -	\$ -	\$ -

Careforn Statemen	Auxopiliway-NOX						Air Quality	Methodolo	gy and Assi	umptions
Description		NO	Daile Fasiania	- (lb-a/da)						
Singering Days Da		NOX			2009	2010	2011	2012	2013	2014
Transfert Transport		Stripping Days								0
Content Cont	CrawlerTractors		-							
Selegate O.1 67 57 Seages										
Author Procession Control Co										
Different Plant										
CAT 979 Excension	OnRoadHaul		62.53							
Grant Company Compan	OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-							
Dilinghamy Trucke/West Trucke 1.72 1.7	Excavators									
Content Cont										
Sent Content Tractors CAT DR Buldocore CA	OffHighway FrucksWater Frucks									
Careform Careform								-	-	- 0
Content Cont	CrawlerTractors		U				U	U	U	U
Comparison	CrawlerTractors			40.16		35.84				
Comparison CAT 697 Sampler 422 40	CrawlerTractors	CAT D11 Bulldozer		20.08	19.00	17.92				
Tisken Tisken Moor Grader with ripper	Excavators									
Implifiquesty Trucks/WeetTrucks	Scrapers									
Designation 125.54 125.5										
State										
NiteberTrinoCloaders				125.34						
CAT D850/E Annotated Tuck	RubberTiredLoaders			-						
Mater Track Substate	OnRoadHaul			25.01	25.01	25.01				
Subtolal Subtolal	BoreDrillRigs									
Embaniment Placement Days	OffHighwayTrucksWaterTrucks									
Careful Tractors										
	0		0	0	0	0	0	0	0	0
Cart Part Principoles										
Care CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT SST Scraper CAT										
Number Tredict Cart Sept Series Wheel Loader										
DeRoadHau CAT D350E Articulated Truck	RubberTiredLoaders									
DiffeignwyTrudski/WaterTrucks Description Descriptio	Excavators									
DeRoadHaul Selly Dump Truck C12 Engine										
Cart CB-534C Vibratory Compactor										
Shell Placement Days										
Subtotal Shell Placement Days O O O O O O O O O										
CrawlerTractors			-	-	-	-	-	-	-	-
CAT DBR Dozer		Shell Placement Days	0	0	0	0	0	0	0	0
CAT D11 Dozer	CrawlerTractors									
CAT 657 Scraper CAT 657 Scraper CAT 657 Scraper CAT 6567 Series Il Wheel Loader CAT 9567 Series Il Wheel Loader CAT 0506 Articulated Truck CAT										
CAT 966F Series Wheel Loader										
Excavators Excavator 375L										
DROAdHau CAT D350E Anticulated Truck DRHighwayTruck XPTD DRAAdHau DRAAGHAU										
DenkoalHaul Selly Dump Truck C12 Engine DenkoalHaul	OnRoadHaul									
CAT CB-534C Vibratory Compactor	OffHighwayTrucksWaterTrucks									
Difference	OnRoadHaul	, ,								
Crest Pavement Days	OffHighwayTractorsCompactors									
Subtotal Crest Pavement Days 3 3 3 3 3 3 3 3 3										
Crest Pavement Days 3 3 3 3 3 3 3 3 3	Onringriway Frucksvvater Frucks		_	_	_	-	_	_	_	
Description Description										
Caraders	OnRoadHaul									
PavingEquipment	Graders	Motor Grader 160H								
CAT CB-534C Vibratory Compactor Subtotal	Pavers				-	-			-	
Subtotal Spillway Construction Days O O O 50 250 131 O	PavingEquipment									
Spillway Construction Days 0 0 0 50 250 131 0	OffHighwayTractorsCompactors									
Concrete Transit Mixer 31.26 31.				-	-		-			- 0
December Concrete Pump Trucks	OnRoadHaul		0	0	0				0	0
Cranes	OnRoadHaul									
Cara Cara	Cranes							16.74		
Definition Care C	CrawlerTractors									
CAT D350E Articulating Truck 12.51	Scrapers									
RubberTiredLoaders										
DnRoadHaul		ů								
Mater Truck										
Subtotal - - 471.45 471.45 471.45 - -										
Parapet Wall Construction Days 0 0 0 0 0 0 0 0 0	gaj aokorrakoi / Idoko		-	-	-				-	-
Cranes All terrain 20-T crane			0	0	0				0	0
Subtotal	Cranes							Ĭ		
	OnRoadHaul									
Maximum Daily 167.2 684.9 695.4 689.0 471.4 471.4									-	
		Maximum Daily	167.2	684.9	695.4	689.0	471.4	471.4	-	-

				I		All C	addinty MICII	odology an
NOx	Annual Emiss	ions (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days								
CAT D7G Bulldozer CAT D9 Bulldozer	0.868	-	-	-	-	-	-	-
CAT D9 Buildozei CAT D11 Dozer	0.000	-	-	-	-	-	-	
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	2.564	-	-	-		-		ī
Quarry Truck 771D	-	-	-	-	-	-	-	-
CAT 160H Motor Crader with ripper	0.875 0.838	-	-	-	-	-	-	-
CAT 160H Motor Grader with ripper Water Truck	1.713	-	-	-	-	-	-	
Subtotal	11110							
Shell Excavation Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	•
CAT D9 Bulldozer	-	3.012	4.750	3.584	-	-	-	-
CAT D11 Bulldozer	-	1.506	2.375	1.792	-	-	-	-
CAT 375 Excavator CAT 657 Scraper	-	31.680	52.800	42.240	-	-	-	-
160H Motor Grader with ripper	-	31.000	32.800	42.240		-		
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	9.401	15.668	12.534	-	-	-	ı
Road Grader with Ripper 160H	-	-	-	-	-	-	-	•
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	1.876	3.126	2.501	-	-	-	-
Drill Rig Water Truck	-	3.891	8.205	6.244	-	-	-	-
Subtotal	-	-	-	-	-	-	-	
Embankment Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	-	-	-	-	-	-	1
CAT D11 Dozer	-	-	-	-		-		ī
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	
Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	•
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Shell Placement Days	_	-	-	-		_		
CAT D7G Bulldozer CAT D9R Dozer	-	-	-	-	-	-	-	
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	0
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-	-	-	0.047	-	-
Motor Grader 160H CAT AP-800C Asphalt Paver	-	-	-	-	-	0.024	-	-
CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-			0.024	-	
CAT CB-534C Vibratory Compactor	-	-	-	-	-	0.019	-	-
Subtotal						2.000		-
Spillway Construction Days								-
Concrete Transit Mixer	-	-	-	0.782	3.908	2.048	-	
Concrete Pump Trucks	-	-	-	0.313	1.563	0.819	-	-
All terrain 20-T crane	-	-	-	0.419	2.093	1.096	-	-
CAT D7G Bulldozer CAT 657 Scraper	-	-	-	1.344 5.280	6.720 26.400	3.521 13.834	-	-
CAT 657 Scraper CAT CB-534C Vibratory Compactor	-	-	-	0.569	26.400	13.834	-	
CAT D350E Articulating Truck	-	-	-	0.303	1.563	0.819	-	
Front End Loader 966F	-	-	-	0.786	3.930	2.059	-	-
End Dump Trucks	-	-	-	0.938	4.689	2.457	-	•
Water Truck	-	-	-	1.045	5.223	2.737	-	-
Subtotal								
Parapet Wall Construction Days								
All terrain 20-T crane Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	
Annual Total	6.857	51.365	86.924	80.681	58.931	31.038	-	-
	0.001	51.000	30.024	50.001	30.001	31.000		

Carwier Tractors							All Quality	Methodolo	gy and Assu	приопъ
Careler Fraction										
Careller Transform		NOx								
Caravier Tractors										2014
Caravier francisco			0	40	0	0	0	0	0	C
Carword Francisco				-						
Scrapers	CrawlerTractors	CAT D9 Bulldozer		-						
RubberTindeLoaders	CrawlerTractors			40.16						
ORROGAD-INITION CAT 0330E Annotated Truck	Scrapers	CAT 657 Scraper		168.96						
Chieflythay/Trucks/WaterTrucks	RubberTiredLoaders	CAT 966F Series II Wheel Loader		62.88						
Executions	OnRoadHaul	CAT D350E Articulated Truck		50.02						
Graders	OffHighwayTrucksWaterTrucks	Quarry Truck 771D		-						
OFF	Excavators	CAT 375 Excavator		-						
Off-lightwayTrucksWelefTucks	Graders	CAT 160H Motor Grader with ripper		20.44						
Subtotal Shell Excavation Days 0 30 0 0 0 0 0 0 0										
Shell Excevation Days	om ngay . raono rraio. rraono		_	342.46	_	_	_	_	-	-
CrawlerTractors		l								C
Carwlet Fractors	CrowlerTrooters		U		U	U	U	0	U	<u> </u>
Carwier Tractors										
Exception										
Scrapers										
Graders										
ORRoadHaul	Scrapers			168.96						
OffisignwayTrucksWaterTrucks CAT D850E Articulated Truck Subtorial Subtorial Sub	Graders	160H Motor Grader with ripper		20.44						
Graders Road Grader with Ripper 160H Rubber FliedLoader S2.88		CAT D350E Articulated Truck		-	-					
Graders Road Grader with Ripper 160H Ribber FliedLoader 62.88	OffHighwayTrucksWaterTrucks	Quarry Truck 771D		-						
RubberTirect.oaders				-						
ORTOGRAPHICAL DATE CAT D350E Articulated Truck DOI							+			
BoreDriRings										
OffHighwayTrucksWaterTruck Water Truck -										
Subtotal										
Embankment Placement Days	Onmigriway i rucksvvater i rucks									
CrawlerTractors										-
CrawlerTractors			0				0	0	0	C
CrawlerTractors	CrawlerTractors	CAT D7G Bulldozer		-	-	-				
Scraper CAT 667 Scraper 168.96 168.96 168.96 168.96	CrawlerTractors	CAT D9R Dozer		20.08	19.00	17.92				
RubberTiredLoaders	CrawlerTractors	CAT D11 Dozer		20.08	19.00	17.92				
RubberTiredLoaders	Scrapers	CAT 657 Scraper		168.96	168.96	168.96				
Excavators Excavator 375L										
OnFload-Haul										
Off-HighwayTrucksValeteTrucks		CAT D350E Articulated Truck		25.01	25.01	25.01				
OnRoadHaul Belly Dump Truck C12 Engine										
OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor 25.48 24.10 22.74 OffHighwayTrucksWaterTrucks Water Truck 83.56 83.56 83.56 Shell Placement Days 0 230 235 235 0 0 0 CrawlerTractors CAT D7G Bulldozer -										
OffHighwayTrucksWaterTruck Water Truck 83.56 83.56 83.56 . Subtotal - 374.61 371.07 367.55 - - CrawlerTractors CAT D7G Bulldozer - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
Subtotal - 374.61 371.07 367.55 - -										
Shell Placement Days	OffHighwayTrucksWaterTrucks									
CrawlerTractors		J								-
CrawlerTractors			0	230	235	235	0	0	0	C
CrawlerTractors	CrawlerTractors	CAT D7G Bulldozer		-	-	-				
Scrapers	CrawlerTractors	CAT D9R Dozer		20.08	19.00	17.92				
RubberTiredLoaders	CrawlerTractors	CAT D11 Dozer		20.08	19.00	17.92				
RubberTiredLoaders	Scrapers	CAT 657 Scraper		168.96	168.96	168.96				
Excavators		•								
OnRoadHaul				_		_				
OffHighwayTrucksWaterTrucks Quarry Truck 771D - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
OnRoadHaul										
OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor 25.48 24.10 22.74 Cranes All terrain 20-T crane - - - OffHighwayTrucksWaterTrucks Subtotal - - - Constance Subtotal - 318.16 314.62 311.10 - ConRoadHaul Belly Dump Truck C12 Engine 31.26 -		,								
Cranes										
OffHighwayTrucksWaterTrucks Water Truck 83.56 83.56 83.56 311.10 -	,									
Subtotal Crest Pavement Days O O O O O O O O O										
Crest Pavement Days	OffHighwayTrucksWaterTrucks									
OnRoadHaul Belly Dump Truck C12 Engine 31.26 Graders Motor Grader 160H - Pavers CAT AP-800C Asphalt Paver 15.86 PavingEquipment CAT BG-650 Windrow Elevator 12.78 OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor 45.48 Subtotal - - Spillway Construction Days 0 0 0 0 0 OnRoadHaul Concrete Transit Mixer 0		Subtotal	-	318.16	314.62	311.10	-	-	-	
OnRoadHaul Belly Dump Truck C12 Engine 31.26 Graders Motor Grader 160H - Pavers CAT AP-800C Asphalt Paver 15.86 PavingEquipment CAT BG-650 Windrow Elevator 12.78 OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor 45.48 Subtotal - - Spillway Construction Days 0 0 0 0 0 OnRoadHaul Concrete Transit Mixer 0		Crest Pavement Days	0	0	0	6	0	0	0	C
Graders	OnRoadHaul			-						
Pavers						-				
PavingEquipment						15.86				
OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor 45.48 Subtotal 105.38 OnRoadHaul Concrete Transit Mixer 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										
Subtotal - - 105.38 - - - Spillway Construction Days 0 0 0 0 0 0 0 OnRoadHaul Concrete Transit Mixer							+			
Spillway Construction Days 0 0 0 0 0 0 0 0 0	om ngriway riactorscompactors									_
OnRoadHaul Concrete Transit Mixer OnRoadHaul Concrete Pump Trucks Cranes All terrain 20-T crane CrawlerTractors CAT D7G Bulldozer Scrapers CAT 657 Scraper OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor OnRoadHaul CAT D350E Articulating Truck RubberTiredLoaders Front End Loader 966F OnRoadHaul End Dump Trucks OffHighwayTrucksWaterTrucks Water Truck Subtotal										
OnRoadHaul Concrete Pump Trucks Cranes All terrain 20-T crane CrawlerTractors CAT D7G Bulldozer Scrapers CAT 657 Scraper OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor OnRoadHaul CAT D350E Articulating Truck RubberTiredLoaders Front End Loader 966F OnRoadHaul End Dump Trucks OffHighwayTrucksWaterTrucks Water Truck Subtotal	0.0	1 ,	0	0	0	0	0	0	0	C
Cranes All terrain 20-T crane CrawlerTractors CAT D7G Bulldozer Scrapers CAT 657 Scraper OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor OnRoadHaul CAT D350E Articulating Truck RubberTiredLoaders Front End Loader 966F OnRoadHaul End Dump Trucks OffHighwayTrucksWaterTrucks Water Truck Subtotal										
CrawlerTractors CAT D7G Bulldozer Scrapers CAT 657 Scraper OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor OnRoadHaul CAT D350E Articulating Truck RubberTiredLoaders Front End Loader 966F OnRoadHaul End Dump Trucks OffHighwayTrucksWaterTrucks Water Truck Subtotal - Parapet Wall Construction Days 0 0 0 0 0 0		·								
Scrapers										
OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor OnRoadHaul CAT D350E Articulating Truck RubberTiredLoaders Front End Loader 966F OnRoadHaul End Dump Trucks OffHighwayTrucksWaterTrucks Water Truck Subtotal - Parapet Wall Construction Days 0 0 0 0 0	CrawlerTractors									
OffHighwayTractorsCompactors CAT CB-534C Vibratory Compactor										
OnRoadHaul CAT D350E Articulating Truck	OffHighwayTractorsCompactors									
RubberTiredLoaders Front End Loader 966F										
OnRoadHaul End Dump Trucks										
OffHighwayTrucksWaterTrucks Water Truck Subtotal - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td>							+			
Subtotal - - - - - - - - -										
Parapet Wall Construction Days 0 0 0 0 0 0	om ngriway ridonovvaler ridono									_
			0	0	0	0	0	0	0	C
		All terrain 20-T crane								
OnRoadHaul Flatbed Truck for Forms movement	OnRoadHaul									
Subtotal		Subtotal	-	-	-	-	-	-	-	-
Maximum Daily - 374.6 371.1 367.6		Maximum Daily	-	374.6	371.1	367.6	-	-	-	-

NOv	Annual Em	issions (tpy)					1	
NOX			2000	2040	2044	2042	2042	204.4
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9 Bulldozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	0.803	-	-	-	-	-	-
CAT 657 Scraper	-	3.379	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	1.258	-	-	-	-	-	-
CAT D350E Articulated Truck	-	1.000	-	-	-	-	-	-
Quarry Truck 771D	_	-	-	-	_	-	_	_
CAT 375 Excavator	_	-	-	_	_	-	_	-
		0.409						
CAT 160H Motor Grader with ripper	-		-	-	-	-	-	-
Nater Truck	-	-	-	-	-	-	-	-
Subtotal								
Shell Excavation Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9 Bulldozer	-	0.301	-	-	-	-	-	_
CAT D11 Bulldozer	_	0.301	-	-	-	-	-	-
CAT 375 Excavator	_	- 0.501	_	_		_	_	_
CAT 657 Scraper	-	2.534	-	-	-	-	-	-
160H Motor Grader with ripper	-	0.307	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	-	-	-	-	-	-	-
Road Grader with Ripper 160H	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.943	-	-	-	-	-	-
CAT D350E Articulated Truck	-	0.750	-	-	-	-	-	-
Drill Rig	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal	1							
Embankment Placement Days				İ				
•	_			_			_	_
CAT D7G Bulldozer	-	-	-		-	-	-	-
CAT D9R Dozer	-	1.004	1.900	1.792	-	-	-	-
CAT D11 Dozer	-	1.004	1.900	1.792	-	-	-	-
CAT 657 Scraper	-	8.448	16.896	16.896	-	-	-	-
CAT 966F Series II Wheel Loader	-	1.572	3.144	3.144	-	-	-	-
Excavator 375L	_		-	-		_	_	_
	_			2.504		_	_	_
CAT D350E Articulated Truck		1.251	2.501	2.501				
Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	1.274	2.410	2.274	-	-	-	-
Water Truck	-	4.178	8.356	8.356	-	-	-	-
Subtotal								
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	2.309	2.233	2.106	-	-	-	-
CAT D11 Dozer	-	2.309	2.233	2.106	-	-	-	-
CAT 657 Scraper	-	19.430	19.853	19.853	-	-	-	-
CAT 966F Series II Wheel Loader	_	-	-	_	-	-	-	-
	_	-	-	-	-	-	_	-
Excavator 375L								
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	2.930	2.832	2.672	-	-	-	-
All terrain 20-T crane	-	-	-	-	-	_	_	_
	-	9.609	9.818	9.818		-	-	-
Water Truck		5.009	3.010	3.010		-		<u> </u>
Subtotal							1	
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-	0.094	-	-	-	-
Motor Grader 160H	-	-	-	-	-	-	-	-
	_	_	-	0.048	_	-	_	-
CAT AP-800C Aenhalt Payor								
CAT AP-800C Asphalt Paver		-	-	0.038	-	-	-	-
CAT BG-650 Windrow Elevator	-						-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	-	-	0.136	-	-		
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor			-	0.136				
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal	-		-	0.136	-	-		
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days	-	-					_	
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer	-	-	-	-	-	-	-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks	-		-		-		-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane	-	-	-	-	-	-		
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane	-		-		-		-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer			- - -	- - -	- - -		-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper	- - - -		- - -		- - - -			-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor		- - - - -	- - - -	- - - - -		- - - - -	- - - -	- - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D76 Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck								-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D76 Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck		- - - - -	- - - -	- - - - -	- - - -	- - - - -	- - - -	- - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F								- - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks							- - - - -	
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT 659 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck					- - - - - - -		- - - - -	- - - - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck Subtotal					- - - - - - -		- - - - -	- - - - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT 659 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck					- - - - - - -		- - - - -	- - - - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck Subtotal Parapet Wall Construction Days					- - - - - - -		- - - - -	- - - - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck Subtotal Parapet Wall Construction Days All terrain 20-T crane					- - - - - - - - -			- - - - - -
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor Subtotal Spillway Construction Days Concrete Transit Mixer Concrete Pump Trucks All terrain 20-T crane CAT D7G Bulldozer CAT 657 Scraper CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck Front End Loader 966F End Dump Trucks Water Truck Subtotal					- - - - - - - - -			-

	T	I				All Quality	ivieti lodolo	gy and Assu	приопъ
	NOv	Daily Emiss	ion (lbs/day)						
	NOX	2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	0		25	2010	0	0		0
CrawlerTractors		U	- U	-	0	U		0	0
CrawlerTractors				-					
CrawlerTractors	CAT D11 Dozer			-					
Scrapers				-					
RubberTiredLoaders				-					
OnRoadHaul	CAT D350E Articulated Truck			-					
OffHighwayTrucksWaterTrucks				250.68					
Excavators									
Graders									
OffHighwayTrucksWaterTrucks				-					
, , , , , , , , , , , , , , , , , , ,	Subtotal	-	-	313.80	-	-	-	-	-
	Shell Excavation Days	0	0	60	0	0	0	0	0
CrawlerTractors		Ū	, and the second	-	Ū				
CrawlerTractors				_					
CrawlerTractors				_					
Excavators									
Scrapers				-					
Graders									
OnRoadHaul									
OffHighwayTrucksWaterTrucks									
Graders									
RubberTiredLoaders									
OnRoadHaul	Loaders								
BoreDrillRigs									
OffHighwayTrucksWaterTrucks				-					
Olimigriway Frucksvvater Frucks				- 460 49					
Consideration		0	0		0	0	0	0	0
CrawlerTractors									
CrawlerTractors									
CrawlerTractors				-					
Scrapers	•			-					
RubberTiredLoaders									
Excavators									
OnRoadHaul									
OffHighwayTrucksWaterTrucks									
OnRoadHaul									
OffHighwayTractorsCompactors									
OffHighwayTrucksWaterTrucks									
				405.20			-		-
		0	0	0	80	0	0	0	0
CrawlerTractors									
CrawlerTractors					35.84				
CrawlerTractors					-				
Scrapers	•				-				
RubberTiredLoaders					-				
Excavators					-				
OnRoadHaul	CAT D350E Articulated Truck				-				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D				208.90				
OnRoadHaul	Belly Dump Truck C12 Engine				31.26				
OffHighwayTractorsCompactors					45.48				
Cranes					-				
OffHighwayTrucksWaterTrucks	Water Truck				41.78				
	Subtotal	-	-	-	363.26	-	-	-	
		0	0	0	10	0	0	0	0
OnRoadHaul									
Graders	Motor Grader 160H				20.44				
Pavers	CAT AP-800C Asphalt Paver				15.86				
PavingEquipment	CAT BG-650 Windrow Elevator				12.78				
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor				45.48				
5 - 7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Subtotal	-	-	-	125.82	-	-	-	-
	Spillway Construction Days			0	0	0	0		0
OnRoadHaul	Concrete Transit Mixer	0	3	3	3	3	0	3	0
OnRoadHaul	Concrete Pump Trucks								
Cranes	All terrain 20-T crane								
CrawlerTractors	CAT D7G Bulldozer								
Scrapers	CAT 657 Scraper								
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor								
OnRoadHaul	CAT D350E Articulating Truck								
RubberTiredLoaders	Front End Loader 966F								
OnRoadHaul	End Dump Trucks								
OffHighwayTrucksWaterTrucks	Water Truck								
om ngriway rracksvvater rracks	Subtotal	_	_	_	_	_		_	
		-	- ^			-	- ^	-	
Cronos	Parapet Wall Construction Days	0	0	0	0	0	0	0	0
Cranes	All terrain 20-T crane								
OnRoadHaul	Flatbed Truck for Forms movement								
	Subtotal	-	-	-	-	-	-	-	-
	Maximum Daily	-	-	460.5	363.3	-	-	-	-

						7	Quality Met	ioudiogy a
NOx	Annual Em	issions (tpv)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9 Bulldozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	
CAT 657 Scraper	-	-	-	-	-	-	-	
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	-	3.134	-	-	-	-	-
CAT 375 Excavator	_	-	0.534	_	_	-	-	
CAT 160H Motor Grader with ripper	_	-	0.256	-	-	-	-	-
Water Truck	_	-	-	-	-	-	-	-
Subtotal								
Shell Excavation Days								
CAT D7G Bulldozer	_	-	-	-		_	_	-
CAT D9 Bulldozer	_	_	_	_	•	-	-	-
CAT D11 Bulldozer	_	_	_	_	•	_	-	-
CAT 375 Excavator	-	_	1.280		-	_	_	_
CAT 657 Scraper	_	_	1.200			_	_	
160H Motor Grader with ripper	-	-	-		-			-
''	-	_			-	-	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	-	12.534		-	-	-	-
	-	-	12.534	-	-	-	-	-
Road Grader with Ripper 160H			-					-
CAT 966F Series II Wheel Loader	-	-			-	-	-	
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Drill Rig	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Embankment Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	•
CAT D9R Dozer	-	-	2.280	-	-	-	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	0.943	-	-	-	-	-
Excavator 375L	-	-	1.280	-	ı	-	-	•
CAT D350E Articulated Truck	-	-		-	-	-	-	-
Quarry Truck 771D	-	-	12.534	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	1.876	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	2.892	-	-	-	-	-
Water Truck	-	-	2.507	-	-	-	-	-
Subtotal								
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	-	-	1.434	-	-	-	1
CAT D11 Dozer	-	-	-	-	1	-	-	1
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	
Excavator 375L	-	-	-	-	-	-	-	
CAT D350E Articulated Truck	_	-	-	_	_	-	-	-
Quarry Truck 771D	_	-	-	8.356	_	_	_	_
Belly Dump Truck C12 Engine	-	-	_	1.251	-	-	-	-
CAT CB-534C Vibratory Compactor	_	-	_	1.819	-	_	_	
All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	-	-	1.671	-	-	-	-
Subtotal	-	-	-	1.011				-
Crest Pavement Days	_		_	0.456	-	_		
Belly Dump Truck C12 Engine		-		0.156			-	-
Motor Grader 160H	-	-	-	0.102	-	-	-	-
CAT AP-800C Asphalt Paver	-	-	-	0.079	-	-	-	-
CAT BG-650 Windrow Elevator	-	-	-	0.064	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	0.227	-	-	-	-
Subtotal								
Spillway Construction Days								
Concrete Transit Mixer	-	-	-	-		-	-	-
Concrete Pump Trucks	-	-	-	-		-	-	-
All terrain 20-T crane	-	-	-	-	-	-	-	-
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	-		-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	١	-	-	ı
CAT D350E Articulating Truck	-	-	-	-	•	-	-	i
Front End Loader 966F	-	-	-	-	-	-	-	-
End Dump Trucks	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	_	-	-	-	
Flatbed Truck for Forms movement	-	-	-		-	-	-	-
produced track for FORMS INDVERNERS		· -	•	-				
Subtotal								
Subtotal Annual Total	_	_	42.049	15.160	_	_		_

	1							
	Annual Emissi	ons (tpy)						
0	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	-	0.003	_	_		0.009	0.006	
CAT D9 Bulldozer	0.032	0.014	-	-	-	-	-	-
CAT D11 Dozer	-	0.028	-	-	-	-	-	-
CAT 657 Scraper	-	0.093	-	-	-			-
CAT 966F Series II Wheel Loader	- 0.000	0.046	-	-	-	0.007	0.005	-
CAT D350E Articulated Truck Quarry Truck 771D	0.099	0.050	0.087	-	-	0.008	0.006	
CAT 375 Excavator	0.024	-	0.007	-	-	-	-	-
CAT 160H Motor Grader with ripper	0.023	0.018	0.007	-	-	0.004	-	-
Water Truck	0.048	-	-	-	-	-	-	-
Ohall Essayation David								
Shell Excavation Days CAT D7G Bulldozer	_	0.001	_	_	_	0.016	_	
CAT D7G Buildozer CAT D9 Bulldozer	-	0.001	0.155	0.108	-	-	-	
CAT D11 Bulldozer	-	0.063	0.078	0.054	-	-	-	-
CAT 375 Excavator	-	-	0.035	-	-	-	-	-
CAT 657 Scraper	-	0.940	1.450	1.160	-	-	-	-
160H Motor Grader with ripper CAT D350E Articulated Truck	-	0.008	-	-	-	-	-	-
Quarry Truck 771D	-	0.261	0.783	0.348	-	-	-	
Road Grader with Ripper 160H	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.034	-	-	-	0.013	-	-
CAT D350E Articulated Truck	-	0.110	0.121	0.097	-	0.014	-	-
Drill Rig	-	0.090	0.190	0.144	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Embankment Placement Days		1			1			
CAT D7G Bulldozer	-	0.014	-	-	-	0.016	-	-
CAT D9R Dozer	-	0.084	0.136	0.054	-	-	-	-
CAT D11 Dozer	-	0.035	0.062	0.054	-	-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	0.232 0.064	0.464 0.114	0.464 0.088	-	0.007	-	-
Excavator 375L	-	0.064	0.114	0.088	-	0.007	-	-
CAT D350E Articulated Truck	-	0.070	0.097	0.097	-	0.007	-	-
Quarry Truck 771D	-	-	0.348	-	-	-	-	-
Belly Dump Truck C12 Engine	-	0.054	0.072	-	-	0.018	-	-
CAT CB-534C Vibratory Compactor	-	0.123	0.172	0.068	-	0.020	-	-
Water Truck	-	0.168	0.302	0.232	-	0.017	-	-
Shell Placement Days								
CAT D7G Bulldozer	-	0.007	-	-	-	0.043	-	-
CAT D9R Dozer	-	0.130	0.073	0.107	-	-	-	-
CAT D11 Dozer	-	0.081	0.073	0.063	-	-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	0.534 0.042	0.545	0.545	-	0.035	-	-
Excavator 375L	-	0.042	-	-	-	0.033	-	
CAT D350E Articulated Truck	-	0.046	-	-	-	0.039	-	-
Quarry Truck 771D	-	-	-	0.232	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	0.048	-	-	-	-
CAT CB-534C Vibratory Compactor	-	0.143	0.092	0.134	-	0.027	-	-
All terrain 20-T crane Water Truck	-	0.319	0.273	0.319	-	0.046	-	
vvater fruck	_	0.515	0.213	0.515		0.040	_	
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	0.007	-	0.010	-	0.004	-	-
Motor Grader 160H CAT AP-800C Asphalt Paver	-	0.003 0.002	-	0.003 0.004	-	0.001	-	-
CAT AF-600C Aspiral Faver CAT BG-650 Windrow Elevator	-	0.002	-	0.004	-	0.001	-	
CAT CB-534C Vibratory Compactor	-	0.010	-	0.011	-	0.004	-	-
Spillway Construction Days								
Concrete Transit Mixer	-	-	-	0.030	0.151	0.079	-	
Concrete Pump Trucks All terrain 20-T crane	-	-	-	0.012 0.012	0.060 0.058	0.032 0.030	-	
CAT D7G Bulldozer	-	-	-	0.012	0.203	0.106	-	
CAT 657 Scraper	-	-	-	0.145	0.725	0.380	-	-
CAT CB-534C Vibratory Compactor	-	-	-	0.017	0.085	0.045	-	-
CAT D350E Articulating Truck	-	-	-	0.012	0.060	0.032	-	-
Front End Loader 966F End Dump Trucks	-	-	-	0.022 0.036	0.110 0.181	0.058 0.095	-	-
Water Truck	-	-	-	0.029	0.145	0.076	-	
	_			0.020	0.170	0.070		
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	-	-	-	-	-
		-	-	-	_	-	-	-
	-			1				
Flatbed Truck for Forms movement		4.054	5.777	4,802	1,778	1.290	0.018	
Flatbed Truck for Forms movement	0.225		5.777	4.802	1.778	1.290	0.018	-
Flatbed Truck for Forms movement			5.777	4.802	1.778	1.290	0.018	-
Flatbed Truck for Forms movement	0.225 Annual Emission	4.054 ons (tpy)						-
Flatbed Truck for Forms movement Annual Total	0.225 Annual Emissic 2007	4.054 ons (tpy) 2008	2009	2010	2011	1.290	2013	2014
Flatbed Truck for Forms movement Annual Total BoreDrillRigs	0.225 Annual Emissic 2007	4.054 ons (tpy) 2008 0.090	2009 0.190	2010 0.144	2011	2012	2013	2014
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes	0.225 Annual Emissic 2007	4.054 ons (tpy) 2008 0.090	2009	2010 0.144 0.012				-
Flatbed Truck for Forms movement Annual Total BoreDrillRigs	0.225 Annual Emissi 2007	4.054 ons (tpy) 2008 0.090	2009 0.190	2010 0.144	2011 - 0.058	2012	2013	-
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders	0.225 Annual Emissic 2007	4.054 ons (tpy) 2008 0.090 - 0.585 - 0.029	2009 0.190 - 0.577 0.084 0.007	2010 0.144 0.012 0.481 - 0.003	2011 - 0.058 0.203 -	2012 - 0.030 0.190 - 0.004	2013	- - - -
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors	0.225 Annual Emissic 2007	4.054 Dons (tpy) 2008 0.090 - 0.585 - 0.029 0.276	2009 0.190 - 0.577 0.084 0.007 0.263	2010 0.144 0.012 0.481 - 0.003 0.230	2011 - 0.058 0.203 - - 0.085	2012 - 0.030 0.190 - 0.004 0.096	2013 - - 0.006 - -	- - - -
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	0.225 Annual Emissi 2007 - - 0.032 0.024 0.023 - 0.048	4.054 cons (tpy) 2008 0.090 - 0.585 - 0.029 0.276 0.748 0.748	2009 0.190 - 0.577 0.084 0.007 0.263 1.792	2010 0.144 0.012 0.481 - 0.003 0.230 1.160	2011 - 0.058 0.203 - 0.085 0.145	2012 - 0.030 0.190 - 0.004 0.096 0.140	2013	-
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul	0.225 Annual Emissi 2007 0.032 0.024 0.023 - 0.048 0.099	4.054 2008 0.090 - 0.585 - 0.029 0.276 0.748 0.337	2009 0.190 - 0.577 0.084 0.007 0.263	2010 0.144 0.012 0.481 - 0.003 0.230 1.160 0.342	2011 - 0.058 0.203 - - 0.085 0.145 0.453	2012 - 0.030 0.190 - 0.004 0.096 0.140 0.327	2013 - - 0.006 - -	
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	0.225 Annual Emissic 2007	4.054 2008 0.090 - 0.585 - 0.029 0.276 0.748 0.337 0.002	2009 0.190 - 0.577 0.084 0.007 0.263 1.792 0.290	2010 0.144 0.012 0.481 - 0.003 0.230 1.160	2011 - 0.058 0.203 - 0.085 0.145	2012 - 0.030 0.190 - 0.004 0.096 0.140	2013 	
Flatbed Truck for Forms movement Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul	0.225 Annual Emissic 2007	4.054 2008 0.090 - 0.585 - 0.029 0.276 0.748 0.337 0.002 0.003 0.185	2009 0.190 - 0.577 0.084 0.007 0.263 1.792 0.290 - 0.114	2010 0.144 0.012 0.481 - 0.003 0.230 0.342 0.004 0.004 0.003 0.110	2011 - 0.058 0.203 - - 0.085 0.145 0.453 - - 0.110	2012 - 0.030 0.190 - 0.004 0.096 0.140 0.327 0.001 0.001 0.120	2013 - - 0.006 - - - 0.006 -	- - - - - - - -
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment	0.225 Annual Emissis 2007 0.032 0.024 0.023 - 0.048 0.099 -	4.054 ons (tpy) 2008 0.090 - 0.585 - 0.029 0.276 0.748 0.337 0.002 0.002	2009 0.190 	2010 0.144 0.012 0.481 - 0.003 0.230 1.160 0.342 0.004 0.003	2011 - 0.058 0.203 - - 0.085 0.145 0.453 -	2012 - 0.030 0.190 - 0.004 0.096 0.140 0.327 0.001	2013 - 0.006 - - 0.006 -	

						1	All Qua	ality Methodo	ology and F
	PM10	Daily Emission	n (lbs/day)						
		2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	100	0	0	0	0	0	0
CrawlerTractors	CAT DO Buildozer	- 0.70	-						
CrawlerTractors CrawlerTractors	CAT D9 Bulldozer CAT D11 Dozer	0.78						 	
Scrapers Scrapers	CAT DTT Dozer CAT 657 Scraper	-						 	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-							
OnRoadHaul	CAT D350E Articulated Truck	2.42							
OffHighwayTrucksWaterTrucks	Quarry Truck 771D								
Excavators	CAT 375 Excavator	0.58							
Graders	CAT 160H Motor Grader with ripper	0.56							
OffHighwayTrucksWaterTrucks	Water Truck	1.16							
	Subtotal	5.50	-	-	-	-	-	-	-
	Shell Excavation Days	s 0	150	250	200	0	0	0	0
CrawlerTractors	CAT D7G Bulldozer		-	-	-				
CrawlerTractors	CAT D9 Bulldozer		1.40	1.24	1.08				
CrawlerTractors	CAT D11 Bulldozer		0.70	0.62	0.54				
Excavators	CAT 375 Excavator		-	-	-				
Scrapers	CAT 657 Scraper		11.60	11.60	11.60				
Graders	160H Motor Grader with ripper		-	-	-				
OnRoadHaul	CAT D350E Articulated Truck		-	-	-				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		3.48	3.48	3.48				
Graders	Road Grader with Ripper 160H		-	-	-				
RubberTiredLoaders	CAT 966F Series II Wheel Loader		-		-				
OnRoadHaul	CAT D350E Articulated Truck		0.97	0.97	0.97				
BoreDrillRigs	Drill Rig		1.20	1.52	1.44			ļ	
OffHighwayTrucksWaterTrucks	Water Truck Subtotal		19.35	19.43	19.11			 	
		-				-	-		-
CITt	Embankment Placement Days	s 0	0	0	0	0	0	0	0
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer		——					 	
Crawler Tractors CrawlerTractors	CAT Dar Dozer CAT D11 Dozer		 					 	
Scrapers	CAT 611 B02ei CAT 657 Scraper								
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-							
Excavators	Excavator 375L	-							
OnRoadHaul	CAT D350E Articulated Truck								
OffHighwayTrucksWaterTrucks	Quarry Truck 771D								
OnRoadHaul	Belly Dump Truck C12 Engine								
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor								
OffHighwayTrucksWaterTrucks	Water Truck								
	Subtotal	-	-	-	-	-	-	-	-
	Shell Placement Days	s 0	0	0	0	0	0	0	0
CrawlerTractors	CAT D7G Bulldozer								
CrawlerTractors	CAT D9R Dozer								
CrawlerTractors	CAT D11 Dozer								
Scrapers	CAT 657 Scraper								
RubberTiredLoaders	CAT 966F Series II Wheel Loader								
Excavators	Excavator 375L							ļ	
OnRoadHaul	CAT D350E Articulated Truck		——					 	
OffHighwayTrucksWaterTrucks OnRoadHaul	Quarry Truck 771D		—					——	
OffHighwayTractorsCompactors	Belly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor		—					——	
Cranes	All terrain 20-T crane								
OffHighwayTrucksWaterTrucks	Water Truck								
Citi igriray riadio riadio	Subtotal	-	_	-	-	-	-	-	_
	Crest Pavement Days						3		
OnRoadHaul	Belly Dump Truck C12 Engine	1					1.21		
Graders	Motor Grader 160H						-		
Pavers	CAT AP-800C Asphalt Paver						0.44		
PavingEquipment	CAT BG-650 Windrow Elevator						0.38		
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor						1.36		
	Subtotal	-	-	-	-	-	3.39	-	-
	Spillway Construction Days	9 0	0	0	50	250	131	0	0
OnRoadHaul	Concrete Transit Mixer				1.21	1.21	1.21		
OnRoadHaul	Concrete Pump Trucks				0.48	0.48	0.48		
Cranes	All terrain 20-T crane				0.46	0.46	0.46		
CrawlerTractors	CAT D7G Bulldozer				1.62	1.62	1.62		
Scrapers	CAT 657 Scraper				5.80	5.80	5.80		
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor				0.68	0.68	0.68		
OnRoadHaul	CAT D350E Articulating Truck				0.48	0.48	0.48		
RubberTiredLoaders	Front End Loader 966F	1			0.88	0.88	0.88	ļJ	
	End Dump Trucks				1.45	1.45	1.45		
OnRoadHaul		1	ı		1.16	1.16	1.16		
OnRoadHaul OffHighwayTrucksWaterTrucks	Water Truck								
	Subtotal	-	-	-	14.22	14.22	14.22	-	-
OffHighwayTrucksWaterTrucks	Subtotal Parapet Wall Construction Days	- s 0		- 0			14.22		- 0
OffHighwayTrucksWaterTrucks Cranes	Subtotal Parapet Wall Construction Days All terrain 20-T crane	- S 0		- 0					- 0
OffHighwayTrucksWaterTrucks	Subtotal Parapet Wall Construction Days	5 0		- 0					0

							Α.	ir Quality M
DM10	Annual Emiss	iono (tnu)						
PMIO	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days								
CAT D7G Bulldozer	-	-				٠		
CAT D9 Bulldozer	0.032	-	-	-	-		-	-
CAT D11 Dozer CAT 657 Scraper	-	-	-				-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-		-	-
CAT D350E Articulated Truck	0.099	-						
Quarry Truck 771D	-	-	-			-		-
CAT 375 Excavator	0.024	-	-	-				-
CAT 160H Motor Grader with ripper	0.023	-	-	-	-	-	-	-
Water Truck Subtotal	0.048	-	-	-	-	-	-	-
Shell Excavation Days								
CAT D7G Bulldozer	-	-	-		-	-	-	-
CAT D9 Bulldozer	-	0.105	0.155	0.108	-	-	-	-
CAT D11 Bulldozer	-	0.053	0.078	0.054	-	-	-	
CAT 375 Excavator	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	0.870	1.450	1.160	-		-	-
160H Motor Grader with ripper	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	0.261	0.435	0.348	-		-	
Road Grader with Ripper 160H	-	- 0.261	0.433	- 0.346	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	0.072	0.121	0.097		-		-
Drill Rig	-	0.090	0.190	0.144	-	-	-	-
Water Truck	-	-	-	•	-	-	-	-
Subtotal Embankment Placement Days								
CAT D7G Bulldozer	-	-	-		-		-	
CAT D/G Buildozer CAT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	-						
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-		-	-
CAT D350E Articulated Truck	-	-	-				-	
Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	-	-		-	-
CAT CB-534C Vibratory Compactor	-	-	-		-		-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Shell Placement Days								
CAT D7G Bulldozer	-	-	-				-	
CAT D9R Dozer CAT D11 Dozer	-	-	-					-
CAT 657 Scraper	-	-	-	-	-		-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	
Excavator 375L	-	-	-	-	-	-	-	
CAT D350E Articulated Truck	-	-			٠		٠	
Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-			-	-	
CAT CB-534C Vibratory Compactor All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-			0.002		•
Motor Grader 160H	-	-	-	-	-	-	-	-
CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-	-	-	0.001 0.001	-	-
CAT CB-534C Vibratory Compactor	-	-	-		-	0.001	-	-
Subtotal						0.002		
Spillway Construction Days								
Concrete Transit Mixer	-	-	-	0.030	0.151	0.079	-	-
Concrete Pump Trucks	-	-	-	0.012	0.060	0.032	-	-
All terrain 20-T crane	-	-	-	0.012	0.058	0.030	-	-
CAT 657 Serpor	-	-	=	0.041	0.203	0.106	-	-
CAT 657 Scraper CAT CB-534C Vibratory Compactor	-	-	-	0.145 0.017	0.725 0.085	0.380 0.045	-	-
CAT D350E Articulating Truck	-	-	-	0.017	0.060	0.045	-	-
Front End Loader 966F	-	-	-	0.022	0.110	0.058	-	
End Dump Trucks	-	-	-	0.036	0.181	0.095		
Water Truck	-	-	-	0.029	0.145	0.076		•
Subtotal								
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	-	-	-	-	-
Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	-	-
Jupitrial	1							

	PM10	Daily Emission	(lbs/day)						
		2007	2008	2009	2010	2011	2012	2013	2014
CrawlerTractors	Stripping Days CAT D7G Bulldozer	0	40	0	0	0	0	0	-
CrawlerTractors CrawlerTractors	CAT D7G Buildozer CAT D9 Buildozer		-						
CrawlerTractors	CAT D11 Dozer		1.40						
Scrapers	CAT 657 Scraper		4.64						
RubberTiredLoaders	CAT 966F Series II Wheel Loader		1.76						
OnRoadHaul	CAT D350E Articulated Truck		1.93						
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		1.55						
Excavators	CAT 375 Excavator		_						
Graders	CAT 160H Motor Grader with ripper		0.56						
OffHighwayTrucksWaterTrucks			0.56			-			
OffHighway Fruckswater Frucks	Water Truck		-						
	Subtotal	-	10.29	-	-	-	-	-	
	Shell Excavation Days	0		0	0	0	0	0	-
CrawlerTractors	CAT D7G Bulldozer		-						
CrawlerTractors	CAT D9 Bulldozer		0.70						
CrawlerTractors	CAT D11 Bulldozer		0.70						
Excavators	CAT 375 Excavator		-						
Scrapers	CAT 657 Scraper		4.64						
Graders	160H Motor Grader with ripper		0.56						
OnRoadHaul	CAT D350E Articulated Truck		-						
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		-						
Graders	Road Grader with Ripper 160H		-			+			
RubberTiredLoaders	CAT 966F Series II Wheel Loader		1.76						
OnRoadHaul	CAT 986F Series II Wheel Loader CAT D350E Articulated Truck		1.76			-			
			1.93			+			
BoreDrillRigs	Drill Rig		-						
OffHighwayTrucksWaterTrucks	Water Truck					-			
	Subtotal	-	10.29	-	-	-	•	-	•
	Embankment Placement Days	0	100	200	200	0	0	0	-
CrawlerTractors	CAT D7G Bulldozer		-	-	-				
CrawlerTractors	CAT D9R Dozer		0.70	0.62	0.54				
CrawlerTractors	CAT D11 Dozer		0.70	0.62	0.54				
Scrapers	CAT 657 Scraper		4.64	4.64	4.64				
RubberTiredLoaders	CAT 966F Series II Wheel Loader		0.88	0.88	0.88				
Excavators	Excavator 375L		- 0.00	0.00	-				
OnRoadHaul	CAT D350E Articulated Truck		0.97	0.97	0.97				
			-	-	-				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		-	-	-				
OnRoadHaul	Belly Dump Truck C12 Engine								
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor		0.88	0.78	0.68				
OffHighwayTrucksWaterTrucks	Water Truck		2.32	2.32	2.32				
	Subtotal	-	11.09	10.83	10.57	-	-	-	-
	Shell Placement Days	0	230	235	235	0	0	0	
CrawlerTractors	CAT D7G Bulldozer		-	-	-				
CrawlerTractors	CAT D9R Dozer		0.70	0.62	0.54				
CrawlerTractors	CAT D11 Dozer		0.70	0.62	0.54				
Scrapers	CAT 657 Scraper		4.64	4.64	4.64				
RubberTiredLoaders	CAT 966F Series II Wheel Loader		-	-	-				
Excavators	Excavator 375L		-	-	-				
OnRoadHaul	CAT D350E Articulated Truck		-	-	-				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		_	_	_				
			-	-	-	+			
OnRoadHaul	Belly Dump Truck C12 Engine		- 0.00						
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor		0.88	0.78	0.68				
Cranes	All terrain 20-T crane		-	-	-				
OffHighwayTrucksWaterTrucks	Water Truck		2.32	2.32	2.32				
	Subtotal	-	9.24	8.98	8.72	-	-	-	-
	Crest Pavement Days	0	0	0	6	0	0	0	
OnRoadHaul	Belly Dump Truck C12 Engine				1.21				
Graders	Motor Grader 160H				-				
Pavers	CAT AP-800C Asphalt Paver				0.44				
PavingEquipment	CAT BG-650 Windrow Elevator				0.38	+		+	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor				1.36	-			
ogriway riactorscompactors	Subtotal			_	3.39		_		
			- 1		3.39				-
	Spillway Construction Days	9 0	0	0	0	0	0	0	1
OnRoadHaul	Concrete Transit Mixer								
OnRoadHaul	Concrete Pump Trucks								
Cranes	All terrain 20-T crane								
CrawlerTractors	CAT D7G Bulldozer								
Scrapers	CAT 657 Scraper								
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor								
OnRoadHaul	CAT D350E Articulating Truck								
RubberTiredLoaders	Front End Loader 966F								
OnRoadHaul	End Dump Trucks								
OffHighwayTrucksWaterTrucks	Water Truck								
O ngilway i ruonovvalei i ruono	Subtotal		_	_	_				
		-		-		-			-
	Parapet Wall Construction Days	0	0	0	0	0	0	0	
Cranes	All terrain 20-T crane								
OnRoadHaul	Flatbed Truck for Forms movement								
1	Subtotal	-	-	-	-	-	-	-	
	Maximum Daily		11.1	10.0	10.6				

	1		I	1	I		Air Quality Me	thodology and	Assumptions
	PM10	Daily Emission	(lhs/day)						
	TWITE	2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	164	25	0	0		12	(
CrawlerTractors	CAT D7G Bulldozer	-	1.40	-	-	-	1.08	1.08	-
CrawlerTractors CrawlerTractors	CAT D9 Bulldozer CAT D11 Dozer	0.78	2.80 1.40	-	-	-	-	-	-
Scrapers	CAT 657 Scraper	-	4.64	-	-	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	4.40	-	-	-	0.88	0.88	-
OnRoadHaul	CAT D350E Articulated Truck	2.42	4.83	-	-	-	0.97	0.97	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D		-	6.96	-		,	-	-
Excavators	CAT 375 Excavator	0.58	-	1.16	-	-	-	-	-
Graders OffHighwayTrucksWaterTrucks	CAT 160H Motor Grader with ripper Water Truck	0.56 1.16	2.24	0.56	-	-	0.56	-	-
Oli ligilway i ruckswater i rucks	Subtotal	5.50	21.71	8.68	-	-	3.49	2.93	
	Shell Excavation Days	0	198	310	200	0	30	0	(
CrawlerTractors	CAT D7G Bulldozer	į	0.70	-	-	-	1.08	-	-
CrawlerTractors	CAT D9 Bulldozer	-	4.90	1.24	1.08	-	-	-	-
CrawlerTractors Excavators	CAT D11 Bulldozer CAT 375 Excavator	-	1.40	0.62 1.16	0.54	-	-	-	-
Scrapers	CAT 657 Scraper	-	16.24	11.60	11.60	-	-	-	
Graders	160H Motor Grader with ripper	-	0.56	-	-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	ı	-	-	-	ı	ı	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	3.48	15.08	3.48	-	-	-	-
Graders	Road Grader with Ripper 160H	-	- 2.00	-	-	-	0.88	-	-
RubberTiredLoaders OnRoadHaul	CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	3.96 5.32	0.97	0.97	-	0.88	-	-
BoreDrillRigs	Drill Rig	-	1.20	1.52	1.44	-	-	-	
OffHighwayTrucksWaterTrucks	Water Truck		-	-	-				-
	Subtotal	-	37.76	32.19	19.11	-	2.93	-	-
CrowlerTreeters	Embankment Placement Days	0			200	0		0	(
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer	-	1.40 3.50	1.86	0.54	-	1.08	-	-
Crawler Fractors Crawler Tractors	CAT D9R Dozer		0.70	0.62	0.54			-	-
Scrapers	CAT 657 Scraper	-	4.64	4.64	4.64	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	2.20	1.32	0.88	,	0.44	-	-
Excavators	Excavator 375L	•	- 0.40	0.58	-	-	- 0.40	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D		2.42	0.97 5.80	0.97	-	0.48	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	3.62	1.21	-	-	1.21	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	6.16	2.34	0.68	-	1.36	-	-
OffHighwayTrucksWaterTrucks	Water Truck	i	5.80	3.48	2.32	ì	1.16		-
	Subtotal	-	30.44	22.81	10.57	-	5.73	-	-
CrowlerTreeters	Shell Placement Days	0			315	0		0	(
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer	-	0.70 2.80	0.62	1.62	-	1.08	-	-
CrawlerTractors	CAT D11 Dozer	-	0.70	0.62	0.54	-	-	-	-
Scrapers	CAT 657 Scraper	-	4.64	4.64	4.64	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	2.64	-	-	•	0.88	-	-
Excavators	Excavator 375L	-	-	-	-	-	- 0.07	-	
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	-	2.90	-	5.80	-	0.97	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	_	-	1.21	-	-	-	<u>-</u>
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	3.52	0.78	2.04	-	0.68	-	-
Cranes	All terrain 20-T crane	į	-	-	-	-	·	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	5.52	2.32	3.48	-	1.16	-	-
	Subtotal Crest Pavement Days	- 0	23.42	8.98	19.33	- 0	4.77	- 0	- 0
OnRoadHaul	Belly Dump Truck C12 Engine	-	3.62	- 0	2.42	-	2.42	-	-
Graders	Motor Grader 160H	-	1.68	-	0.56	-	-	-	-
Pavers	CAT AP-800C Asphalt Paver	į	1.32	-	0.88	-	0.88	-	-
PavingEquipment	CAT BG-650 Windrow Elevator	,	1.50	-	0.76		0.76	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor Subtotal	-	5.28 13.40	-	2.72 7.34	-	2.72 6.78	-	-
	Spillway Construction Days	- 0				250	131	- 0	- 0
OnRoadHaul	Concrete Transit Mixer	-	-	-	1.21	1.21	1.21	-	-
OnRoadHaul	Concrete Pump Trucks	•	-	-	0.48	0.48	0.48	-	-
Cranes	All terrain 20-T crane	•	-	-	0.46	0.46	0.46	-	-
CrawlerTractors	CAT 657 Screpor	-	-	-	1.62	1.62	1.62	-	-
Scrapers OffHighwayTractorsCompactors	CAT 657 Scraper CAT CB-534C Vibratory Compactor	-	-	-	5.80 0.68	5.80 0.68	5.80 0.68	-	-
OnRoadHaul	CAT D350E Articulating Truck	-	-	-	0.48	0.48	0.48	-	
RubberTiredLoaders	Front End Loader 966F		-	-	0.88	0.88	0.88	-	-
OnRoadHaul	End Dump Trucks	•	-	-	1.45	1.45	1.45	•	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	1.16	1.16	1.16	-	-
	Subtotal Parapet Wall Construction Days	- 0			14.22	14.22	14.22	- 0	- 0
Cranes	All terrain 20-T crane	-	-	- 0	- 0	- 0	-	-	-
OnRoadHaul	Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
	Subtotal		-	-	-	-		-	-
	Maximum Daily	5.5	37.8	32.2	19.3	14.2	14.2	2.9	-
		Maximum Dail	y Emissions (II	b/day)					
		2007	2008	2009	2010	2011	2012	2013	2014
	BoreDrillRigs	-	1.200	1.520	1.440	-	-	-	-
	Cranes		-	-	-	-	-	-	-
	CrawlerTractors	-	7.000	1.860	1.620	-	1.080	-	-
	Excavators Graders	-	0.560	1.160	-	-	-	-	-
	OffHighwayTractorsCompactors	-	- 0.360	-	-		-	-	-
	OffHighwayTrucksWaterTrucks	-	3.480	15.080	3.480	-	-	-	-
	OnRoadHaul	-	5.316	0.966	0.966	-	0.966	-	-
	Pavers		-	-	-	-	-	-	-
	PavingEquipment	-	3 060	-	-	-	- 0.990	-	-
	RubberTiredLoaders Scrapers		3.960 16.240	11.600	11.600	-	0.880	-	
	Scrapers	•	10.240	11.000	11.000	-	-	-	-
	The state of the s		07.750	00.100	40.400		0.000		
			37.756	32.186	19.106	-	2.926	-	

DMA	Annual Emiss	ione (tou)						
PM10	Annual Emiss 2007	ions (tpy) 2008	2009	2010	2011	2012	2013	2014
Stripping Days		2008	2009	2010	2011	2012	2013	2014
CAT D7G Bulldozer	-	-	-	-	-	-		-
CAT D9 Bulldozer	-	-	-	-		-		-
CAT D11 Dozer	-	0.028	-	-	-	-	-	-
CAT 657 Scraper	-	0.093	-	-	-	-		-
CAT 966F Series II Wheel Loader	-	0.035	=	-	-	-	-	-
CAT D350E Articulated Truck	-	0.039	-	-	-	-	-	-
Quarry Truck 771D	-	-	-	-	-	-		-
CAT 375 Excavator	*	-	-	-	-	-	•	-
CAT 160H Motor Grader with ripper	-	0.011	-	-	•	-		•
Water Truck Subtotal	-	-	-	-	-	-	-	-
Shell Excavation Days								
Shell Excavation Days CAT D7G Bulldozer	-	-	-	-	-	-		-
CAT D7G Buildozer CAT D9 Bulldozer	-	0.011	-	-		-	-	
CAT D11 Bulldozer		0.011	-	-				
CAT 375 Excavator	_	- 0.011	-	-	-	-	-	_
CAT 657 Scraper	-	0.070	-	-	-	-	_	
160H Motor Grader with ripper	-	0.008	-	-	_	-	_	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	
Quarry Truck 771D	-	-	-	-	-	-	-	-
Road Grader with Ripper 160H	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.026	-	-	-	-	-	-
CAT D350E Articulated Truck	-	0.029	-	-	-	-	-	-
Drill Rig	-	-	-	-	-	-	•	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Embankment Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-		
CAT D9R Dozer	-	0.035	0.062	0.054	-	-	-	-
CAT D11 Dozer	-	0.035	0.062	0.054	-	-	-	-
CAT 657 Scraper	-	0.232	0.464	0.464	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.044	0.088	0.088	-	-	-	-
Excavator 375L CAT D350E Articulated Truck	-	- 0.040	- 0.007	0.097	-	-	-	-
Quarry Truck 771D	-	0.048	0.097	0.097	-	-	-	
Belly Dump Truck C12 Engine	-	-	-	-		-	-	
CAT CB-534C Vibratory Compactor	-	0.044	0.078	0.068	-	-	-	
Water Truck		0.116	0.078	0.232				
Subtotal		0.110	0.202	0.202				
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	_	
CAT D9R Dozer	-	0.081	0.073	0.063		-	-	-
CAT D11 Dozer	-	0.081	0.073	0.063	_	-	_	-
CAT 657 Scraper	-	0.534	0.545	0.545	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	-	-	-	-	-		-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	•	-
CAT CB-534C Vibratory Compactor	-	0.101	0.092	0.080				-
All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	0.267	0.273	0.273	-	-	-	-
Subtotal								
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-	0.004	-	-	•	-
Motor Grader 160H	-	-	-	- 0.004	-	-	-	-
CAT AP-800C Asphalt Paver	-	-	-	0.001	-	-		-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	-	-	0.001 0.004	-	-	-	-
Subtotal	-	-	-	0.004	-	-	-	-
Spillway Construction Days Concrete Transit Mixer	-	-	-	_	-	-		_
Concrete Transit Mixer Concrete Pump Trucks	-	-	-	-	-	-	-	
All terrain 20-T crane	-	-	-	-		-	-	
CAT D7G Bulldozer	-	-	-	-		-	-	
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
CAT D350E Articulating Truck	-	-	-	-	-	-	-	-
Front End Loader 966F	-	-	-	-	-	-	-	-
End Dump Trucks	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	-	-	-	-	-
Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
Subtotal								
Annual Total	-	1.977	2.138	2.091			_	_

							Air Qualit	ty Methodolo	ogy and Ass
	NOx	Daily Emission		2200	2240	2244	2210	2212	2044
	Stripping Days	2007	2008	2009	2010	2011	2012	2013	2014
CrawlerTractors	Stripping Days CAT D7G Bulldozer	0	U	- 25	U	U	U	U	U
CrawlerTractors	CAT D9 Bulldozer			-					
CrawlerTractors	CAT D11 Dozer			-					
Scrapers	CAT 657 Scraper			-					
RubberTiredLoaders	CAT 966F Series II Wheel Loader			-					
OnRoadHaul	CAT D350E Articulated Truck			- 6.06					
OffHighwayTrucksWaterTrucks Excavators	Quarry Truck 771D CAT 375 Excavator			6.96 1.16					
Graders	CAT 375 Excavator CAT 160H Motor Grader with ripper			0.56					
OffHighwayTrucksWaterTrucks	Water Truck			-					
	Subtotal			8.68		-			
	Shell Excavation Days	0	0	60	0	0	0	0	0
CrawlerTractors	CAT D7G Bulldozer			-					
CrawlerTractors	CAT D9 Bulldozer			-					
CrawlerTractors	CAT D11 Bulldozer			-					
Excavators	CAT 375 Excavator			1.16					
Scrapers	CAT 657 Scraper			-					
Graders OnRoadHaul	160H Motor Grader with ripper CAT D350E Articulated Truck			-					
OffHighwayTrucksWaterTrucks	Quarry Truck 771D			11.60					
Graders	Road Grader with Ripper 160H			-					
RubberTiredLoaders	CAT 966F Series II Wheel Loader			-					
OnRoadHaul	CAT D350E Articulated Truck			-					
BoreDrillRigs	Drill Rig			-					
OffHighwayTrucksWaterTrucks	Water Truck			-					
	Subtotal	-	•	12.76	•	-	-	-	-
0 1 7 /	Embankment Placement Days	0	0	120	0	0	0	0	0
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer			1.24					
CrawlerTractors CrawlerTractors	CAT D3R D02er			1.24					
Scrapers	CAT 657 Scraper			-					
RubberTiredLoaders	CAT 966F Series II Wheel Loader			0.44					
Excavators	Excavator 375L			0.58					
OnRoadHaul	CAT D350E Articulated Truck			-					
OffHighwayTrucksWaterTrucks	Quarry Truck 771D			5.80					
OnRoadHaul	Belly Dump Truck C12 Engine			1.21					
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	CAT CB-534C Vibratory Compactor Water Truck			1.56 1.16					
Oli ligilway Huckswater Hucks	Subtotal	-	-	11.99		-	-	-	-
	Shell Placement Days	0	0		80	0	0	0	0
CrawlerTractors	CAT D7G Bulldozer				-				
CrawlerTractors	CAT D9R Dozer				1.08				
CrawlerTractors	CAT D11 Dozer								
Scrapers	CAT 657 Scraper				•				
RubberTiredLoaders	CAT 966F Series II Wheel Loader				-				
Excavators OnRoadHaul	Excavator 375L CAT D350E Articulated Truck				-				
OffHighwayTrucksWaterTrucks	Quarry Truck 771D				5.80				
OnRoadHaul	Belly Dump Truck C12 Engine				1.21				
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor				1.36				
Cranes	All terrain 20-T crane				-				
OffHighwayTrucksWaterTrucks	Water Truck				1.16				
	Subtotal	-	-	-	10.61	-	-	-	-
	Crest Pavement Days	0	0	0	10	0	0	0	0
OnRoadHaul	Belly Dump Truck C12 Engine				1.21				
Graders Pavers	Motor Grader 160H CAT AP-800C Asphalt Paver				0.56				
PavingEquipment	CAT BG-650 Windrow Elevator				0.44				
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor				1.36				
	Subtotal	-	-	-	3.95	-	-	-	-
	Spillway Construction Days	0	0	0	0	0	0	0	0
OnRoadHaul	Concrete Transit Mixer								
OnRoadHaul	Concrete Pump Trucks								
Cranes	All terrain 20-T crane								
CrawlerTractors	CAT D7G Bulldozer CAT 657 Scraper								
Scrapers OffHighwayTractorsCompactors	CAT 657 Scraper CAT CB-534C Vibratory Compactor								
OnRoadHaul	CAT D350E Articulating Truck								
RubberTiredLoaders	Front End Loader 966F								
OnRoadHaul	End Dump Trucks								
OffHighwayTrucksWaterTrucks	Water Truck								
	Subtotal	-	-	-	-	-	-	-	-
	Parapet Wall Construction Days	0	0	0	0	0	0	0	0
Cranes	All terrain 20-T crane								
OnRoadHaul	Flatbed Truck for Forms movement								
	Subtotal	-	-	-	-	-	-	-	-

							,,	ir Quality N
PM10	Annual Emiss	ions (tpv)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days								
CAT DO Bulldozer	-	-	-	-	-	-	-	-
CAT D9 Bulldozer CAT D11 Dozer	-	-		-	-			-
CAT 657 Scraper	-	-		-	-	-	-	
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	•	•	-
Quarry Truck 771D	-	-	0.087	-	-	٠	٠	-
CAT 375 Excavator	-	-	0.015	-	-	-	-	-
CAT 160H Motor Grader with ripper	-	-	0.007	-	-		-	-
Water Truck Subtotal	-	-	-	-	-	-	-	-
Shell Excavation Days								
CAT D7G Bulldozer	-	-		-	-			
CAT D9 Bulldozer	-	-	-	-	-	-	-	-
CAT D11 Bulldozer	-	-		-	-			-
CAT 375 Excavator	-	-	0.035	-		-	-	
CAT 657 Scraper	-	-	·	-	-	-	-	-
160H Motor Grader with ripper	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	- 0.040	-	-	-	-	-
Quarry Truck 771D Road Grader with Ripper 160H	-	-	0.348	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Drill Rig	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Embankment Placement Days								
CAT DOD Days	-	-	- 0.074	-	-	-	-	-
CAT D9R Dozer CAT D11 Dozer	-	-	0.074	-	-	-	-	-
CAT 657 Scraper	-	-	-	-		-	-	
CAT 966F Series II Wheel Loader	-	-	0.026	-	-	-	-	-
Excavator 375L	-	-	0.035	-	-	-	-	-
CAT D350E Articulated Truck	-	-		-	-	٠	٠	-
Quarry Truck 771D	-	-	0.348	-	-	-	-	-
Belly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor	-	-	0.072	-	-	-	-	-
Water Truck	-	-	0.094 0.070	-	-			-
Subtotal	_	-	0.070	_		_	_	-
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	-		0.043	-			-
CAT D11 Dozer	-	-	-	-		-	-	
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-		-	-			-
Excavator 375L CAT D350E Articulated Truck	-	-		-	-		-	-
Quarry Truck 771D	-	-	-	0.232	-	-	-	
Belly Dump Truck C12 Engine	-	-	-	0.048	-	_	_	
CAT CB-534C Vibratory Compactor	-	-	-	0.054	-	-	-	-
All terrain 20-T crane	-	-			-			-
Water Truck	-	-	-	0.046	-			-
Subtotal								
Crest Pavement Days				0.00-				
Belly Dump Truck C12 Engine Motor Grader 160H	-	-	-	0.006	-	-	-	-
CAT AP-800C Asphalt Paver	-	-		0.003	-			-
CAT AP-800C Asprian Paver CAT BG-650 Windrow Elevator	-	-	-	0.002		-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	0.007	-	-	-	-
Subtotal								
Spillway Construction Days	s							
Concrete Transit Mixer	-	-	-	-	-	-	-	-
Concrete Pump Trucks	-	-	-	-	-	-	-	-
All terrain 20-T crane CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D7G Buildozer CAT 657 Scraper	-	-		-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-		-	-	
CAT D350E Articulating Truck	-	-	-	-	-	-	-	-
Front End Loader 966F	-	-	-	-	-	-	-	-
End Dump Trucks	-	-	-	-	-			-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	-	-	-	-	-
Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	-	-
	<u> </u>	1	1.211	0 444				

							Air Quali	ty Methodolo	gy and Ass
	CO	Daily Emissi 2007	ion (lbs/day) 2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	164	25	0	0	16	12	0
CrawlerTractors	CAT D7G Bulldozer	-	44.60		-		47.80	47.80	-
CrawlerTractors CrawlerTractors	CAT D9 Bulldozer CAT D11 Dozer	21.50	111.50 44.60	-	-	-	-	-	
Scrapers	CAT 657 Scraper	-	247.68	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	230.40	-	-	-	46.08	46.08	-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	22.38	67.14	367.44	-	-	8.95	8.95	-
Excavators	CAT 375 Excavator	31.28	31.28	62.56	-	-		-	-
Graders	CAT 160H Motor Grader with ripper	29.96	149.80	29.96	-	-	29.96	-	-
OffHighwayTrucksWaterTrucks	Water Truck	61.24	61.24		-	-		-	-
	Shell Excavation Days	166.36 0	988.24 198	459.96 310	200	- 0	132.79 30	102.83	- 0
CrawlerTractors	CAT D7G Bulldozer	-	22.30	-	-	-	47.80	-	-
CrawlerTractors	CAT D9 Bulldozer	-	156.10	46.20	47.80	-	-	-	-
CrawlerTractors	CAT D11 Bulldozer	-	44.60	23.10	23.90	-	-	-	-
Excavators Scrapers	CAT 375 Excavator CAT 657 Scraper	-	866.88	62.56 619.20	619.20	-	-	-	
Graders	160H Motor Grader with ripper	-	29.96	-	-	-	-	-	
OnRoadHaul	CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	183.72	796.12	183.72	-	-	-	-
Graders	Road Grader with Ripper 160H	-	-	-	-	-	40.00	-	-
RubberTiredLoaders OnRoadHaul	CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	207.36 49.24	- 8.95	8.95	-	46.08 8.95	-	
BoreDrillRigs	Drill Rig	-	63.88	80.84	76.92	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	-
	Subtotal Embarkment Placement Days	-	1,624.04	1,636.97	960.49	-	102.83	-	-
CrawlerTractors	Embankment Placement Days CAT D7G Bulldozer	0	190 44.60	320	200	0	47.80	- 0	0
CrawlerTractors	CAT D7G Buildozei	-	111.50	69.30	23.90	-	-	-	-
CrawlerTractors	CAT D11 Dozer	-	22.30	23.10	23.90	-	-	-	-
Scrapers But he artification does	CAT 657 Scraper	-	247.68	247.68	247.68	-	-	-	-
RubberTiredLoaders Excavators	CAT 966F Series II Wheel Loader Excavator 375L	-	115.20	69.12 31.28	46.08	-	23.04	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	22.38	8.95	8.95	-	4.48	-	
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	306.20	-	-	-	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	33.57	11.19	-	-	11.19	-	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	CAT CB-534C Vibratory Compactor Water Truck	-	197.96 306.20	87.90 183.72	30.32 122.48	-	60.64 61.24	-	
OlinigilwayTrucksWaterTrucks	Subtotal	-	1,101.39	1,038.44	503.31	-	208.39	-	
	Shell Placement Days		325	235	315	0	80	0	0
CrawlerTractors	CAT D7G Bulldozer	-	22.30	-	-	-	47.80	-	-
CrawlerTractors	CAT D9R Dozer	-	89.20	23.10	71.70	-	-	-	
CrawlerTractors Scrapers	CAT D11 Dozer CAT 657 Scraper	-	22.30 247.68	23.10 247.68	23.90 247.68	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	138.24	-	-	-	46.08	-	-
Excavators	Excavator 375L	-	-	-	-	-		-	-
OnRoadHaul	CAT D350E Articulated Truck	-	26.86	-	-	-	8.95	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul	Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	306.20 11.19	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	113.12	29.30	90.96	-	30.32	-	
Cranes	All terrain 20-T crane	-	-	-		-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	306.20	122.48	183.72	-	61.24	-	-
	Subtotal Crest Pavement Days	- 0	965.90	445.66	935.35	- 0	194.39	- 0	- 0
OnRoadHaul	Belly Dump Truck C12 Engine	- 0	33.57	- 0	26 22.38	-	22.38	-	- 0
Graders	Motor Grader 160H	-	89.88	-	29.96	-	-	-	-
Pavers	CAT AP-800C Asphalt Paver	-	69.72		46.48	-	46.48	-	-
PavingEquipment OffHighwayTractorsCompactors	CAT BG-650 Windrow Elevator	-	47.70	-	34.08	-	34.08	-	-
Official Control of the Control of th	CAT CB-534C Vibratory Compactor Subtotal	-	169.68 410.55	-	121.28 254.18	-	121.28 224.22	-	
	Spillway Construction Days	0	0	0	50	250	131	0	0
OnRoadHaul	Concrete Transit Mixer	-	-	-	11.19	11.19	11.19	-	-
OnRoadHaul Cranss	Concrete Pump Trucks	-	-	-	4.48	4.48	4.48	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	24.54 71.70	24.54 71.70	24.54 71.70	-	- :
Scrapers	CAT 657 Scraper	-	-	-	309.60	309.60	309.60	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	30.32	30.32	30.32	-	-
OnRoadHaul	CAT D350E Articulating Truck	-	-	-	4.48	4.48	4.48	-	-
RubberTiredLoaders OnRoadHaul	Front End Loader 966F End Dump Trucks	-	-	-	46.08 13.43	46.08 13.43	46.08 13.43	-	
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	61.24	61.24	61.24	-	
J	Subtotal	-	-	-	577.05	577.05	577.05	-	-
	Parapet Wall Construction Days	0	0	0	0	0	0	0	0
Cranes OnRoadHaul	All terrain 20-T crane Flatbed Truck for Forms movement	-	-	-	-	-	-	-	
On todal laul	Subtotal								-
	Maximum Daily	166.4	1,624.0	1,637.0	960.5	577.1	577.1	102.8	-
			-				-		-

CO	Annual Emis	ssions (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	_	0.089	-	_	-	0.382	0.287	_
CAT D9 Bulldozer	0.882	1.561	-	-	-	-	-	-
CAT D11 Dozer	-	0.892	-	-	-	-	-	-
CAT 657 Scraper	-	4.954	-	-	-	- 0.000	- 0.070	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	0.918	2.396 1.585	-	-	-	0.369 0.072	0.276 0.054	-
Quarry Truck 771D	-	-	4.593	-	-	-	-	-
CAT 375 Excavator	1.282	1.564	0.782	-	-	-	-	-
CAT 160H Motor Grader with ripper	1.228	2.457	0.375	-	-	0.240	-	-
Water Truck Subtotal	2.511 6.82	3.062 18.56	5.75	-	-	1.06	0.62	-
Shell Excavation Days	0.02	10.50	3.73	-	-	1.00	0.02	
CAT D7G Bulldozer	-	0.022	-	-	-	0.717	-	-
CAT D9 Bulldozer	-	4.036	5.775	4.780	-	-	-	-
CAT D11 Bulldozer CAT 375 Excavator	-	2.007	2.888 1.877	2.390	-	-	-	-
CAT 575 Excavator CAT 657 Scraper	-	50.155	77.400	61.920	-	-		-
160H Motor Grader with ripper	-	0.449	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D	-	13.779	41.337	18.372	-	-	-	-
Road Grader with Ripper 160H	-	1 77/	-	-	-	0.601	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	1.774 1.016	1.119	0.895	-	0.691 0.134		-
Drill Rig	-	4.791	10.105	7.692	-	-		-
Water Truck	-	-	-	-	-	-	-	-
Subtotal	-	78.03	140.50	96.05	-	1.54	-	-
Embankment Placement Days		0.440				0.747		<u> </u>
CAT D7G Bulldozer CAT D9R Dozer	-	0.446 2.676	5.082	2.390	-	0.717	-	-
CAT D9R Dozer CAT D11 Dozer	-	1.115	2.310	2.390	-	-		-
CAT DTT Dozei CAT 657 Scraper	-	12.384	24.768	24.768	-	-	-	-
CAT 966F Series II Wheel Loader	-	3.341	5.990	4.608	-	0.346	-	-
Excavator 375L	-	-	1.877	-	-	-	-	-
CAT D350E Articulated Truck	-	0.649	0.895	0.895	-	0.067	-	-
Quarry Truck 771D Belly Dump Truck C12 Engine	-	0.504	18.372 0.671	-	-	0.168	-	-
CAT CB-534C Vibratory Compactor	-	3.959	6.446	3.032	-	0.166		-
Water Truck	-	8.880	15.922	12.248	-	0.919	-	-
Subtotal	-	33.95	82.33	50.33	-	3.13	-	-
Shell Placement Days								
CAT D7G Bulldozer	-	0.223	- 0.744	4 700	-	1.912	-	-
CAT D9R Dozer CAT D11 Dozer	-	4.126 2.565	2.714 2.714	4.720 2.808	-	-		-
CAT 657 Scraper	-	28.483	29.102	29.102	-	-	_	_
CAT 966F Series II Wheel Loader	-	2.189	-	-	-	1.843	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	0.425	-	-	-	0.358	-	-
Quarry Truck 771D	-	-	-	12.248 0.448	-	-	-	-
Belly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor	-	4.596	3.443	5.988	-	1.213		-
All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	16.994	14.391	16.841	-	2.450	-	-
Subtotal	-	59.60	52.37	72.16	-	7.78	-	
Crest Pavement Days		0.000		0.000		0.004		-
Belly Dump Truck C12 Engine Motor Grader 160H	-	0.062 0.165	-	0.090 0.150	-	0.034	-	-
CAT AP-800C Asphalt Paver	-	0.128	-	0.186	-	0.070	-	-
CAT BG-650 Windrow Elevator	-	0.087	-	0.136	-	0.051	-	-
CAT CB-534C Vibratory Compactor	-	0.311	-	0.485	-	0.182	-	
Subtotal	-	0.75	-	1.05	-	0.34	-	-
Spillway Construction Days Concrete Transit Mixer	-	_	_	0.280	1.399	0.733		-
Concrete Transit Mixer Concrete Pump Trucks	-	-	-	0.280	0.560	0.733		-
All terrain 20-T crane	-	-	-	0.614	3.068	1.607	-	-
CAT D7G Bulldozer	-	-	-	1.793	8.963	4.696	-	-
CAT 657 Scraper	-	-	-	7.740	38.700	20.279	-	-
CAT CB-534C Vibratory Compactor	-	-	-	0.758	3.790	1.986	-	-
CAT D350E Articulating Truck Front End Loader 966F	-	-	-	0.112	0.560	0.293 3.018	-	-
Front End Loader 966F End Dump Trucks	-	-	-	1.152 0.336	5.760 1.679	0.880	-	-
Water Truck	-	-	-	1.531	7.655	4.011	-	-
Subtotal	-	-	_	14.43	72.13	37.80	-	-
Parapet Wall Construction Days								
All terrain 20-T crane	-	-	-	-	-	-	-	-
Flatbed Truck for Forms movement Subtotal	-	-	-	-	-	-	-	-
Annual Total	6.821	190.896	280.949	234.009	72.131	51.640	0.617	
	Annual Emis	ssions (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
BoreDrillRigs	-	4.791	10.105	7.692	- 2.069	4.007	-	-
Cranes CrawlerTractors		- 19.758	21.483	0.614 21.271	3.068 8.963	1.607 8.425	0.287	-
Excavators		1.564	4.536	- 21.271	- 0.903	6.425	- 0.287	-
Graders	1.228	3.071	0.375	0.150	-	0.240	-	-
	-	8.866	9.889	10.263	3.790	4.290	-	-
OffHighwayTractorsCompactors			94.616	61.240	7.655	7.379	-	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks		42.715						
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul	0.918	4.240	2.686	3.167	4.196	3.032	0.054	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	0.918	4.240 0.128	2.686	3.167 0.186	-	0.070	-	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment	0.918 - -	4.240 0.128 0.087	2.686	3.167 0.186 0.136	-	0.070 0.051	-	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	0.918 - - -	4.240 0.128	2.686	3.167 0.186	-	0.070	-	-

		1							hodology
	ROG	Daily Emission	(lbs/dav)						
		2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	164	25	0	0	16	12	C
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9 Bulldozer	2.90	5.80 11.60	-	-	-	5.80	5.80	-
CrawlerTractors CrawlerTractors	CAT D9 Buildozer CAT D11 Dozer	2.90	5.80	-	-	-		-	-
Scrapers	CAT 657 Scraper	-	11.60	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	29.00	-	-	-	5.80	5.80	-
OnRoadHaul	CAT D350E Articulated Truck	29.00	58.00	-	-	-	11.60	11.60	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	17.40	-	-	-	-	-
Excavators	CAT 375 Excavator	2.90	-	5.80	-	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	2.90	11.60	2.90	-	-	2.90	-	-
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	2.90 40.60	133.40	26.10	-	-	26.10	23.20	-
	Shell Excavation Days			310	200	- 0	30	23.20	- 0
CrawlerTractors	CAT D7G Bulldozer	-	2.90	-	-	-	5.80	-	-
CrawlerTractors	CAT D9 Bulldozer	-	20.30	5.80	5.80	-	-	-	-
CrawlerTractors	CAT D11 Bulldozer	-	5.80	2.90	2.90	-	-	-	-
Excavators	CAT 375 Excavator	-	-	5.80	-	-	-	-	=
Scrapers	CAT 657 Scraper	-	40.60	29.00	29.00	-	-	-	-
Graders OnRoadHaul	160H Motor Grader with ripper CAT D350E Articulated Truck	-	2.90	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	8.70	37.70	8.70	-	-	-	
Graders	Road Grader with Ripper 160H		- 0.70	-	-	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	26.10	-	-	-	5.80	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	63.80	11.60	11.60	-	11.60	-	
BoreDrillRigs	Drill Rig	-	5.80	5.80	5.80	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	-
	Subtotal	-	176.90	98.60	63.80	-	23.20	-	-
01	Embankment Placement Days	0	190	320	200	0	30	0	0
CrawlerTractors CrawlerTractors	CAT DOR Dozor	-	5.80	9.70	- 0.00	-	5.80	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	14.50 2.90	8.70 2.90	2.90 2.90	-	-	-	-
Scrapers	CAT 657 Scraper	-	11.60	11.60	11.60	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	14.50	8.70	5.80	-	2.90	-	-
Excavators	Excavator 375L	-	-	2.90	-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	29.00	11.60	11.60	-	5.80	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	14.50	-	-	-	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	43.50	14.50		-	14.50	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor Water Truck	-	20.30 14.50	8.70 8.70	2.90 5.80	-	5.80	-	-
OffHighwayTrucksWaterTrucks	Subtotal	-	156.60	92.80	43.50		2.90 37.70	-	<u>:</u>
	Shell Placement Days	0		235	315	0	80	0	0
CrawlerTractors	CAT D7G Bulldozer	-	2.90	-	-	-	5.80	-	-
CrawlerTractors	CAT D9R Dozer	-	11.60	2.90	8.70	-	-	-	-
CrawlerTractors	CAT D11 Dozer	-	2.90	2.90	2.90	-	-	-	-
Scrapers	CAT 657 Scraper	-	11.60	11.60	11.60	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	17.40	-	-	-	5.80	-	-
Excavators	Excavator 375L	-	-		-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	34.80	-	14.50	-	11.60	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul	Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	14.50	-	-	-	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor		11.60	2.90	8.70	-	2.90	-	
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	14.50	5.80	8.70	-	2.90	-	-
	Subtotal	-	107.30	26.10	69.60	-	29.00	-	-
	Crest Pavement Days	0		0	26	0	6	0	0
OnRoadHaul	Belly Dump Truck C12 Engine	-	7.58	÷	5.05	-	5.05	-	-
Graders	Motor Grader 160H	-	1.52	-	0.51	-	-	-	-
Pavers PavingEquipment	CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	1.52 1.52	-	1.01	-	1.01	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	3.03	-	2.02	-	2.02	-	
Om ngriway Fractorsoompactors	Subtotal	-	15.16	-	9.60	-	9.10	-	-
	Spillway Construction Days	0	0	0	50	250	131	0	0
OnRoadHaul	Concrete Transit Mixer	-	-	-	2.53	2.53	2.53	-	-
OnRoadHaul	Concrete Pump Trucks	-	-		1.01	1.01	1.01	-	-
Cranes	All terrain 20-T crane	-	-	-	0.51	0.51	0.51	-	-
CrawlerTractors	CAT D7G Bulldozer	-	-		1.52	1.52	1.52	-	-
Scrapers OffLighway Tractors Compactors	CAT CR 534C Vibratory Composter	-	-	-	2.53	2.53	2.53	-	-
OffHighwayTractorsCompactors OnRoadHaul	CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	0.51 1.01	0.51 1.01	0.51 1.01	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	1.01	1.01	1.01	-	-
OnRoadHaul	End Dump Trucks	-	-		3.03	3.03	3.03	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	0.51	0.51	0.51	-	-
	Subtotal	-	-	-	14.15	14.15	14.15	-	-
·	Parapet Wall Construction Days			0	0	0	0	0	0
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OnRoadHaul	Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
	Subtotal		-			-		-	
	Maximum Daily	40.6	176.9	98.6	69.6	14.1	37.7	23.2	-
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S	Annual Emissio 2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	- 0	0.012	- 0	0	0	0.046	0.035	
CAT D9 Bulldozer	0.119	0.058	-	-	-	-	-	
AT D11 Dozer	-	0.116	-	-	-	-	-	
AT 657 Scraper	-	0.232	-	-	-	-	-	
AT 966F Series II Wheel Loader AT D350E Articulated Truck	1.189	0.302 0.603	-	-	-	0.046 0.093	0.035 0.070	
luarry Truck 771D	1.109	-	0.218	-	-	-	-	
AT 375 Excavator	0.119	-	0.073	-	-	-	-	
AT 160H Motor Grader with ripper	0.119	0.093	0.036	-	-	0.023	-	
Vater Truck	0.119	-	-	-	-	-	-	
Shell Excavation Days	0	0	0	0	0	0	0	
AT D7G Bulldozer	-	0.003	-	-	-	0.087	-	
AT D9 Bulldozer	-	0.525	0.725	0.580	-	-	-	
AT D11 Bulldozer	-	0.261	0.363	0.290	-	-	-	
AT 375 Excavator AT 657 Scraper	-	2.349	0.174 3.625	2.900	-	-	-	
60H Motor Grader with ripper		0.044	3.023	2.500	-	-	-	
AT D350E Articulated Truck	-	-	-	-	-	-	-	
uarry Truck 771D	-	0.653	1.958	0.870	-	-	-	
oad Grader with Ripper 160H	-		-	-	-		-	
AT D3505 Asticulated Truck	-	0.223	1 450	1 160	-	0.087	-	
AT D350E Articulated Truck rill Rig	-	1.317 0.435	1.450 0.725	1.160 0.580	-	0.174	-	
atter Truck	-	- 0.435	- 0.725	- 0.560	-	-	-	
Embankment Placement Days	0	0	0	0	0	0	0	
AT DOR Dozor	-	0.058	- 0.639	- 0.200	-	0.087	-	
AT D9R Dozer AT D11 Dozer	-	0.348 0.145	0.638 0.290	0.290 0.290	-	-	-	
AT D11 Dozer AT 657 Scraper	-	0.145	1.160	1.160	-	-	-	
AT 966F Series II Wheel Loader	-	0.421	0.754	0.580	-	0.044	-	
xcavator 375L	-	-	0.174	-	-	-	-	
AT D350E Articulated Truck	-	0.841	1.160	1.160	-	0.087	-	
uarry Truck 771D	-	- 0.653	0.870	-	-	- 0.210	-	
elly Dump Truck C12 Engine AT CB-534C Vibratory Compactor	-	0.653 0.406	0.870 0.638	0.290	-	0.218 0.087	-	
Vater Truck	-	0.421	0.754	0.580	-	0.044	-	
Shell Placement Days	0	0	0	0	0	0	0	
AT D7G Bulldozer	-	0.029	-	-	-	0.232	-	
AT D9R Dozer	-	0.537	0.341	0.573	-	-	-	
AT D11 Dozer AT 657 Scraper	-	0.334 1.334	0.341 1.363	0.341 1.363	-	-	-	
AT 966F Series II Wheel Loader	-	0.276	-	-	-	0.232	-	
xcavator 375L	-	-	-	-	-	-	-	
AT D350E Articulated Truck		0.551	-	-	-	0.464	-	
luarry Truck 771D	-	-	-	0.580	-	-	-	
telly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor	-	0.471	0.341	0.580 0.573	-	0.116	-	
Il terrain 20-T crane	-	-	-	-	-	-	-	
Vater Truck	-	0.805	0.682	0.798	-	0.116	-	
Crest Pavement Days	0	0	0	0	0	0	0	
elly Dump Truck C12 Engine lotor Grader 160H	-	0.014	-	0.020	-	0.008	-	
AT AP-800C Asphalt Paver	-	0.003	-	0.004	-	0.002	-	
AT BG-650 Windrow Elevator	-	0.003	-	0.004	-	0.002	-	
AT CB-534C Vibratory Compactor	-	0.006	-	0.008	-	0.003	-	
Spillway Construction Days	0	0	0	0 063	0 216	0	0	
oncrete Transit Mixer	-		0 -	0.063	0.316	0.165	0 -	
oncrete Transit Mixer oncrete Pump Trucks	-	-	-				-	
oncrete Transit Mixer oncrete Pump Trucks Il terrain 20-T crane	-	-	-	0.063 0.025	0.316 0.126	0.165 0.066	-	
oncrete Transit Mixer oncrete Pump Trucks II terrain 20-T crane AT D7G Bulldozer AT 657 Scraper	- - - -	- - - -	- - - -	0.063 0.025 0.013 0.038 0.063	0.316 0.126 0.063 0.189 0.316	0.165 0.066 0.033 0.099 0.165	- - - -	
oncrete Transit Mixer oncrete Pump Trucks It terrain 20-T crane AT D7G Bulldozer AT 657 Scraper AT CB-534C Vibratory Compactor		- - - - -	- - - -	0.063 0.025 0.013 0.038 0.063 0.013	0.316 0.126 0.063 0.189 0.316 0.063	0.165 0.066 0.033 0.099 0.165 0.033	- - - - -	
oncrete Transit Mixer oncrete Pump Trucks Il terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT CB-534C Vibratory Compactor AT D350E Articulating Truck	- - - - -	- - - - -		0.063 0.025 0.013 0.038 0.063 0.013 0.025	0.316 0.126 0.063 0.189 0.316 0.063 0.126	0.165 0.066 0.033 0.099 0.165 0.033 0.066		
oncrete Transit Mixer oncrete Pump Trucks II terrain 20-T crane AT D76 Bulldozer AT 657 Scraper AT 658-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F		- - - - -	- - - -	0.063 0.025 0.013 0.038 0.063 0.013 0.025	0.316 0.126 0.063 0.189 0.316 0.063 0.126	0.165 0.066 0.033 0.099 0.165 0.033 0.066	- - - - -	
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rorane AT D7G Bulldozer AT 657 Scraper AT CB-534C Vibratory Compactor AT D350E Articulating Truck ront End Loader 966F nd Dump Trucks	- - - - - - -			0.063 0.025 0.013 0.038 0.063 0.013 0.025	0.316 0.126 0.063 0.189 0.316 0.063 0.126	0.165 0.066 0.033 0.099 0.165 0.033 0.066		
oncrete Transit Mixer oncrete Pump Trucks II terrain 20-7 crane AT D7G Bulldozer AT 657 Scraper AT CB-534C Vibratory Compactor AT D350E Articulating Truck ront End Loader 966F nd Dump Trucks // Attention 10-7 cransity Compactor // AT D350E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck // CAT D450E Articulating Truck				0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.076	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.199		
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 crane AT D7G Bulldozer AT C7G Bulldozer AT C85 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ront End Loader 966F nd Dump Trucks (ater Truck) Parapet Wall Construction Days		- - - - - - - - - -	- - - - - - - - - -	0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.076	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.199 0.033	- - - - - - - - -	
oncrete Transit Mixer oncrete Pump Trucks Il terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 986F and Dump Trucks //ater Truck Parapet Wall Construction Days Il terrain 20-T crane	- - - - - - - - -		- - - - - - - - - - - - - - - - - - -	0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.199 0.033	- - - - - - - - - -	
oncrete Transit Mixer oncrete Pump Trucks I terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 966F at Dump Trucks later Truck Parapet Wall Construction Days I terrain 20-T crane		- - - - - - - - - -	- - - - - - - - - -	0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.076	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.199 0.033	- - - - - - - - -	
oncrete Transit Mixer oncrete Pump Trucks I terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 966F at Dump Trucks later Truck Parapet Wall Construction Days I terrain 20-T crane	- - - - - - - - -		- - - - - - - - - - - - - - - - - - -	0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.199 0.033	- - - - - - - - - - -	
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 966F dt Dump Trucks ater Truck Parapet Wall Construction Days I terrain 20-T crane		- - - - - - - - - - - - - - - - - - -		0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.025 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.096 0.066 0.066 0.199 0.033		
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rane AT D7G Bulldozer AT 657 Scraper AT C85-34C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 966F did Dump Trucks ater Truck Parapet Wall Construction Days I terrain 20-T crane		- - - - - - - - - - - - - - - - - - -		0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.025 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.096 0.066 0.066 0.199 0.033		
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rane AT D7G Bulldozer AT 657 Scraper AT C85-34C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 966F did Dump Trucks ater Truck Parapet Wall Construction Days I terrain 20-T crane				0.063 0.025 0.013 0.038 0.063 0.063 0.013 0.025 0.025 0.025 0.025 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.199 0.033 0.033		
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rane AT D7G Bulldozer AT 657 Scraper AT CB-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F did Dump Trucks atter Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement				0.063 0.025 0.013 0.038 0.063 0.063 0.013 0.025 0.025 0.026 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.096 0.066 0.066 0.199 0.033		
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rorane AT D73 Bulldozer AT C95 Scraper AT C95 Scraper AT C95 Soft Original Truck ont End Loader 966F Id Dump Trucks atter Truck Parapet Wall Construction Days Iterrain 20-T crane attbed Truck for Forms movement				0.063 0.025 0.013 0.038 0.063 0.013 0.025 0.025 0.025 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.126 0.137 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.086 0.199 0.033 0		2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F ad Dump Trucks atter Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement				0.063 0.025 0.013 0.038 0.063 0.063 0.013 0.025 0.025 0.026 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.199 0.033 0.033		2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rorane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 986F dt Dump Trucks ater Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes				0.063 0.025 0.013 0.038 0.063 0.063 0.013 0.025 0.025 0.025 0.076 0.013	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.199 0.033 0.033 0.022 0.033 0.033		2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 rorane AT D7G Bulldozer AT G87 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 986F dt Dump Trucks atter Truck Parapet Wall Construction Days Iterrain 20-T crane attbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders				0.063 0.025 0.013 0.038 0.063 0.063 0.013 0.025 0.025 0.026 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063 0.57 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.096 0.033 0.033 0.033	0.139	2014
concrete Transit Mixer concrete Pump Trucks Iterrain 20-1 rorane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F and Dump Trucks atter Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors				0.063 0.025 0.013 0.038 0.063 0.063 0.075 0.025 0.025 0.076 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.379 0.379 0.379 0.063 0.063 0.063 0.063 0.063 0.063 0.063 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.07 0.07 0.07 0.07 0	0.139	2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 roane AT D73 Bulldozer AT G87 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F Ind Dump Trucks atter Truck Parapet Wall Construction Days Iterrain 20-T crane attbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactor OffHighwayTractorsCompactors				0.063 0.025 0.013 0.038 0.063 0.025 0.076 0.013 0.025 0.076 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010 0.580 0.013 0.013 0.003 0.883 0.883 0.883	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063 0.77 0.063 0.063 0.063 0.063 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.199 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.0552 0.023 0.023 0.023 0.023	0 0.139	2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 986F dd Dump Trucks later Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWateTrucks OrRoadHaul				0.063 0.025 0.013 0.038 0.063 0.053 0.013 0.025 0.025 0.026 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010	0.316 0.126 0.063 0.189 0.316 0.126 0.126 0.379 0.063 0.7 - - - - - - - - - - - - - - - - - - -	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.07 0.086 0.086 0.099 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.0552 0.023 0.023 0.023 0.193 1.539		2014
oncrete Transit Mixer oncrete Pump Trucks Il terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ront End Loader 966F and Dump Trucks Ister Truck Parapet Wall Construction Days Il terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnkadHaul Pawers				0.063 0.025 0.013 0.038 0.063 0.075 0.076 0.076 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010 0.000	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063 0.77 0.063 0.063 0.063 0.063 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.07 0.07 0.07 0.07 0	0 0.139	2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT 0350E Articulating Truck ont End Loader 986F dd Dump Trucks later Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWateTrucks OrRoadHaul				0.063 0.025 0.013 0.038 0.063 0.053 0.013 0.025 0.025 0.026 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.07 0.086 0.086 0.099 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.0552 0.023 0.023 0.023 0.193 1.539	0.139 2013 0.035 0.070	2014
oncrete Transit Mixer oncrete Pump Trucks Iterrain 20-T crane AT D76 Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D369E Articulating Truck ont End Loader 966F and Dump Trucks later Truck Parapet Wall Construction Days Iterrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Graders OffHighwayTractorsCompactors OffHighwayTractorsCompactors OffRoadHaul Pavers PavingEquipment			2009 0,725 - 2.697 0,421 0,036 0,979 4,481 3,480	0.063 0.025 0.013 0.038 0.063 0.025 0.076 0.013 0.025 0.076 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.003 0.883 0.883 0.013 0.004	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063 0.079 0.063 0.063 0.189 0.063 0.063 0.063 0.063 0.063 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.199 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.552 0.023 0.023 0.193 0.1539 0.002	0.139 2013 	
oncrete Transit Mixer oncrete Pump Trucks I terrain 20-7 crane AT D7G Bulldozer AT 657 Scraper AT C8-534C Vibratory Compactor AT D350E Articulating Truck ont End Loader 966F at Dump Trucks later Truck Parapet Wall Construction Days I terrain 20-T crane atbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders Off-lighwayTractorsCompactors Off-lighwayTrucksWaterTrucks OnRoad-Haul Pavers PavingEquipment RubberTiredLoaders				0.063 0.025 0.013 0.038 0.063 0.025 0.076 0.013 0.025 0.076 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.001 0.001 0.004 0.005 0.005 0.005	0.316 0.126 0.063 0.189 0.316 0.063 0.126 0.126 0.379 0.063 0.079 0.063 0.083 0.083 0.0947 0.063 0.083 0.0947 0.094	0.165 0.066 0.033 0.099 0.165 0.033 0.096 0.066 0.066 0.093 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.0552 0.023 0.023 0.1539 0.193 1.539 0.0002 0.475 0.165	0.139 2013 2013 2013 0.035 - 0.0070 - 0.0035	2014
oncrete Transit Mixer oncrete Pump Trucks Il terrain 20-1 crane AT D7G Bulldozer AT 657 Scraper AT 055 Scraper AT 055 Scraper AT 055 Scraper AT 0550 Articulating Truck ront End Loader 966F and Dump Trucks /ater Truck Parapet Wall Construction Days Il terrain 20-T crane latbed Truck for Forms movement BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTrucksWaterTrucks OnRoadHaul Pavers RubberTiredLoaders RubberTiredLoaders RubberTiredLoaders				0.063 0.025 0.013 0.038 0.063 0.076 0.013 0.025 0.025 0.026 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.000 0.0004 0.0004	0.316 0.126 0.063 0.189 0.316 0.126 0.126 0.379 0.063 0.079 0.063 0.1769 0.063 0.189 0.063 0.063 0.063 0.063 0.063 0.063 0.063	0.165 0.066 0.033 0.099 0.165 0.033 0.066 0.066 0.066 0.07 0.033	0.139 2013 	2014

	PM2.5	Daily Emissio 2007	n (lbs/day) 2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	164	25	0	0	16	12	2014
CrawlerTractors	CAT DO Buildozer	- 0.70	1.29	-	-	-	0.99	0.99	-
CrawlerTractors CrawlerTractors	CAT D9 Bulldozer CAT D11 Dozer	0.72	3.22 1.29	-	-	-	-	-	
Scrapers	CAT 657 Scraper		4.27		-		-	-	
RubberTiredLoaders OnRoadHaul	CAT 966F Series II Wheel Loader	-	4.05	-	-	-	0.81	0.81	-
OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck Quarry Truck 771D	2.09	6.26	6.40	-	-	0.83	0.83	
Excavators	CAT 375 Excavator	0.53	0.53	1.07	-	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	0.52	2.58	0.52	-	-	0.52	-	
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	1.07	1.07	- 7.00	-	-	-	- 0.04	-
	Shell Excavation Days	4.92	24.55 198	7.99 310	200	- 0	3.15 30	2.64	-
CrawlerTractors	CAT D7G Bulldozer	- 0	0.64	-	-	-	0.99	-	-
CrawlerTractors	CAT D9 Bulldozer	-	4.51	1.14	0.99	-	-	-	-
CrawlerTractors	CAT D11 Bulldozer	-	1.29	0.57	0.50	-	-	-	-
Excavators	CAT 375 Excavator		-	1.07	-	-	-	-	-
Scrapers Graders	CAT 657 Scraper 160H Motor Grader with ripper		14.94 0.52	10.67	10.67	-	-	-	
OnRoadHaul	CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	3.20	13.87	3.20	-	-	-	-
Graders	Road Grader with Ripper 160H	-	-	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	3.64	- 0.00	- 0.00	-	0.81	-	-
OnRoadHaul BoreDrillRigs	Drill Rig		4.59 1.10	0.83 1.40	0.83 1.32	-	0.83	-	
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	-
	Subtotal		34.43	29.56	17.52		2.64	-	
0	Embankment Placement Days	0		320	200	0	30	0	
CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer	-	1.29	- 1 71	- 0.50	-	0.99	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	3.22 0.64	1.71 0.57	0.50 0.50	-	-	-	
Scrapers	CAT 657 Scraper	-	4.27	4.27	4.27	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	2.02	1.21	0.81	-	0.40	-	-
Excavators	Excavator 375L	-	-	0.53	-	-	-	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	CAT D350E Articulated Truck	-	2.09	0.83	0.83	-	0.42	-	
OffHighway I rucksWater I rucks OnRoadHaul	Quarry Truck 771D Belly Dump Truck C12 Engine		3.13	5.34 1.04	-	-	1.04	-	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	5.67	2.15	0.63	-	1.25	-	
OffHighwayTrucksWaterTrucks	Water Truck	-	5.34	3.20	2.13	-	1.07	-	
	Subtotal	-	27.66	20.87	9.67	-	5.18	-	-
CrawlerTractors	Shell Placement Days CAT D7G Bulldozer	0		235	315	0	80	0	
Crawler Tractors Crawler Tractors	CAT D/G Buildozer CAT D9R Dozer	-	0.64 2.58	0.57	1.49	-	0.99	-	
Crawler Tractors	CAT Dak Dozer	-	0.64	0.57	0.50	-	-	-	
Scrapers	CAT 657 Scraper	-	4.27	4.27	4.27	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	2.43	-	-	-	0.81	-	-
Excavators OnRoadHaul	Excavator 375L CAT D350E Articulated Truck	-	2.50	-	-	-	0.83	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	- :	2.50	-	5.34	-	0.83		
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	1.04	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	3.24	0.72	1.88	-	0.63	-	-
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	-	5.34 21.64	2.13 8.26	3.20 17.71	-	1.07 4.33	-	
	Crest Pavement Days	- 0	11	0.20	26	0	4.55	- 0	
OnRoadHaul	Belly Dump Truck C12 Engine	-	3.13	-	2.09	-	2.09	-	-
Graders	Motor Grader 160H		1.55	-	0.52	-	-	-	
Pavers	CAT AP-800C Asphalt Paver		1.21	-	0.81	-	0.81	-	-
PavingEquipment OffHighwayTractorsCompactors	CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor		1.38 4.86	-	0.70 2.50		0.70 2.50	-	- :
On iignway Fractors Compactors	Subtotal	-	12.13	-	6.61	-	6.10	-	-
	Spillway Construction Days	0		0	50	250	131	0	
OnRoadHaul	Concrete Transit Mixer	-	-	-	1.04	1.04	1.04	-	-
OnRoadHaul	Concrete Pump Trucks	-	-	-	0.42	0.42	0.42	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	0.42 1.49	0.42 1.49	0.42 1.49	-	
Scrapers	CAT D7G Buildozer CAT 657 Scraper	-	-	-	5.34	5.34	5.34	-	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	0.63	0.63	0.63	-	-
OnRoadHaul	CAT D350E Articulating Truck	-	-	-	0.42	0.42	0.42	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	0.81	0.81	0.81	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	End Dump Trucks Water Truck		-	-	1.25 1.07	1.25 1.07	1.25 1.07	-	-
,	Subtotal	-	-	-	12.88	12.88	12.88	-	
	Parapet Wall Construction Days	0	0	0	0	0	0	0	
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	
OnRoadHaul	Flatbed Truck for Forms movement Subtotal		-	-	-	-	-	-	
	Maximum Daily	4.9	34.4	29.6	17.7	12.9	12.9	2.6	
	- Conty	4.8	J4.4	23.0	(1.1	12.3	12.3	2.0	
	1								
								+	

	Annual Emission	ons (tpy) 2008	2009	2010	2011	2012	2012	2014
Stripping Days	2007	2008	2009	2010	2011	2012	2013	2014
CAT D7G Bulldozer		0.003	-	-	-	0.008	0.006	-
CAT D9 Bulldozer CAT D11 Dozer	0.029	0.045 0.026	-	-	-	-	-	-
CAT 657 Scraper	-	0.085	-	-	-	-	-	-
CAT 966F Series II Wheel Loader		0.042	-	-	-	0.006	0.005	-
CAT D350E Articulated Truck Quarry Truck 771D	0.086	0.148	0.080	-	-	0.007	0.005	-
CAT 375 Excavator	0.022	0.027	0.000	-	-	-	-	-
CAT 160H Motor Grader with ripper	0.021	0.042	0.006	-	-	0.004	-	-
Water Truck Subtotal	0.044	0.053	-	-	-	-	-	-
Shell Excavation Days								
CAT D7G Bulldozer	-	0.001	-	-	-	0.015	-	-
CAT D9 Bulldozer	-	0.117	0.143	0.099	-	-	-	-
CAT D11 Bulldozer CAT 375 Excavator	-	0.058	0.071 0.032	0.050	-	-	-	-
CAT 575 Excavator CAT 657 Scraper	-	0.864	1.334	1.067	-			- :
160H Motor Grader with ripper		0.008	-	-	-	-	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	0.240	0.720	0.320	-	-	-	-
Road Grader with Ripper 160H	-	- 0.240	0.720	0.320	-	-	-	
CAT 966F Series II Wheel Loader	-	0.031	-	-	-	0.012	-	-
CAT D350E Articulated Truck	-	0.095	0.104	0.083	-	0.013	-	-
Drill Rig Water Truck	-	0.083	0.175	0.132	-	-	-	-
Subtotal								
Embankment Placement Days								-
CAT D7G Bulldozer CAT D9R Dozer	-	0.013	0.125	0.050	-	0.015	-	-
CAT D9R Dozer CAT D11 Dozer	-	0.077	0.125	0.050	-	-	-	-
CAT 657 Scraper	-	0.213	0.427	0.427	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.059	0.105	0.081	-	0.006	-	-
Excavator 375L CAT D350E Articulated Truck	-	0.060	0.032 0.083	0.083	-	0.006	-	
Quarry Truck 771D		-	0.320	-	-	-	-	-
Belly Dump Truck C12 Engine	-	0.047	0.063	-	-	0.016	-	-
CAT CB-534C Vibratory Compactor Water Truck	-	0.113 0.155	0.158 0.277	0.063 0.213	-	0.019 0.016	-	-
Subtotal	-	0.155	0.211	0.213	-	0.016		
Shell Placement Days								
CAT D7G Bulldozer	-	0.006	-	-	-	0.040	-	-
CAT D9R Dozer CAT D11 Dozer	-	0.119 0.074	0.067 0.067	0.098	-	-	-	-
CAT 657 Scraper	-	0.491	0.502	0.502	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.038	-	-	-	0.032	-	
Excavator 375L CAT D350E Articulated Truck	-	0.040	-	-	-	0.033	-	-
Quarry Truck 771D	-	-	-	0.213	-	- 0.033		
Belly Dump Truck C12 Engine	-	-	-	0.042	-	-	-	-
CAT CB-534C Vibratory Compactor	-	0.132	0.084	0.124	-	0.025	-	-
All terrain 20-T crane Water Truck	-	0.296	0.251	0.293	-	0.043		-
Subtotal		0.200		0.200		-		
Crest Pavement Days								
Belly Dump Truck C12 Engine Motor Grader 160H	-	0.006	-	0.008	-	0.003	-	-
CAT AP-800C Asphalt Paver	-	0.003	-	0.003	-	0.001		
CAT BG-650 Windrow Elevator	-	0.003	-	0.003	-	0.001	-	-
CAT CB-534C Vibratory Compactor	-	0.009	-	0.010	-	0.004	-	-
Spillway Construction Days								
Concrete Transit Mixer		-	-	0.026	0.130	0.068	-	-
Concrete Pump Trucks		-	-	0.010	0.052	0.027	-	-
All terrain 20-T crane CAT D7G Bulldozer	-	-	-	0.011	0.053 0.186	0.028	-	-
CAT 07G Buildozer CAT 657 Scraper	-	-	-	0.037	0.186	0.098	-	-
CAT CB-534C Vibratory Compactor	-	-	-	0.016	0.078	0.041	-	-
CAT D350E Articulating Truck		-	-	0.010	0.052	0.027	-	-
Front End Loader 966F End Dump Trucks	-	-	-	0.020 0.031	0.101 0.156	0.053	-	-
Water Truck	-	-	-	0.027	0.133	0.070	-	
Subtotal								
Parapet Wall Construction Days All terrain 20-T crane	-	-	-	-	-	-	-	
Flatbed Truck for Forms movement	-	-	-	-	-	-	-	-
Subtotal								
Maximum Daily	0.202	3.955	5.298	4.398	1.610	1.168	0.016	-
	Annual Emissi	ons (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
BoreDrillRigs	-	0.083	0.175	0.132	- 0.050	- 0.000	-	-
Cranes CrawlerTractors	0.029	0.571	0.530	0.011 0.442	0.053 0.186	0.028 0.175	0.006	-
Excavators	0.023	0.027	0.077	- 0.442	-	-	-	-
Graders	0.021	0.053	0.006	0.003	-	0.004	-	-
OffHighwayTractorsCompactors	-	0.254	0.242	0.212	0.078	0.089	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul	0.044 0.086	0.744 0.395	1.649 0.250	1.067 0.295	0.133 0.391	0.129 0.282	0.005	
Pavers	-	0.002	-	0.003	-	0.001	-	
PavingEquipment	-	0.003	- 0.405	0.003	-	0.001	- 0.005	-
RubberTiredLoaders Scrapers	-	0.170 1.654	0.105 2.262	0.101 2.129	0.101 0.667	0.110 0.350	0.005	-
	- 1	1.004	2.202	2.123	0.001	0.000	-	
Остарсто			ļ		1.610	1		

										Quality N	<u> </u>
			Unmitigated						tigated Da		
	No. of			Total	Exhaust	Dust	Total	Total	Exhaust	Dust	Total
Schedule	Years	days		PM10	PM10	PM10	PM2.5	PM10	PM10	PM10	PM2.5
Scriedule	rears	uays									
			Auxiliary								
			Spillway								
na	0	0	Excavation								
			Auxiliary	549.02	0.68	548.34	114.11	82.26	0.01	82.25	17.10
			Fuseplug								
			Spillway								
2009-2011	3	720	Construction								
2003 2011		720	Tunnel	0	0	0	0.00	0	0	0	0.00
	_	_		U	U	U	0.00	U	U	U	0.00
na	0	0	Excavation				0.00	_	_	^	0.00
	_	_	Tunnel	0	0	0	0.00	0	0	0	0.00
na	0	0	Construction								
			Main Dam	8.19	0.00	8.19	1.70	1.23	0.00	1.23	0.26
2007-2013	7	720	Construction								
na	0	0	Dike 1	0	0	0	0.00	0	0	0	0.00
na	0	0	Dike 2	0	0	0	0.00	0	0	0	0.00
na	0	0	Dike 3	0	0	0	0.00	0	0	0	0.00
-			Mooney Ridge	0	0	0	0.00	0	0	0	0.00
na	0	0		_		_				_	
2013	1	20	Dike 4	459.61	0.64	458.97	95.53	68.52	0.01	68.51	14.24
2008	1	180	Dike 5	193.03	0.73	192.30	40.12	28.71	0.01	28.70	5.97
2008	1	65	Dike 6	222.17	0.73	221.44	46.18	33.06	0.01	33.05	6.87
2009-2010	2	580	RWD	163.55	0.68	162.87	33.99	24.45	0.02	24.43	5.08
2012	1	240	LWD	122.06	0.64	121.42	25.37	18.13	0.02	18.12	3.77
	0	0	Dike 7								
na				0	0	0	0.00	0	0	0	0.00
na	0	0	Dike 8	0	0	0	0.00	0	0	0	0.000
2008-2010	3	360	MIAD	762.18	0.74	761.44	158.42	113.68	0.02	113.66	23.63
							<u>-</u> '				
				Unmi	itigated lb	s/dav		Miti	gated lbs	/dav	
			2007	8.19	0	8.19	1.70	1.2285	0	1.2285	0.26
			2008	1185.57	2.20	1183.37	246.42	176.68	0.04	176.64	36.72
			2009	1482.94	2.10	1480.84	308.23	221.62	0.05	221.57	46.06
			2010	1482.94	2.10	1480.84	308.23	221.62	0.05	221.57	46.06
			2011	557.21	0.68	556.53	115.81	83.49	0.01	83.48	17.35
			2012	130.25	0.64	129.61	27.07	19.36	0.01	19.35	4.02
			2013	467.80	0.64	467.16	97.23	69.75	0.01	69.74	14.50
			2014	0	0	0	0.00	0	0	0	0.00
			2011	ŭ	ŭ	ŭ	0.00	_ ŭ	Ū	Ŭ	0.00
						, ,					
	NIf		Unmitigated Ar						gated An		
	No. of		Unmitigated Ar	Total	Exhaust	Dust		Total	Exhaust	Dust	
Schedule	No. of Years	days	Unmitigated Ar								
Schedule		days	Unmitigated Ar Auxiliary	Total	Exhaust	Dust	0.00	Total	Exhaust	Dust	0.00
Schedule		days	Auxiliary	Total PM10	Exhaust PM10	Dust PM10	0.00	Total PM10	Exhaust PM10	Dust PM10	0.00
	Years		Auxiliary Spillway	Total PM10	Exhaust PM10	Dust PM10	0.00	Total PM10	Exhaust PM10	Dust PM10	0.00
Schedule		days 0	Auxiliary Spillway Excavation	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Total PM10 0	Exhaust PM10 0	Dust PM10	
	Years		Auxiliary Spillway Excavation Auxiliary	Total PM10	Exhaust PM10	Dust PM10	0.00	Total PM10	Exhaust PM10	Dust PM10	0.00
	Years		Auxiliary Spillway Excavation Auxiliary Fuseplug	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Total PM10 0	Exhaust PM10 0	Dust PM10	
na	Years 0	0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Total PM10 0	Exhaust PM10 0	Dust PM10	
	Years		Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction	Total PM10 0 65.88	Exhaust PM10 0 0.08	Dust PM10 0 65.80	13.69	Total PM10 0 9.87	Exhaust PM10 0 0.000	Dust PM10 0 9.87	2.05
na	Years 0	0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Total PM10 0	Exhaust PM10 0	Dust PM10	
na	Years 0	0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction	Total PM10 0 65.88	Exhaust PM10 0 0.08	Dust PM10 0 65.80	13.69	Total PM10 0 9.87	Exhaust PM10 0 0.000	Dust PM10 0 9.87	2.05
na 2009-2011	Years 0	720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel	Total PM10 0 65.88	Exhaust PM10 0 0.08	Dust PM10 0 65.80	0.00	Total PM10 0 9.87	Exhaust PM10 0 0.000	Dust PM10 0 9.87	2.05
na 2009-2011 na	0 3 0	0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel	Total PM10 0 65.88	0 0 0.08	Dust PM10 0 65.80	13.69	Total PM10 0 9.87	0 0.00 0	Dust PM10 0 9.87	2.05
na 2009-2011	Years 0	720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction	Total PM10 0 65.88 0	0 0.08	Dust PM10 0 0 65.80 0 0	0.00	9.87 0	Exhaust PM10 0 0.000 0.000 0	Dust PM10 0 9.87 0 0	2.05 0.00 0.00
na 2009-2011 na na	0 3 0 0	0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam	Total PM10 0 65.88	0 0 0.08	Dust PM10 0 65.80	0.00	Total PM10 0 9.87	0 0.00 0	Dust PM10 0 9.87	2.05
na 2009-2011 na na 2007-2013	0 3 0 0 7	0 720 0 0 720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction	Total PM10 0 65.88 0 0 0.42	0 0.08 0.00 0.00	Dust PM10 0 65.80 0 0 0 0.42	0.00 0.00 0.09	Total PM10 0 9.87 0 0 0 0.06	Exhaust PM10	Dust PM10 0 9.87 0 0 0 0.06	2.05 0.00 0.00 0.01
na 2009-2011 na na 2007-2013	0 3 0 0 7 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1	Total PM10 0 65.88 0 0 0.42	0 0.08 0.00 0.00 0	Dust PM10 0 65.80 0 0 0.42 0	0.00 0.00 0.09 0.00	Total PM10 0 9.87 0 0 0.06 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0	2.05 0.00 0.00 0.01 0.00
na 2009-2011 na na 2007-2013 na na	0 3 0 0 7 0 0 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 65.88 0 0 0.42 0 0	0 0.08 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0	0.00 0.00 0.09 0.00 0.00	Total PM10 0 9.87 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 0 9.87 0 0 0 0.06 0 0 0	2.05 0.00 0.00 0.01 0.00 0.00
na 2009-2011 na na 2007-2013	0 3 0 0 7 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3	Total PM10 0 65.88 0 0 0.42 0 0	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0.42 0 0 0	0.00 0.00 0.00 0.09 0.00 0.00 0.00	Total PM10 0 9.87 0 0 0 0.06 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0 0.06 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na	0 3 0 0 7 0 0 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 65.88 0 0 0.42 0 0	0 0.08 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0	0.00 0.00 0.09 0.00 0.00	Total PM10 0 9.87 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 0 9.87 0 0 0 0.06 0 0 0	2.05 0.00 0.00 0.01 0.00 0.00
na 2009-2011 na na 2007-2013 na na	0 3 0 0 7 0 0 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3	Total PM10 0 65.88 0 0 0.42 0 0	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0.42 0 0 0	0.00 0.00 0.00 0.09 0.00 0.00 0.00	Total PM10 0 9.87 0 0 0 0.06 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0 0.06 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na na	7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 720 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0 65.88 0 0.42 0 0 0 0 0	0 0.08 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 0	0.00 0.00 0.09 0.00 0.00 0.00 0.00	Total PM10 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na na 2013	7 0 0 0 0 1	720 0 0 720 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0 65.88 0 0.42 0 0 4.60	0.08 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 65.80 0 0 0.42 0 0 4.59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0.06 0 0.06 0 0.69	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.14
na 2009-2011 na na 2007-2013 na na na 2013 2008	7 0 0 0 0 0 1 1 1	720 0 0 720 0 0 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5	Total PM10 0 65.88 0 0.42 0 0 4.60 17.37	0.08 0.00 0.00 0.00 0.00 0.01 0.007	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0.06 0 0.06 0 0.69 2.58	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0 0.69 2.58	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008	7 0 0 0 0 1 1 1 1 1	0 0 0 0 720 0 0 0 0 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22	0.08 0.00 0.00 0.00 0.00 0.01 0.07 0.02	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0.06 0 0.69 2.58 1.07	Exhaust PM10 0 0.00 0.00 0 0.00 0 0 0 0 0	Dust PM10 0 9.87 0 0.06 0 0.06 0 0.69 2.58 1.07	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.14 0.54 0.22
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010	7 0 0 0 0 1 1 1 1 2	0 0 0 0 720 0 0 0 0 0 0 0 20 180 65 580	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71	0.08 0.00 0.00 0.00 0.01 0.002 0.10	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 3.55	Exhaust PM10 0 0.00 0.00 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.54	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012	7 0 0 0 0 1 1 1 1 2 1 1	0 0 0 0 0 0 0 0 0 0 0 0 180 65 580 240	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65	Exhaust PM10 0 0.08 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04	Total PM10 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.55 2.18	Exhaust PM10 0 0.00 0.00 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.54 2.17	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010	7 0 0 0 0 1 1 1 1 2	0 0 0 0 720 0 0 0 0 0 0 0 20 180 65 580	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD	Total PM10 0 65.88 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0	0.08 0.00 0.00 0.00 0.01 0.002 0.10	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 3.55	Exhaust PM10 0 0.00 0.00 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.54	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012	7 0 0 0 0 1 1 1 1 2 1 1	0 0 0 0 0 0 0 0 0 0 0 0 180 65 580 240	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65	Exhaust PM10 0 0.08 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04	Total PM10 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.55 2.18	Exhaust PM10 0 0.00 0.00 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0 0 0 0 1.07 2.58 1.07 3.54 2.17	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 65.88 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0 0	Exhaust PM10 0 0.08 0 0 0.00 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 4.59 17.31 7.20 23.62 14.57 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04 0.00 0.00	Total PM10 9.87 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na	7 0 0 0 0 1 1 1 2 1 0 0 0 0 0 0 0 0 0 0 0	720 0 0 720 0 0 0 0 0 0 20 180 65 580 240 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Auxiliary Fuseplug Spillway Construction Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7	Total PM10 0 65.88 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 4.59 17.31 7.20 23.62 14.57 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04 0.00	Total PM10 9.87 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04 0.00 0.00	Total PM10 9.87 0 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0 6.82	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 9.87 0 0.06 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0.6.82	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 45.73	0.08 0.00 0.00 0.00 0.01 0.00 0.00 0.00	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 6.82	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 9.87 0 0.06 0.06 0 0.69 2.58 1.07 3.54 2.17 0 6.82	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00 1.42
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 0 0 4.60 17.37 7.222 23.71 14.65 0 0 45.73	Exhaust PM10 0 0.08 0 0.00 0 0.00 0 0.01 0.07 0.02 0.10 0.08 0 0 0.04 mitigated 0	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69 t/y 0.4212	0.00 0.00	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 6.82	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0.6.82	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 45.73	0.08 0.00 0.00 0.00 0.01 0.00 0.00 0.00	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 6.82	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 9.87 0 0.06 0.06 0 0.69 2.58 1.07 3.54 2.17 0 6.82	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00 1.42
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73 Un 0.4212 70.75	0.008 0.000 0.001 0.002 0.002 0.004 0.004 0.004	Dust PM10 0 65.80 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 45.69 t/y 0.4212 70.61	0.00 0.00	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0.682	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00	Dust PM10 0 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0.6.82 /y 0.0632 10.54	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42 0.01 2.19
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73	Exhaust	Dust PM10 0 65.80 0 0 0.42 0 0 4.59 17.31 7.20 23.62 14.57 0 45.69 tty 0.4212 70.61 135.52	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.96 3.61 1.50 4.93 3.04 0.00 0.00 9.51	Total PM10 9.87 0 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0 6.82	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 9.87 0 0 0.06 0 0.69 2.58 1.07 0 6.82 /v 0.0632 10.54 20.30	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00 1.42 0.01 2.19 4.22
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73 Un 0.4215 135.75	Exhaust PM10 0 0.08 0 0 0.00 0 0.00 0 0 0.01 0.07 0.02 0.10 0.08 0 0 0.04 mitigated 0 0.13 0.22 0.22	Dust PM10 0 65.80 0 0 0.42 0 0 4.59 17.31 7.20 23.62 14.57 0 45.69 tty 0.4212 70.61 135.52 135.52	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.50 4.93 3.04 0.00 0.00 9.51	Total PM10 9.87 0 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0.682 N 0.0632 10.54 20.30 20.30	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 9.87 0 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0.682 V 0.0632 10.54 20.30 20.30	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 0.00 1.42 0.01 2.19 4.22 4.22
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011	Total PM10 0 65.88 0 0 0.42 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73 Un 0.4212 70.75 135.75 66.30	Exhaust PM10 0 0.08 0 0 0.00 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0.42 0 0 4.59 17.31 7.20 23.62 14.57 0 45.69 tty 0.4212 70.61 135.52 135.52 66.22	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0.682 0.0632 10.54 20.30 20.30 9.93	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 0.682 0.0632 10.54 20.30 9.93	2.05 0.00 0.00 0.00 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42 0.01 2.19 4.22 4.22 2.06
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011 2012	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73 Un 0.4212 70.75 135.75 66.30 15.07	Exhaust PM10 0 0.08 0 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69 tty 0.4212 70.61 135.52 135.52 66.22 14.99	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0.682 0.0632 10.54 20.30 9.93 2.24	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00	Dust PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 6.82 // // // // // // // // //	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42 0.01 2.19 4.22 4.22 2.06 0.47
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011 2012 2013	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 45.73 Un 0.4212 70.75 135.75 135.75 135.75 66.30 15.07 5.02	Exhaust PM10 0 0.08 0 0 0.00 0 0.00 0 0 0.01 0.07 0.02 0.10 0.08 0 0 0.01 0.01 0.02 0.22 0.22 0.08 0.08 0.01	Dust PM10 0 65.80 0 0 0.42 0 0 0 0 4.59 17.31 7.20 23.62 14.57 0 45.69 t/y 0.4212 70.61 135.52 70.61 135.52 66.22 14.99 5.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 6.82 M 0.0632 10.54 20.30 20.30 20.30 2.24 0.75	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00	Dust PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 6.82 0 0.0632 10.54 20.30 20.30 20.30 29.93 2.24 0.75	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42 0.01 2.19 4.22 4.22 2.06 0.47 0.16
na 2009-2011 na na 2007-2013 na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 0 180 65 580 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011 2012	Total PM10 0 65.88 0 0 0.42 0 0 0 4.60 17.37 7.22 23.71 14.65 0 0 45.73 Un 0.4212 70.75 135.75 66.30 15.07	Exhaust PM10 0 0.08 0 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 65.80 0 0 0 0.42 0 0 0 4.59 17.31 7.20 23.62 14.57 0 0 45.69 t/y 0.4212 70.61 135.52 135.52 66.22 14.99	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Total PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.55 2.18 0 0.682 0.0632 10.54 20.30 9.93 2.24	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00	Dust PM10 9.87 0 0 0.06 0 0.06 0 0.69 2.58 1.07 3.54 2.17 0 6.82 // // // // // // // // //	2.05 0.00 0.00 0.01 0.00 0.00 0.00 0.14 0.54 0.22 0.74 0.45 0.00 1.42 0.01 2.19 4.22 4.22 2.06 0.47

	PN	/ 110	PM2		
	Uncontrolled	Controlled	Uncontrolled	Controlled	
Max Daily (lbs/day)	2339	165	1576	111	
Annual (t/y)	309	22	208	15	
CARB Profile No. 343 (Cement Prod./Concre	te Batching)			
PM10	0.92				
PM2.5	0.62				
Source:					
\Construction\On-site	Equipment\PMSIZE_0	9_26_02.xls			

Table 11.12-2 (English Units)

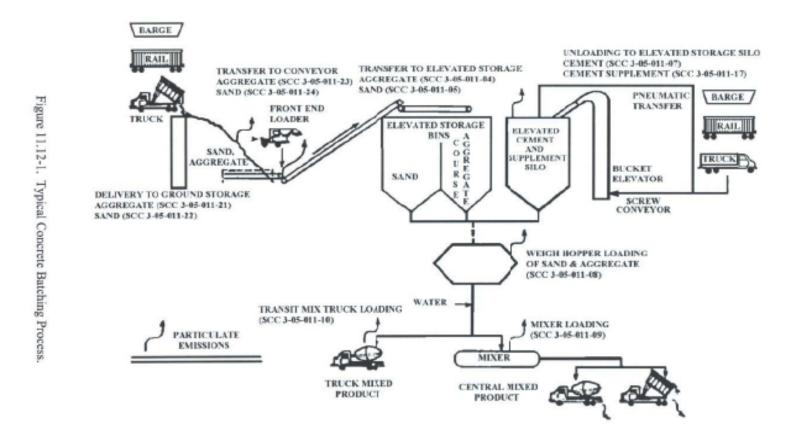
Emission Factors for Concrete Batching a

Source (SCC)		Uncontroll	ed			Contro	lled	
	Total PM	Emission Factor Rating	Total PM10	Emission Factor Rating	Total PM	Emission Factor Rating	Total PM10	EmissionFa ctor Rating
Aggregate transfer ^b (3-05-011-04, 21,23) Sand transfer ^b (3-05-011-05,22,24)	0.0069 0.0021	D D	0.0033 0.00099	D D	ND ND		ND ND	
Cement unloading to elevated storage silo (pneumatic) ^c (3-05-011-07)	0.72	E	0.46	E	0.00099	D	0.00034	D
Cement supplement unloading to elevated storage silo (pneumatic) ^d (3-05-011-17) Weigh hopper loading ^e (3-05-011-08)	3.14 0.0051	E D	1.10 0.0024	E D	0.0089 ND	D	0.0049 ND	E
Mixer loading (central mix) ^f (3-05-011-09)	0.524 or Eqn 11.	_	0.156 or Ed	_	0.0184 or Eqn	В	0.0055 or E	ΕB
Truck loading (truck mix) ⁹ (3-05-011-10) Vehicle traffic (paved roads) Vehicle traffic (unpaved roads) Wind erosion from aggregate and sand	1.122 or Eqn 11. See AP-42 Section See AP-42 Section	on 13.2.1	0.311 or Ed	В	0.0981 or Eqn	В	0.0263 or E	: B
storage piles	See AP-42 Section	on 13.2.5						

ND = No data

- b Reference 9 and 10. Emission factors are based upon an equation from AP-42, Section 13.2.2, with kPM-10 = .35, kPM = .74, U = 10mph, Maggregate =1.77%, and Msand = 4.17%. These moisture contents of the materials (Maggregate and Msand) are the averages of the values obtained from Reference 9 and Reference 10.
- c The uncontrolled PM & PM-10 emission factors were developed from Reference 9. The controlled emission factor for PM was developed from References 9, 10, 11, and 12. The controlled emission factor for PM-10 was developed from References 9 and 10.
- d The controlled PM emission factor was developed from Reference 10 and Reference 12, whereas the controlled PM-10 emission factor was developed from only Reference 10.
- e Emission factors were developed by using the Aggregate and Sand Transfer Emission Factors in conjunction with the ratio of aggregate and sand used in an average yard3 of concrete. The unit for these emission factors is lb of pollutant per ton of aggregate and sand.
- f References 9, 10, and 14. The general factor is the arithmetic mean of all test data.
- g Reference 9, 10, and 14. The general factor is the arithmetic mean of all test data. .

a All emission factors are in lb of pollutant per ton of material loaded unless noted otherwise. Loaded material includes course aggregate, sand, cement, cement supplement and the surface moisture associated with these materials. The average material composition of concrete batches presented in references 9 and 10 was 1865 lbs course aggregate, 1428 lbs sand, 491 lbs cement and 73 lbs cement supplement. Approximately 20 gallons of water was added to this solid material to produce 4024 lbs (one cubic yard) of concrete.



Source (SCC)	Uncontrolled	Controlled	Uncontrolled	Controlled
	Efs -Total PM10 (lb/ton cement)	Efs -Total PM10 (lb/ton cement)	PM-10 Emissions (lbs/day)	PM-10 Emissions (lbs/day)
Aggregate transfer (3-05-011-04, 21,23) Sand transfer (3-05-011-05,22,24) Cement unloading to elevated	0.0033 0.00099	0.0033 0.00099	1.47 0.18	1.47 0.18
storage silo (pneumatic) ^c (3-05-011- 07) Cement supplement unloading to elevated storage silo (pneumatic) ^d (3-	0.46	0.00034	27.77	0.02
05-011-17)	1.10	0.0049	66.40	0.30
Weigh hopper loading • (3-05-011-08) Mixer loading (central mix) ¹ (3-05-011-	0.0024	0.0024	11.47	11.47
09)	0.156	0.0055	745.54	26.29
Truck loading (truck mix) ⁹ (3-05-011- 10) Total	0.311	0.0263	1486.30 2339	125.69 165

Plant Info

Material processing rate per site Total number of sites

300 cu yd/day

max allowed per day as said by Reclaimation

AP-42 Concrete Composition

		weight/unit		fraction	Daily Rate (t/d)
Course Aggregate		1865	lb	0.46	280
Sand		1428	lb	0.35	214
Cement		491	lb	0.12	74
Cement Supplement		73	lb	0.02	11
	<u>SubTotal</u>	3857			
Water		167			
	<u>Total</u>	4024			
Concrete Density		4024	рсу		

CDM Recommended Concrete

			CDM recommended fraction							
Course Aggregate			0.6	445						
Sand			0.3	181						
Cement			0.1	60						
	Total	4779								
Concrete Density		4946 pcy								

	Uncontrolled-	Emissions (lb/day)	Controlled-Em	issions (lb/day)	Uncontrolled	-Emissions (tpy)	Controlled-Emissions (tpy)		
	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5	
Total	136.98	11.09	13.61	1.17	18.08	1.46	1.80	0.15	

The following emission factors were downloaded from AP-42, and used in emission calculations of PM10 for material processing and screening. The highlighted area includes the applicable source/process names and corresponding emission factors.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (Ib/Ton)^a

Source b	Total	EMISSION	Total	EMISSION	Total	EMISSION	
	Particulate Matter r,s	FACTOR RATING	PM-10	FACTOR RATING	PM-2.5	FACTOR RATING	
Primary Crushing	ND		ND ⁿ		ND ⁿ		
(SCC 3-05-020-01)			n		n		
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND ⁿ		ND ⁿ		
Secondary Crushing (SCC 3-05-020-02)	ND		ND^n		ND^n		
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND ⁿ		ND^n		
Tertiary Crushing	0.0054 ^d	E	0.0024°	С	ND^n	<	0.000444
(SCC 3-050030-03)							
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0012 ^d	E	0.00054 ^p	С	0.00010 ^q	E	
Fines Crushing	0.0390 ^e	Е	0.0150 ^e	Е	ND	<	0.000875
(SCC 3-05-020-05) Fines Crushing (controlled)	0.0030 ^f	Е	0.0012 ^f	Е	0.000070 ^q	Е	
(SCC 3-05-020-05)							
Screening	0.025 ^c	Е	0.0087 ^l	С	ND	<	0.000588
(SCC 3-05-020-02, 03)							
Screening (controlled) (SCC 3-05-020-02, 03)	0.0022 ^d	Е	0.00074 ^m	С	0.000050 ^q	Е	
Fines Screening (SCC 3-05-020-21)	0.30g	Е	0.072 ⁹	Е	ND		
Fines Screening (controlled) (SCC 3-05-020-21)	0.0036 ⁹	E	0.0022 ^g	E	ND		
Conveyor Transfer Point (SCC 3-05-020-06)	0.0030 ^h	E	0.00110 ^h	D	ND	<	0.000311
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00014 ⁱ	E	4.6 x 10 ⁻⁵ⁱ	D	1.3 x 10 ^{-5q}	E	
Wet Drilling - Unfragmented Stone	ND		8.0 x 10 ^{-5j}	Е	ND		
(SCC 3-05-020-10)							
Truck Unloading -Fragmented Stone	ND		1.6 x 10 ^{-5j}	Е	ND		
(SCC 3-05-020-31)	_						
Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		0.00010 ^k	E	ND		

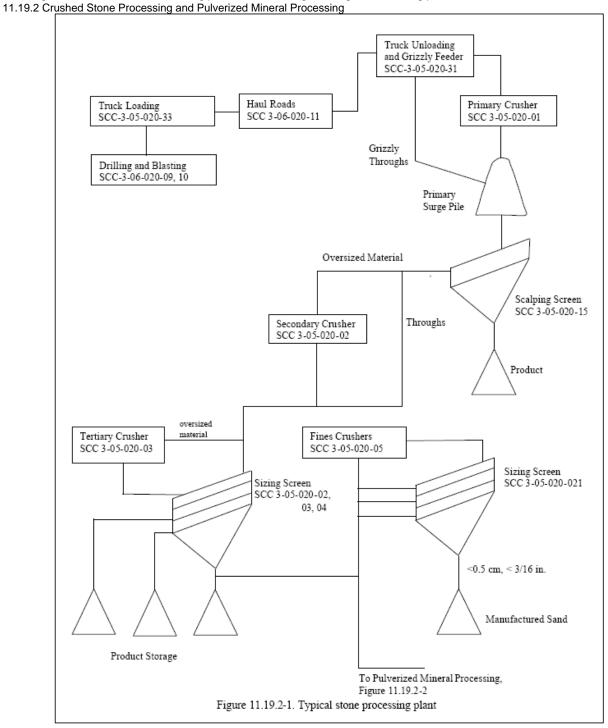
a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

This diagram shows the material handling processes, including crushing and screening processes, which is downloaded from AP-42



5000 ton/day

Material processing rate per site
On-site Material Processing & Screening

one site

					Uncont	rolled-	Controlled-	Emissions	Uncont	rolled-	Controlled-	-Emissions
Source	Uncontrolled	-EF (lb/ton)	Controlled-	EF (lb/ton)	Emissions	s (lb/day)	(lb/c	lay)	Emissio	ns (tpy)	(tp	oy)
	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5	PM-10	PM-2.5
Tertiary Crushing	0.0024	0.00044	0.00054	0.00010	12.00	2.22	2.70	0.50	1.58	0.29	0.36	0.07
Fines Crushing	0.015	0.00088	0.00120	0.00007	75.00	4.38	6.00	0.35	9.90	0.58	0.79	0.05
Screening	0.0087	0.00059	0.00074	0.00005	43.50	2.94	3.70	0.25	5.74	0.39	0.49	0.03
Conveyor Transfer Point	0.0011	0.00031	0.00005	0.00001	5.50	1.55	0.23	0.07	0.73	0.21	0.03	0.01
Wet Drilling - Unfragmented Stone	8.00E-05	0	8.00E-05	0	0.40	0.00	0.40	0.00	0.05	0.00	0.05	0.00
Truck Unloading -Fragmented Stone	1.60E-05	0	1.60E-05	0	0.08	0.00	0.08	0.00	0.01	0.00	0.01	0.00
Truck Unloading - Conveyor, crushed	0.0001	0	0.0001	0	0.50	0.00	0.50	0.00	0.07	0.00	0.07	0.00
Total					136.98	11.09	13.61	1.17	18.08	1.46	1.80	0.15

100 sq ft/blast

Auxillary(acre)	sq ft	total blasts	ef (lb/blast)	work day	emission rates (lb/day)	rate (g/s/m2)
39.4	1716264	17163	2.7	780	59.4	2.81773E-06

http://www.sonoma-county.org/prmd/docs/eir/bluerockdeir/apdx-h.pdf#search='estimating%20PM10%20from%20rock%20blasting'

Blasting

Blasting is used in the quarrying process to break up or open areas of rock for extraction. PM10 emissions are generated during the blast. Much of the particulate matter generated from blasting is larger sized particulate matter, which settles out quickly near the blast area. However, a portion of the particulate matter that becomes airborne is PM10 and may remain airborne for a period of time. During the baseline period there were an average of 15 blasts per year. Under the proposed project it is expected that blasting would occur an average of 30 to 40 times per year.

PM10 emissions from blasting were estimated assuming 15 blasts per year for baseline conditions and 40 blasts per year for the project. The emission factor for blasting uses the equation for blasting contained in the Sonoma County Aggregate Resources Management Plan and Environmental Impact Report (EIP Associates, 1994). The PM10 emission factor (lb/blast) depends on the area of the blast, the depth of the blast, and the material moisture content. The blast area was assumed to be 100 square feet with a depth of 40 feet, and a material moisture content of 2 percent. The resulting emission factor for PM10 is 2.7 pounds of PM10 blast occurrence.

ВΙ

NOx	Daily Emission	ı (lbs/day)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days	82	164	25	0	0	16	12	0
Subtotal	146.30	579.90	251.04	-	-	95.19	78.83	-
Shell Excavation Days	0	198	310	200	0	30	0	0
Subtotal	-	1,042.60	929.70	556.16	-	78.83	-	-
Embankment Placement Days	0	190	320	200	0	30	0	0
Subtotal	-	792.68	632.27	299.04	-	154.82	-	-
Shell Placement Days	0	325	235	315	0	80	0	0
Subtotal	-	630.70	251.70	545.74	-	115.22	-	-
Crest Pavement Days	0	11	0	26	0	6	0	0
Subtotal	-	337.58	ı	197.47	-	181.12	-	-
Spillway Construction Days	0	0	0	50	250	131	0	0
Subtotal	-	-	ı	389.67	389.67	389.67	-	-
Parapet Wall Construction Days	0	0	0	0	0	0	0	0
Subtotal	-	-	1	-	=	-	-	-
Maximum Daily	146.3	1,042.6	929.7	556.2	389.7	389.7	78.8	=

	Annual Emissi	ons (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days	0	0	0	0	0	0	0	(
Subtotal	6.00	6.86	3.14	-	-	0.76	0.47	-
Shell Excavation Days	0	0	0	0	0	0	0	C
Subtotal	-	46.43	81.22	55.62	-	1.18	-	-
Embankment Placement Days	0	0	0	0	0	0	0	C
Subtotal	-	22.55	50.01	29.90	-	2.32	-	-
Shell Placement Days	0	0	0	0	0	0	0	0
Subtotal	-	35.49	29.57	41.12	-	4.61	-	-
Crest Pavement Days	0	0	0	0	0	0	0	0
Subtotal	-	0.62	-	0.81	-	0.27	-	-
Spillway Construction Days	0	0	0	0	0	0	0	0
Subtotal	-	-	-	9.74	48.71	25.52	-	-
Parapet Wall Construction Days	0	0	0	0	0	0	0	0
Subtotal	-	-	-	-	-	-	-	-
Annual Total (Mitigated)	5.998	111.957	163.939	137.186	48.708	34.670	0.473	-

Alternative 3 Data and Results

Alternative 3 - Unmitigated Emissions Summary

			Em	nissions of F	ROG (lbs/da	ay)			
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	89.30	287.30	175.56	172.26	172.26	172.26	0.00	0.00	287.30
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	89.30	287.30	175.56	172.26	172.26	172.26	0.00	0.00	287.30
Offsite Haul Trucks	0.00	15.83	17.23	19.27	9.14	4.36	21.58	0.00	21.58
Worker Trips	0.43	2.42	1.89	1.47	1.40	1.33	1.73	0.00	2.42
Offsite Subtotal	0.43	18.26	19.12	20.73	10.54	5.69	23.32	0.00	23.32
Total	89.73	305.56	194.68	192.99	182.80	177.95	23.32	0.00	305.56
				nissions of					
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	756.38	2420.44	1485.38	1462.08	1462.08	1462.08	0.00	0.00	2420.44
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	756.38	2420.44	1485.38	1462.08	1462.08	1462.08	0.00	0.00	2420.44
Offsite Haul Trucks	0.00	58.70	63.86	71.43	33.88	16.17	80.02	0.00	80.02
Worker Trips	14.54	82.72	64.54	50.00	47.72	45.45	59.09	0.00	82.72
Offsite Subtotal	14.54	141.42	128.40	121.43	81.60	61.62	139.10	0.00	141.42
Total	770.92	2561.86	1613.78	1583.51	1543.68	1523.70	139.10	0.00	2561.86
				nissions of I				•	
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	522.52	1699.96	1050.52	1004.36	1004.36	1004.36	0.00	0.00	1699.96
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	522.52	1699.96	1050.52	1004.36	1004.36	1004.36	0.00	0.00	1699.96
Offsite Haul Trucks	0.00	261.10	284.08	317.74	150.69	71.91	355.92	0.00	355.92
Worker Trips	1.41	8.01	6.25	4.84	4.62	4.40	5.72	0.00	8.01
Offsite Subtotal	1.41	269.11	290.33	322.59	155.31	76.31	361.64	0.00	361.64
Total	523.93	1969.07	1340.85	1326.95	1159.67	1080.67	361.64	0.00	1969.07
	2007	2000		issions of F	2011		2012	2014	PEAK
Construction Equipment	2007 10.92	2008	2009	2010 32.48	32.48	2012	2013	2014	
Onsite Fugitive Dust	346.97	40.98 360.76	21.70 926.05	925.37	32.46 715.04	32.48 147.91	0.00 153.44	0.00 0.00	40.98 926.05
Concrete Batching	165.41	165.41	165.41	165.41	165.41	165.41	165.41	0.00	165.41
Crushing/Processing	27.22	27.22	27.22	27.22	27.22	27.22	27.22	0.00	27.22
Onsite Subtotal	550.52	594.37	1140.38	1150.48	940.15	373.02	346.07	0.00	1150.48
Offsite Haul Trucks	0.00	57.22	62.26	69.64	33.02	15.76	78.00	0.00	78.00
Worker Trips	2.39	13.60	10.61	8.22	7.84	7.47	9.71	0.00	13.60
Offsite Subtotal	2.39	70.82	72.87	77.86	40.87	23.23	87.72	0.00	87.72
Total	552.91	665.19	1213.25	1228.34	981.02	396.25	433.79	0.00	1228.34
Total	002101	000110		issions of P			100110	0.00	122010-1
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	10.05	37.70	19.96	29.88	29.88	29.88	0.00	0.00	37.70
Onsite Fugitive Dust	71.98	74.53	192.42	192.35	148.64	30.37	31.35	0.00	192.42
Concrete Batching	111.47	111.47	111.47	111.47	111.47	111.47	111.47	0.00	111.47
Ö	2.33	2.33	2.33	2.33	2.33	2.33	2.33	0.00	2.33
Crushing/Processing	2.33								
Crushing/Processing Onsite Subtotal	195.83	226.04	326.19	336.04	292.33	174.05	145.15	0.00	336.04
	195.83	226.04	326.19						
Onsite Subtotal	195.83 0.00	226.04 14.98	326.19 16.30	18.23	8.65 1.47	4.13	20.42	0.00	20.42
Onsite Subtotal Offsite Haul Trucks	195.83	226.04	326.19		8.65				

Notes:

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Concrete Batching and Materials Processing (Crushing) are assume to begin in 4th Quarter of 2007; one (1) Batch Plant and two (2) Processing Facilities assumed to operate during project construction. Offsite Haul Trucks and Worker Trips includes paved road dust in PM10 and PM2.5 emission factors.

Alternative 3 - Unmitigated Emissions Summary

			Emi	ssions of R	OG (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	3.66	18.76	18.39	32.30	28.73	21.73	0.00	0.00	32.30
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	3.66	18.76	18.39	32.30	28.73	21.73	0.00	0.00	32.30
Offsite Haul Trucks	0.00	0.04	0.39	0.38	0.45	0.01	0.07	0.00	0.45
Worker Trips	0.06	0.13	0.21	0.16	0.20	0.02	0.12	0.00	0.21
Offsite Subtotal	0.06	0.17	0.60	0.53	0.66	0.03	0.18	0.00	0.66
Total	3.72	18.93	18.99	32.84	29.39	21.76	0.18	0.00	32.84
					CO (tons/ye				
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	31.01	158.47	155.76	274.27	243.75	184.43	0.00	0.00	274.27
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	31.01	158.47	155.76	274.27	243.75	184.43	0.00	0.00	274.27
Offsite Haul Trucks	0.00	0.15	1.45	1.39	1.69	0.04	0.25	0.16	1.69
Worker Trips	1.89	4.39	7.21	5.32	6.95	0.77	3.99	0.00	7.21
Offsite Subtotal	1.89	4.54	8.66	6.71	8.64	0.81	4.24	0.16	8.66
Total	32.90	163.00	164.41	280.98	252.39	185.24	4.24	0.16	280.98
			Emi	issions of N	IOx (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	21.42	111.57	110.20	190.23	167.74	126.73	0.00	0.00	190.23
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	21.42	111.57	110.20	190.23	167.74	126.73	0.00	0.00	190.23
Offsite Haul Trucks	0.00	0.65	6.44	6.19	7.50	0.17	1.10	0.00	7.50
Worker Trips	0.18	0.43	0.70	0.51	0.67	0.07	0.39	0.00	0.70
Offsite Subtotal	0.18	1.08	7.14	6.71	8.17	0.24	1.49	0.00	8.17
Total	21.61	112.65	117.34	196.94	175.91	126.97	1.49	0.00	196.94
			Emi	ssions of P	M ₁₀ (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	0.45	2.45	1.95	4.91	5.25	4.06	0.00	0.00	5.25
Onsite Fugitive Dust	13.94	44.06	112.56	103.87	86.44	18.11	18.08	0.00	112.56
Concrete Batching	5.46	21.83	21.83	21.83	21.83	21.83	21.83	0.00	21.83
Crushing/Processing	0.90	3.59	3.59	3.59	3.59	3.59	3.59	0.00	3.59
Onsite Subtotal	20.74	71.94	139.94	134.21	117.11	47.60	43.51	0.00	139.94
Offsite Haul Trucks	0.00	0.14	1.41	1.36	1.64	0.04	0.24	0.00	1.64
Worker Trips	0.31	0.72	1.18	0.87	1.14	0.13	0.66	0.00	1.18
Offsite Subtotal	0.31	0.87	2.60	2.23	2.79	0.16	0.90	0.00	2.79
Total	21.05	72.80	142.54	136.44	119.90	47.76	44.41	0.00	142.54
			Emi	ssions of P	M _{2.5} (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	0.41	2.25	1.80	4.52	4.83	3.74	0.00	0.00	4.83
Onsite Fugitive Dust	2.89	9.14	23.40	21.60	17.98	3.76	3.74	0.00	23.40
Concrete Batching	3.68	14.71	14.71	14.71	14.71	14.71	14.71	0.00	14.71
Crushing/Processing	0.08	0.31	0.31	0.31	0.31	0.31	0.31	0.00	0.31
Onsite Subtotal	7.05	26.41	40.22	41.14	37.83	22.51	18.76	0.00	41.14
	0.00	0.04	0.37	0.36	0.43	0.01	0.06	0.00	0.43
Offsite Haul Trucks	0.00	0.04	0.57	0.00	0.10				
Offsite Haul Trucks Worker Trips	0.00	0.04	0.22	0.16	0.21	0.02	0.12	0.00	0.22
									0.22 0.64

Notes

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Concrete Batching and Materials Processing (Crushing) are assume to begin in 4th Quarter of 2007; one (1) Batch Plant and two (2) Processing Facilities assumed to operate during project construction. Offsite Haul Trucks and Worker Trips includes paved road dust in PM10 and PM2.5 emission factors.

Alternative 3 - Mitigated Emissions Summary

			Em	nissions of F	ROG (lbs/da	ay)			
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	89.30	287.30	175.56	172.26	172.26	172.26	0.00	0.00	287.30
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	89.30	287.30	175.56	172.26	172.26	172.26	0.00	0.00	287.30
Offsite Haul Trucks	0.00	15.83	17.23	19.27	9.14	4.36	21.58	0.00	21.58
Worker Trips	0.43	2.42	1.89	1.47	1.40	1.33	1.73	0.00	2.42
Offsite Subtotal	0.43	18.26	19.12	20.73	10.54	5.69	23.32	0.00	23.32
Total	89.73	305.56	194.68	192.99	182.80	177.95	23.32	0.00	305.56
				nissions of					
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	756.38	2420.44	1485.38	1462.08	1462.08	1462.08	0.00	0.00	2420.44
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	756.38	2420.44	1485.38	1462.08	1462.08	1462.08	0.00	0.00	2420.44
Offsite Haul Trucks	0.00	58.70	63.86	71.43	33.88	16.17	80.02	0.00	80.02
Worker Trips	14.54	82.72	64.54	50.00	47.72	45.45	59.09	0.00	82.72
Offsite Subtotal	14.54	141.42	128.40	121.43	81.60	61.62	139.10	0.00	141.42
Total	770.92	2561.86	1613.78	1583.51	1543.68	1523.70	139.10	0.00	2561.86
		•		nissions of I				1	
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	418.02	1359.97	840.42	803.49	803.49	803.49	0.00	0.00	1359.97
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	418.02	1359.97	840.42	803.49	803.49	803.49	0.00	0.00	1359.97
Offsite Haul Trucks	0.00	261.10	284.08	317.74	150.69	71.91	355.92	0.00	355.92
Worker Trips	1.41	8.01	6.25	4.84	4.62	4.40	5.72	0.00	8.01
Offsite Subtotal	1.41	269.11	290.33	322.59	155.31	76.31	361.64	0.00	361.64
Total	419.42	1629.08	1130.74	1126.07	958.80	879.80	361.64	0.00	1629.08
	2007	2008	2009	issions of F 2010	2011	2012	2013	2014	PEAK
Construction Equipment	10.92	40.98	21.70	32.48	32.48	32.48	0.00	0.00	40.98
Onsite Fugitive Dust	203.19	210.09	492.73	492.39	357.52	73.95	76.72	0.00	492.73
Concrete Batching	165.41	165.41	165.41	165.41	165.41	165.41	165.41	0.00	165.41
Crushing/Processing	27.22	27.22	27.22	27.22	27.22	27.22	27.22	0.00	27.22
Onsite Subtotal	406.74	443.70	707.06	717.50	582.63	299.06	269.35	0.00	717.50
Offsite Haul Trucks	0.00	57.22	62.26	69.64	33.02	15.76	78.00	0.00	78.00
Worker Trips	2.39	13.60	10.61	8.22	7.84	7.47	9.71	0.00	13.60
Offsite Subtotal	2.39	70.82	72.87	77.86	40.87	23.23	87.72	0.00	87.72
Total	409.13	514.51	779.93	795.36	623.50	322.29	357.07	0.00	795.36
				issions of P				0.00	
	2007	2008	2009	2010	2011	2012	2013	2014	PEAK
Construction Equipment	10.05	37.70	19.96	29.88	29.88	29.88	0.00	0.00	37.70
Onsite Fugitive Dust	40.64	42.02	98.55	98.48	71.51	14.80	15.35	0.00	98.55
Concrete Batching	111.47	111.47	111.47	111.47	111.47	111.47	111.47	0.00	111.47
Crushing/Processing	2.33	2.33	2.33	2.33	2.33	2.33	2.33	0.00	2.33
Onsite Subtotal	164.49	193.53	232.32	242.16	215.19	158.48	129.15	0.00	242.16
Offsite Haul Trucks	0.00	14.98	16.30	18.23	8.65	4.13	20.42	0.00	20.42
Worker Trips	0.45	2.55	1.99	1.54	1.47	1.40	1.82	0.00	2.55
WORKEL THPS									
Offsite Subtotal	0.45	17.53	18.29	19.77	10.12	5.53	22.24	0.00	22.24

Notes:

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Concrete Batching and Materials Processing (Crushing) are assume to begin in 4th Quarter of 2007; one (1) Batch Plant and two (2) Processing Facilities assumed to operate during project construction. Offsite Haul Trucks and Worker Trips includes paved road dust in PM10 and PM2.5 emission factors.

Alternative 3 - Mitigated Emissions Summary

			Emi	ssions of R	OG (tons/y	ear)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	3.66	18.76	18.39	32.30	28.73	21.73	0.00	0.00	32.30
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	3.66	18.76	18.39	32.30	28.73	21.73	0.00	0.00	32.30
Offsite Haul Trucks	0.00	0.04	0.39	0.38	0.45	0.01	0.07	0.00	0.45
Worker Trips	0.06	0.13	0.21	0.16	0.20	0.02	0.12	0.00	0.21
Offsite Subtotal	0.06	0.17	0.60	0.53	0.66	0.03	0.18	0.00	0.66
Total	3.72	18.93	18.99	32.84	29.39	21.76	0.18	0.00	32.84
			Em	issions of C	O (tons/ye	ar)			
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	31.01	158.47	155.76	274.27	243.75	184.43	0.00	0.00	274.27
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	31.01	158.47	155.76	274.27	243.75	184.43	0.00	0.00	274.27
Offsite Haul Trucks	0.00	0.15	1.45	1.39	1.69	0.04	0.25	0.16	1.69
Worker Trips	1.89	4.39	7.21	5.32	6.95	0.77	3.99	0.00	7.21
Offsite Subtotal	1.89	4.54	8.66	6.71	8.64	0.81	4.24	0.16	8.66
Total	32.90	163.00	164.41	280.98	252.39	185.24	4.24	0.16	280.98
				issions of N					
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	17.14	89.26	88.16	152.19	134.19	101.38	0.00	0.00	152.19
Onsite Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Batching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crushing/Processing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Subtotal	17.14	89.26	88.16	152.19	134.19	101.38	0.00	0.00	152.19
Offsite Haul Trucks	0.00	0.65	6.44	6.19	7.50	0.17	1.10	0.00	7.50
Worker Trips	0.18	0.43	0.70	0.51	0.67	0.07	0.39	0.00	0.70
Offsite Subtotal	0.18	1.08	7.14	6.71	8.17	0.24	1.49	0.00	8.17
Total	17.32	90.34	95.30	158.90	142.36	101.63	1.49	0.00	158.90
	2007	2000		ssions of Pl			2012	2011	De els Ve
Construction Equipment	2007 0.45	2008 2.45	2009	2010 4.91	2011 5.25	2012	2013 0.00	2014 0.00	Peak Yr
Onsite Fugitive Dust	8.16	2.45 25.74	1.95 59.99	4.91 54.91	43.22	4.06 9.06	9.04	0.00	5.25 59.99
Concrete Batching	5.46	21.83	21.83	21.83	21.83	21.83	21.83	0.00	21.83
Crushing/Processing	0.90	3.59	3.59	3.59	3.59	3.59	3.59	0.00	3.59
Onsite Subtotal	14.96	53.62	87.37	85.25	73.89	38.54	34.47	0.00	87.37
Offsite Haul Trucks	0.00	0.14	1.41	1.36	1.64	0.04	0.24	0.00	1.64
Worker Trips	0.31	0.72	1.18	0.87	1.14	0.13	0.66	0.00	1.18
Offsite Subtotal	0.31	0.87	2.60	2.23	2.79	0.16	0.90	0.00	2.79
Total	15.27	54.49	89.97	87.48	76.68	38.71	35.37	0.00	89.97
Total	10.21	01110		ssions of Pl			00.07	0.00	00.01
	2007	2008	2009	2010	2011	2012	2013	2014	Peak Yr
Construction Equipment	0.41	2.25	1.80	4.52	4.83	3.74	0.00	0.00	4.83
Onsite Fugitive Dust	1.63	5.15	12.00	10.98	8.64	1.81	1.81	0.00	12.00
Concrete Batching	3.68	14.71	14.71	14.71	14.71	14.71	14.71	0.00	14.71
Crushing/Processing	0.08	0.31	0.31	0.31	0.31	0.31	0.31	0.00	0.31
Onsite Subtotal	5.80	22.43	28.82	30.52	28.49	20.57	16.83	0.00	30.52
				0.36	0.43	0.01	0.06	0.00	0.43
Offsite Haul Trucks	0.00	0.04	0.37	0.50	0.43				
Offsite Haul Trucks Worker Trips	0.00 0.06	0.04 0.14	0.37 0.22						
		0.04 0.14 0.17	0.37 0.22 0.59	0.16 0.52	0.43 0.21 0.64	0.02	0.12	0.00	0.22 0.64

Notes:

Concrete Batching and Materials Processing (Crushing) are assume to be controlled for permitting, controls are part of project design.

Concrete Batching and Materials Processing (Crushing) are assume to begin in 4th Quarter of 2007; one (1) Batch Plant and two (2) Processing Facilities assumed to operate during project construction. Offsite Haul Trucks and Worker Trips includes paved road dust in PM10 and PM2.5 emission factors.

Earth Excavation						f : 11 D	. 16 0	4.1.		1.0. :11	14.05.6	G . 1	77 II D :			7 iii Quaiity		gy and Assu	
Authors			1	Estimate S	Summary of M	Aaterials Requi	ired for Co	rps Alterna	tive - Gated	i Spillway	with 3.5-ft	Concrete \	Wall Rasie			1			
Baskell Medical Requirements (ourys) 68136 0 0 0 1.488 1.144 1.087 0 801 1.100 971 3.090 1.200 524 527 2.4816 7.279 1.000 1.0		Spillway	Fuseplug Spillway				Dike 1	Dike 2	Dike 3	,	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
Sead Markel Requirements (outy) Set 30 0 0 1,488 1,144 1,087 0 801 1,200 971 3,070 2,024 592 324 73,797																			
Sead Markel Requirements (outy) Set 30 0 0 1,488 1,144 1,087 0 801 1,200 971 3,070 2,024 592 324 73,797	0:: : 0.5		0.405057				0.040		0.005		0.400	0.400	0.445	10.101	0.005	4.000	4.004	7 470	0.400.400
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Pre-cease Concrete Paralle (eg 1) Concrete Material Spoil (eu yrt)						, .				Ü									
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Secure Specific Country Sp						1												n	
Assumptions Auxiliary Spillway Excession			3,366.922			1				Ω	1.325	1.987	1.524	6.481	2.035	866	860		3,395.702
Spilway Excavation			0,000,000				_,	.,	.,		.,	.,	.,		_,,,,,			.,	
1	Assumptions	Spillway																	
Rip rap generated from spillway excavation	Assumptions	1		evesystion wil	I he from Auvil	iary Spillway													
Society Soci		2																	
4 Concrete for spillway produced in local batch plant 5 Concrete for spillway produced in local batch plant 6 Borrow for crest replacement will be transported from the Dike 7/Folsom Point spoils location. Aux. Spillway Quantities Earth Rock Earth Rock 1076025 1																			
Concrete for 3.5-ft paragoet walls hauled premixed from off site plant @ 5 truckloads per day																			
6 Sorrow for crest replacement will be transported from the Dike 7Folsom Point spoils location.							f site nlant i	@ 5 truckloa	ds ner dav										
Aux Spillway Quantities Earth Excavation Earth Excavation Chute Common Excav. 1076025 Chute Common Excav. 1076025 Chute Rock Excav. 883140 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Common Excav. 188260 Sale Structure Common Excav. 188260 Sale Structure Gallery Sale																			
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Chute Common Excav. 1076025	Aux Spillway Quantities																		
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Sate Common Excav. 188260	Chute Common Excav.		1076025																-
Sate Rock Excav. 204550	Chute Rock Excav.		883140																-
Approach Channel - P1	Gate Common Excav.		188260																-
AC Rock P1	Gate Rock Excav.																		
Approach Channel - P2	Approach Channel - P1																		
AC Rock P2	AC Rock P1																		
Steel Grout Gate Structure Foundation Gate Structure Gallery Gate Gallery Gate Gate Gallery Gate Gallery Gate Gallery Gate Gallery Gate	Approach Channel - P2																		
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Steel Pier Nose 295960 2																			
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STG Bulkhead 893817 Box Girder Bridge 545 188135 Chute Slab 68060 4741435 Chute Walls 9355 1446670				1	1			600004	60065	10040	260404	44000	125010	4075	15050	70000	1225057		
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Chute Slab 68060 4741435			F.15		1														
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Equipment	Auxiliary Spillway Excavation	Auxiliary Spillway Construction	Tunnel Excavation	Tunnel Construction	Main Dam Construction	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
Stripping Days		4								1	1	1	4	1	1	1	4	
CAT D7G Bulldozer		. 0			2	1	1	1		. 1	1	1	2	1	1	1		
CAT D9 Dozer		1			_					-			_				_	
CAT 966F Series II Wheel Loader					2	1	1	1		1	1	1	2	1	1	1	2	
CAT D350E Articulated Truck		10	1		4	2	2			2	2	2		2	2	2		
CAT 375 Excavator		1																
CAT 160H Motor Grader with ripper		1				1	1	1		1	1	1	1	1	1	1	1	
Water Truck		1				1	1	1		1	1	1	1	1	1	1	1	
Shell Excavation Days										1	1	1						
CAT D7G Bulldozer		0				1	1	1		1	1	1	1	1	1	1	1	
CAT D9 Dozer		l					· ·	-					•		,			
CAT D11 Dozer		2	,															
CAT 657 Scraper		10																
CAT 160H Motor Grader with ripper		1																
CAT 966F Series II Wheel Loader		0	,			1	1	1		1	1	1	1	1	1	1	1	
CAT D350E Articulated Truck		0				2	2	2		2	2	2	2	2	2	2	2	
Drill rig		4					_			_		_	_		_		_	
Water truck		2																
Crest Replacement Days						30	22	22		16	22	20	80	25	10	10	60	
CAT D7G Bulldozer						1	1	1		1	1	1	2	1			••	
CAT D9R Dozer							·	-					_					
CAT D11 Dozer																		
CAT 657 Scraper																		
CAT 966F Series II Wheel Loader						1	1	1		1	1	1	2	1	1	1	2	
CAT D350E Articulated Truck						2		2		2	2	2	4	2	2	2		
CAT CB-534C Vibratory Compactor						1		1		1	1	1	1	1	1	1	1	
Water Truck						1	1	1		1	1	1	1	1	1	1	1	
											·				•			

			,	,													,	amptions
Equipment	Auxiliary Spillway	Auxiliary Spillway	Tunnel	Tunnel Construction	Main Dam	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
Shell Placement Days	Lxcavation	Construction	LXCAVATION	Construction	Construction	DIKE I	DIKC Z	DIKE 3	Mage	DIKE 4	DIKE 3	DIKE 0	KWD	LVVD	DIKC 1	DIKE 0	IVIIAD	TOTAL
CAT D7G Bulldozer																		
CAT D9R Dozer																		
CAT D11 Dozer																		
CAT 657 Scraper																		
CAT 966F Series II Wheel Loader																		
Excavator 375L																		
CAT D350E Articulated Truck																		
Quarry Truck 771D																		
Belly Dump Truck C12 Engine																		
CAT CB-534C Vibratory Compactor																		
All terrain 20-T crane																		
Water Truck																		
Trace Track																		
Crest Pavement Days																		
Belly Dump Truck C12 Engine																		
Motor Grader 160H																		
CAT AP-800C Asphalt Paver																		
CAT BG-650 Windrow Elevator																		
CAT CB-534C Vibratory Compactor																		
and the state of t																		
Spillway Construction Days		431																
Concrete Transit Mixer		5																
Concrete Pump Trucks		2																
All terrain 20-T crane		1																
CAT D7G Bulldozer		3																
CAT 657 Scraper		5																
CAT CB-534C Vibratory Compactor		1																
CAT D350E Articulating Truck		2																
Front End Loader 966F		2																
End Dump Trucks		6																
Water Truck		1																
Parapet Wall Construction Days						30	22	22		16	22	20	80	25	10	10	60	
All terrain 20-T crane						2	2	2		2			4					
Flatbed Truck for Forms movement						1	1	1		1	1	1	2	1		1	2	

																	,,	1
Materials Hauling From Off-Site Sources Construction Schedule	Auxiliary Spillway Excavation	Auxiliary Fuseplug Spillway Construction	Tunnel Excavation	Tunnel Construction	Main Dam Construction	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	TOTAL
Construction ochedule																		
Filter Material Total						317	1,681	232		171	257	197	837	263	112	111	602	
Work Days						1	2	1		1	2	1	5	2	1	1	5	
Loads @ 20 cu yd per load						16	84	12		9	13	10	42	13	6	6	30	
Estimated loads per work day						16				9	6	10	8	7	6	6	6	
											_		-		-		_	
Ready-Mix Concrete						1,203	926	880		648	889	745	3,171	995	424	421	2,280	
Work Days						30	22	22		16	22	20	80	25	10	10	60	
Loads @ 10 cu yd per load						120	93	88		65	89	75	317	100	42	42	228	
Estimated loads per work day						4	4	4		4	4	4	4	4	4	4	4	
Reinforcement Steel						39	34			26	37	28	130	41	14	12	94	
		100				39	34			20	31	28	130	41	14	12	94	
Work Days		100				1	1	1		1	1	1	1	1	1	1	1	
Steel Transport Total		0)									_						
Loads @ 10 tons per load		0)			4	4	1		3	4	3	13	4	2	1	10	
Estimated loads per work day		0)			4	4	1		3	4	3	13	4	2	1	10	
Raw Materials for Concrete Mixing																		
Work Days		431																
Cement and Gravel Transport Total		280810	1															
Loads @ 20 cu yd per load		14041																
Estimated loads per work day		33																
Estimated leads per work day		- 55																
	1	1	1	1	1													

		ı	ı	1										All Quality	Methodolo	gy and Assu	приопъ
	Auxiliary Fuseplug Spillway Construction	Tunnel Excavation	Tunnel Construction	Main Dam Construction	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	
Materials Hauling On-site																	
Auxilliary Spillway Excavation																	
Work Days	782																
Total Transported	3425057																
Loads @ 20 cy per load	171253																
Estimated Loads per work day	219																
Riprap Material Total					1,348	2,407	985		726	1,089	835	3,552	1,115	474	472	2,554	
Work Days					2	4	2		1	2	1	4	2	1	1	3	
Loads @ 20 cu yd per load					67	120	49		36	54	42	178	56	24	24	128	
Estimated loads per work day					34	30	25		36	27	42	44	28	24	24		
Folsom Point Processing																	
Work Days	780																
Total Processed	103307.4																
Loads @ 20 cy per load	5165.37																
Estimated Loads per work day	7																
Spillway Concrete Hauling																	
Work Days	431																
Total Processed	280810																
Loads @ 10 cy per load	28081																
Estimated Loads per work day	65																
	Auxiliary Fuseplug Spillway Construction	Tunnel Excavation	Tunnel Construction	Main Dam Construction	Dike 1	Dike 2	Dike 3	Mooney Ridge	Dike 4	Dike 5	Dike 6	RWD	LWD	Dike 7	Dike 8	MIAD	
On-site Dike Reconstruction Hauling				1													
Work Days					8	8	6		4	6	5	20	8	3	3		
Materials Total					1,488	1,144	1,087		801	1,202	921	3,920	1,230	524	521	2,818	
Loads @ 20 cu yd per load					74.4	57.2	54.35		40.05	60.1	46.05	196	61.5	26.2	26.05	140.9	
Loads @ 30 cu yd per load																	
Estimated loads per work day					9	7	9		10	10	9	10	8	9	9	7	

							Air Qu	ality Metho	dology a
	NOx	Daily Emissio	n (lbs/day)						
		2007	2008	2009	2010	2011	2012	2013	2014
CrawlerTractors	Stripping Days CAT D7G Bulldozer	82	127 140.56	74	0	360	21	0	-
Crawler Tractors Crawler Tractors	CAT D/G Buildozer CAT D9 Dozer	21.16	20.08	57.00	-	35.84	53.76		-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	118.76	47.16	-	31.44	47.16	-	-
OnRoadHaul Excavators	CAT D350E Articulated Truck CAT 375 Excavator	417.80 21.34	1,004.56 21.34	250.68	-	167.12	250.68	-	-
Excavators Graders	CAT 375 Excavator CAT 160H Motor Grader with ripper	20.44	143.98	61.32	-	-	61.32	-	-
OffHighwayTrucksWaterTrucks	Water Truck	41.78	250.68	125.34	-	-	125.34	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	522.52	1,699.96	541.50	-	234.40	538.26	-	-
	Shell Excavation Days	0	177	324	200	0	21	0	
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer	-	100.40	57.00	-	-	53.76	-	-
Crawler Tractors Crawler Tractors	CAT D9 Dozer CAT D11 Dozer	-	40.16	38.00	35.84	-	-	-	-
Scrapers	CAT 657 Scraper	-	422.40	422.40	422.40	-	-	-	
Graders	CAT 160H Motor Grader with ripper	-	20.44	20.44	20.44	-		-	-
RubberTiredLoaders OnRoadHaul	CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	83.32 417.80	47.16 250.68	-	-	47.16 250.68	-	
BoreDrillRigs	Drill rig	-	103.76	131.28	124.88	-	230.00	-	
OffHighwayTrucksWaterTrucks	Water truck	-	83.56	83.56	83.56	-	-	-	-
		-	-	-	-	-		-	-
		-	-	-	-	-	-	-	
	+	-	-	-	-	-	-	-	-
	Subtotal	-	1,271.84	1,050.52	687.12	-	351.60	-	-
-	Crest Replacement Days	0		94	20	0	45	0	
CrawlerTractors	CAT DOB Dozor	-	100.40	57.00		-	17.92	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	-	-	-	-	-	-	
Scrapers	CAT 657 Scraper	-	-	-	-	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	110.04	78.60	31.44	-	47.16	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	503.16	252.48	85.36	-	250.68		
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	CAT CB-534C Vibratory Compactor Water Truck	-	143.70 208.90	114.08 167.12	41.78 41.78	-	68.22 125.34	-	
g.may donovrator Hucks		-	200.90	-	41.70	-	125.54	-	
		-				-		-	
	0.14.4.1	-	-	-	-	-	-	-	-
	Subtotal Shell Placement Days	- 0	1,066.20	669.28	200.36	- 0	509.32 0	- 0	-
CrawlerTractors	CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CrawlerTractors	CAT D9R Dozer	-		-		-	-	-	-
CrawlerTractors	CAT D11 Dozer	-	-	-	-	-	-	-	-
Scrapers RubberTiredLoaders	CAT 657 Scraper CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavators	Excavator 375L	-	-	-	-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	-	-	-	-		-
OnRoadHaul OffHighwayTractorsCompactors	Belly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor	-	-	-	-	-	-		-
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-		ē	ē		-
	Subtotal	-	-	-	-	-	-	-	-
OnRoadHaul	Crest Pavement Days Belly Dump Truck C12 Engine	- 0	- 0	- 0	- 0	- 0	- 0	- 0	-
Graders	Motor Grader 160H	-	-	-	-	-	-	-	-
Pavers	CAT AP-800C Asphalt Paver	-	-	-	-	-		-	-
PavingEquipment OffHighwayTractorsCompactors	CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Om ngriway Fractors Compactors	Subtotal	-	-	-	-	-	-		-
	Spillway Construction Days	0	0	0	235	250	235	0	
OnRoadHaul	Concrete Transit Mixer	-	-	-	208.90	208.90	208.90	-	
OnRoadHaul Crance	Concrete Pump Trucks	-	-	-	83.56	83.56	83.56	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	16.74 53.76	16.74 53.76	16.74 53.76	-	
Scrapers	CAT 657 Scraper	-	-	-	211.20	211.20	211.20	-	
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	22.74	22.74	22.74	-	
OnRoadHaul RubberTiredLoaders	CAT D350E Articulating Truck Front End Loader 966F	-	-	-	83.56 31.44	83.56 31.44	83.56 31.44	-	
OnRoadHaul	End Dump Trucks	-		-	250.68	250.68	250.68		
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	41.78	41.78	41.78	-	-
	Subtotal	-	-	-	1,004.36	1,004.36	1,004.36	-	
Cranes	Parapet Wall Construction Days All terrain 20-T crane	- 0	158 234.36	94 167.40	20 66.96	- 0	45 100.44	- 0	-
OnRoadHaul	Flatbed Truck for Forms movement	-	292.46	208.90	83.56	-	125.34	-	
	Subtotal	-	526.82	376.30	150.52	-	225.78	-	
	Maximum Daily	522.5	1,700.0	1,050.5	1,004.4	1,004.4	1,004.4	-	-
			T						
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								Air Quality
NOx	Annual Emiss	sions (tpy)						
21:	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	_	0.512	0.703	-	6.451	0.188	_	-
CAT D9 Dozer	0.868	1.004	-	-	-	-	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	17.130	0.488 23.039	0.582	-	5.659	0.165 0.877	-	-
CAT D350E Articulated Truck CAT 375 Excavator	0.875	1.067	3.092	-	30.082	- 0.877	-	-
CAT 160H Motor Grader with ripper	0.838	1.511	0.756	-	-	0.215	-	-
Water Truck	1.713	2.653	1.546	-	-	0.439	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal Shall Fuzzuntion David	21.42	30.27	6.68	-	42.19	1.88	-	-
Shell Excavation Days CAT D7G Bulldozer	-	0.271	0.703	-	-	0.188		-
CAT D9 Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	3.012	4.750	3.584 42.240	-	-	-	-
CAT 657 Scraper CAT 160H Motor Grader with ripper	-	31.680 1.533	52.800 2.555	2.044	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.259	0.582	-	-	0.165	-	-
CAT D350E Articulated Truck	-	1.128	3.092	-	-	0.877	-	-
Orill rig Water truck	-	7.782 6.267	16.410 10.445	12.488 8.356	-	-	-	-
valor track	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	51.93	91.34	68.71	-	1.23	-	-
Crest Replacement Days								
CAT D7G Bulldozer	-	2.189	0.703	-	-	0.224	-	-
CAT D9R Dozer CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	2.028	0.896	0.314	-	0.354	-	-
AT D350E Articulated Truck	-	9.962	3.026	0.854	-	1.880		-
CAT CB-534C Vibratory Compactor Vater Truck	-	2.176 3.301	1.310 1.964	0.418 0.418	-	0.512 0.940	-	-
rator rator	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	19.65	7.90	2.00	-	3.91	-	-
Shell Placement Days		13.03	1.50	2.00	-	3.31	-	1
AT D7G Bulldozer	-	-	-	-	-	-	-	-
AT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
xcavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
All terrain 20-T crane Vater Truck	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Motor Grader 160H CAT AP-800C Asphalt Paver	-	-	-	-	-	-	-	-
CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Spillway Construction Days Concrete Transit Mixer	-	-	-	24.546	26.113	24.546		-
Concrete Pump Trucks	-	-	-	9.818	10.445	9.818	-	-
All terrain 20-T crane	-	-	-	1.967	2.093	1.967	-	-
CAT D7G Bulldozer CAT 657 Scraper	-	-	-	6.317 24.816	6.720 26.400	6.317 24.816	-	-
CAT CB-534C Vibratory Compactor	-	-	-	2.672	2.843	2.672	-	-
CAT D350E Articulating Truck	-	-	-	9.818	10.445	9.818	-	-
ront End Loader 966F	-	-	-	3.694	3.930	3.694	-	-
End Dump Trucks Vater Truck	-	-	-	29.455 4.909	31.335 5.223	29.455 4.909	-	-
Subtotal	-	-	-	118.01	125.55	118.01	-	-
Parapet Wall Construction Days							-	
Ill terrain 20-T crane Flatbed Truck for Forms movement	-	4.319 5.390	1.908 2.381	0.670 0.836	-	0.753 0.940	-	-
	-	9.71	4.29	1.51	-	1.69	-	
Annual Total	21.423	111.571	110.203	190.233	167.737	126.730	-	-
	Annual Emiss	ions (tov)						-
	2007	2008	2009	2010	2011	2012	2013	2014
BoreDrillRigs	-	7.782	16.410	12.488	-	-	-	-
Cranes	-	4.319	1.908	2.637	2.093	2.720	-	-
CrawlerTractors	0.868	6.988	6.859	9.901	13.171	6.917	-	-
Excavators	0.875	1.067	-	-	-	-	-	-
Graders OffLighwovTractorsCompactors	0.838	3.044	3.311	2.044	- 0.040	0.215	-	-
OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	1 713	2.176	1.310	3.090	2.843	3.184 6.288	-	-
OnRoadHaul	1.713 17.130	12.221 39.519	13.955 11.591	13.683 75.326	5.223 108.419	78.212	-	-
Pavers	17.130	39.519	11.591	75.326	108.419	78.212	-	-
PavingEquipment	-	-	-	-	-	-	-	-
RubberTiredLoaders	-	2.775	2.059	4.009	9.589	4.378	-	-
Scrapers	-	31.680	52.800	67.056	26.400	24.816	-	-
	21.423	111.571	110.203	190.233	167.737	126.730		
	∠ 1.4∠3	111.571	110.203	150.233	101.131	120.730		

		ı	ı			ı	All	Quality	wetr
	PM10	Daily Emission	on (lbs/day)						
	Stripping Days	2007	2008	2009	2010	2011	2012	2013	2014
CrawlerTractors	CAT D7G Bulldozer	- 02	4.90	3.10	-	1.08	1.62	-	-
CrawlerTractors	CAT D9 Dozer	0.78	0.70	-	-	-	-		-
RubberTiredLoaders OnRoadHaul	CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	7.80	3.60 21.40	3.10 6.20	-	0.88 4.64	1.32 6.96	-	-
Excavators	CAT 375 Excavator	0.78	0.70	-	-	-	-	-	-
Graders OffHighwayTrucksWaterTrucks	CAT 160H Motor Grader with ripper Water Truck	0.78 0.78	3.64 6.04	2.48	-	-	1.68 3.48	-	-
om ignital reductivator reduct	Water Hack	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	10.92	40.98	17.36	-	6.60	15.06	-	-
	Shell Excavation Days	0	177	324	200	0	21	0	(
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9 Dozer	-	3.50	2.48	-	-	1.62	-	-
CrawlerTractors	CAT D11 Dozer	-	1.40	1.24	1.08	-	-	-	-
Scrapers	CAT 657 Scraper	-	7.00	6.20	5.40	-	-		-
Graders RubberTiredLoaders	CAT 160H Motor Grader with ripper CAT 966F Series II Wheel Loader	-	0.70 2.46	0.62 2.48	0.54	-	1.32	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	10.68	4.96	-	-	6.96	-	-
BoreDrillRigs OffHighwayTrucksWaterTrucks	Drill rig Water truck	-	2.80 1.40	2.48 1.24	2.16 1.08	-	-	-	-
Om ignway rruckswater rrucks	Water adox	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	-	29.94	21.70	10.26	-	9.90	-	-
Consideration	Crest Replacement Days		158	94	20	0	45	0	_
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer	-	3.50	1.86	-	-	0.54	-	-
CrawlerTractors	CAT D11 Dozer	-	-	-	-	-	-	-	-
Scrapers RubberTiredLoaders	CAT 657 Scraper CAT 966F Series II Wheel Loader	-	3.60	3.10	1.08	-	1.32	-	-
OnRoadHaul	CAT 9350 Series if Wheel Loader CAT D350E Articulated Truck	-	14.40	4.96	2.16	-	6.96	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	4.22	2.48	0.54	-	2.04	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	5.34	2.48	0.54	-	3.48	-	-
		-	-	-	-	-	-	-	-
	Subtotal	-	31.06	14.88	4.32	-	14.34	-	-
	Shell Placement Days	0	10	0	0	0		0	
CrawlerTractors	CAT D7G Bulldozer	-	-	-	•	-	-	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	-	-	-	-	-	-	-
Scrapers	CAT 657 Scraper	-	-	-		-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavators OnRoadHaul	Excavator 375L CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	-		-	-	-	-
OnRoadHaul OffHighwayTractorsCompactors	Belly Dump Truck C12 Engine CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Cranes	All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-		-	-	-	-
	Subtotal Crest Pavement Days	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- (
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Graders	Motor Grader 160H	-	-	-	-	-	-	-	-
Pavers PavingEquipment	CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
	Subtotal	-	-	-	235	-	-	-	-
OnRoadHaul	Spillway Construction Days Concrete Transit Mixer	- 0	0	0	5.80	250 5.80	235 5.80	- 0	-
OnRoadHaul	Concrete Pump Trucks	-	-	-	2.32	2.32	2.32	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	1.16 3.48	1.16 3.48	1.16 3.48	-	-
Scrapers	CAT 657 Scraper	-	-	-	5.80	5.80	5.80	-	-
OffHighwayTractorsCompactors OnRoadHaul	CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	1.16 2.32	1.16 2.32	1.16 2.32	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	2.32	2.32	2.32	-	-
OnRoadHaul	End Dump Trucks	-	-	-	6.96	6.96	6.96	-	-
OffHighwayTrucksWaterTrucks	Water Truck Subtotal	-	-	-	1.16 32.48	1.16 32.48	1.16 32.48	-	-
	Parapet Wall Construction Days		158	94	20		45	0	_
Cranes	All terrain 20-T crane	-	6.44	4.60	1.84	-	2.76	-	-
OnRoadHaul	Flatbed Truck for Forms movement Subtotal	-	6.72 13.16	2.30 6.90	0.92 2.76	-	3.48 6.24	-	-
	Maximum Daily	10.9	41.0	21.7	32.5	32.5	32.5	-	-
								-	
									-
		1	1	1	i	1	l		L

PM10								
	Annual Emiss 2007	sions (tpy) 2008	2009	2010	2011	2012	2013	2014
Stripping Days	-	0.018	0.000	_			-	-
CAT D7G Bulldozer CAT D9 Dozer	0.032	0.018	0.023	-	0.194	0.006	-	-
CAT 966F Series II Wheel Loader	-	0.016	0.023	-	0.158	0.005	-	-
CAT D350E Articulated Truck CAT 375 Excavator	0.320	0.391	0.046	-	0.835	0.024	-	-
CAT 160H Motor Grader with ripper	0.032	0.044	0.023	-	-	0.006	-	-
Water Truck	0.032	0.046	0.023	-	-	0.012	-	-
	-		-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal Shell Excavation Days								
CAT D7G Bulldozer	-	0.009	0.023	-	-	0.006	-	-
CAT D9 Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	0.105 0.525	0.155 0.775	0.108 0.540	-	-	-	-
CAT 160H Motor Grader with ripper	-	0.053	0.078	0.054	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.009	0.023	-	-	0.005	-	-
CAT D350E Articulated Truck Drill rig	-	0.022	0.046	0.216	-	0.024	-	-
Water truck	-	0.105	0.155	0.108	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-			-	-
	-	-	-	-	-	-	-	-
Subtotal Creat Replacement Davis								
Crest Replacement Days CAT D7G Bulldozer	-	0.076	0.023	-	-	0.007	-	-
CAT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-		-	-		-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	0.062	0.035	0.011	-	0.010	-	-
CAT D350E Articulated Truck	-	0.281	0.057	0.022	-	0.052	-	-
CAT CB-534C Vibratory Compactor Water Truck	-	0.068	0.029	0.005	-	0.015	-	-
water fluck	-	- 0.067	0.029	- 0.003	-	- 0.026	-	-
	-		-	-		=	-	-
Subtotal	-	-	-	-	-	=	-	-
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck Quarry Truck 771D	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal								
Crest Pavement Days Belly Dump Truck C12 Engine	_		_	_	_		_	_
Motor Grader 160H	-	-	-	-	-		-	-
CAT AP-800C Asphalt Paver	-	-	-	-	-	-	-	-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Subtotal	-	-	-	_	-		-	-
Spillway Construction Days								
Concrete Transit Mixer	-	-	-	0.682	0.725	0.682	-	-
Concrete Pump Trucks All terrain 20-T crane	-	-	-	0.273 0.136	0.290 0.145	0.273	-	-
CAT D7G Bulldozer	-	-	-	0.409	0.435	0.409	-	-
CAT 657 Scraper CAT CB-534C Vibratory Compactor	-	-	-	0.682 0.136	0.725 0.145	0.682	-	-
CAT D350E Articulating Truck	-	-	-	0.136	0.145	0.136	-	-
Front End Loader 966F	-	-	-	0.273	0.290	0.273	-	-
End Dump Trucks Water Truck	-	-	-	0.818	0.870 0.145	0.818	-	-
Subtotal	-			0.100	J.14J	0.100		<u> </u>
Parapet Wall Construction Days								
All terrain 20-T crane Flatbed Truck for Forms movement	-	0.119 0.136	0.052 0.026	0.018	-	0.021	-	-
Subtotal	-	0.130	0.020	0.009	-	0.020	-	
Annual Total	0.448	2.451	1.954	4.913	5.248	4.061	-	-
	Annual Emiss	sions (tpy)						
	2007	2008	2009	2010	2011	2012	2013	2014
BoreDrillRigs	-	0.210	0.310	0.216	-	-	-	-
Cranes CrawlerTractors	- 0.033	0.119	0.052	0.155	0.145	0.157	-	-
Crawler Hacifors	0.032	0.244	0.224	0.517	0.629	0.427	-	-
	0.032	0.035	0.100	0.054	-	0.006	-	-
Excavators Graders		0.068	0.029	0.142	0.145	0.152	-	-
Excavators	-	0.000						-
Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks	0.032	0.238	0.207	0.250	0.145	0.175	-	
Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul	0.032 0.320	0.238 0.829	0.175	2.075	3.010	2.172	-	-
Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	0.032 0.320	0.238 0.829 -	0.175	2.075	3.010	2.172	-	-
Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment	0.032 0.320 -	0.238 0.829 -	0.175	2.075	3.010	2.172	-	-
Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	0.032 0.320	0.238 0.829 -	0.175	2.075	3.010	2.172	-	-

								ality Metho	
	СО	Daily Emissio	n (lbs/day)						
		2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	127	74	0	360	21	0	
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9 Dozer	21.50	156.10 22.30	69.30	-	47.80	71.70	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	21.30	159.80	69.12	-	46.08	69.12	-	
OnRoadHaul	CAT D350E Articulated Truck	612.40	1,472.48	367.44	-	244.96	367.44	-	
Excavators	CAT 375 Excavator	31.28	31.28	-	-	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	29.96	211.04	89.88	-	-	89.88	-	-
OffHighwayTrucksWaterTrucks	Water Truck	61.24	367.44	183.72	-	-	183.72	-	-
		-	-	-	-	-	-	-	-
		-	-		-	-	-	-	-
	Cultural	750.00	0.400.44	770.40	-	- 000.04	704.00	-	
	Subtotal	756.38	2,420.44	779.46	- 000	338.84	781.86	-	
CrawlerTractors	Shell Excavation Days CAT D7G Bulldozer	0	177 111.50	324 69.30	200	0	71.70	- 0	
Crawler Tractors	CAT D7 G Buildozei CAT D9 Dozer	-	- 111.30	- 09.30	-	-	- 11.70	-	
CrawlerTractors	CAT D11 Dozer	-	44.60	46.20	47.80	-	-	-	
Scrapers	CAT 657 Scraper	-	619.20	619.20	619.20	-	-		
Graders	CAT 160H Motor Grader with ripper	-	29.96	29.96	29.96	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	122.12	69.12	1-1	-	69.12	•	
OnRoadHaul	CAT D350E Articulated Truck	-	612.40	367.44	1-1	-	367.44	•	
BoreDrillRigs	Drill rig	-	127.76	161.68	153.84	-	-	-	
OffHighwayTrucksWaterTrucks	Water truck	-	122.48	122.48	122.48	-	-	-	-
		-	-	-	-	-	-	-	-
	+	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	-	1,790.02	1,485.38	973.28	-	508.26	-	
	Crest Replacement Days	0	1,730.02	94	20	0	45	0	
CrawlerTractors	CAT D7G Bulldozer	-	111.50	69.30	-	-	23.90	-	
CrawlerTractors	CAT DPG Buildozei CAT D9R Dozer	-	-	-	-	-	-	-	
Crawler Tractors	CAT D11 Dozer	-	-	-	-	-	-	-	
Scrapers	CAT 657 Scraper	-	-	-	-	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	161.28	115.20	46.08	-	69.12	-	
OnRoadHaul	CAT D350E Articulated Truck	-	737.52	370.08	125.12	·	367.44		
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	174.36	149.14	61.24	-	90.96	-	
OffHighwayTrucksWaterTrucks	Water Truck	-	306.20	244.96	61.24	-	183.72	-	
·		-	-	-	-	-	-	-	
		-	-	-		-	-	-	
		-	-	-	-	-	-	-	
	Subtotal	-	1,490.86	948.68	293.68	-	735.14	-	
	Shell Placement Days		10	0	0	0	0	0	
CrawlerTractors	CAT D7G Bulldozer	-	-	-	-	-	-	-	
CrawlerTractors	CAT D9R Dozer	-	-	-	-	-	-	-	
CrawlerTractors Scrapers	CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	
Excavators	Excavator 375L	-	-	-	-	-	-	-	
OnRoadHaul	CAT D350E Articulated Truck	-	-		-	-	-	-	
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-		-	-	-	-	
OnRoadHaul	Belly Dump Truck C12 Engine	-	-		-	-	-		
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-		-	-	-	
Cranes	All terrain 20-T crane	-	-	•	-	-	-	-	
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	
	Subtotal	-	-	-	-	-	-	-	-
	Crest Pavement Days	0	0	0	0	0	0	0	
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Graders	Motor Grader 160H	-	-		-	-	-	-	
Pavers	CAT AP-800C Asphalt Paver	-	-	-	-	-	-	-	-
PavingEquipment	CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor Subtotal	-	-		-	-	-	-	
		-	-	-	-	-	-	-	
OnRoadHaul	Spillway Construction Days Concrete Transit Mixer	0	- 0	- 0	235	250	235	- 0	
OnRoadHaul OnRoadHaul	Concrete Transit Mixer Concrete Pump Trucks	-	-	-	306.20 122.48	306.20 122.48	306.20 122.48	-	-
Onkoadhaul Cranes	All terrain 20-T crane	-	-	-	122.48 24.54	122.48 24.54	122.48 24.54	-	
CrawlerTractors	CAT D7G Bulldozer	-	-	-	71.70	71.70	71.70	-	
Scrapers	CAT 657 Scraper	-	-	-	309.60	309.60	309.60	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-		30.32	30.32	30.32	-	
OnRoadHaul	CAT D350E Articulating Truck	-	-	-	122.48	122.48	122.48	-	
RubberTiredLoaders	Front End Loader 966F	-	-	-	46.08	46.08	46.08	-	
OnRoadHaul	End Dump Trucks	-	-	-	367.44	367.44	367.44	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	61.24	61.24	61.24	-	-
	Subtotal Subtotal	-	-	- 04	1,462.08	1,462.08	1,462.08	-	-
Prance	Parapet Wall Construction Days All terrain 20-T crane	- 0	158 343.56	94 245.40	20 98.16	- 0	45 147.24	- 0	
Oranes OnRoadHaul	Flatbed Truck for Forms movement	-	428.68	306.20	122.48	-	183.72	-	
J Gadi ladi	Subtotal	-	772.24	551.60	220.64	-	330.96	-	
	Maximum Daily	756.4	2,420.4	1,485.4	1,462.1	1,462.1	1,462.1	-	
	amian bany	7 30.4	4,740.4	1,700.4	1,702.1	1,704.1	1,702.1	- 1	
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								Air Quality
CO	Annual Emiss							
Stripping David	2007	2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	-	0.569	0.855	-	8.604	0.251	-	-
CAT D9 Dozer	0.882	1.115	-	-	-	-	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	25.108	0.573 33.770	0.852 4.532	-	8.294 44.093	0.242 1.286	-	-
CAT 375 Excavator	1.282	1.564	-	-	-	-	-	-
CAT 160H Motor Grader with ripper	1.228	2.215	1.109	-	-	0.315	-	-
Water Truck	2.511	3.889	2.266	-	-	0.643	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	31.01	43.69	9.61	-	60.99	2.74	-	-
Shell Excavation Days CAT D7G Bulldozer	-	0.301	0.855	-	-	0.251	-	-
CAT D9 Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	3.345	5.775	4.780	-	-	-	-
CAT 657 Scraper CAT 160H Motor Grader with ripper	-	46.440 2.247	77.400 3.745	61.920 2.996	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.380	0.852	2.550	-	0.242	-	-
CAT D350E Articulated Truck	-	1.653	4.532	-	-	1.286	-	-
Drill rig	-	9.582	20.210	15.384	-	-		-
Water truck	-	9.186	15.310	12.248	-	-	-	-
	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-
Outhorsel.	-	-	-	-	-	-	-	-
Subtotal Creat Replacement David	-	73.13	128.68	97.33	-	1.78	-	-
Crest Replacement Days CAT D7G Bulldozer	-	2.431	0.855	-	-	0.299		-
CAT D7G Buildozei CAT D9R Dozer	-	-	-	-	-	- 0.233	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	- 0.70	-	- 0.404	-	-	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	2.972 14.602	1.313 4.436	0.461 1.251	-	0.518 2.756	-	-
CAT CB-534C Vibratory Compactor	-	2.564	1.697	0.612	-	0.682	-	-
Water Truck	-	4.838	2.878	0.612	-	1.378	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	27.41	11.18	2.94	-	5.63		-
Shell Placement Days								
CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CAT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	-
CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
All terrain 20-T crane	-	-	-	-	-	-	-	-
Water Truck	-	-	-	-	-	-	-	-
Subtotal Crest Pavement Days	-	-	-	-	-	-	-	-
Belly Dump Truck C12 Engine	-	-	-	_	-	_	-	-
Motor Grader 160H	-	-	-	-	-	-		-
CAT AP-800C Asphalt Paver	-		-	-	-	-		-
CAT BG-650 Windrow Elevator CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-		-
Spillway Construction Days								
Concrete Transit Mixer	-	-	-	35.979	38.275	35.979	-	-
Concrete Pump Trucks	-	-	-	14.391	15.310	14.391	-	-
All terrain 20-T crane CAT D7G Bulldozer	-	-	-	2.883 8.425	3.068 8.963	2.883 8.425	-	-
CAT 657 Scraper	-	-	-	36.378	38.700	36.378	-	-
CAT CB-534C Vibratory Compactor	-	-	-	3.563	3.790	3.563	-	-
CAT D350E Articulating Truck	-	-	-	14.391	15.310	14.391	-	-
Front End Loader 966F End Dump Trucks	-	-	-	5.414 43.174	5.760 45.930	5.414 43.174	-	-
Water Truck	-	-	-	7.196	7.655	7.196	-	-
Subtotal	-	-	-	171.79	182.76	171.79	-	-
Parapet Wall Construction Days								
All terrain 20-T crane	-	6.331	2.798	0.982	-	1.104	-	-
Flatbed Truck for Forms movement	-	7.900 14.23	3.491 6.29	1.225 2.21	-	1.378 2.48	-	-
Annual Total	31.012	158.467	155.759	274.266	243.751	184.425	-	-
					-			
	Annual Emiss		2000	2040	2044	2012	2042	204.4
BoreDrillRigs	2007	2008 9.582	2009 20.210	2010 15.384	2011	2012	2013	2014
Cranes	-	6.331	20.210	3.865	3.068	3.988	-	-
CrawlerTractors	0.882	7.760	8.339	13.205	17.567	9.225	-	-
Excavators	1.282	1.564	-	-	-	-	-	-
Graders	1.228	4.462	4.854	2.996	-	0.315	-	-
OffHighwayTractorsCompactors	-	2.564	1.697	4.175	3.790	4.245		-
OffHighwayTrucksWaterTrucks	2.511	17.913	20.454	20.056	7.655	9.217	-	-
OnRoadHaul	25.108	57.925	16.990	110.412	158.918	114.641	-	-
Pavers	-	-	-	-	-	-	-	-
PavingEquipment	-	-	-	-	-	-	-	-
RubberTiredLoaders	-	3.925	3.018	5.875	14.054	6.417	-	-
Scrapers	-	46.440	77.400	98.298	38.700	36.378	-	-
	31.012	158.467	155.759	274.266	243.751	184.425		-
	01.012	.00.707	.00.103	L. T.200	2.0.701	.07.720		1

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	ROG	Daily Emission	on (lhe/day)						
	ROG	2007	2008	2009	2010	2011	2012	2013	2014
	Stripping Days	82	127	74	0	360	21	0	0
CrawlerTractors	CAT D7G Bulldozer	-	20.30	8.70	-	5.80	8.70	-	-
CrawlerTractors RubberTiredLoaders	CAT D9 Dozer CAT 966F Series II Wheel Loader	2.90	2.90 19.30	8.10	-	5.40	8.10	-	-
OnRoadHaul	CAT 966F Series if Wheel Loader CAT D350E Articulated Truck	72.00	173.12	43.20	-	28.80	43.20	-	-
Excavators	CAT 375 Excavator	3.68	3.68	-	-	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	3.52	24.80	10.56	-	-	10.56	-	-
OffHighwayTrucksWaterTrucks	Water Truck	7.20	43.20	21.60	-	-	21.60	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	89.30	287.30	92.16	-	40.00	92.16	-	-
	Shell Excavation Days			324	200	0	21	0	0
CrawlerTractors	CAT D7G Bulldozer	-	14.50	8.70	-	-	8.70	-	-
CrawlerTractors CrawlerTractors	CAT D9 Dozer CAT D11 Dozer	-	5.80	5.80	5.80	-		-	-
Scrapers	CAT 657 Scraper	-	72.80	72.80	72.80	-	-	-	-
Graders	CAT 160H Motor Grader with ripper	-	3.52	3.52	3.52	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	14.32	8.10	-	-	8.10	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	72.00	43.20	-	-	43.20	-	-
BoreDrillRigs OffHighwayTrucksWaterTrucks	Drill rig Water truck	-	15.04 14.40	19.04 14.40	18.08 14.40	-	-	-	-
Olli ligilway i rucks water i rucks	Water truck	-	14.40	-	14.40	-		-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-
	Subtotal	-	212.38	175.56	114.60	-	60.00	-	-
CrawlerTractors	CAT DZG Rulldozor	. 0		94 8.70	20	- 0	45 2.00	- 0	- 0
CrawlerTractors CrawlerTractors	CAT D7G Bulldozer CAT D9R Dozer	-	14.50	8.70	-	-	2.90	-	-
Crawler Tractors Crawler Tractors	CAT D9R D0zer CAT D11 Dozer	-	-	-	-	-		-	
Scrapers	CAT 657 Scraper	-	-	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	18.90	13.50	5.40	-	8.10	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	86.72	43.52	14.72	-	43.20	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	21.92	18.24	7.20	-	11.04	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	36.00	28.80	7.20	-	21.60	-	-
		-	-	-	-	-		-	
		-	-	-	-	-	-	-	-
	Subtotal	-	178.04	112.76	34.52	-	86.84	-	-
	Shell Placement Days	0	10	0	0	0	0	0	0
CrawlerTractors	CAT D7G Bulldozer	-	-	-	-	-	-	-	-
CrawlerTractors	CAT D9R Dozer	-	-	-	-	-	-	-	-
CrawlerTractors Scrapers	CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavators	Excavator 375L	-	-	-	-	-	-	-	-
OnRoadHaul	CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	-	-	-	-	-	
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
OffHighwayTractorsCompactors Cranes	CAT CB-534C Vibratory Compactor All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	
-	Subtotal	-	-	-	-	-	-	-	-
	Crest Pavement Days	0	0	0	0	0	0	0	0
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Graders	Motor Grader 160H	-	-	-	-	-	-	-	-
Pavers PavingEquipment	CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-	-	-		-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
3 -7	Subtotal	-	-	-	-	-	-	-	-
	Spillway Construction Days	9 0	0	0	235	250	235	0	0
OnRoadHaul	Concrete Transit Mixer	-	-	-	36.00	36.00	36.00	-	-
OnRoadHaul	Concrete Pump Trucks	-	-	-	14.40	14.40	14.40	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	2.88 8.70	2.88 8.70	2.88 8.70	-	-
Scrapers	CAT 677 Scraper	-	-	-	36.40	36.40	36.40	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	3.68	3.68	3.68		-
OnRoadHaul	CAT D350E Articulating Truck	-	-	-	14.40	14.40	14.40	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	5.40	5.40	5.40	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	End Dump Trucks Water Truck	-	-	-	43.20	43.20 7.20	43.20	-	-
Om ngriway Frucks Water Frucks	Subtotal		-	-	7.20 172.26	172.26	7.20 172.26	-	-
	Parapet Wall Construction Days	0		94	20	0	45	0	0
Cranes	All terrain 20-T crane	-	40.32	28.80	11.52	-	17.28	-	-
OnRoadHaul	Flatbed Truck for Forms movement	-	50.40	36.00	14.40	-	21.60	-	-
	Subtotal	-	90.72	64.80	25.92	-	38.88	-	-
	Maximum Daily	89.3	287.3	175.6	172.3	172.3	172.3	-	-
		-							
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ROG	Annual Emiss 2007	ions (tpy) 2008	2009	2010	2011	2012	2013	2014
Stripping Days CAT D7G Bulldozer	_	0.074		-	1.044			_
CAT D7G Buildozer CAT D9 Dozer	0.119	0.074	0.107	-	1.044	0.030		-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	2.952	0.073 3.970	0.100 0.533	-	0.972 5.184	0.028 0.151	-	-
CAT 375 Excavator	0.151	0.184	-	-	-	-	-	-
CAT 160H Motor Grader with ripper Vater Truck	0.144 0.295	0.260 0.457	0.130 0.266	-	-	0.037 0.076	-	-
Talo. Talo.	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	3.66	5.16	1.14	-	7.20	0.32	-	-
Shell Excavation Days CAT D7G Bulldozer	-	0.039	0.107	-	-	0.030		-
CAT D9 Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	0.435 5.460	0.725 9.100	0.580 7.280	-	-	-	-
CAT 160H Motor Grader with ripper	-	0.264	0.440	0.352	-	-	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	0.045 0.194	0.100 0.533	-	-	0.028 0.151	-	-
Orill rig	-	1.128	2.380	1.808	-	-	-	-
Vater truck	-	1.080	1.800	1.440	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	8.65	- 15.19	11.46	-	0.21	-	-
Crest Replacement Days		0.5.5	0 :					
CAT D7G Bulldozer CAT D9R Dozer	-	0.316	0.107	-	-	0.036	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	0.348	- 0.154	0.054	-	0.061	-	-
CAT D350E Articulated Truck	-	1.717	0.522	0.147	-	0.324	-	-
CAT CB-534C Vibratory Compactor	-	0.326	0.208	0.072	-	0.083	-	-
Vater Truck	-	0.569	0.338	0.072	-	0.162	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	3.28	1.33	0.35	-	0.67		-
Shell Placement Days								
CAT D7G Bulldozer CAT D9R Dozer	-	-	-	-	-	-	-	-
CAT D11 Dozer	-	=	-	=	-	-		-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
Quarry Truck 771D Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
All terrain 20-T crane Water Truck	-	-	-	-	-	-		-
Subtotal	-	-	-	-	-	-	-	-
Crest Pavement Days Belly Dump Truck C12 Engine	-	-	_	-	-	-		_
Motor Grader 160H	-	-	-	-	-	-	-	-
CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-		-
Subtotal	-	-	-	-	-	-	-	-
Spillway Construction Days Concrete Transit Mixer	-	-	-	4.230	4.500	4.230		-
Concrete Pump Trucks	-	-	-	1.692	1.800	1.692	-	-
All terrain 20-T crane CAT D7G Bulldozer	-	-	-	0.338 1.022	0.360 1.088	0.338 1.022	-	-
CAT 657 Scraper	-	-	-	4.277	4.550	4.277	-	-
CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	0.432 1.692	0.460 1.800	0.432 1.692	-	-
Front End Loader 966F	-	-	-	0.635	0.675	0.635	-	-
End Dump Trucks	-	-	-	5.076	5.400	5.076	-	-
Vater Truck Subtotal	-	-	-	0.846 20.24	0.900 21.53	0.846 20.24	-	-
Parapet Wall Construction Days								
All terrain 20-T crane Flatbed Truck for Forms movement	-	0.743 0.929	0.328 0.410	0.115 0.144	-	0.130 0.162	-	-
	-	1.67	0.410	0.144	-	0.162	-	<u> </u>
nnual Total	3.661	18.757	18.390	32.305	28.733	21.731	-	-
	Annual Emiss							
BoreDrillRigs	2007	2008 1.128	2009 2.380	2010 1.808	2011	2012	2013	2014
Cranes	-	0.743	0.328	0.454	0.360	0.468	-	-
CrawlerTractors	0.119	1.009	1.047	1.602	2.132	1.119	-	-
Excavators	0.151	0.184	-	-	-	-	-	-
Graders OffHighwayTractorsCompactors	0.144	0.524	0.570	0.352	- 0.460	0.037	-	-
On migriway mactors compactors	0.295	0.326 2.106	0.208 2.405	0.504 2.358	0.460 0.900	0.515 1.084	-	-
OffHighwayTrucksWaterTrucks			1.998	12.981	18.684	13.478	-	-
	2.952	6.810						. —
OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	-	-	-					

		1			1	1	All	Quality	weu
	PM2.5	Daily Emission							
	Stripping Days	2007 s 82	2008 127	2009	2010	2011	2012	2013	2014
CrawlerTractors	CAT D7G Bulldozer	-	4.51	2.85	-	0.99	1.49	-	-
CrawlerTractors RubberTiredLoaders	CAT D9 Dozer CAT 966F Series II Wheel Loader	0.72	0.64 3.31	2.85	-	0.81	1.21	-	-
OnRoadHaul	CAT D350E Articulated Truck	7.18	19.69	5.70	-	4.27	6.40	-	-
Excavators Graders	CAT 375 Excavator CAT 160H Motor Grader with ripper	0.72	0.64 3.35	2.28	-	-	1.55	-	-
OffHighwayTrucksWaterTrucks	Water Truck	0.72	5.56	2.28	-	-	3.20	-	-
		-	-	-	-	-		-	-
		-	-	-	-	-	-	-	-
	Subtotal	10.05	37.70	15.97	-	6.07	13.86	-	-
CrawlerTractors	Shell Excavation Days CAT D7G Bulldozer	s 0	177 3.22	324 2.28	200	0	21 1.49	0	0
CrawlerTractors	CAT D9 Dozer	-	-	-	-	-	-	-	-
CrawlerTractors	CAT D11 Dozer CAT 657 Scraper	-	1.29 6.44	1.14	0.99 4.97	-	-	-	-
Scrapers Graders	CAT 160H Motor Grader with ripper	-	0.64	5.70 0.57	0.50	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	2.26	2.28	-	-	1.21	-	-
OnRoadHaul BoreDrillRigs	CAT D350E Articulated Truck Drill rig	-	9.83 2.58	4.56 2.28	1.99	-	6.40	-	-
OffHighwayTrucksWaterTrucks	Water truck	-	1.29	1.14	0.99	-	-	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	-	27.54	19.96	9.44	-	9.11	-	-
	Crest Replacement Days	s 0	158	19.96	9.44	- 0	9.11	- 0	
CrawlerTractors	CAT D7G Bulldozer	-	3.22	1.71	-	-	0.50	-	-
CrawlerTractors CrawlerTractors	CAT D9R Dozer CAT D11 Dozer	-	-	-	-	-	-	-	-
Scrapers	CAT 611 Bozel CAT 657 Scraper	-	-	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	3.31	2.85	0.99	-	1.21	-	-
OnRoadHaul OffHighwayTractorsCompactors	CAT D350E Articulated Truck CAT CB-534C Vibratory Compactor	-	13.25 3.88	4.56 2.28	1.99 0.50	-	6.40 1.88	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	4.91	2.28	0.50	-	3.20	-	-
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
	Subtotal	- s 0	28.58	13.69	3.97	-	13.19	-	- 0
CrawlerTractors	Shell Placement Days CAT D7G Bulldozer	-	10	- 0	-	- 0	- 0	- 0	-
CrawlerTractors	CAT D9R Dozer	-	-	-	-	-	-	-	-
CrawlerTractors Scrapers	CAT D11 Dozer CAT 657 Scraper	-	-	-	-	-	-	-	-
RubberTiredLoaders	CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavators OnRoadHaul	Excavator 375L CAT D350E Articulated Truck	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Quarry Truck 771D	-	-	-	-	-	-	-	-
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
OffHighwayTractorsCompactors Cranes	CAT CB-534C Vibratory Compactor All terrain 20-T crane	-	-	-	-	-	-	-	-
OffHighwayTrucksWaterTrucks	Water Truck	-	-	-	-	-	-	-	-
	Subtotal Crest Pavement Days	s 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0
OnRoadHaul	Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Graders	Motor Grader 160H	-	-	-	-	-	-	-	-
Pavers PavingEquipment	CAT AP-800C Asphalt Paver CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
OffHighwayTractorsCompactors	CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
	Subtotal Spillway Construction Day:	- o	- 0	- 0	235	250	235	- 0	- 0
OnRoadHaul	Concrete Transit Mixer	-	-	-	5.34	5.34	5.34		-
OnRoadHaul	Concrete Pump Trucks	-	-	-	2.13	2.13	2.13	-	-
Cranes CrawlerTractors	All terrain 20-T crane CAT D7G Bulldozer	-	-	-	1.07 3.20	1.07 3.20	1.07 3.20	-	-
Scrapers	CAT 657 Scraper	-	-	-	5.34	5.34	5.34		-
OffHighwayTractorsCompactors OnRoadHaul	CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-	-	-	1.07 2.13	1.07 2.13	1.07 2.13	-	-
RubberTiredLoaders	Front End Loader 966F	-	-	-	2.13	2.13	2.13	-	-
OnRoadHaul OffHighwayTrucksWaterTrucks	End Dump Trucks	-	-	-	6.40	6.40 1.07	6.40 1.07	-	-
OffnigriwayTrucksvvaterTrucks	Water Truck Subtotal	-	-	-	1.07 29.88	29.88	29.88	-	-
	Parapet Wall Construction Days		158	94	20		45	_	
Cranes OnRoadHaul	All terrain 20-T crane Flatbed Truck for Forms movement	-	5.92 6.18	4.23 2.12	1.69 0.85	-	2.54 3.20	-	-
Ontoadriadi	Subtotal	-	12.11	6.35	2.54	-	5.74		-
	Maximum Daily	10.0	37.7	20.0	29.9	29.9	29.9	-	-
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Stripping Days CAT D7G Bulldozer CAT D9 Dozer CAT 966F Series II Wheel Loader CAT 9366F Articulated Truck CAT 375 Excavator CAT 160H Motor Grader with ripper Water Truck	2007 - 0.029	2008						
CAT D7G Bulldozer CAT D9 Dozer CAT 966F Series II Wheel Loader CAT D350E Articulated Truck CAT 376 Excavator CAT 104 Motor Grader with ripper Water Truck	-	2000	2009	2010	2011	2012	2013	2014
CAT D7G Bulldozer CAT D9 Dozer CAT 966F Series II Wheel Loader CAT D350E Articulated Truck CAT 375 Excavator CAT 1050H Motor Grader with ripper Water Truck			2009	2010	2011	2012	2013	2014
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck CAT 375 Excavator CAT 160H Motor Grader with ripper Water Truck	0.029	0.016	0.021	-	0.179	0.005		
CAT D350E Articulated Truck CAT 375 Excavator CAT 180H Motor Grader with ripper Water Truck		0.032	- 0.004	-	0.146	- 0.004	-	-
CAT 375 Excavator CAT 160H Motor Grader with ripper Water Truck	0.294	0.015	0.021	-	0.146	0.004	-	-
Water Truck	0.029	0.032	-	-	-	- 0.022	-	-
	0.029	0.040	0.021	-	-	0.005	-	-
Subtotal	0.029	0.042	0.021	-	-	0.011	-	-
Subtotal	-	-	-	-	-	-	-	-
Subtotal	-			-	-	-	-	-
Subtotal	0.41	0.54	0.13	-	1.09	0.05	-	-
Shell Excavation Days								
CAT D7G Bulldozer	-	0.009	0.021	-	-	0.005	-	-
CAT D44 Dozer	-	- 0.007	- 0 1 4 2	0.099	-	-	-	-
CAT D11 Dozer CAT 657 Scraper	-	0.097	0.143	0.099	-		-	-
CAT 160H Motor Grader with ripper	-	0.048	0.071	0.050	-	-	-	-
CAT 966F Series II Wheel Loader	-	0.008	0.021	-	-	0.004	-	-
CAT D350E Articulated Truck	-	0.020	0.042	-	-	0.022	-	-
Drill rig Water truck	-	0.193	0.285	0.199	-	-	-	-
water truck	-	0.037	0.143	-	-		-	
	-		-	-	-	-	-	-
	-	-	-	-	-	-		
Cultitatal	-	- 0.05	- 1 44	-	-	- 0.03	-	-
Subtotal Crost Panlacoment Days	-	0.95	1.44	0.94	-	0.03	-	-
Crest Replacement Days CAT D7G Bulldozer	-	0.070	0.021	-	_	0.006	-	-
CAT D7G Buildozer CAT D9R Dozer	-	- 0.070	- 0.021	-	-	-	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper	-	- 0.057	-	-	-	- 0.000	-	-
CAT 966F Series II Wheel Loader CAT D350E Articulated Truck	-	0.057 0.258	0.033	0.010	-	0.009	-	-
CAT CB-534C Vibratory Compactor	-	0.258	0.052	0.020	-	0.048	-	-
Water Truck	-	0.080	0.027	0.005	-	0.024		-
	-			-		-	-	-
	-	-	-	-	-	-	-	-
Subtotal	-	0.53	0.16	0.04	-	0.10	-	-
Shell Placement Days		0.00	0.10	0.01		0.10		
CAT D7G Bulldozer	-	-	-	-	-	-		-
CAT D9R Dozer	-			-	-	-	-	-
CAT D11 Dozer	-	-	-	-	-	-	-	-
CAT 657 Scraper CAT 966F Series II Wheel Loader	-	-	-	-	-	-	-	-
Excavator 375L	-	-	-	-	-	-	-	-
CAT D350E Articulated Truck	-	-	-	-	-	-		-
Quarry Truck 771D	-			-		-	-	-
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor All terrain 20-T crane	-	-		-	-		-	-
Water Truck	-		-	-	-	-	-	-
Subtotal	-	-	-	=	Ē	-	-	-
Crest Pavement Days								
Belly Dump Truck C12 Engine	-	-	-	-	-	-	-	-
Motor Grader 160H CAT AP-800C Asphalt Paver	-		-	-	-	-	-	-
CAT BG-650 Windrow Elevator	-	-	-	-	-	-	-	-
CAT CB-534C Vibratory Compactor	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Spillway Construction Days				0.007	0.007	0.00=		
Concrete Transit Mixer Concrete Pump Trucks	-	-	-	0.627 0.251	0.667 0.267	0.627	-	-
All terrain 20-T crane	-	-	-	0.251	0.287	0.251	-	-
CAT D7G Bulldozer	-	-	-	0.376	0.400	0.376	-	-
CAT 657 Scraper	-		-	0.627	0.667	0.627	-	-
CAT CB-534C Vibratory Compactor CAT D350E Articulating Truck	-		-	0.125 0.251	0.133	0.125 0.251	-	-
Front End Loader 966F	-	-	-	0.251	0.267	0.251	-	-
End Dump Trucks	-	-	-	0.752	0.800	0.752		-
Water Truck	-	-	-	0.125	0.133	0.125	-	-
Subtotal	-	-	-]	3.51	3.74	3.51	-	-
Parapet Wall Construction Days All terrain 20-T crane	-	0.100	0.048	0.047	_	0.019		-
Flatbed Truck for Forms movement	-	0.109	0.048	0.017	-	0.019	-	-
Subtotal	-	0.23	0.07	0.03	-	0.04	-	-
	0.412	2.255	1.798	4.520	4.828	3.736		
	Annual F	ione (text)						
	Annual Emiss	2008	2009	2010	2011	2012	2013	2014
Annual Total	2007	0.193	0.285	0.199	-	-	-	- 2014
Annual Total	2007		0.048	0.142	0.400	0.444		
Annual Total BoreDrillRigs		0.109			0.133	0.144	-	-
Annual Total	-	0.109 0.224	0.206	0.476	0.133 0.579	0.144	-	-
Annual Total BoreDrillRigs Cranes	-							
Annual Total BoreDrillRigs Cranes CrawlerTractors	- - 0.029	0.224	0.206	0.476	0.579	0.393	-	-
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators	- - 0.029 0.029	0.224 0.032	0.206	0.476	0.579	0.393		-
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders	- 0.029 0.029 0.029	0.224 0.032 0.089	0.206 - 0.092	0.476 - 0.050	0.579 - -	0.393 - 0.005	-	-
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors	- 0.029 0.029 0.029	0.224 0.032 0.089 0.062	0.206 - 0.092 0.027	0.476 - 0.050 0.130	0.579 - - 0.133	0.393 - 0.005 0.139	-	-
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers	- 0.029 0.029 0.029 - 0.029	0.224 0.032 0.089 0.062 0.219	0.206 - 0.092 0.027 0.191	0.476 - 0.050 0.130 0.230	0.579 - - 0.133 0.133	0.393 - 0.005 0.139 0.161	-	-
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment PavingEquipment	- 0.029 0.029 0.029 - 0.029 0.294	0.224 0.032 0.089 0.062 0.219 0.763	0.206 - 0.092 0.027 0.191 0.161 -	0.476 - 0.050 0.130 0.230 1.909 -	0.579 - - 0.133 0.133 2.769 -	0.393 - 0.005 0.139 0.161 1.998 -		
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment RubberTiredLoaders	- 0.029 0.029 0.029 - 0.029 0.294	0.224 0.032 0.089 0.062 0.219 0.763 - - 0.080	0.206 - 0.092 0.027 0.191 0.161 - 0.075	0.476 - 0.050 0.130 0.230 1.909 - - 0.261	0.579 - 0.133 0.133 2.769 - 0.413	0.393 - 0.005 0.139 0.161 1.998 - - 0.268		
Annual Total BoreDrillRigs Cranes CrawlerTractors Excavators Graders OffHighwayTractorsCompactors OffHighwayTrucksWaterTrucks OnRoadHaul Pavers PavingEquipment PavingEquipment	- 0.029 0.029 0.029 - 0.029 0.294	0.224 0.032 0.089 0.062 0.219 0.763	0.206 - 0.092 0.027 0.191 0.161 -	0.476 - 0.050 0.130 0.230 1.909 -	0.579 - - 0.133 0.133 2.769 -	0.393 - 0.005 0.139 0.161 1.998 -		

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	No. of		Unmitigated					Mitigated Da				-
Schedule	Years	dovo		Total	Exhaust	Dust	Total		Total	Exhaust	Dust	Total
Scriedule	Teals	days		PM10	PM10	PM10	PM2.5		PM10	PM10	PM10	PM2.5
			Auxiliary	0	0	0	0.00	Auxiliary	0	0	0	0.00
	0		Spillway					Spillway				
na	0	0	Excavation	F74 F4	0.00	F70.00	440.70	Excavation	0.70	0.04	05.00	4.00
			Auxiliary	571.54	0.68	570.86	118.79	Auxiliary	8.78	0.01	85.63	1.82
			Fuseplug					Fuseplug				
0000 0044	_	700	Spillway					Spillway				
2009-2011	3	720	Construction	_	_	_	0.00	Construction	_	0	0	0.00
	_		Tunnel	0	0	0	0.00	Tunnel	0	0	0	0.00
na	0	0	Excavation					Excavation		_		0.00
	_		Tunnel	0	0	0	0.00	Tunnel	0	0	0	0.00
na	0	0	Construction	0.00	0.00	0.00	0.00	Construction	0.00	0.00	0.00	0.00
0007 0040	-	700	Main Dam	0.00	0.00	0.00	0.00	Main Dam	0.00	0.00	0.00	0.00
2007-2013	7	720	Construction			0.70		Construction		_	0.55	0.40
na	0	0	Dike 1	3.79	0	3.79	0.79	Dike 1	0.57	0	0.57	0.12
na	0	0	Dike 2	8.32	0.64	7.68	1.73	Dike 2	1.16	0.01	1.15	0.24
na	0	0	Dike 3	2.77	0	2.77	0.58	Dike 3	0.41	0	0.41	0.09
na	0	0	Mooney Ridge				0.00	Mooney Ridge				0.00
2013	1	20	Dike 4	5.24	0.00	5.24	1.09	Dike 4	0.78	0.00	0.78	0.16
2008	1	180	Dike 5	3.50	0.00	3.50	0.73	Dike 5	0.52	0.00	0.52	0.11
2008	1	65	Dike 6	3.22	0.00	3.22	0.67	Dike 6	0.48	0.00	0.48	0.10
2009-2010	2	580	RWD	3.53	0.00	3.53	0.73	RWD	0.53	0.00	0.53	0.11
2012	1	240	LWD	1.28	0.00	1.28	0.27	LWD	0.19	0.00	0.19	0.04
na	0	0	Dike 7	2.74	0	2.74	0.57	Dike 7	0.41	0	0.41	0.09
na	0	0	Dike 8	5.45	0	5.45	1.13	Dike 8	0.81	0	0.81	0.17
2008-2010	3	360	MIAD	4.12	0.00	4.12	0.86	MIAD	0.61	0.00	0.61	0.13
				Unm	itigated lb	s/dav			Miti	gated lbs	/dav	
			2007	0	0	0	0.00	2007	0	0	0	0.00
			2008	10.84	0.00	10.84	2.25	2008	1.61	0.00	1.61	0.33
			2009	579.19	0.68	578.51	120.38	2009	9.92	0.00	86.77	2.06
			2010	579.19	0.68	578.51	120.38	2010	9.92	0.01	86.77	2.06
			2010	571.54		570.86	118.79	2010	8.78	0.01		1.82
			2012		0.68			2012			85.63	
				1.28	0.00	1.28	0.27		0.19	0.00	0.19	0.04
			2013	5.24	0.00	5.24	1.09	2013	0.78	0.00	0.78	0.16
			2014	0	0	0	0.00	2014	0	0	0	0.00
			Hamitiant of A					Mitimate d Ann	Facia	-: (4		
	No. of		Unmitigated Ar					Mitigated Ann				
Schodulo	No. of	dave	Unmitigated Ar	Total	Exhaust	Dust		Mitigated Ann	Total	Exhaust	Dust	
Schedule	No. of Years	days		Total PM10	Exhaust PM10	Dust PM10	0.00		Total PM10	Exhaust PM10	Dust PM10	0.00
Schedule		days	Auxiliary	Total	Exhaust	Dust	0.00	Auxiliary	Total	Exhaust	Dust	0.00
	Years		Auxiliary Spillway	Total PM10	Exhaust PM10	Dust PM10	0.00	Auxiliary Spillway	Total PM10	Exhaust PM10	Dust PM10	0.00
Schedule na		days 0	Auxiliary Spillway Excavation	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Auxiliary Spillway Excavation	Total PM10 0	Exhaust PM10 0	Dust PM10 0	
	Years		Auxiliary Spillway Excavation Auxiliary	Total PM10	Exhaust PM10	Dust PM10	0.00	Auxiliary Spillway Excavation Auxiliary	Total PM10	Exhaust PM10	Dust PM10	0.00
	Years		Auxiliary Spillway Excavation Auxiliary Fuseplug	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Auxiliary Spillway Excavation Auxiliary Fuseplug	Total PM10 0	Exhaust PM10 0	Dust PM10 0	
na	Years 0	0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway	Total PM10 0	Exhaust PM10 0	Dust PM10 0	
	Years		Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction	Total PM10 0 68.58	Exhaust PM10 0 0.08	Dust PM10 0 68.50	14.26	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction	Total PM10 0 1.05	Exhaust PM10 0 0.00	Dust PM10 0	0.22
na 2009-2011	O 3	720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel	Total PM10 0	Exhaust PM10 0	Dust PM10 0		Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel	Total PM10 0	Exhaust PM10 0	Dust PM10 0	
na	Years 0	0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation	Total PM10 0 68.58	0 0 0.08	Dust PM10 0 68.50	0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation	Total PM10 0 1.05	0 0 0.00	Dust PM10 0 10.28	0.22
na 2009-2011 na	0 3 0	0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel	Total PM10 0 68.58	Exhaust PM10 0 0.08	Dust PM10 0 68.50	14.26	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel	Total PM10 0 1.05	Exhaust PM10 0 0.00	Dust PM10 0	0.22
na 2009-2011	O 3	720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction	Total PM10 0 68.58 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50	0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction	Total PM10 0 1.05 0 0	Exhaust PM10 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0	0.22
na 2009-2011 na na	0 3 0	0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam	Total PM10 0 68.58	0 0 0.08	Dust PM10 0 68.50	0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam	Total PM10 0 1.05	0 0 0.00	Dust PM10 0 10.28	0.22
na 2009-2011 na na 2007-2013	0 3 0 0 7	0 720 0 0 720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction	Total PM10 0 68.58 0 0 0.00	0 0.08 0.00 0.00	Dust PM10 0 68.50 0 0 0 0.00	0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction	Total PM10 0 1.05 0 0 0.00	0 0.00 0.00 0.00	Dust PM10 0 0 10.28 0 0 0 0 0.00	0.22 0.00 0.00 0.00
na 2009-2011 na na 2007-2013	0 3 0 0 7 0	0 720 0 0 720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1	Total PM10 0 68.58 0 0 0.00	0 0.08 0.00 0.00 0.00	Dust PM10 0 68.50 0 0 0.00	0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1	Total PM10 0 1.05 0 0 0.00 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na	0 3 0 0 7 0 0 0	0 720 0 0 720 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 68.58 0 0 0.00 0	0 0.08 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 1.05 0 0 0 0.00 0 0	0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013	0 3 0 0 7 0	0 720 0 0 720	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3	Total PM10 0 68.58 0 0 0.00 0 0	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3	Total PM10 0 1.05 0 0 0.00 0 0 0	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na	0 3 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	720 0 0 720 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 68.58 0 0 0.00 0	0 0.08 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2	Total PM10 0 1.05 0 0 0 0.00 0 0	0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na na	7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 720 0 720 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0 68.58 0 0 0.00 0 0 0 0	0.08 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 68.50 0 0.00 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na na 2013	7 0 0 0 0 0 0 0 1 1	720 0 0 720 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0 68.58 0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0	0.08 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 68.50 0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0	14.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge	Total PM10 0	0 0.00 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008	7 0 0 0 0 0 1 1 1	720 0 0 720 0 0 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5	Total PM10 0 68.58 0 0.00 0 0.00 0 0 0 0 0 0 0	0.08 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 68.50 0 0.00 0 0.00 0 0 0.05 0.32	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	0 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0.00 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008	7 0 0 0 0 0 1 1 1 1 1 1	720 0 0 720 0 0 0 0 0 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 68.50 0 0 0.00 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6	Total PM10 0 1.05 0 0.00 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0.00 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010	7 0 0 0 0 1 1 1 1 2	0 0 0 0 720 0 0 0 0 0 0 20 180 65 580	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.08 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.02
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012	7 0 0 0 0 1 1 1 1 2 1 1	0 0 0 0 0 0 0 0 0 0 0 20 180 65 580 240	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.08 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.07 0.02 0.11 0.03	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010	7 0 0 0 0 1 1 1 1 2	0 0 0 0 720 0 0 0 0 0 0 20 180 65 580	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.08 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0.05 0.32 0.10 0.15 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.02 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 68.58 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.05 0	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0 0.05 0.32 0.10 0.515 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na	7 0 0 0 0 1 1 1 2 1 0 0 0 0 0 0 0 0 0 0 0	720 0 0 720 0 0 0 0 0 20 180 65 580 240	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7	Total PM10 0 68.58 0 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0.05 0.32 0.10 0.15 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7	Total PM10 0 1.05 0 0 0.00 0 0 0.01 0.05 0.02 0.08 0.02 0	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.02 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 68.58 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.05 0	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0 0.05 0.32 0.10 0.515 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25	Exhaust PM10 0 0.08 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0.25	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0 0 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25	0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00	Dust PM10 0 68.50 0 0 0.00 0 0 0.05 0.32 0.10 0.51 0.15 0 0.25	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0.00 0 0.00 0 0.01 0.05 0.02 0.08 0.02 0 0 0.04	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25	0.008 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Dust PM10 0 68.50 0 0 0.00 0 0 0 0 0 0 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25 t/y 0	14.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.07 0.02 0.11 0.03 0.00 0.00 0.05	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0.00 0 0.00 0 0.01 0.05 0.02 0.08 0.02 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0.51 0.15 0 0 0.25 Un 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0.00 0 0.00 0 0.01 0.05 0.02 0.08 0.02 0 0 0 0 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Auxiliary Fuseplug Spillway Construction Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009	Total PM10 0 68.58 0 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0.25 Un 0 0.67 69.34	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0.25 t/y 0 0.67 69.26	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0 0.00 0 0.01 0.05 0.02 0.08 0.02 0 0.04 N 0 0 1.17	Exhaust PM10 0 0.00 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0.00 0 0.01 0.05 0.02 0 0.04 /v 0 0.10 10.39	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 68.58 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0 0 0 0.25 Un 69.34 69.34	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0 0 0.25 t/y 0 69.26 69.26	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation One Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1itigated t 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0.00 0 0.01 0.05 0.02 0.02 0 0.04 /v /v 0 0.10 10.39 10.39	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011	Total PM10 0 68.58 0 0 0.00 0 0.00 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25 Un 0 69.34 69.34 68.58	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0 0 0 0 0 69.26 69.26 69.26 68.50	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011 2012	Total PM10 0 68.58 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0.51 0.15 0 0 0.25 Un 69.34 69.34 68.58 0.15	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2010 2011 2012	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0.00 0 0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.02 0.00 0.02 0.24 0.24 0.22 0.00
na 2009-2011 na na 2007-2013 na na na 2013 2008 2008 2009-2010 2012 na na	7 0 0 0 1 1 1 1 2 1 0 0 0 0	720 0 720 0 0 0 0 0 0 0 20 180 65 580 0 0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD 2007 2008 2009 2010 2011	Total PM10 0 68.58 0 0 0.00 0 0.00 0 0 0.05 0.32 0.10 0.51 0.15 0 0 0.25 Un 0 69.34 69.34 68.58	Exhaust	Dust PM10 0 68.50 0 0 0.00 0 0.00 0 0.05 0.32 0.10 0.51 0.15 0 0 0 0 0 0 69.26 69.26 69.26 68.50	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Auxiliary Spillway Excavation Auxiliary Fuseplug Spillway Construction Tunnel Excavation Tunnel Construction Main Dam Construction Dike 1 Dike 2 Dike 3 Mooney Ridge Dike 4 Dike 5 Dike 6 RWD LWD Dike 7 Dike 8 MIAD	Total PM10 0 1.05 0 0 0.00 0 0 0 0 0 0 0 0 0	Exhaust PM10 0 0.00 0 0.00 0 0 0 0 0 0 0	Dust PM10 0 10.28 0 0 0 0.00 0 0 0 0 0 0 0 0	0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01

Model Matrix

Model Name	Alternative	Met Data	Pollutant	Avg. Period	Mitigation?	Grid	Construction Year	Model Date	Additional Comments
A1MNO2	1	1987	NO2	1-hr	Yes	Coarse	2009	10/25/2006	Complete
A1MNO2b	1	1988	NO2	Annual	Yes	Coarse	2009	10/25/2006	Complete
A1MNO2c	1	1987	NO2	1-hr	Yes	Fine	2009	10/25/2006	Complete
A1MNO2d	1	1988	NO2	Annual	Yes	Fine	2009	10/25/2006	Complete
A1MPM10c	1	1985	PM10	24-hr	Yes	Coarse/Fine	2009	10/25/2006	Complete
A1MPM10d	1	1988	PM10	Annual	Yes	Coarse	2009	10/25/2006	Complete
A1MPM10f	1	1988	PM10	Annual	Yes	Fine	2009	10/26/2006	Complete
A1MPM25c	1	1985	PM2.5	24-hr/Annual	Yes	Coarse	2009	11/1/2006	Complete
A1MPM25d	1	1986	PM2.5	24-hr/Annual	Yes	Coarse	2009	11/1/2006	Complete
A1MPM25e	1	1987	PM2.5	24-hr/Annual	Yes	Coarse	2009	11/1/2006	Complete
A1MPM25f	1	1985	PM2.5	24-hr/Annual	Yes	Fine	2009	11/2/2006	Complete
A1MPM25g	1	1986	PM2.5	24-hr/Annual	Yes	Fine	2009	11/2/2006	Complete
A1MPM25h	1	1987	PM2.5	24-hr/Annual	Yes	Fine	2009	11/2/2006	Complete
A1UNO2	1	1987	NO2	1-hr	No	Coarse	2009	10/25/2006	Complete
A1UNO2b	1	1988	NO2	Annual	No	Coarse	2009	10/25/2006	Complete
A1UNO2c	1	1987	NO2	1-hr	No	Fine	2009	10/26/2006	Complete
A1UNO2d	1	1988	NO2	Annual	No	Fine	2009	10/26/2006	Complete
A1UPM10	1	1985	PM10	24-hr	No	Coarse	2009	10/25/2006	Complete
A1UPM10b	1	1988	PM10	Annual	No	Coarse	2009	10/25/2006	Complete
A1UPM10c	1	1985	PM10	24-hr	No	Fine	2009	10/26/2006	Complete
A1UPM10d	1	1988	PM10	Annual	No	Fine	2009	10/26/2006	Complete
A1UPM25	1	1985	PM2.5	24-hr/Annual	No	Coarse	2009	10/31/2006	Complete
A1UPM25b	1	1986	PM2.5	24-hr/Annual	No	Coarse	2009	10/31/2006	Complete
A1UPM25c	1	1987	PM2.5	24-hr/Annual	No	Coarse	2009	10/31/2006	Complete
A1UPM25e	1	1985	PM2.5	24-hr/Annual	No	Fine	2009	11/1/2006	Complete
A1UPM25f	1	1986	PM2.5	24-hr/Annual	No	Fine	2009	11/1/2006	Complete
A1UPM25g	1	1987	PM2.5	24-hr/Annual	No	Fine	2009	11/1/2006	Complete
A3MNO2	2	1987	NOO	1	Vas	Caaraa/Fina	2000	10/27/2006	Commisto
	3		NO2	1-hr	Yes	Coarse/Fine	2008		Complete
A3MNO2b	3	1988 1985	NO2	Annual 24-hr	Yes Yes	Coarse/Fine	2008 2009	10/27/2006	Complete
A3MPM10 A3MPM10b	3		PM10 PM10	24-nr 24-hr	Yes	Coarse Coarse	2009	10/26/2006	Complete
A3MPM10b	3	1985 1988			Yes	Fine	2009	10/26/2006	Complete
	3		PM10 PM10	Annual			2009	10/27/2006	Complete
A3MPM10d A3MPM25	3	1988 1985	PM2.5	Annual 24-hr/Annual	Yes Yes	Fine Coarse	2009	10/27/2006 11/1/2006	Complete Complete
A3MPM25b	3	1986	PM2.5	24-hr/Annual	Yes	Coarse	2009	11/1/2006	·
	3								Complete
A3MPM25c	3	1987	PM2.5	24-hr/Annual	Yes	Coarse	2009	11/1/2006	Complete
A3MPM25d	3	1985	PM2.5	24-hr/Annual	Yes	Fine Fine	2009	11/2/2006	Complete
A3MPM25e A3MPM25f	3	1986 1987	PM2.5 PM2.5	24-hr/Annual 24-hr/Annual	Yes Yes	Fine	2009 2009	11/2/2006 11/2/2006	Complete Complete
A3MPM25f A3UNO2	3	1987	NO2	24-nr/Annuai 1-hr	No Yes	Coarse/Fine	2009	10/27/2006	Complete
A3UNO2b	3	1987	NO2 NO2	Annual	No	Coarse/Fine	2008	10/27/2006	Complete
A3UNU2b A3UPM10	3	1988	PM10	24-hr	No	Coarse	2008	10/2//2006	Complete
A3UPM10b	3	1985	PM10 PM10	24-nr Annual	No	Coarse	2009		Complete
A3UPM10b	3	1988	PM10 PM10	Annuai 24-hr	No	Fine	2009	10/26/2006 10/27/2006	Complete
A3UPM10d	3	1985	PM10 PM10	24-nr Annual	No	Fine	2009	10/27/2006	Complete
A3UPM100 A3UPM25	3	1988	PM2.5	24-hr/Annual	No	Coarse	2009	11/1/2006	Complete
A3UPM25 A3UPM25b	3	1985	PM2.5 PM2.5	24-nr/Annual 24-hr/Annual		Coarse	2009		·
					No No			11/1/2006	Complete
A3UPM25c	3	1987	PM2.5	24-hr/Annual	No	Coarse	2009	11/1/2006	Complete
A3UPM25d	3	1985	PM2.5	24-hr/Annual	No	Fine	2009	11/2/2006	Complete
A3UPM25e	3	1986	PM2.5	24-hr/Annual	No	Fine	2009	11/2/2006	Complete
A3UPM25f	3	1987	PM2.5	24-hr/Annual	No	Fine	2009	11/2/2006	Complete

Alternative 3: Onroad Haul changed to Off Highway

Model Name	Alternative	Met Data	Pollutant	Avg. Period	Mitigation?	Grid	Construction Year	Model Date	Additional Comments
A3MNO2Ra	3	1987	NO2	1-hr	Yes	Coarse	2008	10/30/2006	Complete
A3MNO2Rb	3	1988	NO2	Annual	Yes	Coarse	2008	10/30/2006	Complete
A3MNO2Rc	3	1987	NO2	1-hr	Yes	Coarse/Fine	2008	10/30/2006	Complete
A3MNO2Rd	3	1988	NO2	Annual	Yes	Fine	2008	10/31/2006	Complete
A3UNO2Ra	3	1987	NO2	1-hr	No	Coarse	2008	10/30/2006	Complete
A3UNO2Rb	3	1988	NO2	Annual	No	Coarse	2008	10/30/2006	Complete
A3UNO2Rc	3	1987	NO2	1-hr	No	Fine	2008	10/31/2006	Complete
A3UNO2Rd	3	1988	NO2	Annual	No	Fine	2008	10/31/2006	Complete

Note:

Coarse grid spacing = 500 m Fine grid spacing = 50 m, 11 x 11

	Comparison of Modeled Concentrations to NAAQS Standard										
		Model	ed Concent	ration		Modeled Concentration with Background					
Pollutant	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	
NO2											
Annual	8.41		7.26			27.06		26.20			
PM10											
24-Hr	63.93		44.71			122.93		103.71			
Annual	3.35		2.39			25.35		24.39			
PM2.5											
24-Hr	9.04		7.65			71.04		69.65			
Annual	1.22		0.91			13.42		13.11			

Notes:

- 1-Modeled concentration for NO2 is shown as NOx. NO2/NOx ratio of 0.75 applied to modeled concentration for results shown with background.
- 2-24-Hour average for PM10 reported as the H2H.
- 3-24-Hour average for PM2.5 reported as the H8H averaged over three years; this method approximates the 98th percentile.
- 4-Annual average for PM2.5 reported as the maximum annual average over three years of meteorological data (1985, 1986, and 1987).
- 5-Sacramento-Del Paso Manor monitoring station used for background concentrations (years 2003, 2004, 2005).
- 6-Background concentration for NOx: 20.8 ug/m3 (Annual)
- 7-Background concentration for PM10: 59 ug/m3 (24-hr) and 22 ug/m3 (Annual)
- 8-Background concentration for PM2.5: 62 ug/m3 (24-hr) and 12.2 ug/m3 (Annual)

Red text: Concentration exceeds NAAQS or CAAQS.

		Alter	native 1, Mi	itigated, 2	009, PM10)		
			Pe	eak (ug/m	3)			
			Model	w/back	ground	Loca	ation	
Source Group	Avg. Period	Grid	Results	CA	EPA	Х	Υ	Comments
ALL	24-hr	Coarse	44	121	103	658867.44	4285746	H2H
ALL	24-hr	Fine	64	141	123	659367.44	4285646	H2H
ROADS	24-hr	Fine	2.6	80	62	659117.44	4286246	H2H
AUXSPILL	24-hr	Fine	45	122	104	659367.44	4285646	H2H
BORROW3	24-hr	Fine	3.7	81	63	659317.44	4286246	H2H
CONPROC1	24-hr	Fine	18	95	77	660367.44	4284746	H2H
LWD	24-hr	Fine	4.8	82	64	660367.44	4285246	H2H
MAINDAM	24-hr	Fine	1.0	78	60	659367.44	4286046	H2H
MIAD	24-hr	Fine	21	98	80	663867.44	4284746	H2H
PROCESS4	24-hr	Fine	3.1	80	62	658867.44	4287246	H2H
PROCESS5	24-hr	Fine	1.8	79	61	662367.44	4283746	H2H
RWD	24-hr	Fine	22	99	81	659217.44	4286246	H2H
COFFER	24-hr	Fine	8.2	85	67	660867.44	4284746	H2H
ALL	Annual	Coarse	3	29	25	658867.44	4287246	none
ALL	Annual	Fine	3	29	25	658967.44	4287346	none
ROADS	Annual	Fine	0.1	26	22	658967.44	4287346	none
AUXSPILL	Annual	Fine	0	26	22	658717.44	4287746	none
BORROW3	Annual	Fine	0.3	26	22	658867.44	4287746	none
CONPROC1	Annual	Fine	0	26	22	658817.44	4286896	none
LWD	Annual	Fine	0.1	26	22	658717.44	4287746	none
MAINDAM	Annual	Fine	0.0	26	22	658967.44	4287396	none
MIAD	Annual	Fine	0	26	22	658867.44	4287746	none
PROCESS4	Annual	Fine	0.4	26	22	658967.44	4287346	none
PROCESS5	Annual	Fine	0.0	26	22	658917.44	4287046	none
RWD	Annual	Fine	2	28	24	658917.44	4287196	none
COFFER	Annual	Fine	0.1	26	22	658917.44	4286996	none

		Alterna	ative 1, Unr	nitigated,	2009, PM ²	10		
			Pe	eak (ug/m	3)			
			Model	w/back	ground	Loca	ation	
Source Group	Avg. Period	Grid	Results	CA	EPA	Х	Υ	Comments
ALL	24-hr	Coarse	72	149	131	658867.44	4285746	H2H
ALL	24-hr	Fine	110	187	169	659367.44	4285646	H2H
ROADS	24-hr	Fine	2.6	80	62	659117.44	4286246	H2H
AUXSPILL	24-hr	Fine	81	158	140	659367.44	4285646	H2H
BORROW3	24-hr	Fine	14.7	92	74	659317.44	4286246	H2H
CONPROC1	24-hr	Fine	14	91	73	659367.44	4285696	H2H
LWD	24-hr	Fine	9.0	86	68	659317.44	4285646	H2H
MAINDAM	24-hr	Fine	2.1	79	61	659367.44	4286046	H2H
MIAD	24-hr	Fine	10	87	69	659367.44	4285696	H2H
PROCESS4	24-hr	Fine	1.7	79	61	659317.44	4286246	H2H
PROCESS5	24-hr	Fine	0.6	78	60	659367.44	4286246	H2H
RWD	24-hr	Fine	45	122	104	659217.44	4286246	H2H
COFFER	24-hr	Fine	10.8	88	70	659367.44	4286196	H2H
ALL	Annual	Coarse	5	31	27	658867.44	4287246	none
ALL	Annual	Fine	7	33	29	658967.44	4287346	none
ROADS	Annual	Fine	0.1	26	22	658967.44	4287346	none
AUXSPILL	Annual	Fine	1	27	23	658717.44	4287746	none
BORROW3	Annual	Fine	1.4	27	23	658867.44	4287746	none
CONPROC1	Annual	Fine	0	26	22	658817.44	4286896	none
LWD	Annual	Fine	0.2	26	22	658717.44	4287746	none
MAINDAM	Annual	Fine	0.0	26	22	658967.44	4287396	none
MIAD	Annual	Fine	0	26	22	658867.44	4287746	none
PROCESS4	Annual	Fine	0.4	26	22	658967.44	4287346	none
PROCESS5	Annual	Fine	0.0	26	22	658917.44	4287046	none
RWD	Annual	Fine	4	30	26	658917.44	4287196	none
COFFER	Annual	Fine	0.2	26	22	658917.44	4286996	none

PM10 Background (ug/m3)

Avg. Period	CA	EPA
24-hr	77	59
Annual	26	22

Avg. Period	CA	EPA
24-hr	50	150
Annual	20	50

Red text: Concentration exceeds NAAQS or CAAQS.

Alternative 1, Mitigated, 2009, PM2.5									
			Pe	eak (ug/m	3)				
			Model	Model w/background Location			ation		
Source Group	Avg. Period	Grid	Results	CA	EPA	Х	Υ	Comments	
ALL	24-hr	Coarse	5.8		68	660367.44	4285246	Н8Н	
ALL	24-hr	Fine	9.0		71	660567.44	4285246	H8H	
ROADS	24-hr	Fine	0.1		62	660567.44	4285246	H8H	
AUXSPILL	24-hr	Fine	4.3		66	660567.44	4285246	H8H	
BORROW3	24-hr	Fine	0.0		62	660117.44	4284996	H8H	
CONPROC1	24-hr	Fine	5.1		67	660567.44	4285146	H8H	
LWD	24-hr	Fine	0.8		63	660567.44	4285246	H8H	
MAINDAM	24-hr	Fine	0.1		62	660217.44	4285346	H8H	
MIAD	24-hr	Fine	0.3		62	660567.44	4285246	H8H	
PROCESS4	24-hr	Fine	0.0		62	660517.44	4285246	H8H	
PROCESS5	24-hr	Fine	0.0		62	660517.44	4285046	Н8Н	
RWD	24-hr	Fine	0.2		62	660117.44	4285346	H8H	
COFFER	24-hr	Fine	0.5		63	660567.44	4285146	Н8Н	
ALL	Annual	Coarse	0.8	13	13	660367.44	4285246	none	
ALL	Annual	Fine	1.2	13	13	660567.44	4285246	none	
ROADS	Annual	Fine	0.0	12	12	660567.44	4285246	none	
AUXSPILL	Annual	Fine	0.6	13	13	660567.44	4285246	none	
BORROW3	Annual	Fine	0.0	12	12	660117.44	4285296	none	
CONPROC1	Annual	Fine	0.4	12	13	660567.44	4284996	none	
LWD	Annual	Fine	0.2	12	12	660567.44	4285246	none	
MAINDAM	Annual	Fine	0.0	12	12	660267.44	4285296	none	
MIAD	Annual	Fine	0.0	12	12	660567.44	4285246	none	
PROCESS4	Annual	Fine	0.0	12	12	660167.44	4285346	none	
PROCESS5	Annual	Fine	0.0	12	12	660617.44	4284996	none	
RWD	Annual	Fine	0.0	12	12	660117.44	4285346	none	
COFFER	Annual	Fine	0.0	12	12	660567.44	4285246	none	

	Alternative 1, Unmitigated, 2009, PM2.5								
			Peak (ug/m3)						
			Model	w/back	ground	Location			
Source Group	Avg. Period	Grid	Results	CA	EPA	X	Υ	Comments	
ALL	24-hr	Coarse	9.0		71	660367.44	4285246	H8H	
ALL	24-hr	Fine	13.1		75	660567.44	4285246	H8H	
ROADS	24-hr	Fine	0.1		62	660567.44	4285246	Н8Н	
AUXSPILL	24-hr	Fine	7.4		69	660567.44	4285246	Н8Н	
BORROW3	24-hr	Fine	0.1		62	660117.44	4284996	Н8Н	
CONPROC1	24-hr	Fine	5.1		67	660567.44	4285146	Н8Н	
LWD	24-hr	Fine	1.5		64	660567.44	4285246	H8H	
MAINDAM	24-hr	Fine	0.1		62	660217.44	4285346	H8H	
MIAD	24-hr	Fine	0.6		63	660567.44	4285246	H8H	
PROCESS4	24-hr	Fine	0.0		62	660517.44	4285246	H8H	
PROCESS5	24-hr	Fine	0.0		62	660517.44	4285046	H8H	
RWD	24-hr	Fine	0.3		62	660117.44	4285346	H8H	
COFFER	24-hr	Fine	1.0		63	660567.44	4285146	H8H	
ALL	Annual	Coarse	1.3	13	14	660367.44	4285246	none	
ALL	Annual	Fine	1.9	14	14	660567.44	4285246	none	
ROADS	Annual	Fine	0.0	12	12	660567.44	4285246	none	
AUXSPILL	Annual	Fine	1.1	13	13	660567.44	4285246	none	
BORROW3	Annual	Fine	0.0	12	12	660117.44	4285296	none	
CONPROC1	Annual	Fine	0.4	12	13	660567.44	4284996	none	
LWD	Annual	Fine	0.3	12	13	660567.44	4285246	none	
MAINDAM	Annual	Fine	0.0	12	12	660217.44	4285346	none	
MIAD	Annual	Fine	0.0	12	12	660567.44	4285146	none	
PROCESS4	Annual	Fine	0.0	12	12	660167.44	4285346	none	
PROCESS5	Annual	Fine	0.0	12	12	660617.44	4284996	none	
RWD	Annual	Fine	0.1	12	12	660117.44	4285346	none	
COFFER	Annual	Fine	0.1	12	12	660567.44	4285146	none	

PM2.5 Background (ug/m3)

Avg. Period	CA	EPA
24-hr	73.2	62
Annual	12	12.2

Avg. Period	CA	EPA	
24-hr		35	
Annual	12	15	

Red text: Concentration exceeds NAAQS or CAAQS.

NO2/NOx Ratio 0.75

Alternative 1, Mitigated, 2009, NO2										
				Peak (ı	ıg/m3)					
		Model Project w/			w/back	kground		ation		
Source Group	Avg. Period	Grid	Results	NO2	CA	EPA	Х	Υ	Comments	
ALL	1-hr	Coarse	525.3	52.5	242.4	na	660367.44	4285246	none	
ALL	1-hr	Fine	653.9	49.0	238.9	na	660517.44	4285196	none	
ROADS	1-hr	Fine	10.4	10.4	200.3	na	660817.44	4285096	none	
AUXSPILL	1-hr	Fine	637.6	51.0	240.9	na	660517.44	4285196	none	
BORROW3	1-hr	Fine	1.8	1.8	191.7	na	659867.44	4285396	none	
CONPROC1	1-hr	Fine	na	na	na	na	na	na	none	
LWD	1-hr	Fine	18.8	18.8	208.7	na	659867.44	4285396	none	
MAINDAM	1-hr	Fine	na	na	na	na	na	na	none	
MIAD	1-hr	Fine	163.2	160.0	349.8	na	660867.44	4284746	none	
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none	
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none	
RWD	1-hr	Fine	112.7	112.7	302.6	na	660767.44	4285096	none	
COFFER	1-hr	Fine	266.9	165.5	355.3	na	660817.44	4285096	none	
ALL	Annual	Coarse	6.7	5.1	na	25.8	658867.44	4287246	none	
ALL	Annual	Fine	8.4	6.3	na	27.1	658917.44	4287246	none	
ROADS	Annual	Fine	0.1	0.1	na	20.8	658967.44	4287346	none	
AUXSPILL	Annual	Fine	0.4	0.3	na	21.1	658867.44	4287496	none	
BORROW3	Annual	Fine	0.0	0.0	na	20.8	658967.44	4287346	none	
CONPROC1	Annual	Fine	na	na	na	na	na	na	none	
LWD	Annual	Fine	0.0	0.0	na	20.8	658867.44	4287496	none	
MAINDAM	Annual	Fine	na	na	na	na	na	na	none	
MIAD	Annual	Fine	0.1	0.1	na	20.8	658967.44	4287446	none	
PROCESS4	Annual	Fine	na	na	na	na	na	na	none	
PROCESS5	Annual	Fine	na	na	na	na	na	na	none	
RWD	Annual	Fine	7.7	5.8	na	26.6	658917.44	4287246	none	
COFFER	Annual	Fine	0.1	0.1	na	20.8	658917.44	4286996	none	

Alternative 1, Unmitigated, 2009, NO2										
				Peak (ı	ıg/m3)					
			Model	Project	w/back	ground	Loca	ation		
Source Group	Avg. Period	Grid	Results	NO2	CA	EPA	Х	Υ	Comments	
ALL	1-hr	Coarse	655.4	49.2	239.0	na	660367.44	4285246	none	
ALL	1-hr	Fine	815.9	44.9	234.8	na	660517.44	4285196	none	
ROADS	1-hr	Fine	10.4	10.4	200.3	na	660817.44	4285096	none	
AUXSPILL	1-hr	Fine	796.3	46.2	236.1	na	660517.44	4285196	none	
BORROW3	1-hr	Fine	2.8	2.8	192.7	na	659867.44	4285396	none	
CONPROC1	1-hr	Fine	na	na	na	na	na	na	none	
LWD	1-hr	Fine	23.5	23.5	213.4	na	659867.44	4285396	none	
MAINDAM	1-hr	Fine	na	na	na	na	na	na	none	
MIAD	1-hr	Fine	204.6	188.2	378.1	na	660867.44	4284746	none	
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none	
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none	
RWD	1-hr	Fine	141.1	141.1	330.9	na	660767.44	4285096	none	
COFFER	1-hr	Fine	333.6	113.4	303.3	na	660817.44	4285096	none	
ALL	Annual	Coarse	8.4	6.3	na	27.1	658867.44	4287246	none	
ALL	Annual	Fine	10.5	7.9	na	28.6	658917.44	4287246	none	
ROADS	Annual	Fine	0.1	0.1	na	20.8	658967.44	4287346	none	
AUXSPILL	Annual	Fine	0.5	0.4	na	21.2	658867.44	4287496	none	
BORROW3	Annual	Fine	0.1	0.0	na	20.8	658967.44	4287346	none	
CONPROC1	Annual	Fine	na	na	na	na	na	na	none	
LWD	Annual	Fine	0.0	0.0	na	20.8	658867.44	4287496	none	
MAINDAM	Annual	Fine	na	na	na	na	na	na	none	
MIAD	Annual	Fine	0.1	0.1	na	20.8	658967.44	4287446	none	
PROCESS4	Annual	Fine	na	na	na	na	na	na	none	
PROCESS5	Annual	Fine	na	na	na	na	na	na	none	
RWD	Annual	Fine	9.7	7.3	na	28.0	658917.44	4287246	none	
COFFER	Annual	Fine	0.2	0.1	na	20.9	658917.44	4286996	none	

NO2 Background (ug/m3)

Avg. Period	CA	EPA		
1-hr	189.88	NA		
Annual	NA	20.75472		

Avg. Period	CA	EPA
1-hr	470	NA
Annual	NA	100

Red text: Concentration exceeds NAAQS or CAAQS.

Alternative 3, Mitigated, 2009, PM10								
				eak (ug/m				
			Model	Model w/background		Location		
Source Group	Avg. Period	Grid	Results	CA	EPA	X	Υ	Comments
ALL	24-hr	Coarse	32.3	109.3	91.3	658867.44	4285746	H2H
ALL	24-hr	Fine	44.7	121.7	103.7	659117.44	4285696	H2H
AUXSPILL	24-hr	Fine	32.0	109.0	91.0	659067.44	4285696	H2H
COFFER	24-hr	Fine	3.4	80.4	62.4	659117.44	4285996	H2H
CONPROC1	24-hr	Fine	11.0	88.0	70.0	659017.44	4285746	H2H
DIKE1	24-hr	Fine	0.1	77.1	59.1	658917.44	4285996	H2H
DIKE2	24-hr	Fine	0.1	77.1	59.1	659067.44	4285996	H2H
DIKE3	24-hr	Fine	0.1	77.1	59.1	659117.44	4285696	H2H
DIKE4	24-hr	Fine	na	na	na	na	na	H2H
DIKE5	24-hr	Fine	na	na	na	na	na	H2H
DIKE6	24-hr	Fine	na	na	na	na	na	H2H
MIAD	24-hr	Fine	0.1	77.1	59.1	659117.44	4285746	H2H
PROCESS3	24-hr	Fine	0.7	77.7	59.7	659067.44	4285946	H2H
PROCESS4	24-hr	Fine	1.5	78.5	60.5	658917.44	4285996	H2H
PROCESS5	24-hr	Fine	0.2	77.2	59.2	658917.44	4285496	H2H
PROCESS6	24-hr	Fine	0.1	77.1	59.1	659117.44	4285996	H2H
ROADS	24-hr	Fine	0.4	77.4	59.4	659117.44	4285996	H2H
RWD	24-hr	Fine	na	na	na	na	na	H2H
ALL	Annual	Coarse	1.8	27.8	23.8	660367.44	4285246	none
ALL	Annual	Fine	2.4	28.4	24.4	660567.44	4285246	none
AUXSPILL	Annual	Fine	1.9	27.9	23.9	660567.44	4285246	none
COFFER	Annual	Fine	0.2	26.2	22.2	660567.44	4285246	none
CONPROC1	Annual	Fine	0.4	26.4	22.4	660567.44	4285146	none
DIKE1	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none
DIKE2	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none
DIKE3	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none
DIKE4	Annual	Fine	na	na	na	na	na	none
DIKE5	Annual	Fine	na	na	na	na	na	none
DIKE6	Annual	Fine	na	na	na	na	na	none
MIAD	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none
PROCESS3	Annual	Fine	0.0	26.0	22.0	660117.44	4285296	none
PROCESS4	Annual	Fine	0.0	26.0	22.0	660117.44	4285346	none
PROCESS5	Annual	Fine	0.0	26.0	22.0	660567.44	4285196	none
PROCESS6	Annual	Fine	0.0	26.0	22.0	660517.44	4284996	none
ROADS	Annual	Fine	0.0	26.0	22.0	660567.44	4285246	none
RWD	Annual	Fine	na	na	na	na	na	none

	Alternative 3, Unmitigated, 2009, PM10								
				eak (ug/m					
			Model	w/back	ground	Location			
Source Group	Avg. Period	Grid	Results	CA	EPA	Х	Υ	Comments	
ALL	24-hr	Coarse	54.0	131.0	113.0	659367.44	4285746	H2H	
ALL	24-hr	Fine	91.5	168.5	150.5	659417.44	4285646	H2H	
AUXSPILL	24-hr	Fine	76.1	153.1	135.1	659417.44	4285646	H2H	
COFFER	24-hr	Fine	11.9	88.9	70.9	659617.44	4285996	H2H	
CONPROC1	24-hr	Fine	15.1	92.1	74.1	659517.44	4285696	H2H	
DIKE1	24-hr	Fine	1.0	78.0	60.0	659517.44	4285996	H2H	
DIKE2	24-hr	Fine	0.8	77.8	59.8	659567.44	4285996	H2H	
DIKE3	24-hr	Fine	0.9	77.9	59.9	659617.44	4285996	H2H	
DIKE4	24-hr	Fine	na	na	na	na	na	H2H	
DIKE5	24-hr	Fine	na	na	na	na	na	H2H	
DIKE6	24-hr	Fine	na	na	na	na	na	H2H	
MIAD	24-hr	Fine	0.1	77.1	59.1	659617.44	4285696	H2H	
PROCESS3	24-hr	Fine	0.7	77.7	59.7	659117.44	4285996	H2H	
PROCESS4	24-hr	Fine	1.5	78.5	60.5	659267.44	4285996	H2H	
PROCESS5	24-hr	Fine	0.4	77.4	59.4	659617.44	4285996	H2H	
PROCESS6	24-hr	Fine	0.2	77.2	59.2	659617.44	4285496	H2H	
ROADS	24-hr	Fine	0.9	77.9	59.9	659167.44	4285996	H2H	
RWD	24-hr	Fine	na	na	na	na	na	H2H	
ALL	Annual	Coarse	3.3	29.3	25.3	660367.44	4285246	none	
ALL	Annual	Fine	4.4	30.4	26.4	660567.44	4285246	none	
AUXSPILL	Annual	Fine	3.7	29.7	25.7	660567.44	4285246	none	
COFFER	Annual	Fine	0.3	26.3	22.3	660567.44	4285246	none	
CONPROC1	Annual	Fine	0.4	26.4	22.4	660567.44	4285146	none	
DIKE1	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none	
DIKE2	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none	
DIKE3	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none	
DIKE4	Annual	Fine	na	na	na	na	na	none	
DIKE5	Annual	Fine	na	na	na	na	na	none	
DIKE6	Annual	Fine	na	na	na	na	na	none	
MIAD	Annual	Fine	0.0	26.0	22.0	660617.44	4284996	none	
PROCESS3	Annual	Fine	0.0	26.0	22.0	660117.44	4285296	none	
PROCESS4	Annual	Fine	0.0	26.0	22.0	660117.44	4285346	none	
PROCESS5	Annual	Fine	0.0	26.0	22.0	660567.44	4285196	none	
PROCESS6	Annual	Fine	0.0	26.0	22.0	660517.44	4284996	none	
ROADS	Annual	Fine	0.0	26.0	22.0	660567.44	4285246	none	
RWD	Annual	Fine	na	na	na	na	na	none	

PM10 Background (ug/m3)

Avg. Period	CA	EPA
24-hr	77	59
Annual	26	22

Avg. Period	CA	EPA
24-hr	50	150
Annual	20	50

Red text: Concentration exceeds NAAQS or CAAQS.

		Alte	rnative 3 Mi	tigated 20	009 PM2.5			
				eak (ug/m				
			Model	w/bacl	v/background Location			
Source Group	Avg. Period	Grid	Results	CA	EPA	X	Υ	Comments
ALL	24-hr	Coarse	4.4		66.4	660367.44	4285246	Н8Н
ALL	24-hr	Fine	7.6		69.6	660567.44	4285246	H8H
AUXSPILL	24-hr	Fine	3.6		65.6	660567.44	4285246	H8H
COFFER	24-hr	Fine	0.6		62.6	660567.44	4285146	H8H
CONPROC1	24-hr	Fine	5.4		67.4	660567.44	4285146	H8H
DIKE1	24-hr	Fine	0.0		62.0	660567.44	4285146	Н8Н
DIKE2	24-hr	Fine	0.0		62.0	660617.44	4284996	Н8Н
DIKE3	24-hr	Fine	0.0		62.0	660617.44	4284996	H8H
DIKE4	24-hr	Fine	na		na	na	na	H8H
DIKE5	24-hr	Fine	na		na	na	na	H8H
DIKE6	24-hr	Fine	na		na	na	na	H8H
MIAD	24-hr	Fine	0.0		62.0	660567.44	4285246	H8H
PROCESS3	24-hr	Fine	0.0		62.0	660117.44	4285196	H8H
PROCESS4	24-hr	Fine	0.0		62.0	660517.44	4285246	Н8Н
PROCESS5	24-hr	Fine	0.0		62.0	660517.44	4285046	Н8Н
PROCESS6	24-hr	Fine	0.0		62.0	660617.44	4284996	Н8Н
ROADS	24-hr	Fine	0.0		62.0	660567.44	4285246	H8H
RWD	24-hr	Fine	na		na	na	na	Н8Н
ALL	Annual	Coarse	0.6	13	13	660367.44	4285246	none
ALL	Annual	Fine	0.9	13	13	660567.44	4285246	none
AUXSPILL	Annual	Fine	0.5	13	13	660567.44	4285246	none
COFFER	Annual	Fine	0.0	12	12	660567.44	4285246	none
CONPROC1	Annual	Fine	0.4	12	13	660567.44	4284996	none
DIKE1	Annual	Fine	0.0	12	12	660617.44	4284996	none
DIKE2	Annual	Fine	0.0	12	12	660517.44	4284996	none
DIKE3	Annual	Fine	0.0	12	12	660517.44	4284996	none
DIKE4	Annual	Fine	na	na	na	na	na	none
DIKE5	Annual	Fine	na	na	na	na	na	none
DIKE6	Annual	Fine	na	na	na	na	na	none
MIAD	Annual	Fine	0.0	12	12	661117.44	4284296	none
PROCESS3	Annual	Fine	0.0	12	12	660117.44	4285296	none
PROCESS4	Annual	Fine	0.0	12	12	660167.44	4285346	none
PROCESS5	Annual	Fine	0.0	12	12	660617.44	4284996	none
PROCESS6	Annual	Fine	0.0	12	12	660567.44	4285196	none
ROADS	Annual	Fine	0.0	12	12	660567.44	4285246	none
RWD	Annual	Fine	na	na	na	na	na	none

		Alterna	ative 3, Unn	nitigated, 2	2009, PM2	2.5					
	Peak (ug/m3)										
			Model	w/back	ground	Location					
Source Group	Avg. Period	Grid	Results	CA	EPA	X	Υ	Comments			
ALL	24-hr	Coarse	6.5		68.5	660367.44	4285246	H8H			
ALL	24-hr	Fine	10.6		72.6	660567.44	4285196	H8H			
AUXSPILL	24-hr	Fine	6.9		68.9	660567.44	4285246	H8H			
COFFER	24-hr	Fine	1.1		63.1	660567.44	4285146	H8H			
CONPROC1	24-hr	Fine	5.1		67.1	660567.44	4285146	H8H			
DIKE1	24-hr	Fine	0.0		62.0	660567.44	4285146	H8H			
DIKE2	24-hr	Fine	0.0		62.0	660617.44	4284996	H8H			
DIKE3	24-hr	Fine	0.0		62.0	660617.44	4284996	H8H			
DIKE4	24-hr	Fine	na		na	na	na	H8H			
DIKE5	24-hr	Fine	na		na	na	na	Н8Н			
DIKE6	24-hr	Fine	na		na	na	na	H8H			
MIAD	24-hr	Fine	0.0		62.0	660567.44	4285246	H8H			
PROCESS3	24-hr	Fine	0.0		62.0	660117.44	4285196	H8H			
PROCESS4	24-hr	Fine	0.0		62.0	660517.44	4285246	H8H			
PROCESS5	24-hr	Fine	0.0		62.0	660517.44	4285046	Н8Н			
PROCESS6	24-hr	Fine	0.0		62.0	660617.44	4284996	H8H			
ROADS	24-hr	Fine	0.0		62.0	660567.44	4285246	H8H			
RWD	24-hr	Fine	na		na	na	na	Н8Н			
ALL	Annual	Coarse	1.0	13.0	13.2	660367.44	4285246	none			
ALL	Annual	Fine	1.4	13.4	13.6	660567.44	4285246	none			
AUXSPILL	Annual	Fine	1.0	13.0	13.2	660567.44	4285246	none			
COFFER	Annual	Fine	0.1	12.1	12.3	660567.44	4285246	none			
CONPROC1	Annual	Fine	0.4	12.4	12.6	660567.44	4284996	none			
DIKE1	Annual	Fine	0.0	12.0	12.2	660617.44	4284996	none			
DIKE2	Annual	Fine	0.0	12.0	12.2	660517.44	4284996	none			
DIKE3	Annual	Fine	0.0	12.0	12.2	660517.44	4284996	none			
DIKE4	Annual	Fine	na	na	na	na	na	none			
DIKE5	Annual	Fine	na	na	na	na	na	none			
DIKE6	Annual	Fine	na	na	na	na	na	none			
MIAD	Annual	Fine	0.0	12.0	12.2	660567.44	4285246	none			
PROCESS3	Annual	Fine	0.0	12.0	12.2	660117.44	4285296	none			
PROCESS4	Annual	Fine	0.0	12.0	12.2	660167.44	4285346	none			
PROCESS5	Annual	Fine	0.0	12.0	12.2	660617.44	4284996	none			
PROCESS6	Annual	Fine	0.0	12.0	12.2	660567.44	4285196	none			
ROADS	Annual	Fine	0.0	12.0	12.2	660567.44	4285246	none			
RWD	Annual	Fine	na	na	na	na	na	none			

PM2.5 Background (ug/m3)

Avg. Period	CA	EPA
24-hr	73.2	62
Annual	12	12.2

Avg. Period	CA	EPA	
24-hr		35	
Annual	12	15	

Red text: Concentration exceeds NAAQS or CAAQS.

NO2/NOx Ratio 0.75

		Alternative 3	, wiitigated I	<u>, 2008 (۱-۱</u> Peak (۱		OF (AIINU	ai), NOZ		I
			Model	Project		kground	Location		
Source Group	Ava Period	Grid	Results	NO2	CA	EPA	X	Y	Comments
ALL	1-hr		461	64.5	254		660367.44	4285246	
ALL		Coarse	578	49.1	239	na	1	4285246	none
AUXSPILL	1-hr	Fine Fine	577	49.1	239	na	660517.44 660517.44	4285196	none
	1-hr					na	1		none
COFFER CONPROC1	1-hr	Fine Fine	261	161.8	352	na	660867.44	4284746	none
	1-hr		na	na	na	na	na	na	none
DIKE1	1-hr	Fine	na	na	na	na	na	na	none
DIKE2	1-hr	Fine	na	na	na	na	na	na	none
DIKE3	1-hr	Fine	na	na	na	na	na	na	none
DIKE4	1-hr	Fine	313	143.9	334	na	658867.44	4288746	none
DIKE5	1-hr	Fine	263	163.3	353	na	658867.44	4288746	none
DIKE6	1-hr	Fine	255	158.1	348	na	658867.44	4287246	none
MIAD	1-hr	Fine	209	192.5	382	na	663367.44	4284246	none
PROCESS3	1-hr	Fine	na	na	na	na	na	na	none
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none
PROCESS6	1-hr	Fine	na	na	na	na	na	na	none
ROADS	1-hr	Fine	2.8	2.8	193	na	658367.44	4286746	none
RWD	1-hr	Fine	173	168.2	358	na	658867.44	4286246	none
ALL	Annual	Coarse	4.5	3.3	na	24	658867.44	4288746	none
ALL	Annual	Fine	7.3	5.4	na	26	658867.44	4288246	none
AUXSPILL	Annual	Fine	1.7	1.3	na	22	660367.44	4285246	none
COFFER	Annual	Fine	0.26	0.2	na	21	661867.44	4283746	none
CONPROC1	Annual	Fine	na	na	na	na	na	na	none
DIKE1	Annual	Fine	na	na	na	na	na	na	none
DIKE2	Annual	Fine	na	na	na	na	na	na	none
DIKE3	Annual	Fine	na	na	na	na	na	na	none
DIKE4	Annual	Fine	2.8	2.1	na	23	659367.44	4289246	none
DIKE5	Annual	Fine	5.6	4.2	na	25	658867.44	4288246	none
DIKE6	Annual	Fine	0.82	0.6	na	21	658867.44	4288246	none
MIAD	Annual	Fine	1.4	1.0	na	22	663867.44	4284746	none
PROCESS3	Annual	Fine	na	na	na	na	na	na	none
PROCESS4	Annual	Fine	na	na	na	na	na	na	none
PROCESS5	Annual	Fine	na	na	na	na	na	na	none
PROCESS6	Annual	Fine	na	na	na	na	na	na	none
ROADS	Annual	Fine	0.027	0.0	na	21	658867.44	4288246	none
RWD	Annual	Fine	2.1	1.6	na	22	658867.44	4287246	none

	Al	ternative 3,	Unmitigate	d, 2008 (1	-Hr) and 2	2009 (Ann	ual), NO2		
				Peak (ı	ug/m3)	•			
			Model	lodel Project w/background		Loca			
Source Group	Avg. Period	Grid	Results	NO2	CA	EPA	Х	Υ	Comments
ALL	1-hr	Coarse	575	48.9	239	na	660367.44	4285246	none
ALL	1-hr	Fine	721	43.3	233	na	660517.44	4285196	none
AUXSPILL	1-hr	Fine	720	43.2	233	na	660517.44	4285196	none
COFFER	1-hr	Fine	326	124.0	314	na	660867.44	4284746	none
CONPROC1	1-hr	Fine	na	na	na	na	na	na	none
DIKE1	1-hr	Fine	na	na	na	na	na	na	none
DIKE2	1-hr	Fine	na	na	na	na	na	na	none
DIKE3	1-hr	Fine	na	na	na	na	na	na	none
DIKE4	1-hr	Fine	391	93.9	284	na	658867.44	4288746	none
DIKE5	1-hr	Fine	329	124.9	315	na	658867.44	4288746	none
DIKE6	1-hr	Fine	320	121.4	311	na	658867.44	4287246	none
MIAD	1-hr	Fine	262	162.4	352	na	663367.44	4284246	none
PROCESS3	1-hr	Fine	na	na	na	na	na	na	none
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none
PROCESS6	1-hr	Fine	na	na	na	na	na	na	none
ROADS	1-hr	Fine	5.1	5.1	195	na	658367.44	4286746	none
RWD	1-hr	Fine	217	186.5	376	na	658867.44	4286246	none
ALL	Annual	Coarse	5.6	4.2	na	25	658867.44	4288746	none
ALL	Annual	Fine	9.1	6.8	na	28	658867.44	4288246	none
AUXSPILL	Annual	Fine	2.1	1.6	na	22	660367.44	4285246	none
COFFER	Annual	Fine	0.32	0.2	na	21	661867.44	4283746	none
CONPROC1	Annual	Fine	na	na	na	na	na	na	none
DIKE1	Annual	Fine	na	na	na	na	na	na	none
DIKE2	Annual	Fine	na	na	na	na	na	na	none
DIKE3	Annual	Fine	na	na	na	na	na	na	none
DIKE4	Annual	Fine	3.5	2.6	na	23	659367.44	4289246	none
DIKE5	Annual	Fine	7.0	5.2	na	26	658867.44	4288246	none
DIKE6	Annual	Fine	1.03	0.8	na	22	658867.44	4288246	none
MIAD	Annual	Fine	1.7	1.3	na	22	663867.44	4284746	none
PROCESS3	Annual	Fine	na	na	na	na	na	na	none
PROCESS4	Annual	Fine	na	na	na	na	na	na	none
PROCESS5	Annual	Fine	na	na	na	na	na	na	none
PROCESS6	Annual	Fine	na	na	na	na	na	na	none
ROADS	Annual	Fine	0.048	0.0	na	21	658867.44	4288246	none
RWD	Annual	Fine	2.6	1.9	na	23	658867.44	4287246	none

	Alternative	3, Mitigated	, Revised F	laul Roads	, 2008 (1-	Hr) and 20	009 (Annual)), NO2	
				Peak (ı	ıg/m3)				
			Model	Project	w/back	ground	Loc	ation	
Source Group	Avg. Period	Grid	Results	NO2	CA	EPA	Х	Υ	Comments
ALL	1-hr	Coarse	554	49.8	240	na	658867.44	4287246	none
ALL	1-hr	Fine	867	43.3	233	na	658967.44	4287446	none
AUXSPILL	1-hr	Fine	460	69.0	259	na	660367.44	4285246	none
COFFER	1-hr	Fine	261	177.5	367	na	660867.44	4284746	none
CONPROC1	1-hr	Fine	na	na	na	na	na	na	none
DIKE1	1-hr	Fine	na	na	na	na	na	na	none
DIKE2	1-hr	Fine	na	na	na	na	na	na	none
DIKE3	1-hr	Fine	na	na	na	na	na	na	none
DIKE4	1-hr	Fine	528	52.8	243	na	658867.44	4288746	none
DIKE5	1-hr	Fine	550	49.5	239	na	658817.44	4287496	none
DIKE6	1-hr	Fine	585	46.8	237	na	658967.44	4287346	none
MIAD	1-hr	Fine	209	186.2	376	na	663367.44	4284246	none
PROCESS3	1-hr	Fine	na	na	na	na	na	na	none
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none
PROCESS6	1-hr	Fine	na	na	na	na	na	na	none
ROADS	1-hr	Fine	2.8	2.8	193	na	658367.44	4286746	none
RWD	1-hr	Fine	326	130.2	320	na	658967.44	4287346	none
ALL	Annual	Coarse	7.2	5.4	na	26	658867.44	4288746	none
ALL	Annual	Fine	9.6	7.2	na	28	658867.44	4288646	none
AUXSPILL	Annual	Fine	0.3	0.2	na	21	658617.44	4288496	none
COFFER	Annual	Fine	0.12	0.1	na	21	658817.44	4288496	none
CONPROC1	Annual	Fine	na	na	na	na	na	na	none
DIKE1	Annual	Fine	na	na	na	na	na	na	none
DIKE2	Annual	Fine	na	na	na	na	na	na	none
DIKE3	Annual	Fine	na	na	na	na	na	na	none
DIKE4	Annual	Fine	1.7	1.3	na	22	659117.44	4288996	none
DIKE5	Annual	Fine	8.3	6.2	na	27	658867.44	4288646	none
DIKE6	Annual	Fine	0.91	0.7	na	21	658667.44	4288496	none
MIAD	Annual	Fine	0.1	0.1	na	21	659117.44	4288996	none
PROCESS3	Annual	Fine	na	na	na	na	na	na	none
PROCESS4	Annual	Fine	na	na	na	na	na	na	none
PROCESS5	Annual	Fine	na	na	na	na	na	na	none
PROCESS6	Annual	Fine	na	na	na	na	na	na	none
ROADS	Annual	Fine	0.025	0.0	na	21	659067.44	4288696	none
RWD	Annual	Fine	0.4	0.3	na	21	658617.44	4288496	none

	Alternative 3	3, Unmitigate	d. Revised	Haul Road	ls. 2008 (1	-Hr) and	2009 (Annua	al). NO2	
		-, .	1	Peak (ı		, , , , , , , , , , , , , , , , , , , ,	1		
			Model	Project		ground	Loca	ation	
Source Group	Avg. Period	Grid	Results	NO2	CA	EPA	Х	Υ	Comments
ALL	1-hr	Coarse	693	45.0	235	na	658867.44	4287246	none
ALL	1-hr	Fine	1084	43.4	233	na	658967.44	4287446	none
AUXSPILL	1-hr	Fine	72	71.9	262	na	658817.44	4287496	none
COFFER	1-hr	Fine	86	85.7	276	na	658617.44	4287096	none
CONPROC1	1-hr	Fine	na	na	na	na	na	na	none
DIKE1	1-hr	Fine	na	na	na	na	na	na	none
DIKE2	1-hr	Fine	na	na	na	na	na	na	none
DIKE3	1-hr	Fine	na	na	na	na	na	na	none
DIKE4	1-hr	Fine	408	89.8	280	na	658717.44	4287496	none
DIKE5	1-hr	Fine	688	44.7	235	na	658817.44	4287496	none
DIKE6	1-hr	Fine	731	43.9	234	na	658967.44	4287346	none
MIAD	1-hr	Fine	65	65.0	255	na	658617.44	4286996	none
PROCESS3	1-hr	Fine	na	na	na	na	na	na	none
PROCESS4	1-hr	Fine	na	na	na	na	na	na	none
PROCESS5	1-hr	Fine	na	na	na	na	na	na	none
PROCESS6	1-hr	Fine	na	na	na	na	na	na	none
ROADS	1-hr	Fine	3.8	3.8	194	na	658617.44	4286996	none
RWD	1-hr	Fine	407	89.5	279	na	658967.44	4287346	none
ALL	Annual	Coarse	9.0	6.8	na	28	658867.44	4288746	none
ALL	Annual	Fine	9.6	7.2	na	28	658867.44	4288646	none
AUXSPILL	Annual	Fine	0.3	0.2	na	21	658617.44	4288496	none
COFFER	Annual	Fine	0.12	0.1	na	21	658817.44	4288496	none
CONPROC1	Annual	Fine	na	na	na	na	na	na	none
DIKE1	Annual	Fine	na	na	na	na	na	na	none
DIKE2	Annual	Fine	na	na	na	na	na	na	none
DIKE3	Annual	Fine	na	na	na	na	na	na	none
DIKE4	Annual	Fine	1.7	1.3	na	22	659117.44	4288996	none
DIKE5	Annual	Fine	8.3	6.2	na	27	658867.44	4288646	none
DIKE6	Annual	Fine	0.91	0.7	na	21	658667.44	4288496	none
MIAD	Annual	Fine	0.1	0.1	na	21	659117.44	4288996	none
PROCESS3	Annual	Fine	na	na	na	na	na	na	none
PROCESS4	Annual	Fine	na	na	na	na	na	na	none
PROCESS5	Annual	Fine	na	na	na	na	na	na	none
PROCESS6	Annual	Fine	na	na	na	na	na	na	none
ROADS	Annual	Fine	0.025	0.0	na	21	659067.44	4288696	none
RWD	Annual	Fine	0.4	0.3	na	21	658617.44	4288496	none

NO2 Background (ug/m3)

Avg. Period	CA	EPA
1-hr	189.88	NA
Annual	NA	20.75

Standard (ug/m3)

Avg. Period	CA	EPA
1-hr	470	NA
Annual	NA	100

			Alternativ	e 1, Mitiga	ted, 2009,	PM2.5			
					Model	Results			
		2	4-Hour Av	erage, H8I	H	Annual Average			
Source Group	Grid	1985	1986	1987	Average	1985	1986	1987	Max
ALL	Coarse	7.11	4.79	5.40	5.77	0.83	0.68	0.81	0.83
ALL	Fine	12.18	7.28	7.67	9.04	1.22	0.93	1.09	1.22
ROADS	Fine	0.13	0.14	0.15	0.14	0.02	0.02	0.02	0.02
AUXSPILL	Fine	4.87	3.81	4.14	4.27	0.63	0.48	0.54	0.63
BORROW3	Fine	0.04	0.03	0.02	0.03	0.00	0.00	0.00	0.00
CONPROC1	Fine	7.36	4.05	3.89	5.10	0.41	0.22	0.32	0.41
LWD	Fine	0.85	0.69	0.73	0.75	0.15	0.13	0.13	0.15
MAINDAM	Fine	0.06	0.07	0.03	0.06	0.01	0.00	0.00	0.01
MIAD	Fine	0.34	0.28	0.24	0.29	0.02	0.02	0.02	0.02
PROCESS4	Fine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PROCESS5	Fine	0.03	0.02	0.02	0.03	0.00	0.00	0.00	0.00
RWD	Fine	0.17	0.14	0.16	0.16	0.03	0.02	0.03	0.03
COFFER	Fine	0.57	0.53	0.54	0.55	0.04	0.04	0.04	0.04

Alternative 1, Unmitigated, 2009, PM2.5											
					Model	Results					
		2	4-Hour Av	erage, H8	Н		Annual	Average			
Source Group	Grid	1985	1986	1987	Average	1985	1986	1987	Max		
ALL	Coarse	10.03	8.33	8.54	8.97	1.35	1.17	1.27	1.35		
ALL	Fine	15.59	10.03	13.54	13.05	1.91	1.49	1.70	1.91		
ROADS	Fine	0.13	0.14	0.15	0.14	0.02	0.02	0.02	0.02		
AUXSPILL	Fine	8.49	6.64	7.21	7.45	1.09	0.84	0.94	1.09		
BORROW3	Fine	0.15	0.12	0.10	0.12	0.02	0.02	0.02	0.02		
CONPROC1	Fine	7.36	4.05	3.89	5.10	0.41	0.22	0.32	0.41		
LWD	Fine	1.69	1.38	1.45	1.51	0.31	0.25	0.27	0.31		
MAINDAM	Fine	0.13	0.14	0.06	0.11	0.01	0.01	0.01	0.01		
MIAD	Fine	0.66	0.53	0.46	0.55	0.04	0.04	0.03	0.04		
PROCESS4	Fine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
PROCESS5	Fine	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00		
RWD	Fine	0.31	0.25	0.29	0.28	0.05	0.04	0.05	0.05		
COFFER	Fine	1.05	0.97	1.00	1.01	0.07	0.08	0.08	0.08		

	Alternative 3, Mitigated, 2009, PM2.5												
					Model	Results							
		2	4-Hour Av	erage, H8I	Н		Annual	Average					
Source Group	Grid	1985	1986	1987	Average	1985	1986	1987	Max				
ALL	Coarse	5.58	3.72	3.93	4.41	0.60	0.49	0.61	0.61				
ALL	Fine	10.79	6.06	6.10	7.65	0.91	0.68	0.83	0.91				
AUXSPILL	Fine	4.09	3.20	3.47	3.59	0.53	0.40	0.45	0.53				
COFFER	Fine	0.60	0.59	0.57	0.59	0.04	0.04	0.05	0.05				
CONPROC1	Fine	7.36	4.85	3.89	5.37	0.41	0.32	0.32	0.41				
DIKE1	Fine	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
DIKE2	Fine	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
DIKE3	Fine	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
DIKE4	Fine	na	na	na	na	na	na	na	0.00				
DIKE5	Fine	na	na	na	na	na	na	na	0.00				
DIKE6	Fine	na	na	na	na	na	na	na	0.00				
MIAD	Fine	0.02	0.02	0.02	0.02	0.0016	0.0017	0.0013	0.0017				
PROCESS3	Fine	0.01	0.00	0.00	0.00	0.0006	0.0004	0.0004	0.0006				
PROCESS4	Fine	0.00	0.00	0.00	0.00	0.0004	0.0004	0.0005	0.0005				
PROCESS5	Fine	0.01	0.01	0.01	0.01	0.0009	0.0008	0.0007	0.0009				
PROCESS6	Fine	0.00	0.00	0.00	0.00	0.0001	0.0002	0.0003	0.0003				
ROADS	Fine	0.02	0.02	0.02	0.02	0.0020	0.0018	0.0021	0.0021				
RWD	Fine	na	na	na	na	na	na	na	0.00				

		P	Iternative	3, Unmitig	gated, 2009								
			Model Results										
		2	4-Hour Av	erage, H8	Н		Annual Average						
Source Group	Grid	1985	1986	1987	Average	1985	1986	1987	Max				
ALL	Coarse	7.69	5.75	6.17	6.54	0.99	0.81	0.96	0.99				
ALL	Fine	13.57	8.21	10.00	10.59	1.43	1.09	1.29	1.43				
AUXSPILL	Fine	7.86	6.15	6.67	6.89	1.01	0.77	0.87	1.01				
COFFER	Fine	1.10	1.01	1.04	1.05	0.07	0.08	0.09	0.09				
CONPROC1	Fine	7.36	4.05	3.89	5.10	0.41	0.22	0.32	0.41				
DIKE1	Fine	0.02	0.02	0.01	0.02	0.00	0.00	0.00	0.00				
DIKE2	Fine	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
DIKE3	Fine	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
DIKE4	Fine	na	na	na	na	na	na	na	0.00				
DIKE5	Fine	na	na	na	na	na	na	na	0.00				
DIKE6	Fine	na	na	na	na	na	na	na	0.00				
MIAD	Fine	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00				
PROCESS3	Fine	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
PROCESS4	Fine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
PROCESS5	Fine	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00				
PROCESS6	Fine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
ROADS	Fine	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00				
RWD	Fine	na	na	na	na	na	na	na	0.00				

	On-Site Haul Truck Paved and Unpaved Road Vehicle Miles Traveled (VMT)												
		<u>Peak</u>	<u>Daily</u>				Ave. Daily						
VMT	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	VMT	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5		
2007	292.000	187.000	167.500	275.500	494.500	2007	104.250	100.615	93.865	171.058	257.077		
2008	605.500	446.250	443.500	538.000	593.000	2008	205.373	168.493	175.673	253.673	447.923		
2009	856.500	868.500	221.000	917.000	1131.000	2009	460.942	360.231	107.429	578.776	676.987		
2010	793.000	809.500	157.500	853.500	1068.500	2010	389.635	313.308	66.583	537.929	627.641		
2011	92.000	153.500	121.000	123.000	333.000	2011	43.692	80.538	53.949	58.103	81.679		
2012	668.000	1002.000	350.000	1056.000	1244.000	2012	153.108	339.742	70.962	374.692	584.538		
2013	862.000	1266.000	497.000	1445.500	1417.000	2013	155.163	342.221	121.004	501.000	842.538		
2014	394.000	674.000	497.000	873.500	849.000	2014	47.163	64.990	121.004	225.923	418.538		

l	On-Site Haul Truck Paved and Unpaved Road Dust												
PM10 (lb/day)	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5		PM10 (tpy)	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	
2007	3.123	2.000	1.791	2.946	5.288		2007	0.145	0.140	0.130	0.238	0.357	
2008	6.475	4.772	4.743	5.753	6.341		2008	0.286	0.234	0.244	0.353	0.623	
2009	9.159	9.288	2.363	9.806	12.095		2009	0.641	0.501	0.149	0.805	0.941	
2010	8.480	8.657	1.684	9.127	11.426		2010	0.542	0.436	0.093	0.748	0.873	
2011	0.984	1.642	1.294	1.315	3.561		2011	0.061	0.112	0.075	0.081	0.114	
2012	7.143	10.715	3.743	11.293	13.303		2012	0.213	0.472	0.099	0.521	0.813	
2013	9.218	13.538	5.315	15.458	15.153		2013	0.216	0.476	0.168	0.696	1.171	
2014	4.213	7.208	5.315	9.341	9.079		2014	0.066	0.090	0.168	0.314	0.582	
PM2.5 (lb/day)	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5		PM2.5 (tpy)	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	
2007	0.317	0.203	0.182	0.299	0.537		2007	0.015	0.014	0.013	0.024	0.036	
2008	0.657	0.484	0.481	0.584	0.644		2008	0.029	0.024	0.025	0.036	0.063	
2009	0.930	0.943	0.240	0.995	1.227		2009	0.065	0.051	0.015	0.082	0.096	
2010	0.861	0.879	0.171	0.926	1.160		2010	0.055	0.044	0.009	0.076	0.089	
2011	0.100	0.167	0.131	0.133	0.361		2011	0.006	0.011	0.008	0.008	0.012	
2012	0.725	1.087	0.380	1.146	1.350		2012	0.022	0.048	0.010	0.053	0.082	
2013	0.936	1.374	0.539	1.569	1.538		2013	0.022	0.048	0.017	0.071	0.119	
2014	0.428	0.731	0.539	0.948	0.921		2014	0.007	0.009	0.017	0.032	0.059	

PM_{2.5} Modeling

The National Ambient Air Quality Standard (NAAQS) for PM_{2.5} states that the "24 hour standard is attained with 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard." Using the post processing file option in AERMOD, it is possible to generate the 98th percentile directly in a model run; however, batching model inputs with this option were found to be unsuccessful. An alternative method using the high 8 high (H8H) was used in AERMOD to generate results required for the modeling.

A method for evaluating the 98th percentile is found in Appendix N to 40 CFR 50 (shown at the end of this document). The high to use in the modeling is calculated with the following approach:

- 1. Sort all the daily values from a site in ascending order; the number of days being analyzed is referred to as "n."
- 2. Compute (0.98) x (n) as the number "i.d.," where "i" is the integer part of the result. Since one year of meteorological data contains 365 days, this results in the following: $(0.98) \times (365) = 357.7$.
- 3. The 98th percentile is then given as: $P_{0.98,y} = X_{[i+1]}$; therefore, the 98th percentile for a year of day is day number 358 (i.e., 357 + 1).
- 4. Since the data is sorted in ascending order, the high value to review is 8 (see table below).

Day	High Value
365	1
364	2
363	3
362	4
361	5
360	6
359	7
358	8

As a quality check, the results of a model using the 98^{th} percentile and the H8H were reviewed. For the same model run, the 98^{th} percentile was calculated by AERMOD as $8.9~\mu g/m^3$, whereas the H8H was calculated as $12.2~\mu g/m^3$. As such, using the H8H for PM2.5 analyses provides a conservative approach to modeling (Folsom Dam, Alt 1 Mitigated, 1985).

The PM_{2.5} NAAQS requires the 98^{th} percentile to be averaged over three years; therefore, three individual years of meteorological data must be run for PM_{2.5} modeling. The 24-hour average will be reported as the average of these three years, whereas the annual standard will be reported as the maximum annual average from the given years.

- b. This value is rounded to 13.3, indicating that this area meets the annual PM_{2.5} standard.
- 2.6 Equations for the 24-Hour $PM_{2.5}$ Standard. (a) When the data for a particular site and year meet the data completeness requirements in section 2.2 of this appendix, calculation of the 98m percentile is accomplished by the following steps. All the daily values from a particular site and year comprise a series of values $(x_1, x_2, x_3, ..., x_n)$, that can be sorted into a series where each number is equal to or larger than the preceding number $(x_{[1]}, x_{[2]}, x_{[3]}, ..., x_{[n]})$. In this case, $x_{[1]}$ is the smallest number and $x_{[n]}$ is the largest value. The 98m percentile is found from the sorted series of daily values which is ordered from the lowest to the highest number. Compute $(0.98) \times (n)$ as the number "i.d", where "i" is the integer part of the result and "d" is the decimal part of the result. The 98m percentile value for year y, $P_{0.98, y}$, is given by

Equation 6

$$P_{0.98,y} = X_{[i+1]}$$

where:

Equation 6:

 $P_{0.98,y} = 98^{th}$ percentile for year y;

 $X_{l \mapsto 1l} = \text{the } (i=1)^{\text{th}}$ number in the ordered series of numbers; and

- i = the integer part of the product of 0.98 and n.
- (b) The 3-year average 98th percentile is then calculated by averaging the annual 98th percentiles:

Equation 7

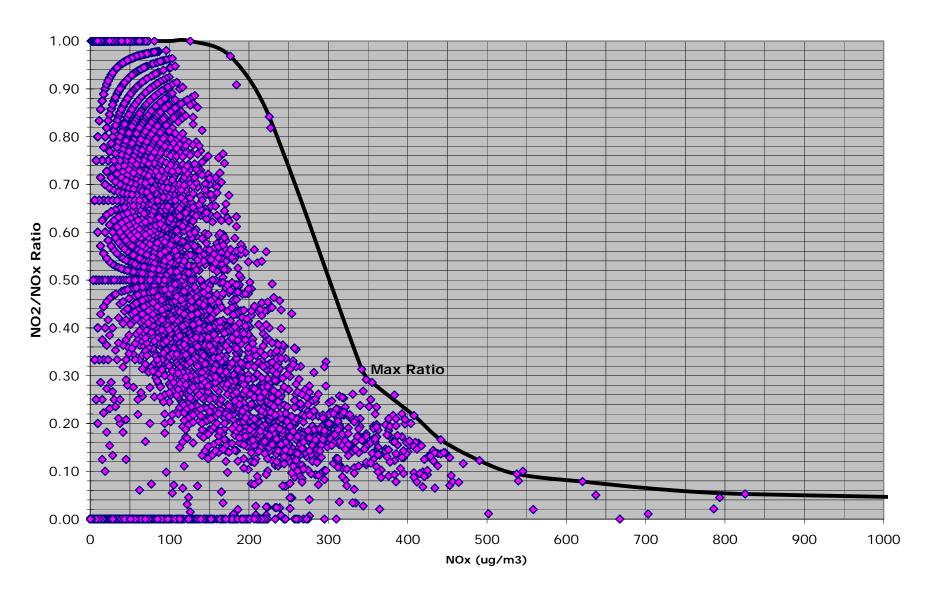
$$P_{0.98} = \frac{\sum_{y=1}^{3} P_{0.98,y}}{3}$$

(c) The 3-year average 98th percentile is rounded according to the conventions in section 2.3 of this appendix before a comparison with the standard is made.

Example 4—Ambient Monitoring Site With Every-Day Sampling That Meets the Primary 24-Hour PM_{2.5} Standard.

a. In each year of a particular 3 year period, varying numbers of daily PM_{2.5} values (e.g., 281, 304, and 296) out of a possible 365 values were recorded at a particular site with the following ranked values (in μg/m³):

NO2/NOX Ratio - Del Paso Manor 2002-2004



Appendix F Transportation Methods and Assumptions

Appendix F Transportation Methods and Assumptions

Determination of daily truck trips associated with each Folsom DS/FDR alternative includes the following assumptions:

- Total truck trips are distributed evenly over multiple year construction periods.
- Daily trips are not applicable for the entire construction period. The Daily trips illustrate the 'worse case' scenario at the beginning of each construction phase when both materials and equipment will be delivered to the site.
- Quantities of delivered materials will be met prior to the end of each construction period.
- Daily truck calculations assume 244 hauling days per year

Tables 3.9-22 through 3.9-29 (included in this Appendix) illustrate the daily trips associated with hauling in materials and equipment. Tables 3.9-30 through 3.9-37 (included in this Appendix) illustrate the trips assigned to each route.

Determination of daily worker trips associated with all Folsom DS/FDR alternatives includes the following assumptions:

Each worker number represents four daily trips (workers are illustrated per shift)

Worse case scenario assumes each worker will travel alone and not carpool

Each worker will drive to each Folsom DS/FDR feature as opposed to meeting at a staging area to be dispersed to their respective work sites.

Tables 3.9-38 through 3.9-77 (included in this Appendix) illustrate the distribution of workers to each Folsom DS/FDR feature from each unemployment region as identified in *Trip Distribution*. Tables 3.9-38 through 3.9-77 illustrate slightly higher worker and trip numbers than the summary illustrated on Table 3.9-12 through 3.9-16 (included in Section 3.9 of the EIS/EIR) due to rounding.

Tables 3.9-78 through 3.9-85 (included in this Appendix) illustrate the assignment of truck and worker trips as well as the daily impacts of each alternative associated with hauling materials and equipment and personnel arrivals and departures. Tables 3.9-86 through 3.9-93 (included in Section 3.9 of the EIS/EIR) illustrate the expected changes in ADT (if any), the changes (if any) in LOS, the v/c ratios for all roadways experiencing LOS F, and the percent increase in ADT (if any) for each alternative for each construction year. Emergency operations are currently not included in this analysis and it is not yet determined if its inclusion will affect the analysis presented thus far.

			2007	Table 3.9-22 Construction Traffic		
Facility	Materials Route	Alternative 1 Transfer Dumps Tractor/Flatbed	Alternative 2 Transfer Dumps Tractor/Flatbed	Alternative 3 Transfer Dumps Tractor/Flatbed	Alternative 4 Transfer Dumps Tractor/Flatbed	Alternative 5 Transfer Dumps Tractor/Flatbed
Dike 1	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	Total Daily Total Daily	Total Daily Total Daily	Total Daily Total Daily	Total Daily Total Daily	Total Daily Total Daily
Dike 2	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					
Dike 3	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					
Dike 4	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 5	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 6	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
RWD	Filter Material A-4 Pre-Mixed Con A-4 Steel Reinforce O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4					
Main Dam	Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
LWD	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 7	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 8	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforce O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6					
Aux. Spill	wi Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Tunnel	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
	ov Equipment O-5	0 0	0 0	0 (0 0 0	0 0
	t. Equipment 0-5	0 0	0 0	0 (0 0 0	0 0
	Equipment O-2	12 1 12 1	12 1 12 1	0 (0 12 1 12 1	12 1 12 1
	ay Equipment O-1					
TOTALS	Filter Material	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0 0 0	0 0 0 0
	Raw Concrete Steel Reinforcement	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0	$egin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0
	Pre-Cast Walls Road Base Asphalt	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0
	Equipment	12 1 12 1	12 1 12 1	0 0 0	0 12 1 12 1	12 1 12 1

			2008	Table 3.9-23 Construction Traffic		
Facility	Materials Route	Alternative 1 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 2 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 3 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 4 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 5 Transfer Dumps Tractor/Flatbed Total Daily Total Daily
Dike 1	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	Total Suny	Total Buny Total Buny	iotal Buny Iotal Buny	Total Bully Total Bully	Total Daily
Dike 2	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					
Dike 3	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					
Dike 4	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3	785 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	58 1 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 180 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0	360 2 0 0 0 0 0 0 0 0 0 100 1 30 1 0
Dike 5	Equipment O-3 Filter Material A-3 Pre-Mixed Con A-3	1,621 7 0 0	270 3 0	3 1 16 88 1 0	280 2 0	520 2 0 0 0
	Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 0	0 0 0 0 0 0 0 39 13 0 25 5 0	0 0 0 0 1111 1 0 30 1 0
Dike 6	Equipment O-3 Filter Material A-3 Pre-Mixed Con A-3	2 1 48 1 973 4 0	90 2 0	3 1 16 68 1 0 0 0 75 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	840 9 0	300 2 0
	Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 0	0 0 0 0 0 0 0 33 17 0 0 25 5 0	0 0 0 0 0 0 100 1 0 30 1 0
RWD	Filter Material A-4 Pre-Mixed Con A-4 Steel Reinforce O-4 Pre-Cast Walls O-4 Road Base O-4	2 1 47 1	4 1 5	3 1 16 287 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 1 5 1	4 1 5 1
Main Dam	Asphalt O-4 Equipment O-4 Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5			3 1 26		
LWD	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 7	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 8	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforce O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6	18,089 75 0 4,100 17 0 0 0 295 2 0 127 1 0 4 1 67 1	16,800 69 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	206 1 ((((((((((((((((((12,240 51 0 3,960 17 0 0 0 0 0 0 270 2 0 0 80 1 0 12 1 12 1	16,800 69 0 0 0 0 0 0 0 0 0
Aux. Spillw	ay Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Tunnel	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
	w Equipment O-5	0 0	0 0	0 (0 0 0	0 0
	Equipment O-5 Equipment O-2	12 1 12 1	12 1 12 1	0 0	0 0 0	12 1 12 1
	vEquipment O-6	0 0 0	0 (0 0		8 1 6 1
Granite Bay	Equipment O-1					
TOTALS	Filter Material Raw Concrete Steel Reinforcement	21,468 90 0 0 4,100 17 0 0 0 0 0 0	17,190 75 0 0 0 0 0 0 0 0 0 0 0	707 6 0 0 775 6 0 0 0 0 16 5	0 13,540 63 0 0 0 3,960 17 0 0 0 0 0 0	17,980 75 0 0 0 0 0 0 0 0 0 0
	Pre-Cast Walls Road Base Asphalt	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 506 5 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 371 33 0 0 150 12 0 0	0 0 0 0 581 5 0 0 170 4 0 0
	Equipment	22 5 217 5	38 5 40 5	15 5 98 5	5 38 5 37 5	44 6 43 6

						2009	Table 3.9-24 Construction Traffic					
Facility	Materials Route	Transfer Dumps				actor/Flatbed	Altern Transfer Dumps	Tractor/Flatbed	Transfer Dumps	Tractor/Flatbed	Alternat	Tractor/Flatbed
Dike 1	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	Total Dai.	ly Total	Daily Total	Daily Tot	al Daily	Total Daily 106 121 (() () () () () () () () () () () () ()	2	Total Daily	Total Daily	Total Daily	Total Daily
Dike 2	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1							2				
Dike 3	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1							1				
Dike 4	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3											
Dike 5	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3											
Dike 6	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3											
RWD	Filter Material A-4 Pre-Mixed Con A-4 Steel Reinforce O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4	3,522 334 167 2	15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 4,800 0 20 0 0 0 384 0 135 1 10	0 2 1	8,800 37 2,000 9 0 0 7 1			3,600 184 120 10	15 0 0 0 0 1 1 1 7	0 3,720 16 0 0 0 0 0 0 0 0 0 0 525 3 0 160 1 1 10 1	0 0 0 0 0 0 0 0 0 12
Main Dam	Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5											
LWD	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5											
Dike 7	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5											
Dike 8	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5											
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforce O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6	18,089 4,100 295 127 4	75 17 0 0 2 2 1 1 67	0 16,800 0 0 0 0 0 270 0 80 1 12	69 0 0 0 2 1	0 0 0 0 0 0 0 0 14	(4	12,210	17 0 0 2	0 16,800 69 0 0 0 0 0 0 0 0 270 2 0 80 1 1 10 1	0 0 0 0 0 0 0 12
Aux. Spill	w Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5	904 12481 1250 92 4	4 52 0 82 0 6 1 88 1 88	0 6160 1 0 6160 0 0 0	0 0 0	0 0 8480 76 0 0 0 0 9 1	92	367	0 6160 2	•		0 0 0 0 0 0
Tunnel	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5			6840	0 29 0 0 0 0	0 0 0 0 0 0 0 0 7						
Aux. Borr	o Equipment O-5		0	0	0	0			0	0	0 0	0
	t. Equipment O-5	0	0 0	0 0		0 0	·	,	0 0	0 0	0 0 0	0 0
	rr Equipment O-6	12	0 0	0 12	0	12 1	·		0 12	0 12	1 12 1 1 0 8 1	12 1 6 1
	ajEquipment O-1											
TOTALS	Filter Material Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	22,515 16,581 0 0 1879 386 22	94 0 69 0 0 82 0 0 10 0 3 0 4 229	0 21,600 0 13,020 1 8,800 0 0 654 0 215 4 43	0 4 2	0 0 0 7,280 113 2,000 9 0 0 0 49 5	0 (92 1	0 376 0 0 0	0 15,840 0 10,120 6 0 0 0 0 0 0 454 0 200 5 40	31 0 0 18,480 4 0 0 3 0 2 0	2 0 0	0 0 0 0 0 0 0 0 0 0 0 0 42 4
	_qapmont		. 223	-1 43	J	5		16/	- 40	., 55	. 70 4	74 4

									Table 3.9-25 Construction Tra									
Facility	Materials Route	Transfer Dun Total D		1 Tractor/Flatbed otal Daily	Transfer Du Total		Tractor/Flatb	ed Daily	Transfer Dump Total Da		ractor/Flatbed	Transfer Du Total		4 Tractor/Flatbed otal Dail		Altern sfer Dumps Daily	ative 5 Tractor/Flatbed Total Daily	
Dike 1	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	rotur L	rany i	oui Duily	Total	Duny	Total 5	, any	Total Da	.,	uar Duny	rotar	Duny .	otar Ban	y	Duny	, otal Bally	
Dike 2	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1																	
Dike 3	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1																	
Dike 4	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3																	
Dike 5	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3																	
Dike 6	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforce O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3																	
RWD	Filter Material A-4 Pre-Mixed Con A-4 Steel Reinforce O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4	3,522 334 167 2	15 0 0 0 2 1	62	0 4,800 0 20 0 0 0 384 0 135 1 10	20 1 0 0 2 1 1	8,800 2,000 7	0 0 37 9 0 0				3,600 184 120 10	15 0 0 0 1 1	7	0 1	720 166 0 0 0 0 0 525 3 60 1 10 1		0 0 0 0 0 0
Main Dan	n Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5																	
LWD	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5																	
Dike 7	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5																	
Dike 8	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5																	
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforce O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6	18089 4100 295 127 4	75 17 0 0 2 1	67	0 16800 0 0 0 0 0 270 0 80 1 12	35 0 0 0 27 8 1	14	0 0 0 0 0 0	206 228	1 1 0 0 0 0	0 0 4 1 0 0 0 0 0	12240 3960 270 80	51 17 0 0 2 1	10		800 69 0 0 0 270 2 80 1		0 0 0 0 0
Aux. Spill	w Filter Material A-5 Raw Concrete BP-2 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5	904 12481 1250 92 4	4 52 0 0 6 1	82	0 6160 1 0 0	0 14 0 0 0 0	18480	0 0 42 0 0 0	28081 92 4	0 116 0 0 0	367 2 0 0 0 0 0 0 57 1	6160	0 14 0 0 0 0	18480	0 0 42 0 0 0	0 0 0 0 0 0		0 0 0 0 0
Tunnel	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5				6840	0 29 0 0 0 0	7	0 0 0 0 0										
Aux. Borr	ro Equipment O-5				5,													
	t. Equipment O-5																	
	Equipment O-2 rr Equipment O-6		0		0	0		0		0	0		0		0	12 1	12	_1
	a)Equipment O-1		<u> </u>	<u>'</u>		' 	'				· 			<u>'</u>				=
TOTALS	Filter Material Raw Concrete	22,515 16,581	94 69	0	0 21,600 0 13,020	55 44	0	0	206 28,309	1 117	0 0	15,840 10,120	66 31	0	0 20,5	520 85 0 0	0	0
	Steel Reinforcement Pre-Cast Walls Road Base	0 0 1879	0 0 10	82 0 0	1 8,800 0 0	37 0 29	27,280 2,000 0	79 9 0	0 0	0 0	371 3 0 0 0 0	0 0 0 454	0 0 3	18,480 0 0	0 0 0	0 0 0 0 795 5	0	0
	Asphalt Equipment	386 10	3	0 217		9	0 37	0	92 4	1	0 0 67 2	200	2	0 25	0 2	240 2 2	0	3

						Table 3.9-26 Construction Traffic					
Facility	Materials Route		ative 1 Tractor/Flatbed Total Daily	Altern Transfer Dumps Total Daily	native 2 Tractor/Flatbed Total Daily	Alter Transfer Dumps Total Daily	native 3 Tractor/Flatbed Total Daily	Alter Transfer Dumps Total Daily	native 4 Tractor/Flatbed Total Daily	Alternative Transfer Dumps Total Daily	e 5 Tractor/Flatbed Total Daily
Dike 1	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforc O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	Iotal Daily	I Otal Dally	I Otal Dally	i otai Daily	Total Daily	i otai Daily	i otai Daily	i otai Daily	Iotal Dally	Total Daily
Dike 2	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforc O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1										
Dike 3	Filter Material A-1 Pre-Mixed Con A-1 Steel Reinforce O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1										
Dike 4	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforcs O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3										
Dike 5	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforcs O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3										
Dike 6	Filter Material A-3 Pre-Mixed Con A-3 Steel Reinforco O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3										
RWD	Filter Material A-4 Pre-Mixed Con A-4 Steel Reinforcs O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4									3720 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
Main Dan	Rilter Material A-5 Raw Concrete BP-2 Steel Reinforc O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	1260	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1	3060 13 0 0 0 0 0 0 4 1	0 0 0 0 0 0 0 0
LWD	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforc O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5										
Dike 7	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforc O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5										
Dike 8	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforc O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5										
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforce O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6				0 0 0					16800 69 0 0 0 270 2 80 1	0 0 0 0 0 0 0 0
Aux. Spill	W Filter Material A-5 Raw Concrete BP-2 Steel Reinforco O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5	904 4 12481 52 0 1250 6 92 1 4	82	0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 18480 42 0 0 0 0 0	28081 11	0 (6 (7 (7 (7 (7 (7 (7 (7 (7 (7 (7 (7 (7 (7	6160 1	0 0 0 4 0 0 0 18480 42 0 0 0 0 0 0 1 8 1	0 0 0 0 0 0 0	0 0 0 0 0 0 0
Tunnel	Filter Material A-5 Pre-Mixed Con A-5 Steel Reinforce O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5			6840 25 (6840 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0						
Aux. Borr	o Equipment O-5										
	t. Equipment O-5										
	Equipment O-2									12 1	12 1
	ayEquipment O-1		. '								
TOTALS	Filter Material	904 4	0	0 16,800 69	0 0	0 28,081 11	0 0 0		0 0 0	20,520 85	0 0
	Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	12,481 52 0 0 0 0 1250 6 92 1 4 1	82 0 0 0	0 80 1	18,480 42	0 0 0 0 92	6 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 1 0 0 0 0 1 1 0	2 0 0 0 0 0 0 0	00 0 0 0 18,480 42 0 0 0 0 0 0 0 0 0 2 9 2	3,060 13 0 0 0 0 795 5 240 2 26 3	0 0 0 0 0 0 0 0 0 0 0 0 35 4

											able 3.9-27	raffic								
Facility	Materials	Route	Transfer L Total	Alternati Dumps Daily	ive 1 Tractor/l Total	Flatbed Daily	Transfer L Total	Alterna Jumps Daily	tive 2 Tractor/ Total		Transfer Total	Alterna	tive 3 Tractor/Flatbed Total Daily	Transfer Total	Alternat Dumps Daily	Tractor/Flatb	ed aily	Transfer Di		e 5 Tractor/Flatbed Total Daily
Dike 1	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-1 O-1 O-1 O-1 O-1 O-1	Total	Daily	rotar	Duny	Total	Daily	rotar	Suny	rotar	Dany	roda <i>Dany</i>	Total	Daily	Total D		rotal	Dany	Total Daily
Dike 2	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-1 A-1 O-1 O-1 O-1 O-1																		
Dike 3	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-1 A-1 O-1 O-1 O-1 O-1																		
Dike 4	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-3 A-3 O-3 O-3 O-3 O-3																		
Dike 5	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-3 A-3 O-3 O-3 O-3 O-3																		
Dike 6	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-3 A-3 O-3 O-3 O-3 O-3																		
RWD	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-4 A-4 O-4 O-4 O-4 O-4																3720 525 160 10	16 0 0 0 3 1	0 0 0 0 0 0 0 0 0 12
Main Dam	Filter Material Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 BP-2 O-5 O-5 O-5 O-5 O-5																3060	0 13 0 0 0 0	0 0 0 0 0 0 0 0
LWD	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 O-5 O-5 O-5 O-5 O-5	1,111 100 50 2	5 0 0 0 1 1	47	0 0 0 0 0 0	4,560 60 124 40 10	19 1 0 0 1 1	2,700 600	0 0 12 3 0 0	90 100	1 1 0 0 0 0	2	0 1,200 0 1 1 0 0 110 0 70 1 10	5 0 0 0 1 1	6	0 0 0 0 0 0	1,320 156 45 10	6 0 0 0 1 1	0 0 0 0 0 0 0 0 0 0
Dike 7	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 A-5 O-5 O-5 O-5 O-5					38 12 6	1 0 0 0 1 1 1	4	0 0 0 0 0 0	39 43 3	1 1 0 0 0 0	1	0 585 0 1 1 0 0 22 0 24 1 6	3 0 0 0 1 1	4	0 0 0 0 0 0	53 14 6	3 0 0 0 1 1	0 0 0 0 0 0 0 4
Dike 8	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 A-5 O-5 O-5 O-5 O-5					32 12 6	1 0 0 0 1 1 1	4	0 0 0 0 0 0	38 43 3	1 1 0 0 0 0		0 315 0 1 0 0 0 16 0 10 1 6	2 0 0 0 1 1	4	0 0 0 0 0 0	48 14 6	3 0 0 0 1 1	0 0 0 0 0 0 0 4
MIAD	Filter Material Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-6 BP-3 O-6 O-6 O-6 O-6																		
Aux. Spill	w Filter Material Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 BP-2 O-5 O-5 O-5 O-5 O-5																		
Tunnel	Filter Material Pre-Mixed Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment	A-5 O-5 O-5 O-5 O-5 O-5																		
	Equipment	0-5																		
	Equipment Equipment	O-5 O-2																12	1	12 1
	r Equipment	O-6										1				<u>'</u>		'	<u>'</u>	
Granite Ba	ay Equipment	0-1																		
TOTALS	Filter Material Raw Concrete Steel Reinforcement Pre-Cast Walls Road Base Asphalt Equipment		1,111 0 0 0 100 50	5 0 0 0 1 1	0 0 0 0 0 0 0 47	0 0 0 0 0 0	4,638 60 2,700 0 194 64 22	21 1 12 0 3 3 3	0 0 2,700 600 0 0	0 12 3 0	167 186 0 0 0 0	3 3 0 0 0 0	4 0 0	0 2,100 0 0 3 0 0 0 0 148 0 104 3 22	10 0 0 0 3 3 3	0 0 0 0 0 0 0	0 0 0 0 0 0	6,210 3,060 0 0 782 233 48	28 13 0 0 6 4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

			2013 (Table 3.9-28 Construction Traffic		
Facility	Materials Route	Alternative 1 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 2 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 3 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 4 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 5 Transfer Dumps Tractor/Flatbed Total Daily Total Daily
Dike 1	Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1	rotal Daliy rotal Daliy	Total Daily Total Daily Total Daily Daily Total Daily Daily Total Daily	rotal Dany rotal Dany	Total Daily Total Daily	Total Daily Total Daily
Dike 2	Equipment O-1 Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1		6 1 4 1 120 1 0 0 0 0 0 0 0 240 1 0 0 80 1 0 0 6 1 4 1		6 1 4 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 1 4 1 0 2,800 12 0 0 0 0 0 0 0 0 0 0 0 550 3 0 120 1 0 6 1 4 1
Dike 3	Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1		120 1 0 0 0 0 0 0 0 0 240 1 0 80 1 0 6 1 4 1		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,800 12 0 0 0 0 0 0 0 0 0 0 0 0 550 3 0 0 120 1 0 6 1 4 1
Dike 4	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 5	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 6	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
RWD	Filter Material A-4 Pre-Mixed Conc A-4 Steel Reinforcer O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4					
Main Dam	Filter Material A-5 Raw Concrete BP-2 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5	2,500 11 (0.500 0.	720 4 0 0 0 2,200 5 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 720 4 0 5 0 2,200 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0
LWD	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5		4,560 19 0 60 1 0 0 2,700 12 0 600 3 124 1 0 40 1 0 10 1 6 1	90 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,200	0 1,320 6 0 0 0 0 0 0 0 0 0 0 0 0 156 1 0 0 45 1 0 10 1 9 1
Dike 7	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 8	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforcer O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6					
Aux. Spillw	ay Filter Material A-5 Raw Concrete BP-2 Steel Reinforcer O-5 Pre-Cast Walls Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Tunnel	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Aux. Borro	w Equipment O-5					
	Equipment O-5					
	Equipment O-2					
	ov Equipment O-6 / Equipment O-1	0 0	11 1 6 1	0 0	11 1 6 1	11 1 6 1
	Filter Material					
TOTALS	Raw Concrete Steel Reinforcement	0 0 0 0 2,500 11 0 0 0 0 166	780 5 0 0 1 0 0 4,900 17		0 1,200 5 0 0 0 720 4 0 0 1 0 0 2,200 5	0 10,840 47 0 0 0 720 4 0 0 5 0 0 2,200 5
	Pre-Cast Walls Road Base	0 0 0 0	0 0 600 3 0 938 5 0 0	0 0 0 0	0 0 0 0 0 695 4 0 0	0 0 0 0 0 0 1892 11 0 0
	Asphalt Equipment	0 0 0 0		0 0 0 0 15 2 18 2	0 430 4 0 0 2 45 7 29 6	0 440 5 0 0 6 45 7 32 6

				Table 3.9-29 Construction Traffic		
Facility	Materials Route	Alternative 1 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 2 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 3 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 4 Transfer Dumps Tractor/Flatbed Total Daily Total Daily	Alternative 5 Transfer Dumps Tractor/Flatbed Total Daily Total Daily
Dike 1	Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1	rotan Dany rotan Dany	rotai vany rotai vany	i Otal Dally i Otal Dally	rotal Daily rotal Daily	2,800 10 10 10 10 10 10 10
Dike 2	Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					2,800 12 0 0 0 0 0 0 0 550 3 0 120 1 8 1
Dike 3	Filter Material A-1 Pre-Mixed Conc A-1 Steel Reinforcer O-1 Pre-Cast Walls O-1 Road Base O-1 Asphalt O-1 Equipment O-1					2,800 12 0 0 0 0 0 0 0 0 0 0 0 550 3 0 120 1 0 12 1 8 1
Dike 4	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 5	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
Dike 6	Filter Material A-3 Pre-Mixed Conc A-3 Steel Reinforcer O-3 Pre-Cast Walls O-3 Road Base O-3 Asphalt O-3 Equipment O-3					
RWD	Filter Material A-4 Pre-Mixed Conc A-4 Steel Reinforcer O-4 Pre-Cast Walls O-4 Road Base O-4 Asphalt O-4 Equipment O-4					
Main Dam	Filter Material					720 0 0 0 720 3 0 10 0 2,200 10 0 0 0 0 0 0 12 1 2 1
LWD	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 7	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Dike 8	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
MIAD	Filter Material A-6 Raw Concrete BP-3 Steel Reinforcer O-6 Pre-Cast Walls O-6 Road Base O-6 Asphalt O-6 Equipment O-6					
Aux. Spillwa	y Filter Material A-5 Raw Concrete BP-2 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Tunnel	Filter Material A-5 Pre-Mixed Conc A-5 Steel Reinforcer O-5 Pre-Cast Walls O-5 Road Base O-5 Asphalt O-5 Equipment O-5					
Aux. Borrow	P Equipment O-5					
Folsom Pt.						
Beals Pt.						
MIAD Borro		0 0				11 1 6 1
TOTALS	Filter Material					
IOIALS	Raw Concrete Steel Reinforcement	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	2,200 10 2,200 10
	Pre-Cast Walls Road Base	0 0 0 0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 1736 10 0 0
	Asphalt Equipment	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	

									2007	Assianm		ble 3.9-3		Equipment	t)										
			Alternative 1					Alternative 2		g			Alternative		7			Alternative	: 4				Alternative	5	
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	t Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	: Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	s Total
A-1					0					0					0)				0					О
A-2					0					0					0)				0					0
A-3					0					0					C)				0					0
A-4					0					0					0)				0					0
A-5					0					0					0)				0					0
A-6					0					0					0)				0					0
O-1					0					0					0)				0		_			0
O-2			2		4			2		4					0)		2		4		_		2	4
O-3					0					0					0)				0					0
O-4					0					0					0)				0					1 0
O-5					0					0					0)				0		_			- 0
O-6					0										U)				0					1 0
BP-2					0					0					0					0					
BP-3					0					0										0				-	1 0
DF-3				Total	4				Total	4				Total	0)			Total	4				Total	1 4

												Table 3.9-													
										2008 As	signment c	of Daily Trips		Equipment)											
			Alternative 1					Alternative 2					Alternative 3		•			Alternative 4				-	Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0					0					0					()				0
A-2					0					0					0					()				0
A-3	15				30	6				12	. (5			12	. 12				24	1 (5			12
A-4					0					0	4	ł l			8					()				0
A-5					0					0					0					()				0
A-6	75				150	69				138	1				2	51				102	69	9			138
O-1					0					0					0					()				0
O-2			2		4			2		4					0			2	2	4	Į.		2	2	4
O-3		6	6		24		6	6		24		3	(5	18		42	ϵ	5	96	5	6	5	ć	24
O-4					0					0		1	2	2	6					()				0
O-5					0					0					0			()	()		()	0
O-6		3	2		10		3	2		10		1	2	2	6		3	2	2	10)	3	3	£	14
BP-2					0					0				2	4					()			4	0
BP-3				17	34					0				1	2				17	34	Į.			4	0
				Total	252				Total	188				Total	58				Total	270)			Total	192

F-11 F-11

										2009 As	signment o	Table 3.9- of Daily Trips		Equipment)											
		A	Alternative 1				A	Alternative 2			Ī		Alternative 3	,			1	Alternative 4					Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0					0	7	7			14					(
A-2					0					0					0					(
A-3					0					0					0					C					(
A-4	15				30	21				42					0	15				30	10	5			32
A-5	4				8					0					0)				0					(
A-6	75				150	35				70	1	-			2	51				102	69)			138
O-1					0					0		3	(9					0					(
O-2					0			2		4					0			2		4			2	2	4
O-3					0					0					0					C					(
O-4		3	2		10		49	2		102					0		2	2		8		4	. 2	2	12
O-5		8	2		20		76	4		160		3	2		10		42	2		88					(
O-6		3	2		10		3	2		10		1	2		6		3	2		10		3	4		14
BP-2				52	104				55	110				116	232	2			14	28				0	(
BP-3				17	34					0				1	. 2				17	34				0	(
				Total	366				Total	498				Total	275				Total	304				Total	200

										2010 As	sianment o	Table 3.9-		Fauinment)											
		F	Alternative 1				A	Alternative 2		2010 A3	Signifient o		Alternative 3	Lquipment			1	Alternative 4				1	Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0					0					0)				0					
A-2					0					0					0)				0					
A-3					0					0					0)				0					(
A-4	15				30	21				42					0	15				30	16				32
A-5	4				8					0					0)				0					(
A-6	75				150	35				70	1				2	51				102	69				138
O-1					0					0					0					0					(
O-2					0					0					0					0			2		4
O-3					0					0					0					0					C
O-4		3	2		10		49	2		102					0		2	2		8		4	2		12
O-5		8	2		20		42	4		92		3	2	2	10		42	2		88					C
O-6		3	1		8		35	2		74		1	1		4		3	1		8		3	1		8
BP-2				52	104				43	86				116	232				14	28					
BP-3				17	34					0				1	2				17	34					
				Total	364				Total	466				Total	250)			Total	298				Total	194

F-13 F-13

												Table 3.9-													
	1		Alternative 1					Alternative 2		2011 Assi	gnment of	Daily Trips (Materials & Alternative 3	Equipment	•)			Alternative 4					Alternative 5		
Route Designation	Aggregate Trips		Equipment	Batch Plant Trips	Total	Aggregate Trips	1	Equipment	Batch Plant Trips	Total	Aggregate Trips	1	Equipment	Batch Plant Trips	Total	Aggregate Trips		Equipment	Batch Plant Trips	Total	Aggregate Trips		Equipment	Batch Plant Trips	Total
A-1					0					0)				0)				()				0
A-2					0					C)				0)				()				0
A-3					0					C)				0)				()				0
A-4					0					C)				0)				() 1	5			32
A-5	4	1			8					C)				0)				()				0
A-6					0	69				138	3				0)				(6	9			138
O-1					0					0					0					()				0
O-2					0					C					0					()			2	4
O-3					0					C					0					()				0
O-4					0					0					0					()	4		2	12
O-5		8	2		20		42	4		92	2	3	3	3	12	2	42	4	1	92	2	C	1	2	4
O-6					0		3	2	2	10					0					()	3	1	1	8
BP-2				52	104				49	98				116	232				20	40)			13	26
BP-3					0					C					0					()				0
	Total 132 Total						338	3			Total	244	<u> </u>			Total	132	2			Total	224			

										2012 4	oianmont a	Table 3.9-		Fauinmont)											
			Alternative 1					Alternative 2		2012 AS	signment d		Alternative 3	<u>Equipment)</u>		1	1	Alternative 4					Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0					0					0					()				0
A-2					0					0					0)				()				C
A-3					0					0					0)				()				0
A-4					0					0					0)				(1	6			32
A-5	5	5			10	21				42	. 3	3			6	10				20	1.	2			24
A-6					0					0					0)				()				0
O-1					0					0					0					()				0
O-2					0					0					0					()				0
O-3					0					0					0					()				0
O-4					0					0					0					()	4	. 2	2	12
O-5		2	2		8		21	6		54		3	6		18		6	6	5	24	1	6	5 8	3	28
O-6					0					0					0					()				0
					0					0					0					()				0
BP-2					0				1	2				3	6					()				0
BP-3					0					0					0					()				0
				Total	18				Total	98				Total	30				Total	44	1			Total	96

F-15 F-15

												Table 3.9-													
										2013 As	signment o	f Daily Trips		Equipment)											
			Alternative 1				A	Alternative 2					Alternative 3	•				Alternative 4					Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0	3				6					0					(36	5			72
A-2					0	1				2					0)				() 5	5			10
A-3					0					0					0)				()				0
A-4					0					0					0)				()				0
A-5					0	19				38	1				2	. 5				10) (5			12
A-6					0					0					0)				()				0
O-1					0		6	8	3	28					0		6		3	28	3	12	. 8	3	40
O-2					0		2	2	2	8					0			2	2	4	1	2	. 2	2	8
O-3					0					0					0					()				0
O-4					0					0					0					()				0
O-5		1	1		4		22	3	3	50		1	4		10		7	3	3	20)	7	3	3	20
O-6					0					0					0					()				0
BP-2				11	22				5	10				1	2				4	8	3			4	8
BP-3					0					0					0					()				0
				Total	26				Total	142				Total	14				Total	70)			Total	170

F-16 F-16

Table 3.9-37 2014 Assignment of Daily Trips (Materials & Equipment)

		A	lternative 1				A	lternative 2					ernative 3				A	Iternative 4				A	Alternative 5		
Route Designation	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total	Aggregate Trips	Offsite Trips	Equipment Trips	Batch Plant Trips	Total
A-1					0					0					0					0	36				72
A-2					0					0					0					0	5				10
A-3					0					0					0					0					0
A-4					0					0					0					0					0
A-5					0					0					0					0					0
A-6					0					0					0					0					0
O-1					0					0					0					0		12	8		40
O-2					0					0					0					0		2	2		8
O-3					0					0					0					0					0
O-4					0					0					0					0					0
O-5					0					0					0					0		10	2		24
O-6					0					0					0					0					0
BP-2					0					0					0					0				3	6
BP-3					0					0					0					0					0
				Total	0				Total	160															

The results shown in the total columns are doubled to represent a round trip delivery of construction materials &/or equipment.

					able 3.9-3											
		Co	nstructio		r 2007 Wo		Distributio	n								
	•		T	Α	Iternative '	1										
Route Numerical Designation	1		2		3		4		5		6		7			
					ı				<u> Driginatio</u>							
			Rosev				Sacram		Sacram		El Dor		El Dora			_
	Rocklin		area		Folso	m	(I-80		(US 5		(US 5		(GVF	,	Total	
	5%		5%		5%	ı	40%		40%		2.5%		2.5%		100%	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	1 42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																<u> </u>
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	1 68
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	3	6	3	6	3	6	21	42	21	42	2	4	2	4	55	5 110

					Table 3.9-											
			Construct	tion Ye	ear 2008 W	orker/	Distributi	ion								
					Alternative	e 1										
Route Numerical Designation	1		2		3		4		5		6		7			
							Wo	rker (Originatio							
			Rosev	/ille			Sacram		Sacram		El Dora		El Dor			
	Rocklin	area	area	a	Folso	m	(I-80)	(US 5	i 0)	(US 5	0)	(GVI	₹)	Total	
	5%		5%		5%		40%		40%		2.5%		2.5%		100%	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)	1	2	1	2	1	2	8	16	8			2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction	1	2	1	2	1	2	11	22	11	22		2	1	2	27	54
Dike 6 Stripping/Excavation and Construction	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	- 68
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting																
Totals	7	14	7	14	7	14	52	104	52	104	5	10	5	10	135	270

			Comot		Table 3.		. Dietributi									
			Const	ruction	Alternati		r Distributi	on								
Route Numerical Designation	1		2		3	ve i	4		5		6		7			
Noute Numerical Designation	ı				3			orkor C	Drigination		0		1			-
							Sacram		Sacram	ento	El Dor	ado	El Dora	ado		-
	Rocklir	n area	Roseville	e area	Folso	nm	(I-80		(US 5		(US 5		(GVF		Tota	al
	5%		5%		5%		40%		40%		2.5%		2.5%		100	
Project Feature	Workers		Workers		Workers								Workers		Workers	
Granite Bay Borrow Development (913,000 cu yds max)		111,00												111		
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	68
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting	1	2	1	2	1	2	8	16	8	. •		2	1	2	21	42
Totals	12	24	12	24	12	24	89	178	89	178	8	16	8	16	230	460

F-20 F-20

					3.9-41											
		Constr	ruction Ye			r Dist	ribution									
				Altern	ative 1						T					
Route Numerical Designation	1		2		3		4		5		6		7			
									rigination		T					
			Rosev	ille			Sacram		Sacram		El Dor		El Dor			
	Rocklin		area		Folso		(I-80	_	(US 5		(US 5		(GV		Tota	
	5%		5%		5%		40%		40%		2.5%		2.59		100°	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Worker	Trip
Granite Bay Borrow Development (913,000 cu yds max)																<u> </u>
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting	1	2	1	2	1	2	8	16	1	16	1	2	1	2	21	-
Totals	9	18	9	18	9	18			1		6	_	6	12	175	_

		C = 1			ble 3.9-42		io4vib4io	_								
		Con	Struction		ernative 1		istributio	<u>n</u>								
Route Numerical Designation	1 1		2	Ait	3		4		5		6		7			
Route Numerical Designation	<u>'</u>				<u> </u>			kor O	riginatior		0					
			Rosev	مالة			Sacram		Sacram		El Dor	ado	El Dor	ado		
	 Rocklin	aroa	area		Folso	m	(I-80		(US 5		(US 5		(GVF		Tota	al.
	5%		5%		5%		40%		40%		2.5%		2.5%		100	
Project Feature									Workers							
Granite Bay Borrow Development (913,000 cu yds max)	WOINCIS	11110	WOIKCIS	тпр	VVOIRCIS	тр	WOI KCI S	тпр	Workers	тр	WOIKCIS	11111	WOIKCIS	11110	WOINCI	
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																<u> </u>
MIAD -Stripping/Excavation and Construction																<u> </u>
MIAD Jet Grouting																<u> </u>
Totals	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122

		Con	struction		ble 3.9-43		istributio									
		Con	Struction		ernative 1	Ker L	istributio	<u>'' </u>								
Route Numerical Designation	1		2	ΛIL	3		4		5		6		7			
Route Numerical Designation	!		۷					kor O	riginatior	`	0					
			Rosev	مااة			Sacram		Sacram		El Dor	ado	El Dora	ohe		
	Rocklin	aroa	area		Folso	m	(I-80		(US 5		(US 5		(GVF		Tota	al le
	5%		5%		5%		40%		40%		2.5%		2.5%	_	100	
Project Feature								•		-						
Granite Bay Borrow Development (913,000 cu yds max)			Trip Workers Tr													
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122

			Const	ruction	Table 3.9 Year 2013		Distribution	n								
			CONS	raction	Alternativ											
Route Numerical Designation	1		2		3		4		5		6		7			
					•		W	orker O	rigination				•			
							Sacram	ento	Sacram	ento	El Dor	ado	El Dor	ado		
	Rocklin	area	Roseville	e area	Folse	om	(I-80	0)	(US 5	50)	(US !	50)	(GVF	₹)	Tota	al
	5%)	5%)	5%)	40%	6	40%	, 0	2.59	%	2.5%	6	100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40) 80
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40) 8

		Cons	struction		ole 3.9-45 2014 Wor	ker Di	stribution	า								
		00111			ernative 1		<u> </u>	-								
Route Numerical Designation	1		2		3		4		5		6		7			
							Wor	ker O	rigination	1	•		•			
			Rosev	ille			Sacram	ento	Sacram	ento	El Dor	ado	El Dor	ado		
	Rocklin	area	area	a	Folso	m	(1-80))	(US 5	50)	(US 5	50)	(GVF	₹)	Tota	al .
	5%)	5%)	5%		40%	6	40%	6	2.5%	%	2.5%	6	1009	6
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Worker	Trip
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals																

			0 (4' V	Table 3.9	_	D'- (-'l ('-	_								
			Constru	iction Y			Distributio	<u>n</u>								
Doute Neuropical Decimation	4		_		Alternativ		4				0		7		1	
Route Numerical Designation	1		2		3		4	0	5		6		/			
									rigination		El Dar		- FI Dow	- d -		
	D a alalia		Danasiii		Fala		Sacram		Sacram		El Dor		El Dora		T-4	-1
	Rocklin		Rosevil		Folse		(I-80		(US 5		(US 5		(GVF		Tot	
	5%		5%		5%		40%	-	40%	_	2.5%		2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	1 42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	2 4	2	4	13	26	13	26	1	2	1	2	34	4 68
Auxiliary Spillway Construction																Ī
Tunnel Construction																1
Left Wing Dam Stripping/Excavation and Construction																1
Dike 7 & 8 Stripping/Excavation and Construction																1
Main Concrete Dam Raise																1
Main Concrete Dam Tendons and Shears																1
Folsom Point Area Borrow Development and processing																1
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	3	6	(3 6	3	6	21	42	21	42	2	4	2	4	55	5 110

F-26 F-26

					able 3.9-4											
			Construc	tion Yea	ar 2008 Wo	rker Di	stribution									
				ı	Alternative	2										
Route Numerical Designation	1		2		3		4		5		6		7			
							Wo	orker O	rigination							
							Sacram	ento	Sacram		El Dora		El Dora			
	Rocklin	area	Roseville	e area	Folso	m	(I-80	0)	(US 5	50)	(US 5	0)	(GVF	?)	Tot	al
	5%		5%)	5%	ı	40%	6	40%	, 0	2.5%	6	2.5%	6	100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)	1	2	1	2	1	2	ρ	16	8	16	1	2	1	2	21	1 42
Dike 4&5 Stripping/Excavation and Construction	1	2	1	2	1	2	11	22	11	22	1	2	1	2	27	
Dike 6 Stripping/Excavation and Construction	1	2	1	2	1	2	0	16	0	16	1	2	1	2	21	_
Right Wing Dam Stripping/Excavation and Construction	<u>'</u>		- 1		ı		0	10	8	10	- 1				۷.	42
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	1	2	4	2	1	13	26	13	26	1	2	1	2	34	1 68
Auxiliary Spillway Construction		4		4		4	13	20	13	20	I		I		34	1 00
Tunnel Construction																+
Left Wing Dam Stripping/Excavation and Construction																+
Dike 7 & 8 Stripping/Excavation and Construction																+-
Main Concrete Dam Raise																+-
Main Concrete Dam Tendons and Shears																+
Folsom Point Area Borrow Development and processing (1,673,000																+
cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	2 64
MIAD Jet Grouting							·-									†
Totals	7	14	7	14	7	14	52	104	52	104	5	10	5	10	135	5 270

		Col	nstruction		ble 3.9-48		Dietributio	nn .								
		COI	isti uctioi		ternative 2		//Stributio	<i>,</i> ,,,								
Route Numerical Designation	1		2	7.0	3		4		5		6		7			
	-							rker O	rigination	า			<u> </u>			
			Rosev	ille			Sacram		Sacram		El Dora	ado	El Dora	ado		
	Rocklin	area	area	3	Folso	m	(1-80))	(US 5	50)	(US 5	0)	(GVF	?)	Tota	al
	5%		5%		5%		40%	, 0	40%	<u>, </u>	2.5%	<u>, </u>	2.5%	, 0	1009	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)						-		-				-		-		
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	68
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting																
Totals	13	26	13	26	13	26	93	186	93	186	8	16	8	16	241	482

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		Con	struction		ole 3.9-49 2010 Wor	ker Di	istribution	า								
		0011	ou aou ou		ernative 2	101 21	<u>ouributior</u>									
Route Numerical Designation	1		2		3		4		5		6		7			
<u> </u>							Wor	ker O	rigination)					1	
			Rosev	ille			Sacram		Sacram		El Dor	ado	El Dor	ado		•
	Rocklin	area	area	a	Folso	m	(1-80))	(US 5	0)	(US 5	50)	(GVF	₹)	Tota	al
	5%)	5%)	5%		40%	, 0	40%	, D	2.5%	%	2.5%	6	100	 %
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Worker	Trip
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu																
yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	2 64
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	2 64
MIAD Jet Grouting																
Totals	10	20	10	20	10	20	72	144	72	144	6	12	6	12	186	372

			_		Table 3.9											
			Constru	iction Y			Distribution	n								
	1		ı		Alternativ	e 2			1		1				ı	
Route Numerical Designation	1		2		3		4		5		6		7			
			ı		ı				rigination				1		ı	
							Sacram		Sacram		El Dor		El Dora			
	Rocklin		Rosevill		Folse		(I-80))	(US 5		(US 5		(GVF		Tota	
	5%		5%		5%		40%	~	40%		2.5%		2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction	2	4	2	2 4	2	4	12	24	12	24	1	2	1	2	32	2 64
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise	2	4	2	2 4	2	4	18	36	18	36	1	2	1	2	44	1 88
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	2 4	2	4	12	24	12	24	1	2	1	2	32	2 64
MIAD Jet Grouting																
Totals	9	18	(18	g	18	66	132	66	132	5	10	5	10	169	338

					Table 3.9	-51										
			Constru	ıction Y	ear 2012 V	Vorker i	Distributio	n								
					Alternativ	e 2										•
Route Numerical Designation	1		2		3		4		5		6		7			
			-		•		Wo	orker O	rigination						-	
							Sacram	ento	Sacram	ento	El Dor	ado	El Dora	ado		
	Rocklin	area	Rosevill	e area	Folse	om	(I-80))	(US 5	50)	(US 5	50)	(GVF	?)	Tota	al
	5%		5%	, D	5%)	40%	6	40%	6	2.5%	6	2.5%	6	100°	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	80
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	5	10	5	10	5	10	40	80	40	80	3	6	3	6	101	202

The number of workers and trips may be slightly higher than those illustrated on the summary table. Since all worker and trip numbers must be whole numbers, the values have been rounded up to the nearest 1 worker or 1 trip.

						ble 3.9-5										
				Construc	tion Year			ribution								
					1	ernative			_				_	1		
Route Numerical Designation	1			2	3		4		5		(5	7			
									rigination		leib i	// // /				
	5			•••			Sacrar		Sacran		El Dorad	•			- .	
	Rocklin			ille area	Folse		(I-8		(US		50		(GVR	,	Tota	
	5%			<u></u>	5%		40		40%			5%	2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction	1	2	1	2	1	2	9	18	9	18	1	2	1	2	23	4
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and																
Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	12
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	8
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	8	16	8	16	8	16	61	122	61	122	5	10	5	10	156	31

				\ 4 4*		3.9-53										
			C	onstructi	on Year 20	native 2		oution								
Pouto Numerical Designation	1		1 .	2	Allen 3	ialive Z	4		5		1 6	2	7	1		
Route Numerical Designation	'		4		<u> </u>		'		၂ <u>၁</u> Drigination)	- 1			
							Sacrar		Sacran	anto	El Dorad	o (US	El Dora	do		
	Rocklin	aroa	Posovi	ille area	Folso	am.	(I-8		(US		50	•	(GVR		Tot	·al
	5%			%	5%		40		40%		2.5	•	2.5%		100	
Project Feature	Workers		Workers		Workers		Workers		Workers				Workers			Trips
Granite Bay Borrow Development (913,000 cu yds max)	Workers	Пірз	WOIREIS	TTIPS	WOINCIS	Пірз	WOIKEIS	Пірз	WOINCIS	IIIps	WOIREIS	TTIPS	WOINCIS	ш	WOINCIS	IIIps
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000																
cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals																

		0		Table 3		N - 416	4*									
		Consi	truction Ye			VISTIBU	tion									
Route Numerical Designation	. 1		2	Alterna	3		1		5		6		7			
Noute Numerical Designation					3		W ₄	orkor O	riginatio	2	0		,			
	<u> </u>						Sacran	ento	Sacran	nento	El Dor		El Do			
	Rocklin		Roseville		Folse		(1-80		(US		(US		(GV	_	Tota	
Design to Factoring	5%		5%		5%		40%		409		2.5		2.5		100%	
Project Feature	Workers	Trips	Workers	Trips	workers	Trips	Workers	Trips	workers	Trips	workers	Trips	workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																+
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																+
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	4 6
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																1
MIAD Jet Grouting																1
Totals	2	4	2	4	2	4	13	26	13	26	1	2	. 1	2	34	4 6

		Constr		Table 3	.9-55 3 Worker D	Nictribu	ution									
		Consu		Alterna		JISUIDU	uon									
Route Numerical Designation	1		2		3		4		5		6		7			
•			L		<u> </u>		W	orker C	riginatio	n					<u> </u>	
							Sacram	nento	Sacran	nento	El Dor	ado	El Doi	rado		
	Rocklir	n area	Rosevill	e area	Folse	om	(1-80	0)	(US	50)	(US	50)	(GV	R)	Tota	al
	5%		5%		5%		40%		40%		2.59		2.5		100%	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																<u> </u>
Dikes 1, 2, 3 Stripping, Excavation and Construction																<u> </u>
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction	1	2	1	2	1	2	11	22	11	22	1	2	1	2	27	54
Dike 6 Stripping/Excavation and Construction	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	68
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting																
Totals	9	18	9	18	9	18	68	136	68	136	6	12	6	12	175	350

		Con	struction \		3.9-56 09 Worker	Dietrik	oution									
			Struction		native 3	DISCIN	duon									
Route Numerical Designation	1		2		3		4		5		6		7			
							Wo	orker O	rigination							
							Sacrame	ento	Sacram	ento	El Dor		El Dor	ado		
	Rocklin	area	Roseville	e area	Folse	om	(I-80))	(US 5	50)	(US 5	50)	(GVI	₹)	Tota	al
	5%		5%		5%		40%		40%		2.5%		2.5%		100%	
	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																<u> </u>
Dikes 1, 2, 3 Stripping, Excavation and Construction	1	2	1	2	1	2	9	18	9	18	1	2	1	2	23	46
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	1	2	34	68
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	. 2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	4:
Totals	9	18	9	18	9	18	66	132	66	132	6	12	6	12	171	34:

		Con	otruction '		3.9-57 10 Worker	Distrik	ution									
		Con	Struction		native 3	DISUIL	ution									
Route Numerical Designation	,		2	7 11011	3			ļ.	5	5	6		7	Ī		
			•		•		1	Norker C	riginatio	n	•		•	•		
							Sacrai	mento	Sacrar	mento	El Dor	ado	El Dor	ado		
	Rockli	n area	Rosevill	e area	Folso	om	(I-8	30)	(US	50)	(US !	50)	(GVI	R)	Tot	al
	5	%	5%		5%		40		40		2.59		2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																<u> </u>
Beals Point South/North Borrow Development (1,250,000 cu yd max)																<u> </u>
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	6
MIAD Jet Grouting	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	4
Totals	6	12	6	12	6	12	44	88	44	88	3 4	8	4	8	114	22

					e 3.9-58											
		Co	nstruction			er Distril	bution									
	_			Alte	rnative 3		_				_					
Route Numerical Designation	1		2		3		4	1	5		(3	7			
							1		Originatio		•					
							Sacra		Sacrar		El Do		El Dor			
	Rocklin		Roseville		Fols		(I-8		(US		(US		(GVI		Tot	
	5%		5%		5%			<u>%</u>	40			5%	2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	. 2	4	61	12
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise	2	4	2	4	2	4	18	36	18	36	1	2	. 1	2	44	8
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	5	10	5	10	5	10	42	84	42	84	3	(3	6	105	21

		0.			3.9-59	Diatrib										
		C	onstructio		12 Worker native 3	DISTID	итюп									
Route Numerical Designation	1	1		2	3		4		5	5	6	3	7			
		-					V	Vorker O	rigination	<u> </u>		-				
							Sacrar		Sacrar		El Do	rado	El Dor	ado		
	Rockli	n area	Rosev	ille area	Folse	om	(I-8	30)	(US	50)	(US	50)	(GVI	R)	Tot	al
	5	%	5	5%	5%)	40	%	40	%	2.5	5%	2.59	%	100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	12
Dike 7 & 8 Stripping/Excavation and Construction	2	4	2	4	. 2	4	16	32	16	32	1	2	2 1	2	40	8
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	5 5	10	5	1(5	10	40	80	40	80	3	6	3	6	101	20

					3.9-60											
		Co	onstructio		13 Worker	Distrib	ution									
				Alter	native 3											
Route Numerical Designation	1	1		2	3		4		5		(3	7			
					_				riginatior)						
							Sacrar	mento	Sacrar	nento	El Do	rado	El Dor	ado		
	Rockli	n area	Rosev	ille area	Folse	om	(I-8	30)	(US	50)	(US	50)	(GV	R)	Tot	al
	59	%	5	5%	5%		40		40			5%	2.5		100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	12
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	2 1	2	40	8
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	5 5	10	5	10	5	10	40	80	40	80	3	6	3	6	101	20

					Table 3.9-											
			Construc	ction Ye	ear 2014 W	orker l	Distribution	1								
			_		Alternative						•					
Route Numerical Designation	1		2		3		4		5		6		7			
									igination							
							Sacram		Sacran		El Dor		El Dora			
	Rocklin		Rosevill		Folse		(I-80		(US		(US		(GVR	_	Tota	
	5%		5%		5%		40%		409		2.59		2.5%		1009	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																<u> </u>
Dike 4&5 Stripping/Excavation and Construction																<u> </u>
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing																
(1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals							_			_						

				Co	notruotion	Table 3.9 Year 2007 V		tribution								
				Co	ristruction	Alternativ		TIDUTION								
Route Numerical Designation	,	1		2		3	1	4		5		6		7		
Troute trainerieur poeignatien								Worke	er Originat	0		<u> </u>		•		
							Sac	ramento		ramento	EI	Dorado	ELD	orado		
	Rockli	in area	Rosev	ille area	Fo	Isom		I-80)		IS 50)		JS 50)		SVR)	Tot	tal
	5			5%		5%		40%		40%		2.5%		.5%	100	
Project Feature	Workers		Workers		Workers		Workers	Trips	Workers		Workers		Workers	Trips	Workers	
Granite Bay Borrow Development (913,000 cu yds max)						1		<u> </u>		.		1				
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	2 1	2	1	2	8	10	8	16	1	:	2 1	2	21	4
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	1 2	4	2	4	13	20	6 13	26	1	:	2 1	2	34	1 6
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	3	6	3	6	3	6	21	4:	2 21	42	2		4 2	4	55	5 11

						Table 3.9-6										
				Con	struction Y	'ear 2008 W		ribution								
			_		-	Alternative	4									
Route Numerical Designation		1		2		3		4		5		6		7		
			_		-		_		Originati							
								ramento		ramento		Dorado		orado		
		in area		ille area		som		(I-80)		JS 50)	•	JS 50)	<u> </u>	SVR)	Tot	
		%		5%		5%		40%		40%		2.5%	_	.5%	100	
·	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	1	2	1	2	8	16	8	16	1	2	2 1	2	21	
Dike 4&5 Stripping/Excavation and Construction	1	2	! 1	2	1	2	. 11	22	2 11	22	2 1	2	2 1	2	27	54
Dike 6 Stripping/Excavation and Construction	1	2	1	2	1	2	. 8	16	8	16	1	2	2 1	2	21	42
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	. 2	4	2	4	13	26	13	26	1	2	2 1	2	34	68
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																<u></u>
MIAD -Stripping/Excavation and Construction	2	4	. 2	4	2	4	12	24	12	24	1	2	2 1	2	32	64
MIAD Jet Grouting																
Totals	7	14	7	14	7	14	52	104	52	104	1 5	10	0 5	10	135	270

				0.		Table 3.		(v:btio.o.								
				C	onstruction	Alternat	Worker Dis	ribution								
Route Numerical Designation	1	1		2		3	1	4		5		6	Ι	7		
		-					1	Work	ker Origin	ation			1	•	1	
	Rockli	n area	Rosevi	ille area	Fo	Isom		mento 80)	Sac	ramento JS 50)		Dorado JS 50)		Dorado (GVR)	Tota	al
	59			%		5%		0%	· .	40%		2.5%		2.5%	100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)	1	2	1	2	1	2	2 8	16	8	16	1	2	2 1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	3	48	24	48	2	4	1 2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)	2	4	2	4	2	4	13	26	13	26	1	2	2 1	2	34	68
Auxiliary Spillway Construction	3	6	3	6	3	6	3	48	24	48	2	4	1 2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	2	4	2		12	24	12	24	1	2	2 1	2	32	64
MIAD Jet Grouting	1	2	1	2	1	2	2 8	16		16	1	2	2 1	2	21	42
Totals	12	24	12	24	12	24	1 89	-	_	178	8	16	8	16	230	460

			0 4		Table 3.9-6		*- 4*!4*									
			Consti	uction Ye	ear 2010 W		ISTRIBUTION	1								
Desta Newsorked Deskurether		,	1		Alternative		1 4				1 0		1 7			
Route Numerical Designation		l		2	3		4	/ O	5		6	1	/	J		
									rigination		FLDa		I FI Daw			
	D 1-15		D		Fala		Sacran		Sacram		El Do		El Dor		T-4	_1
		n area		lle area	Folse		(I-8	•	(US 5		(US		(GVI		Tot	
		%	<u>.</u>	<u>%</u>	5%		400		40%		2.5		2.5%		100	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																
MIAD -Stripping/Excavation and Construction	2	4	. 2		1 2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting	1	2	1	2	2 1	2	8	16	8	16	1	2	1	2	21	42
Totals	9	18	9	18	3 9	18	68	136	68	136	6	12	2 6	12	175	350

			Construct	-	able 3.9-60 r 2011 Wo		tribution									
			Constructi		Iternative 4		MIDUUOII									
Route Numerical Designation	1		2		3		4		5		6		7			
							W	orker O	rigination	1						
							Sacram	ento	Sacran	nento	El Dor	ado	El Dor	ado		
	Rocklin	area	Roseville	e area	Folse	om	(I-80	0)	(US	50)	(US !	50)	(GVI	₹)	Tota	al
	5%)	5%	·)	5%	, D	40%	6	40%	%	2.59	%	2.5%	%	100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise	2	4	2	4	2	4	18	36	18	36	1	2	1	2	44	88
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																<u> </u>
Totals	5	10	5	10	5	10	42	84	42	84	3	6	3	6	105	210

		Cons	struction		le 3.9-67 2012 Work	ar Nis	stribution									
		COIIS	su ucuon		ernative 4	ei Dis	Stribution									
Route Numerical Designation	1		2		3		4		5		6		7			
							Wo	orker	Originatio	n	•					
			Rosev	/ille			Sacram	ento	Sacram	ento	El Dora	ado	El Dora	ado		
	Rocklin	area	area	a	Folso	m	(I-80)	(US 5	0)	(US 5	0)	(GVF	₹)	Total	I
	5%)	5%)	5%		40%	, D	40%	, 0	2.5%	<u>/</u> 0	2.5%	6	100%	,
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	80
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																<u> </u>
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	5	10	5	10	5	10	40	80	40	80	3	6	3	6	101	202

		Cor	netruction		ble 3.9-68 2013 Wor		istribution	2								
		COI	isti uctioi		ternative 4	KEI D	isti ibutioi	<u> </u>								
Route Numerical Designation	1		2	,	3		4	1	5		6		7			
	-						W	orker O	rigination				-		1	
			Rosev	ille			Sacrai		Sacrar		El Dora	ado	El Dora	ado		
	Rocklin	area	are	a	Folso	m	(1-8	30)	(US	50)	(US 5	0)	(GVR	2)	Tota	al
	5%		5%	ı	5%		40	%	40	%	2.5%	,	2.5%	,	100%	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trip	Worker	Trip
Granite Bay Borrow Development (913,000 cu yds max)	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	
Dikes 1, 2, 3 Stripping, Excavation and Construction	1	2	1	2	1	2	9	18	9	18	1	2	1	2	23	46
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	80
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	10	20	10	20	10	20	73	146	73	146	6	12	6	12	188	376

F-48 F-48

			Constructi		ble 3.9-69		etribution									
			JOHSH UCH		ternative 4		unbuuon									
Route Numerical Designation	1		2	711	3		4		5		6		7			
							W	orker C	Drigination							
							Sacram		Sacram		El Dor	ado	El Dor	ado		
	Rocklin	area	Roseville	e area	Folse	om	(1-80))	(US 5	i 0)	(US	50)	(GVF	₹)	Tota	ıl
	5%)	5%)	5%	, D	40%	, 0	40%	, 0	2.5	%	2.5%	6	100%	<u></u>
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000 cu																
yd max)																<u> </u>
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals																

			_		Table 3.9-7											
			Construc				istribution	1								
			_		Alternative	5					_					
Route Numerical Designation	1		2		3		4		5		6		7			
			1						Origination							
							Sacram		Sacramer	-					_	_
	Rocklin		Rosevill		Folse		(I-80	•	50)		(US		El Dorado	`	Tota	
	5%		5%		5%		40%		40%		2.59		2.5%		100%	
•	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	1	2	10	20	10	20	1	2	1	2	25	5 50
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	2	4	2	4	2		18	36	18	36	2	4	2	4	46	9:

F-50 F-50

				7	able 3.9-7	1										
		C	Construct	ion Yea	ar 2008 Wo	orker D	istribution	1								
				F	Alternative	5										
Route Numerical Designation	1		2		3		4		5		6		7			
					_				Origination				_			
							Sacram		Sacram		El Dor		El Dor			
	Rockli	n area	Rosevil		Folse		(I-80	0)	(US 5	(0)	(US		(GVI	₹)	Tota	ال.
	59		5%		5%		40%		40%	~	2.59		2.5%		100%	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																<u> </u>
Dikes 1, 2, 3 Stripping, Excavation and Construction																<u> </u>
Beals Point South/North Borrow Development (1,250,000 cu yd max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction	1	2	1	2	1	2	11	22	11	22	1	2	1	2	27	54
Dike 6 Stripping/Excavation and Construction	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	1	2	10	20	10	20	1	2	1	2	25	5 50
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	2 64
MIAD Jet Grouting																
Totals	6	12	6	12	6	12	49	98	49	98	5	10	5	10	126	252

					Table 3.9-											
			Constru	ction Ye	ear 2009 W	orker L	Distribution									
					Alternative	5							_			
Route Numerical Designation	,	1	2		3		4		5		6		7			
			_						rigination				•			
							Sacramo		Sacram		El Dor		El Dor			
		in area	Rosevill		Folse		(I-80		(US 5		(US		(GVI	/	Tota	
	5		5%		5%		40%		40%		2.5		2.5%		100%	
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	. 1	2	1	2	8	16	8	16	1	2	1	2	21	1 42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	8 6	3	6	24	48	24	48	2	4	2	4	61	1 122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	2 1	2	10	20	10	20	1	2	1	2	25	
MIAD -Stripping/Excavation and Construction	2	4	. 2	2 4	2	4	12	24	12	24	1	2	1	2	32	2 64
MIAD Jet Grouting																
Totals	7	14	7	7 14	7	14	54	108	54	108	5	10	5	10	139	9 278

					Table 3.9-7											
			Constr		ar 2010 Wo		stribution									
					Alternative	5	•		_							
Route Numerical Designation		1	2	2	3		4		5		6	3	7			
							W	orker Or	igination							
							Sacran	nento	Sacran		El Do		El Dora	ıdo		
	Rocki	in area	Rosevi	lle area	Folse	om	(I-8	0)	(US	50)	(US	50)	(GVR	(1)	Tota	ıl
	5	%	5	%	5%	, D	409	%	40%	6	2.5	5%	2.5%	, l	100%	6
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction	'		<u>'</u>		'		J	10		10			<u>'</u>		۷.	72
Dike 6 Stripping/Excavation and Construction									†							
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2		. 2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)											_		_			1
Auxiliary Spillway Construction																1
Tunnel Construction																1
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise			İ													
Main Concrete Dam Tendons and Shears																1
Folsom Point Area Borrow Development and processing (1,673,000																1
cu yd max)	1	2	. 1	2	1	2	10	20	10	20	1	2	2 1	2	25	50
MIAD -Stripping/Excavation and Construction	2	4	. 2	4	. 2	4	12	24	12	24	1	2	. 1	2	32	2 64
MIAD Jet Grouting																
Totals	7	14	7	14	7	14	54	108	54	108	5	10	5	10	139	278

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			Comot	wation V	Table 3.9-		Nio4wih4io.	_								
			Const	ruction Y	ear 2011 M Alternative		istribution	1								
Route Numerical Designation	,	1		2	3		1		5		6	 6	7			
Noute Numerical Designation		<u> </u>			<u> </u>		<u> </u>	lorker O	ر rigination			,	,			
							Sacran		Sacran		EI Do	rado	El Dor	ado		
	Rockli	in area	Rosevi	ille area	Folse	om	(I-8		(US		_	50)	(GVF		Tota	al
		%	1	%	5%		409		409		2.5		2.5%		100	
Project Feature	Workers		Workers		Workers		Workers				Workers		Workers		Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	1	2	2 1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise	2	4	2	4	2	4	18	36	18	36	1	2	1	2	44	88
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	2 1	2	10	20	10	20	1	2	1	2	25	50
MIAD -Stripping/Excavation and Construction	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
MIAD Jet Grouting																
Totals	9	18	9	18	9	18	72	144	72	144	6	12	6	12	183	366

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					Table 3.9-											
			Const	ruction Y	ear 2012 W		istribution	1								
	T	_		_	Alternative	5			_							
Route Numerical Designation	<i>'</i>	1		2	3		4		5		6	<u> </u>	7			
					1				rigination							
							Sacran		Sacran		El Do		El Dor			
		in area	ł	ille area	Folse	om	(I-8	0)	(US		(US		(GVI	_	Tota	
	5	%	5	%	5%		409		40°		2.5		2.5%		100	%
Project Feature	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trips	Workers	Trip	Workers	Trips
Granite Bay Borrow Development (913,000 cu yds max)																
Dikes 1, 2, 3 Stripping, Excavation and Construction																
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)	1	2	1	2	1	2	8	16	8	16	1	2	1	2	21	42
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction	2	4	2	4	. 2	4	16	32	16	32	1	2	1	2	40	80
Main Concrete Dam Raise	2	4	2	4	. 2	4	18	36	18	36	1	2	1	2	44	88
Main Concrete Dam Tendons and Shears																
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	1	2	10	20	10	20	1	2	1	2	25	50
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting															_	
Totals	12	24	12	24	12	24	100	200	100	200	8	16	8	16	252	504

		Con	struction		ole 3.9-76 2013 Worl	or Di	atribution									
		COII	Struction		ernative 5	(er Di	SUIDUUOII									
Route Numerical Designation	1		2	7 (1)	3		4		5		6		7	I		
							Wo	orker	Originatio	n			<u> </u>	<u> </u>		
			Rosev	/ille			Sacram		Sacram		El Dora	ado	El Dora	ado		
	Rocklin	area	are	а	Folso	m	(I-80))	(US 5	0)	(US 5	i 0)	(GVF	۲)	Total	
	5%		5%)	5%		40%	•	40%	,)	2.5%	6	2.5%	6	100%	,
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)	2	4	2	4	2	4	12			24		2	1	2	32	
Dikes 1, 2, 3 Stripping, Excavation and Construction	1	2	1	2	1	2	9	18	9	18	1	2	1	2	23	46
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction	3	6	3	6	3	6	24	48	24	48	2	4	2	4	61	122
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	80
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)	1	2	1	2	1	2	10	20	10	20	1	2	1	2	25	50
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																<u> </u>
Totals	11	22	11	22	11	22	83	166	83	166	7	14	7	14	213	426

					able 3.9-77											
		Со	nstructio		r 2014 Wo		istributio	<u> </u>								
			•	A	Iternative 5									1		
Route Numerical Designation	1		2		3		4		5		6		7			
									Originati		•		•			
			Rosev	ille			Sacram		Sacrar		El Dora		El Dora			
	Rocklin	area	are	a	Folso	m	(I-80)	(US	50)	(US 5	0)	(GVF	₹)	Total	
	5%		5%		5%		40%	_	40		2.5%		2.5%		100%	
Project Feature	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trip	Workers	Trips	Workers	Trip	Workers	Trip	Workers	Trip
Granite Bay Borrow Development (913,000 cu yds max)	2	4	2	4	2	4	12	24	12	24	1	2	1	2	32	64
Dikes 1, 2, 3 Stripping, Excavation and Construction	1	2	1	2	1	2	9	18	9	18	1	2	1	2	23	46
Beals Point South/North Borrow Development (1,250,000 cu yd																
max)																
Dike 4&5 Stripping/Excavation and Construction																
Dike 6 Stripping/Excavation and Construction																
Right Wing Dam Stripping/Excavation and Construction																
Auxiliary Spillway Borrow Development (3,190,000 cu yds)																
Auxiliary Spillway Construction																
Tunnel Construction																
Left Wing Dam Stripping/Excavation and Construction																
Dike 7 & 8 Stripping/Excavation and Construction																
Main Concrete Dam Raise																
Main Concrete Dam Tendons and Shears	2	4	2	4	2	4	16	32	16	32	1	2	1	2	40	80
Folsom Point Area Borrow Development and processing (1,673,000																
cu yd max)																
MIAD -Stripping/Excavation and Construction																
MIAD Jet Grouting																
Totals	7	14	7	14	7	14	49	98	49	98	4	8	4	8	127	254

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Table 3.9-78

										2007 [Table 3 Daily Project Impacts		s 1 throug	h 5												
	ROUTE																	2007		•						
	DESIGNATION	No Action	on/No Pro	nject New New	New	Alterna New N	tive 1	1%	1 1	New IN		Alternative New New		1	- 1	New	New INev	Alternative V I New		New New	INew	Alternative 4	1	New INew INew INe	Iternative 5	
	Materials/ Equip.				ite Equipme	BP W	orker Ne		s	Aggregat O	Offsite Equipme	BP Worl	ke New	%		Aggreg		ipment New BP Worl	er New	% Aggr	egate Offsite	Equipmen New BP Worker New %		Aggregate Offsit Equipme BP		ew %
Roadway Location Folsom Boulevard Natoma Street to B		Worker Routes ADT W-3A, W-5A, W-6A, W-3B, W-5B,	code L	OS e Trips Trips	s nt Trips	Trips Tr	ips AD	Ге	code	LOS e Trips T	rips nt Trips	Trips r Trip	s ADT	increa	ase code	LOS e Trips	s Trips Trip	s Trips Trips	ADT	increase code LOS Trips	Trips	t Trips Trips ADT increa	ise code LC	OS Trips e nt Trips Trip	s Trips A	OT increase code LOS
Ravine Road		W-6B, W-3C, W-5C, W-6C, W-	04AD F	.			100 3	,900 0.26	% 4AD	-			00 37.90	0 0	6% 4AD	_			60 37.86	0 0.16% 4AD F		100 37,900 0,2	5% 4AD F		0.4	37.884 0.22% 4AD F
Folsom Boulevard Leidesdorff Street	to	W-3A, W-5A, W-6A, W-3B, W-5B,		' 		+ +				-						-					-			 		
Greenback Lane Folsom-Auburn Oak Hill Drive to F		W-6B, W-3C, W-5C, W-6C 32,600 W-1C, 2C, 3C, 4C, 5C, 6C, 7C,	4AD D)		+ +	40 3	2,640 0.12	% 4AD	D			40 32,64	0 0.12	2% 4AD	D			32,60	0 4AD D		40 32,640 0.11	2% 4AD D		40	32,640 0.12% 4AD D
Road Dam Road		1D,2D, 2E, W-3A, 5A, 6A, 3B, 5B,		.),356 0.14		_			16 40,31			_						56 40 356 0 1	1% 4AU F		48	
Folsom-Auburn Folsom Dam Road	d to	6B,1E 40,300 W-3A, 5A, 6A, 7A, 3B, 4B, 5B, 6B,				+				F					4% 4AU	F			16 40,31							40,348 0.12% 4AU F
Road Oak Avenue Auburn-Folsom (A- Douglas Boulevard		7B, 1E, 2E, 5C 21,400 W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B,	4AU D)			76 2	,476 0.36	% 4AU	D			76 21,47	6 0.3	6% 4AU	D			21,40	0 4AU D		40 21,440 0.19	9% 4AU D		52	21,452 0.24% 4AU D
F) Road Eureka Road	O-3, O-4, BP-1	5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 34,300	4AU F	,		2	100 3	,402 0.30	% 4AU	F	2	1	00 34,40	2 0.30	0% 4AU	F			16 34,31	6 0.05% 4AU F		2 100 34,402 0.3	0% 4AU F	2	92	34,394 0.27% 4AU F
Auburn-Folsom (A- Eureka Road to O	0ak Hill A-2, A-3, O-2, O- 3, BP-1	W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 30,500	2A F	,		2	100 3	0,602 0.33	% 2A	F	2	1	00 30,60	2 0.3	3% 2A	F			8 30,50	8 0.03% 2A F		2 100 30,602 0.3	3% 2A F	2	92	30,594 0.31% 2A F
Sierra College north of Douglas Boulevard Boulevard	A-1, A-2, O-1, O-2	W-2A, W-2B, W-2C, W-2D, W-2E	AAD D	,		2	12 2	5,300 0.06	% 4AD	D	2		12 25,30	0 0	16% 4AD	D			8 25,29	4 0.03% 4AD D		2 12 25,300 0.0	5% 4AD D	2	8	25,296 0.04% 4AD D
Eureka Road east of N. Sunrise	A-3, A-4, O-3, O-		6AD D	<u> </u>	<u> </u>	_		3.908	6AD	_	-		38.90	_	6AD	-			38.90	1 1 1 1		38,908	6AD D			38.908 6AD D
Avenue Douglas Boulevard east of A-F Road	4, BP-1 A-1,O-1	N-14 W-24 W-34 W-44 W-54)		+ +		,,	6AD	D				1	6AD	D					+					
-		W-6A, W-7A 13,184	2A D)			1:	3,184	2A	D			13,18	4	2A	D			13,18	4 2A D		13,184	2A D			13,184 2A D
Douglas Boulevard Barton Road to A-Road	O-1, O-2, O-3, O-	W-1A, W-2A, W-4A, W-1B, W-2B, W-4B, W-1C, W-2C, W-1D, W-40,200	4AD F		:	2	56 4	,258 0.14	% 4AD	F	2		56 40,25	8 0.14	4% 4AD	F			16 40,21	6 0.04% 4AD F		2 56 40,258 0.1-	1% 4AD F	2	48	40,250 0.12% 4AD F
Douglas Boulevard Barton to Sierra Co	Colleg	46.491	4AD F	,			4	5.491	4AD	F			46.49	1	4AD	F			46,49	1 4AD F		46.491	4AD F			46,491 4AD F
Blue Ravine Road Oak Avenue Parky	way to A-5, A-6,O-5, O-6,							,					,						,			1 1 1 1 1 1 1				
Green Valley Road Natoma Street	d/East BP-2, BP3	19,500	4AD D)			4 1	,504 0.02	% 4AD	D			4 19,50	4 0.02	2% 4AD	D			4 19,50	4 0.02% 4AD D		4 19,504 0.0	2% 4AD D		4	19,504 0.02% 4AD D
East Natoma St Cimmaron Circle to Folsom Dam Road	to d	W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E 16,600	AAII C				120 1	5.720 0.72	% 4AII	C		1	20 16.72	0 0.72	2% 4AII	C			120 16.72	0 0.72% 4AU C		120 16.720 0.7	2% 4AU C		92	16,692 0,55% 4AU C
East Natoma St Folsom Dam Road	d to A-5, A-6,O-5, O-6,	W-7A, 7B, 7C,	1110 0				120	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				20 10,72	0.77	270 1710	_			120 10,72	0.7270 1710 0		120 10,720 0	70 1710		02	0.0070 1710 0
Green Valley Road		1D,2D,3D,4D,5D,6D,7D, 1E, 2E, 3E, 4E, 5E, 6E 27,100	4AU D)			140 2	,240 0.52	% 4AU	D		1	36 27,23	6 0.50	0% 4AU	D			136 27,23	6 0.50% 4AU D		140 27,240 0.5	2% 4AU D		100	27,200 0.37% 4AU D
Green Valley Road East Natoma Stree Sophia Parkway	et to A-6, O-6	W-1E, W-2E, W-3E, W-4E, W-5E, W-6E 32.000	AAII F	,			3	2.000	4AU	F			32.00	0	4AU	F			32.00	O 4AU F		32,000	4AU F		96	32.096 0.30% 4AU F
Greenback Lane Hazel Avenue to		W-4B, W-4C, W-4D, W-4E	4AMD B	.				,	% 4AMD				84 24.18		5% 4AMD				52 24.15	1 1 1			5% 4AMD B			24.172 0.30% 4AMD B
Madison Avenue East Bidwell Street Clarksville Road to	o Iron A-5, A-6, O-5, O- 6, BP-2, BP-3			,		+		,		В						В							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- '-	.,
Point Road Oak Avenue Blue Ravine Road		39,300 W-6D, W-6E	4AD F	'		+ +	4 3	,304 0.01	% 4AD	F			4 39,30	4 0.0	1% 4AD	F			4 39,30	4 0.01% 4AD F		4 39,304 0.0	1% 4AD F		44	39,344 0.11% 4AD F
Parkway East Bidwell Stree	et	22,200	6AD C	2			4 2	2,204 0.02	% 6AD	С			4 22,20	4 0.02	2% 6AD	С			4 22,20	4 0.02% 6AD C		4 22,204 0.0	2% 6AD C		44	22,244 0.20% 6AD C
Scott Road (south) south of White Road	ck A-5, A-6, BP-2, BP-3	1,652	2C A	A/B				,652	2C	A/B			1,65	2	2C	A/B			1,65	2 2C A/B		1,652	2C A/I	в		1,652 2C A/B
White Rock Road between Scott Roa (south) and Scott I																										
(north)		9,087	2C E					,087	2C	E			9,08	7	2C	E			9,08	7 2C E		9,087	2C E			9,087 2C E
Scott Road (north) north of White Roo Road	ck A-5, A-6, BP-2, BP-3	6,324	2C D)				5,324	2C	D			6,32	4	2C	D			6,32	4 2C D		6,324	2C D			6,324 2C D
US50 Hazel Avenue to F Boulevard	Folsom O-5, O-6	W-5A, W-5B, W-5C, W-5D, W-5E	14FA F	,			84 11	5.884 0.07	% 4FA	F			84 116.88	4 0.0	7% 4FA	F			52 116,85	2 0.04% 4FA F		84 116.884 0.0	7% 4FA F		72 1	16,872 0.06% 4FA F
US50 Folsom Boulevard	i to O-5, O-6	W-6A, W-6B, W-6C		.				,	% 4F	-			4 99.00			_			99.00	1 1 1			1% 4F F			99.004 0.00% 4F F
Prairie City Road US50 Prairie City Road t		W-6A, W-6B, W-6C				+		,		F				-		F				1 1 1						-,
US50 Bidwell Street US50 East Bidwell St to		71,800 W-6A, W-6B, W-6C, W-6D, W-6E	4F E			+ +	4 7	,804 0.01	% 4F	E			4 71,80	4 0.0	1% 4F	E			71,80	0 4F E		8 71,808 0.0	1% 4F E		4	71,804 0.01% 4F E
County Line		81,900	4F F				8 8	,908 0.01	% 4F	F			8 81,90		1% 4F	F			4 81,90	4 0.00% 4F F		8 81,908 0.0	1% 4F F		8	81,908 0.01% 4F F
													Re	gional A	Access Rout	tes										
Hammonton- Smartville (H-S)	Road A-1, A-2																									
Road		9,043						,043	2C	E			9,04		2C	E			9,04			9,043	2C E			9,043 2C E
N Beale Road south of H-S Road Feather River Blvd. south of N. Beale		27,805	4AU E			+ +	2	,805	4AU	E			27,80	5	4AU	E			27,80	5 4AU E		27,805	4AU E			27,805 4AU E
Ramp	Olicci 14-1, 14-2																									
		56,574	4AMD F				5	5.574	4AMD	F			56,57	4	4AMD	F			56.57	4 4AMD F		56.574	4AMD F			56,574 4AMD F
Highway 70 Yuba County, east		50)571	1										22,01						22,01			25,57				
Feather River Bou interchange	ulevard	100,046	4F F				10	0,046	4F	F			100,04	6	4F	F			100,04	6 4F F		100,046	4F F		1	00,046 4F F
Highway 65 Roseville, northea: Route 80	ast of A-1, A-2	22,153	32A F				2:	2,153	2A	F			22,15	3	2A	F			22,15	3 2A F		22,153	2A F			22,153 2A F
Highway 65 Lincoln, northeast	of 7th A-1, A-2	23,225		.				3.225	24	_			23,22		24	_			23.22			23,225	24	 		23,225 2A F
Street		23,225	ZA F				2	5,225	ZA.	F			23,22	0	ZA	_			23,22	D ZA F		23,225	ZA F			23,220 ZA F
Interstate 80 Roseville, northea:	ast of A-1, A-2, O-1, O-2	126.757	AFA E	,		2	12	5,759 0.00	% 4FA	F	2		126,75	9 0.00	10% 4F∆	F			126,75	7 4FA F		2 126,759 0.00	2% 4FA =	2	1	26,759 0.002% 4FA F
Interstate 80 Rocklin, south of S	Sierra A-1, A-2, O-1, O-2	/···			<u> </u>	-				_ +	2					_								+ + + +		
College Boulevard	t	104,902	4FA F			2	10-	,904 0.00	% 4FA	F	2		104,90	4 0.00	0% 4FA	F			104,90	2 4FA F		2 104,904 0.00	2% 4FA F	2	1	04,904 0.002% 4FA F

New Aggregate trips are those trips hauling aggregate materials (fine & coarse filters, road base and asphalt)

New Offsite trips are those trips hauling offsite materials (slope u/s, toe drain, hdpe pipe, pipe filter, u/s filter, seeding, rebar)

New BP trips are those trips hauling aggregate materials (cement, fine & coarse aggregates) directly to the batch plants. This does not include trips from the batch plants to the project features

New Equipment trips are those trips hauling in equipment to each project feature staging area (staging area assumed adjacent to project feature for hauling evaluation).

Table 3.9-79

												2008	B Daily Projec	Table 3.9 ect Impacts A		l through	n 5																					
		ROUTE DESIGNATIONS		No A	Action/No	<u> </u>	Alter	native 1				-		Alternative							2008	Alternative 3						Alt	ernative 4						Alter	native 5		
		Materials/ Equip.				New New Ne Aggregate Offsite Eq	w New uipmen BP	New Worker Ne	ew %		New Aggr	New Negat Offsite	New N Equipmen B	New New BP Work	ker New	% incre		Ner Agg			ew quipment	New New BP Works	er New %			New Aggregate	New I	New Equipme New E	New BP Worker	New	%		New N Aggregate C	ew New Offsite Equip	New men BP	New Worker Nev	w %	
Roadway Folsom Boulevard	Location Natoma Street to	Routes	Worker Routes W-3A, W-5A, W-	ADT	code LC	OS Trips t T	rips Trips	Trips AE	OT in	crease code	LOS e Trip	ps Trips t	t Trips T	Trips Trips	s ADT	е	code	LOS e T	rips Tri	ips Tr	rips	Trips Trips	ADT inc	crease coo	de LOS	Trips	Trips	nt Trips Trips	Trips	ADT	increase	e code LOS	S Trips T	rips t Trips	s Trips	Trips AD	T incre	rease code LOS
	Blue Ravine Road		6A, W-3B, W-5B, W-6B, W-3C, W- 5C, W-6C, W-3D,																																			
Folsom Boulevard	Leidesdorff Street		W-5D, W-3E, W-5E W-3A, W-5A, W-	38,934	4AD F			248 3	39,182	0.64% 4AD	F		-+		248 39,	182 0.6	64% 4AD	F					324 39,258	0.83% 4A	D F				:	248 39,18	2 0.64%	% 4AD F		+		232 39	9,166 0	0.60% 4AD F
Folsom-Auburn	to Greenback Lane Oak Hill Drive to	A-4, O-4, BP-1	6A, W-3B, W-5B, W-6B, W-3C, W- W-1C, 2C, 3C, 4C,	33,578	4AD D			132 3	33,710	0.39% 4AD	D				132 33,	710 0.3	39% 4AD	D					208 33,786	0.62% 4A	D D					132 33,71	0 0.39%	% 4AD D		\longrightarrow		132 33	3,710 0	0.39% 4AD D
Road	Folsom Dam Road	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5C, 6C, 7C, 1D,2D, 2E, W-3A, 5A, 6A, 3B, 5B,	41,509	4AU F			164 4	41.673	0.40% 4AU	F				164 41.0	673 0.4	10% 4AU	F	1	2			368 41.880	0.89% 4A	U F					164 41.67	3 0.40%	% 4AU F				144 41	.653 0	0.35% 4AU F
Folsom-Auburn Road	Folsom Dam Road to Oak Avenue		W-3A, 5A, 6A, 7A, 3B, 4B, 5B, 6B, 7B 1E, 2E, 5C					268 2		1.22% 4AU	D						22% 4AU	D					288 22,330							268 22,31		% 4AU D				276 22		1.25% 4AU D
Auburn-Folsom (A- F) Road	Douglas Boulevard to Eureka Road	A-2,A-3,A-4, O-2, O 3, O-4, BP-1		,																																	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Auburn-Folsom (A-		A-2, A-3, O-2, O-3,	2D, 1E, 2E W-3A, 5A, 6A, 7A,	35,329	4AU F	15 6	8	308 3	35,666	0.95% 4AU	F	6 6	8		308 35,0	657 0.9	93% 4AU	F	4	8			248 35,589	0.74% 4A	U F	12	42	8	;	308 35,69	9 1.05%	% 4AU F	6	6	8	300 35	5,649 0	0.91% 4AU F
F) Road	Oak Hill Drive	BP-1	1B, 2B, 3B, 4B, 5B 6B, 7B, 1C, 2C, 1D 2D, 1E, 2E	31,415	2A F	6	8	308 3	31,737	1.02% 2A	F		2		308 31,	725 0.9	99% 2A	F					248 31,663	0.79% 2A	F	12		2	:	308 31,73	7 1.029	% 2A F	6		2	300 31	,723 0	0.98% 2A F
Sierra College Boulevard	north of Douglas Boulevard	A-1, A-2, O-1, O-2	W-2A, W-2B, W- 2C, W-2D, W-2E	26,045	4AD D	2	2	16 2	26,065	0.08% 4AD	D		2		28 26,0	075 0.1	12% 4AD	D					36 26,081	0.14% 4A	D D			2		28 26,07	5 0.129	% 4AD D			2	24 26	3,071 0	0.10% 4AD D
Eureka Road	east of N. Sunrise Avenue	A-3, A-4, O-3, O-4, BP-1 A-1,O-1	M 40 M 20 M	40,076	6AD D	15 6	6	4	40,103	0.07% 6AD	D	6 6	6		40,0	0.0	04% 6AD	D	4	8			40,088	0.03% 6A	D D	12	42	6		40,13	6 0.15%	6AD D	6	6	6	40	0,094 0	0.04% 6AD D
			W-1A, W-2A, W- 3A, W-4A, W-5A, W-6A, W-7A	13,580	2A D			1	13,580	2A	D				13,	580	2A	D					13,580	2A	. D					13,58	0	2A D				13	3,580	2A D
Douglas Boulevard	Barton Road to A-F Road	A-1, A-2, A-3, A-4, O-1, O-2, O-3, O-4 BP-1	W-4B, W-1C, W-																																			
Douglas Boulevard			2C, W-1D, W-2D,	41,406		15 6	8			0.47% 4AD	F	6 6	- 8		164 41,		14% 4AD	F	4	8				0.39% 4A		12	42	8		164 41,63		4AD F	6	- 6	8	156 41		0.43% 4AD F
Blue Ravine Road	Colleg Blvd. Oak Avenue Parkway to Green	A-5, A-6,O-5, O-6, BP-2, BP3	W-6D, W-6E	47,886	4AD F				47,886	4AD	F				47,	886	4AD	F					47,886	4A	D F					47,88	6	4AD F		+		4/	7,886	4AD F
East Natoma St	Valley Road/East Natoma Street Cimmaron Circle to		W-1D, 3D, 4D, 5D,	20,085	4AD D	75 3	2 17			0.52% 4AD	D	3 3	2				08% 4AD	D	1	2	3	3	8 20,102	0.08% 4A	D D	51	. 3	2	17	8 20,16	6 0.40%	% 4AD D	69	3	4	8 20),169 0	0.42% 4AD D
East Natoma St	Folsom Dam Road Folsom Dam Road	A-5, A-6,O-5, O-6,	1E, 2E, 3E, 4E, 5E W-7A, 7B, 7C,	17,098	4AU C	+ + +		240 1	17,338	1.40% 4AU	С				240 17,	338 1.4	10% 4AU	С					240 17,338	1.40% 4A	U C				:	240 17,33	8 1.40%	% 4AU C	+ +	+		212 17	7,310 1	1.24% 4AU C
	to Green Valley Road	BP-2, BP3	1D,2D,3D,4D,5D,6 D,7D, 1E, 2E, 3E, 4E, 5E, 6E	27,913	4AU E	75 3	2 17	7 272 2	28,282	1.32% 4AU	E	3 3	2		272 28,	193 1.0	00% 4AU	E	1	2	3	3	260 28,182	0.96% 4A	U E	51	. 3	2	17	272 28,25	8 1.249	% 4AU E	69	3	4	232 28	3,221 1	1.10% 4AU E
Green Valley Road	East Natoma Street to Sophia Parkway	A-6, O-6	W-1E, W-2E, W- 3E, W-4E, W-5E,	32,960		75 3	2	124 3		0.62% 4AU	F	69 3	2		124 33,			F	1	1	2			0.40% 4A		51	3	2		124 33,14		% 4AU F	69	3	4	220 33		0.90% 4AU F
Greenback Lane	Hazel Avenue to Madison Avenue		W-4B, W-4C, W- 4D, W-4E	24,823	4AMD B			208 2	25,031	0.84% 4AME	В				208 25,0	0.8	34% 4AME) В					272 25,095	1.10% 4A	MD B					208 25,03	1 0.849	% 4AMIB				196 25	5,019 0	0.79% 4AMIB
East Bidwell Street Oak Avenue	Clarksville Road to Iron Point Road Blue Ravine Road	A-5, A-6, O-5, O-6, BP-2, BP-3	W-6D, W-6E W-6D, W-6E	40,479	4AD F	3 2	17 194	4 8 4	40,703	0.55% 4AD	F	3 2	17	194	8 40,	703 0.5	55% 4AD	F	1	2	3	14	8 40,507	0.07% 4A	D F	3	2	17 1	146	8 40,65	5 0.43%	% 4AD F	3	4	15	2 8 40	0,646 0	0.41% 4AD F
Parkway	to East Bidwell Street		,	22,866	6AD C			8 2	22,874	0.03% 6AD	С				8 22,	874 0.0	3% 6AD	С					8 22,874	0.03% 6A	D C					8 22,87	4 0.03%	6AD C				8 22	2,874 0	0.03% 6AD C
Scott Road (south) White Rock Road	south of White Rock Road between Scott	A-5, A-6, BP-2, BP 3 A-5, A-6, BP-2, BP	-	1,702	2C A,	/B 75	17	7	1,794	5.41% 2C	A/B				1,7	702	2C	A/B	1		3	3	1,709	0.41% 2C	A/B	51			17	1,77	0 4.00%	% 2C A/B	69	-		1	,771 4	4.05% 2C A/B
	Road (south) and Scott Road (north)	3		9,360	2C E	75	17	7	9,452	0.98% 2C	E				9,	360	2C	E	1		3	3	9,367	0.07% 2C	; E	51			17	9,42	8 0.73%	% 2C E	69			9	9,429 0	0.74% 2C E
Scott Road (north)	Road	A-5, A-6, BP-2, BP 3		6,514	2C D	75 3	2		6,594	1.23% 2C	D	3	2		6,	519 0.0	08% 2C	D		1			6,515	0.02% 2C	D		3	2		6,51	9 0.089	% 2C D		3	4	6	5,521 0	0.11% 2C D
US50	Hazel Avenue to Folsom Boulevard Folsom Boulevard	O-5, O-6 O-5, O-6	W-5A, W-5B, W- 5C, W-5D, W-5E W-6A, W-6B, W-60	120,304	4FA F	3	2	208 12	20,517	0.18% 4FA	F	3	2		208 120,	517 0.1	18% 4FA	F		1			272 120,577	0.23% 4F	A F		3	2	:	208 120,51	7 0.189	4FA F		3	4	196 120	,507 0	0.17% 4FA F
US50	to Prairie City Road Prairie City Road to		W-6A, W-6B, W-60	101,970	4F F	3	2			0.02% 4F	F	3	2		12 101,		2% 4F	F		1				0.02% 4F	F		3	2	_	12 101,98				3	4	12 101		0.02% 4F F
US50	East Bidwell Street East Bidwell St to	,	W-6A, W-6B, W-	73,954		3	2		73,975	0.03% 4F	E	3	2		12 73,)2% 4F	E		1				0.02% 4F			3	2	+	12 73,97		1 1		3	4			0.03% 4F E
	County Line		6C, W-6D, W-6E	84,357	4F F			20 8	34,377	0.02% 4F	IF				20 84,)2% 4F egional Ac	F cess Route	es				24 84,381	0.03% 4F	F					20 84,37	7 0.02%	% 4F F				20 84	1,377 0	0.02% 4F F
Hammonton-	north of N. Beale	A-1, A-2																																				
Smartville (H-S) Road N Beale Road	Road south of H-S Road	A-1. A-2		9,315 28,639					9,315 28,639	2C 4AU	E				9,3		2C 4AU	E					9,315 28,639	2C	E U E					9,31		2C E 4AU E		\perp			9,315 3.639	2C E 4AU E
	south of N. Beale Street			20,000					3,230	15					20,		,,,,,							.,,						20,00	1						,,,,,,,	
Highway 70	Yuba County, east	A-1, A-2																																				
	of Feather River Boulevard interchange			59,969	4AMD F				59,969	4AME	F				59,	969	4AME) F					59,969	4A	MD F					59,96	9	4AMIF				59	9,969	4AMIF
Highway 65	Roseville, northeast of Route 80			106,049					06,049	4F	F				106,0		4F						106,049	4F						106,04		4F F					5,049	4F F
Highway 65	Lincoln, northeast of 7th Street			23,483	2A F				23,483	2A	F				23,	483	2A	F					23,483	2A	F					23,48	3	2A F				23	3,483	2A F
Highway 65	Wheatland, northeast of Evergreen Drive	A-1, A-2		24,619	2A F				24,619	2A	F				24,0	619	2A	F					24,619	2A	F					24,61	9	2A F				24	I,619	2A F
Interstate 80	Roseville, northeast	A-1, A-2, O-1, O-2	-				2		20.500	0.000/ 454	F.				100	500 00	200/ 454						400 500							400.50	0.000	V 450 5				4	. 500	0.000/ 454 5
Interstate 80		A-1, A-2, O-1, O-2		130,560	4FA F	+ + +	2	13	30,562	0.00% 4FA	F	2		4	130,	0.0	00% 4FA	-					130,560	4F	A F			2		130,56	2 0.00%	% 4FA F		2		4 130	0,566 0	0.00% 4FA F
	Sierra College Boulevard			108,050	4FA F		2	10	08,052	0.00% 4FA	F	2		4	108,	0.0	1% 4FA	F					108,050	4F	A F			2		108,05	2 0.009	64FAF		2		4 108	3,056 0	0.01% 4FA F

New Aggregate trips are those trips hauling aggregate materials (fine & coarse filters, road base and asphalt)

New Offsite trips are those trips hauling offsite materials (slope u/s, toe drain, hdpe pipe, pipe filter, u/s filter, seeding, rebar)

New BP trips are those trips hauling aggregate materials (cement, fine & coarse aggregates) directly to the batch plants. This does not include trips from the batch plants to the project features

New Equipment trips are those trips hauling in equipment to each project feature staging area (staging area assumed adjacent to project feature for hauling evaluation).

Table 3.9-80

												2009 Daily	Table / Project Impa	e 3.9-80 cts Alternatives	1 throu	igh 5													
		ROUTE DESIGNATIONS		No Action/No	Project			Alternat	ive 1					Alternative 2	2		2009	Alternative 3					Alte	rnative 4		Alternat	ve 5		
		BEGIOIWITION O		11071011011110	New	New	New	New Ne				New New	New	New New		New	New New	New New			New	New	New New	New New	New New	7 1110111111	lew		
Boodway	Location	Materials/ Equip. Routes	Worker Routes	ADT code	Aggregat	te Offsit	e Equipment	BP Wo	orker	% DT increase	anda I	Aggregat Offsite	Equipment Trips	BP Worke Trips Trips		w % Aggreg T increase code LOS e Trips	at Offsite Equipment	BP Worker N Trips Trips A	lew %	L	O Aggregat e Trips		Equipmen BP Trips Trips			en New BP	Vorker New rips ADT	%	20.1.05
Roadway Folsom	Natoma Street to	Roules	W-3A, W-5A, W-6A, W-	ADT Code	LOS Trips	Trips	Trips	Trips Tri	ps inew A	D1 Increase (code L	LOS e Trips Trips	Trips	Trips Trips	ADI	Increase code LOS e mps	Trips Trips	Trips Trips A	ADT Increase	e code S	e inps	Trips I	Trips Trips	Trips New ADT Increase Icode Icose I	ps Trips LTrips	Trips	nps AD1	increase co	de LOS
Boulevard	Blue Ravine Road		3B, W-5B, W-6B, W-3C, W-5C, W-6C, W-3D, W- 5D, W-3E, W-5E	40,103 4AD	С				416 40	519 1.04%	4AD E	.			136 40	0,539 1.09% 4AD F		304	40,407 0.76%	ν 4AD Ε				416 40,519 1.04% 4AD F			256 40,359	0.64% 4	AD E
Folsom	Leidesdorff Street to Greenback Lane	0	W-3A, W-5A, W-6A, W- 3B, W-5B, W-6B, W-3C,	40,103 4AD	r				410 40	1.0478	470 1			-	130 40	J,339 1.0976 4AD 1		304	40,407 0.70%	10 4AD 1				410 40,515 1.0476 47.0 1			230 40,333	0.0478 4	10 1
Boulevard Folsom-Auburn	Oak Hill Drive to	A-4, O-4, BP-1	W-5C, W-6C W-1C, 2C, 3C, 4C, 5C,	34,586 4AD	D				156 34	742 0.45%	4AD E)		1	156 34	4,742 0.45% 4AD D		44	34,630 0.13%	% 4AD D)			156 34,742 0.45% 4AD D			156 34,742	0.45% 4	AD D
Road	Folsom Dam Road		6C, 7C, 1D,2D, 2E, W- 3A, 5A, 6A, 3B, 5B,	42,755 2A	F	15	3 2		348 43	123 0.86%	2A F	= 21 4	9 2	3	356 43	3,183 1.00% 2A F		108	42,863 0.25%	%2A F	. 1	5 2	2	348 43,122 0.86% 2A F	16 4	2	308 43,085	0.77% 2	A F
Folsom-Auburi Road	Folsom Dam Road to Oak Avenue		W-3A, 5A, 6A, 7A, 3B, 4B, 5B, 6B, 7B, 1E, 2E,	22,704 4AU	D				196 22	900 0.86%	4AU E	D		1	188 22	2,892 0.83% 4AU D		72	22,776 0.32%	% 4AU D)			164 22,868 0.72% 4AU D			196 22,900	0.86% 4	AU D
Auburn-Folson (A-F) Road	Douglas Boulevard to Eureka Road	A-2,A-3,A-4, O-2, C 3, O-4, BP-1	 W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B, 5B, 6B, 7B, 																										
Auburn-Folson		k A-2, A-3, O-2, O-3,	1C, 2C, 1D, 2D, 1E, 2E W-3A, 5A, 6A, 7A, 1B,	36,389 4AU	E	15	3 2		172 36	581 0.53%	4AU F	21 4	9 4	1	180 36	6,643 0.70% 4AU F		112	36,501 0.31%	% 4AU F	1.	5 2	4	172 36,582 0.53% 4AU F	16 4	4	132 36,545	0.43% 4	AU F
(A-F) Road	Hill Drive	BP-1	2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E	32,358 2A	F				172 32	,530 0.53%	2A F	=	2	1	180 32	2,540 0.56% 2A F		112	32,470 0.35%	% 2A F			2	172 32,532 0.54% 2A F		2	132 32,492	0.41% 2	A F
Sierra College Boulevard	Boulevard		W-2A, W-2B, W-2C, W- 2D, W-2E	26,827 4AD	D				48 26	875 0.18%	4AD E	o	2		52 26	6,881 0.20% 4AD D	7 3	6 36	26,879 0.19%	% 4AD D)		2	48 26,877 0.19% 4AD D		2	28 26,857	0.11% 4	AD D
Eureka Road	east of N. Sunrise Avenue	A-3, A-4, O-3, O-4, BP-1		41,279 6AD	D	15	3 2		41	299 0.05%	6AD E	21 4	9 2		41	1,351 0.17% 6AD D			41,279	6AD D	1	5 2	2	41,298 0.05% 6AD D	16 4	2	41,301	0.05% 6	AD D
Douglas Boulevard	east of A-F Road	A-1,O-1	W-1A, W-2A, W-3A, W- 4A, W-5A, W-6A, W-7A	13,988 2A	D				13	,988	2A [o .			13	3,988 2A D	7 3	6 92	14,096 0.77%	% 2A D)			13,988 2A D			13,988	2.	A D
Douglas Boulevard	Barton Road to A-F Road	O-1, O-2, O-3, O-4,	W-1A, W-2A, W-4A, W- 1B, W-2B, W-4B, W-1C,																										
		BP-1	W-2C, W-1D, W-2D, W- 1E, W-2E	42,649 4AD	F	15	3 2		128 42	797 0.35%	4AD F	21 4	9 4	1	36 42	2,859 0.49% 4AD F	7 3	6 108	42,773 0.29%	% 4AD F	1.	5 2	4	128 42,798 0.35% 4AD F	16 4	4	88 42,761	0.26% 4	AD F
Douglas Boulevard	Barton to Sierra Colleg Blvd.			49,323 4AD	F				49	,323	4AD F	=			49	9,323 4AD F			49,323	4AD F				49,323 4AD F			49,323	4.	AD F
Blue Ravine Road	Oak Avenue Parkway to Green	A-5, A-6,O-5, O-6, BP-2, BP3	W-6D, W-6E																										
Fret Nations 6	Valley Road/East Natoma Street		W 4D 4D 4D 5D 4E	20,688 4AD	D	79	11 4	69	20 20	,871 0.88%	4AD E	35 7	9 6	55	20 20	0,883 0.94% 4AD D	1 4	4 117 20	20,834 0.71%	% 4AD D	5	1 45	4 31	20 20,839 0.73% 4AD D	69 3	4	8 20,772	0.41% 4	AD D
	Cimmaron Circle to Folsom Dam Road		W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E	17,611 4AU	D				532 18	143 3.02%	4AU E)		3	372 17	7,983 2.11% 4AU D		532	18,143 3.02%	% 4AU D)			532 18,143 3.02% 4AU D			212 17,823	1.20% 4	AU D
East Natoma S	to Green Valley	A-5, A-6,O-5, O-6, BP-2, BP3	W-7A, 7B, 7C, 1D,2D,3D,4D,5D,6D,7D, 1E, 2E, 3E, 4E, 5E, 6E	28,751 4AU	E	79	11 4	60	596 29	510 2.64%	4Δ11 F	35 7	9 6	55 6	344 29	9,570 2.85% 4AU F	1 4	4 117 588	29,465 2.48%	% 4ΔII F	5	1 45	4 31	596 29,478 2.53% 4AU F	69 3	4	232 29,059	1.07% 4	ΔII F
Green Valley	East Natoma Street to Sophia Parkway	A-6, O-6	W-1E, W-2E, W-3E, W- 4E, W-5E, W-6E	33,949 4AU	F	75	3 2	- 0,		233 0.84%		= 35	3 2	1		4.113 0.48% 4AU F	1 1	2 204		64AU F	5	1 3	2	204 34.209 0.77% 4AU F	69 3	4	220 34.245	0.87% 4	
Road Greenback	Hazel Avenue to Madison Avenue		W-4B, W-4C, W-4D, W-	25,568 4AMI						924 1.39%		2		3		5,940 1.45% 4AMD C		228	. ,	% 4AMD C	:			356 25,924 1.39% 4AMD C			216 25,784	0.84% 4	
Lane East Bidwell	Clarksville Road to	A-5, A-6, O-5, O-6, BP-2, BP-3	W-6D, W-6E	41,694 4AD	F	11	4 69	326		124 1.03%		= 79	4 69	326	_	2.192 1.19% 4AD F	4 4 11			% 4AD F	. 4	5 4	31 262	20 42.056 0.87% 4AD F	3 4	152	8 41.861	0.40% 4	
Street Oak Avenue	Blue Ravine Road to East Bidwell Street		W-6D, W-6E	23,552 6AD	·	11	4 00	020		572 0.08%		2	4 00	320		3,572 0.08% 6AD C	1 11			6AD C		J 4	31 202	20 23.572 0.08% 6AD C	7 1	132	8 23.560	0.03% 6	
Scott Road (south)		k A-5, A-6, BP-2, BP-	3	1.754 2C	Δ /B	79		60		902 8.44%		A/B 35		55		1,844 5.13% 2C A/B	1	117	1,872 6.73%		/R 5:	1	31	1.836 4.68% 2C A/B	69		1.823	3.93% 2	
White Rock Road	between Scott Road (south) and Scott	d A-5, A-6, BP-2, BP-	3	1,734 20	11/ 15	,,		02		302 0.4470	20 /	33		33		3.1370 20 770		117	1,072 0.70%	10 20	, B 3.	1	31	1,000 4.00 / 120 / 120	0)		1,020	0.0070 2	
Scott Road	Road (north)	A-5, A-6, BP-2, BP-	2	9,641 2C	E	79		69	9	789 1.54%	2C E	35		55	g	9,731 0.93% 2C E	1	117	9,759 1.22%	% 2C E	5	1	31	9,723 0.85% 2C E	69		9,710	0.72% 2) E
(north) US50	Road Hazel Avenue to			6,710 2C	D		11 4		6	725 0.22%	2C	7	9 6		6	6,795 1.27% 2C D	4	4	6,718 0.12%	% 2C)	45	4	6,759 0.73% 2C D	3	4	6,717	0.10% 2	J D
U050	Folsom Boulevard	O-5, O-6	W-5A, W-5B, W-5C, W- 5D, W-5E W-6A, W-6B, W-6C	123,914 4FA	F		11 4		356 124	,285 0.30%	4FA F	- 7	9 6	3	372 124	4,371 0.37% 4FA F	4	4 264 1	124,186 0.22%	4FA F		45	4	356 124,319 0.33% 4FA F	3	4	216 124,137	0.18% 4	FA F
US50	Folsom Boulevard to Prairie City Road			105,030 4F	F		11 4		12 105	,057 0.03%	4F F	- 7	9 6		12 105	5,127 0.09% 4F F	4	4 4 1	105,042 0.01%	% 4F F		45	4	12 105,091 0.06% 4F F	3	4	12 105,049	0.02% 4	E E
US50	Prairie City Road to East Bidwell Street	U-5, U-6	W-6A, W-6B, W-6C	76,173 4F	E		11 4		12 76	200 0.04%	4F E	■ 7	9 6		12 76	6,270 0.13% 4F E	4	4 4	76,185 0.02%	% 4F E	:	45	4	12 76,234 0.08% 4F E	3	4	12 76,192	0.02% 4	F E
0550	East Bidwell St to County Line		W-6A, W-6B, W-6C, W- 6D, W-6E	86,888 4F	F				32 86	920 0.04%	4F F	=			32 86	6,920 0.04% 4F F		24	86,912 0.03%	% 4F F				32 86,920 0.04% 4F F			20 86,908	0.02% 4	E E
																Regional Access Routes													
Hammonton- Smartville (H-S	north of N. Beale Road	A-1, A-2																											
Road N Beale Road	south of H-S Road	A-1, A-2	4	9,594 2C 29,499 4AU	E F					,594 2 ,499 4	2C E 4AU F					9,594 2C E 9,499 4AU F		14	9,608 0.15% 29,513 0.05%			+		9,594 2C E 29,499 4AU F		-	9,594 29,499	20	C E AU F
Feather River Blvd. Ramp	south of N. Beale Street	A-1, A-2																14											\Box
	Yuba County, east	A 1 A 2																											
riigiiway 70	of Feather River Boulevard	A-1, A-2																											
Highway 65	interchange Roseville, northeast	1 Δ-1 Δ-2		63,568 4AMI	F				63		4AMD F	=			63	3,568 4AMD F		14	63,582 0.02%	% 4AMD		$\downarrow \downarrow \downarrow$		63,568 4AMD F			63,568	4.	AMDF
Highway 65	of Route 80 Lincoln, northeast o			112,412 4F	F	_	-		112	,412	4F F	=			112	2,412 4F F		14 1	112,426 0.01%	% 4F		1		112,412 4F F		1	112,412	4	f F
Highway 65	7th Street Wheatland,	A-1, A-2		24,892 2A	F	_			24	,892	2A F	=			24	4,892 2A F		14	24,906 0.06%	% 2A		$\downarrow \downarrow \downarrow$		24,892 2A F			24,892	2.	A F
i iigiiway 03	northeast of Evergreen Drive	7.01,70-2		26,097 2A	F				26	.097	2A F	.			26	6,097 2A F		14	26,111 0.05%	% 2A				26,097 2A F			26,097	2	A F
Interstate 80		t A-1, A-2, O-1, O-2		-0/07/ 211					20						-				_5, 0.007					20,001			20,091	2	
Interstate 80	of Route 65 Rocklin, south of			134,477 4FA	F	-			134	,477	4FA F	=	2	4	134	4,483 0.00% 4FA F	3 6	23 1	134,509 0.02%	% 4FA F		2	4	134,483 0.00% 4FA F	2	4	134,483	0.00% 4	-A F
	Sierra College Boulevard	, ,,,,,,		111,292 4FA	F				111	,292	4FA F	=	2		111	1,294 0.00% 4FA F	3 6	1	111,301 0.01%	% 4FA F				111,292 4FA F			111,292	4	FA F
								_							_	· · · · · · · · · · · · · · · · · · ·						_							

New Aggregate trips are those trips hauling aggregate materials (fine & coarse filters, road base and asphalt)

New Offsite trips are those trips hauling offsite materials (slope u/s, toe drain, hdpe pipe, pipe filter, u/s filter, seeding, rebar)

New BP trips are those trips hauling aggregate materials (cement, fine & coarse aggregates) directly to the batch plants. This does not include trips from the batch plants to the project features

New Equipment trips are those trips hauling in equipment to each project feature staging area (staging area assumed adjacent to project feature for hauling evaluation).

Table 3.9-81

010	Daily	Project	Impacts	Alternatives	1	through	۱ 5

		IPOLITE	1	2010 Daily Project Impacts Alternatives 1 through 5													2010																			
		ROUTE DESIGNATION	ı	No Action/No Project Alternative 1 New New New New New New						Alternative 2								Alternative 3						Alternative 4						Alternative 5						
1		Materials/					ew New ffsite Equipme	en BP W	Vorker New	%	New Aggreg		New Equipme		orker New					New New Offsite Equipme				New Aggre			New Worker Ne						BP W	lew Vorker New		
Roadway Folsom	Location Natoma Street to Blu		Worker Routes W-3A, W-5A, W-6A,	ADT code		Trips Tr	ips t Trips	Trips T	rips ADT	increase code L0	OS e Trips	Trips	nt Trips	Trips Trip	ps ADT	incre	ase code	e LOS	e Trips T	Trips nt Trips	Trips Trips	ADT incre	ease code	OS e Trips	Trips nt Tr	rips Trip	Trips AD	T incre	ease code	LOS e Trips	Trips	nt Trips	Trips Tr	rips ADT	Γ increas	se code LOS
Boulevard	Ravine Road		W-3B, W-5B, W-6B, W-3C, W-5C, W-6C,																																	
			W-3D, W-5D, W-3E,	40,906 4AD	F				316 41.2	22 0.77% 4AD F					336 41.	242 0.8	2% 4AD) F			200	41,106 0.	19% 4AD	.			316 4	1 222 0	.77% 4AD	F				256 44	1,162 0.63%	% 4AD F
Folsom	Leidesdorff Street to		W-3A, W-5A, W-6A,	10,700 1115	Ť				0.0,2	0.77.0 17.0					000 11	2.2 0.0	270 1712				20.	3 11,100 0.	.070 1712				0.0	,LLL O.	, , , , , , , , ,	f I				200	,102 0.007	
Boulevard	Greenback Lane		W-3B, W-5B, W-6B, W-3C, W-5C, W-6C	35,278 4AD	D				116 35,3	94 0.33% 4AD D					116 35,	394 0.3	3% 4AD	D D				35,278	4AD I)			116 3	5,394 0.	.33% 4AD	D				156 35	5,434 0.449	% 4AD E
Folsom- Auburn Road	Oak Hill Drive to Folsom Dam Road	A-4, O-4, BP-1	W-1C, 2C, 3C, 4C, 5C, 6C, 7C, 1D,2D,																																	
			2E, W-3A, 5A, 6A, 3B 5B, 6B,1E	43,611 2A	F	15	3	2	292 43,9	3 0.72% 2A F		21 4	9 :	2	300 43,	983 0.8	5% 2A	F			48	3 43,659 0.	11% 2A	-	15 2	2	292 4	3,922 0.	.71% 2A	F	16	4 2		308 43	3,941 0.76%	% 2A F
Folsom- Auburn Road	Folsom Dam Road to Oak Avenue		W-3A, 5A, 6A, 7A, 3B 4B, 5B, 6B, 7B, 1E,																																	
Auburn-			2E, 5C 2, W-3A, 5A, 6A, 7A, 1B	23,159 4AU	D				120 23,2	9 0.52% 4AU D					112 23,	271 0.4	8% 4AU	J D			24	4 23,183 0.	10% 4AU)			120 2	3,279 0.	.52% 4AU	D				196 23	3,355 0.85°	% 4AU D
Folsom (A-F)	Eureka Road	0-3, O-4, BP-1	2B, 3B, 4B, 5B, 6B,																																	
Road			7B, 1C, 2C, 1D, 2D, 1E, 2E	37,117 4AU	F	15	3	2	72 37,2	9 0.25% 4AU F		21 4	9 :	2	80 37,	269 0.4	1% 4AU	I F			48	37,165 0.	13% 4AU	:	15 2	2	72 3	7,208 0.	.25% 4AU	F	16	4 4		132 37	7,273 0.429	% 4AU F
Auburn- Folsom (A-F)	Eureka Road to Oak Hill Drive	A-2, A-3, O-2, O- 3, BP-1	 W-3A, 5A, 6A, 7A, 1B 2B, 3B, 4B, 5B, 6B, 																																	
Road			7B, 1C, 2C, 1D, 2D, 1E, 2E	33,006 2A	F				72 33,0	8 0.22% 2A F					80 33,	086 0.2	4% 2A	F			48	33,054 0.	15% 2A	-			72 3	3,078 0.	.22% 2A	F		2		132 33	3,140 0.419	% 2A F
Blue Ravine	Folsom Boulevard to Siblev Street			19,588	С				19,5	18 C					19.	.588		С				19,588		:			1:	9,588		С				132 19	9,720 0.679	%
Road Blue Ravine	Sibley Street to Riley			31,491	F				31.4							491		F				31,491						1.491		F				132 31		
Sierra College	north of Douglas	A-1, A-2, O-1, O	- W-2A, W-2B, W-2C, W-2D, W-2E	27,364 4AD	D.				,	0 0.13% 4AD D							5% 4AD				24		9% 4AD I						.13% 4AD	<u>.</u>		2		28 27		% 4AD D
Boulevard Eureka Road	Boulevard east of N. Sunrise	A-3, A-4, O-3, O		42,105 6AD	D	15	2		42,1			21 4	0 /				7% 6AD	1 1				42.105	6AD	,				2.105	6AD	D					2.105	6AD D
Douglas	Avenue east of A-F Road	4, BP-1 A-1,O-1	W-1A, W-2A, W-3A,	,	D	15	3	2				21 4	9 .	4			7% 6AD	, D				,								_					,	
Boulevard Douglas	Barton Road to A-F	A-1, A-2, A-3, A-	W-4A, W-5A, W-6A, W-1A, W-2A, W-4A,	14,268 2A	D				14,2	58 2A D				1 1	14,	268	2A	D				14,268	2A I)			1.	1,268	2A	D				14	4,268	2A D
Boulevard	Road	4, O-1, O-2, O-3, O-4, BP-1	W-1B, W-2B, W-4B, W-1C, W-2C, W-1D,																																	
Douglas	Barton to Sierra Colle		W-2D, W-1E, W-2E	43,502 4AD	F	15	3	2	72 43,5	0.21% 4AD F		21 4	9 :	2	80 43	654 0.3	5% 4AD) F			48	3 43,550 0.	11% 4AD	=	15 2	2	72 4	3,593 0.	.21% 4AD	F	16	4 4		88 43	3,614 0.269	% 4AD F
Boulevard Blue Ravine	Blvd. Oak Avenue Parkwa	-	WED WEE	50,310 4AD	F				50,3	0 4AD F				 	50,	310	4AD) F				<u> </u>	4AD I	=			5),310	4AD	F				50	0,310	4AD F
Road	to Green Valley	6, BP-2, BP3	W-OD, W-OE																																	
	Road/East Natoma Street			21,102 4AD	D	79	11	3 69	16 21,2	0.84% 4AD D		35 7	7 (6 43	16 21,	279 0.8	4% 4AD) D	1	4 3	117 16	6 21,243 0.	67% 4AD I)	51 45	3 3	1 16 2	1,248 0.	.69% 4AD	D	69	3 1		8 21	1,183 0.389	% 4AD D
East Natoma St	Cimmaron Circle to Folsom Dam Road		W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E	17,964 4AU	D				424 18,3	88 2.36% 4AU D					448 18	412 2.4	9% 4AU	I D			41:	2 18,376 2.	29% 4AU I)			412 1	3,376 2.	.29% 4AU	D				212 18	8,176 1.189	% 4AU D
East Natoma St	Folsom Dam Road to Green Valley Road	A-5, A-6,O-5, O- 6, BP-2, BP3	W-7A, 7B, 7C, 1D,2D,3D,4D,5D,6D,7																																	
			D, 1E, 2E, 3E, 4E, 5E 6E	29,327 4AU	F	79	11	3 69	456 29,9	5 2.11% 4AU F		35 7	7 (6 43	504 29	992 2.2	7% 4AU	ı F	1	4 3	117 45	2 29,904 1.	97% 4AU I	-	51 45	3 3	1 456 2	9,913 2.	.00% 4AU	F	69	3 1		232 29	9,632 1.04	% 4AU F
Green Valley	East Natoma Street t Sophia Parkway	o A-6, O-6	W-1E, W-2E, W-3E, W-4E, W-5E, W-6E	34,628 4AU	F	75	3	1	212 34,9	9 0.84% 4AU F		35 3	5 2	2	124 34.	.824 0.5	7% 4AU	I F	1	1 1	200	34,839 0.	61% 4AU I	=	51 3	1	204 3	1,887 0.	.75% 4AU	F	69	3 1		220 34	4.921 0.85	% 4AU F
Greenback	Hazel Avenue to Madison Avenue		W-4B, W-4C, W-4D, W-4F	26,080 4AMI	DC				272 26,3	1.04% 4AMD C					288 26	368 1.1	0% 4AM	1D C			176	6 26,256 0.	57% 4AMD	,			272 2	3.352 1	.04% 4AMD) C				216 26	6 296 0 839	% 4AMD C
Oak Avenue	Hazel Avenue to Sar Juanita Avenue	ita	W-72	13,420 2AMI					13,4							420	2AM					13,420	2AMD I					3,420	2AMD						3,420	2AMD B
East Bidwell	Blue Ravine Road to			27.162 4AD					27.1							162	4AD					27.162	4AD	,				7.162	4AD	1 1					7.162	4AD D
Street East Bidwell	Oak Avenue Parkwa Clarksville Road to Ir	on A-5, A-6, O-5, O	- W-6D, W-6E	42,528 4AD	Б	44	2 .	69 324						1 1						3 117	250 16		92% 4AD	-	45 0	24 2				-	2		246			
Street Oak Avenue	Point Road Blue Ravine Road to	6, BP-2, BP-3	W-6D, W-6E		F	- 11	3 6	69 324	16 42,9		-	-		1 1			4% 4AD		4	3 117	250 16				45 3	31 20			.83% 4AD	-	3	1	146			% 4AD F
Parkway Oak Avenue	East Bidwell Street East Bidwell St to Ril	ey		24,024 6AD	С				16 24,0								7% 6AD) C			16		07% 6AD	3				,	.07% 6AD	С					,	% 6AD C
Parkway Scott Road	St south of White Rock	A-5, A-6, BP-2,		24,024	С		- (69 296	24,3				43	3 156	24,	223 0.8				117	236		17%	_		31 10			.81%	++-			138		4,162 0.579	%
(south) White Rock	Road between Scott Road	BP-3		1,790 2C	A/B	79		69	1,9	88 8.27% 2C A	В	35		43	1,	868 4.3	6% 2C	A/B				1,790	2C	V/B				1,790	2C	A/B	_			1	1,790	2C A/B
Road	(south) and Scott Ro	ad BP-3		9,834 2C	F	79		69	9.9	1.50% 2C F		35		43	۵	912 0.7	9% 2C	F				9.834	20	.			1	9,834	20	F				,	9,834	2C F
Scott Road	north of White Rock	A-5, A-6, BP-2, BP-3		6,845 2C	D.	7.7	11	2	6.8				7	40			1% 2C	L'				6.845	2C 1	$\overline{}$				5.845	2C	i.					6.845	2C P
(north) US50	Hazel Avenue to	BP-3 O-5, O-6	W-5A, W-5B, W-5C,		<u>п</u>		11	2				1 -	7					- L		4 -	<u> </u>			-						-	+		H			
US50	Folsom Boulevard to	O-5, O-6	W-5D, W-5E W-6A, W-6B, W-6C	126,393 4FA	r	+	11	3	272 126,6			+ 7	-	0			9% 4FA		+	4 3	170		14% 4FA	-	45	3			.25% 4FA	-	+	3 1	\vdash	216 126		% 4FA F
US50	Prairie City Road Prairie City Road to	O-5, O-6	W-6A, W-6B, W-6C	107,131 4F	F		11	3		3 0.02% 4F F		7	7 (6		,222 0.0		F	-	4 3	+ +	107,138 0.		-	45	3		7,187 0.		F .	+	3 1			7,147 0.019	
US50	East Bidwell Street East Bidwell St to		W-6A, W-6B, W-6C,	77,697 4F	E		11	3		9 0.03% 4F E		7	7 (6			2% 4F	E		4 3	 	77,704 0.		-	45	3			.07% 4F	E	+	3 1	\vdash	12 77		1 1 1
-	County Line		W-6D, W-6E	88,626 4F	F				24 88,6	0.03% 4F F					24 88		3% 4F	F ess Route	es		10	88,642 0.	02% 4F				24 8	3,650 0.	.03% 4F	F				20 88	8,646 0.02%	% 4F F
Home	north of N. D1- D	ad A 4 A 2														ixegi	Auto	- Jo .toule																		
Hammonton- Smartville (H-	north of N. Beale Roa	ad A-1, A-2														700						0.700		.				700							. 700	
	south of H-S Road			9,786 2C 30,088 4AU	F		\pm	$\pm +$	9,7					$\pm \pm$		786 088	4AU	I F				9,786 30,088	4AU					9,786 0,088	2C 4AU	F	╁	<u> </u>	<u>L</u>		9,786 0,088	2C E 4AU F
Feather River Blvd. Ramp	south of N. Beale Street	A-1, A-2																																		
		F A 1 A 2																																		
riigiiway /U	Yuba County, east of Feather River			67,383 4AMI					67,3	3 4AMD F					67	383	4004	1D F				67,383	4AMD I	.				7,383	4AMD						7,383	4AMD F
Highway 65	Roseville, northeast	ge of A-1, A-2			D F			+					1	1 +			4AM		+		 		4F	_	+ +				4F	<u> </u>	-					4AMD F
	Route 80 Lincoln, northeast of	A-1, A-2		119,157 4F	F			++	119,1			-		+++		157					+ + -	119,157		·	+ +			9,157		г	-				9,157	
Highway 65	7th Street Wheatland, northeas			26,386 2A	F		-	++	26,3			-	-	++		386	2A	F		_	+-	26,386	2A I	-	+	_		5,386	2A	F	+		\vdash		6,386	2A F
J -,	of Evergreen Drive	· -		27,663 2A	F			+	27,6	3 2A F					27,	663	2A	F				27,663	2A I	:			2	7,663	2A	F				27	7,663	2A F
Interstate 80	Roseville, northeast	of A-1, A-2, O-1, O	-	100 510 47 1	r.				138.5	2 4FA F					100	540	4FA					138.512	4FA					3.512	4FA	-		2			8.518 0.00%	0/ 454
Interstate 80	Route 65 Rocklin, south of Sie		-	138,512 4FA	F			++				+	1	+		512					+				+	_		,-		-	+	4	4			% 4FA F
L	College Boulevard	2		114,631 4FA	F				114,6	31 4FA F			1		114	631	4FA	F				114,631	4FA	-			11-	1,631	4FA	JF			1 1	114	4,631	4FA F

New Aggregate trips are those trips hauling aggregate materials (fine & coarse filters, road base and asphalt)

New Offsite trips are those trips hauling offsite materials (slope u/s, toe drain, hdpe pipe, pipe filter, u/s filter, seeding, rebar)

New BP trips are those trips hauling aggregate materials (cement, fine & coarse aggregates) fine & coarse aggregates) and the project features of the project features of the project features and trips are those trips hauling aggregates materials (cement, fine & coarse aggregates) and the project feature for hauling evaluation).

	<u> </u>	DESIGNATIONS																	20																	
	lr I		i	No Action/No F	Ne	ew New New	Alternat	lew	%	New	Nev		New	native 2 New				New	New New	Alternative 3 New New		%		New	New Ne	ew N	Alternative ew New			New	New	v New	Alternat New Nev	v		
Folsom Na	ocation I			ADT code	Ag LOS e 1	ggregat Offsite Equipme Trips Trips nt Trips	BP W	Vorke New Trips ADT	increas e code	Aggı LOS e Tri	egat Offs os Trip	site Equipm s t Trips	en BP Trips	Worker N Trips A	New %	crease c	ode LOS	Aggregat e Trips	Offsite Equipmen Trips t Trips	BP Worke Trips r Trips	e New s ADT	increas e	code LO	Aggrega S e Trips	t Offsite Ed Trips t 1	quipmen B rips T	P Work	e New s ADT	% increase code	Aggre LOS Trips	egate Offs Trip:	ite Equipmen s t Trips	BP Wo Trips r Tr	rke New ips ADT	% increase	code LOS
Boulevard Bl	atoma Street to lue Ravine Road		W-3A, W-5A, W-6A, W-3B, W-5B, W-6B,																																	
			W-3C, W-5C, W- 6C, W-3D, W-5D, W-3E, W-5E	41,725 4AD	F			108 41,833	0.26% 4AD	F				300	42,025	0.72% 4	AD F			188	8 41.91	13 0.45%	4AD F				18	38 41,91	3 0.45% 4AD	F				336 42,06	1 0.81%	614AD F
	eidesdorff Street to Freenback Lane		W-3A, W-5A, W-6A, W-3B, W-5B, W-6B,																																	
	ak Hill Drive to		W-3C, W-5C, W-6C W-1C, 2C, 3C, 4C,	35,984 4AD	Е			35,984	4AD	E					35,984	4	AD E				35,98	84	4AD E					35,98	4 4AD) E				156 36,14	0.43%	4AD E
Road Fo	olsom Dam Road		5C, 6C, 7C, 1D,2D, 2E, W-3A, 5A, 6A, 3B, 5B, 6B,1E	44,484 2A	Е			24 44,508	0.05% 2A	_				72	44,556	0.16% 2	, E			40	0 44,52	24 0.09%	2A E					10 44.52	4 0.09% 2A	L L	16	4 2		324 44.83	0.78%	4 2A E
	olsom Dam Road Oak Avenue		W-3A, 5A, 6A, 7A, 3B, 4B, 5B, 6B, 7B,	44,404 211				24 44,000	0.0070 271					- 12	44,000	0.1070 2							2/					10 44,02	0.007/0/2/1	T I	10	4 2		,,,,		1
Auburn-Folsom Do	ouglas Boulevard	A-2,A-3,A-4, O-2, O-	1E, 2E, 5C W-3A, 5A, 6A, 7A,	23,623 4AU	D			23,623	4AU	D				16	23,639	0.07% 4	AU D				23,62	23	4AU D					23,62	3 4AL	I D			-	164 23,78	7 0.69%	4AU D
(A-F) Road to	Eureka Road		1B, 2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E	37,860 4AU	Е			24 37 884	0.06% 4AU	_				72	37,932	0.10% /	ALL E			40	0 37.00	00 0.11%	14011 E					40 37.90	0 0.11% 4AL		16	4		148 38,03	0.45%	6 4 A L L E
Auburn-Folsom Eu (A-F) Road Hi	ureka Road to Oak	A-2, A-3, O-2, O-3,	W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B, 5B,	37,000 470				24 37,004	0.00% 4.40	<u> </u>				12	31,932	0.13704	AU I			40	0 37,90	50 0.1176	440					+0 37,90	0.1176 474	<u>' </u>	10	4 4		140 30,03	2 0.4370	1470
(***,*******			6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E	33,667 2A	F			24 33,691	0.07% 2A	F				72	33,739	0.21% 2	A F			40	0 33,70	0.12%	2A F				4	40 33,70	7 0.12% 2A	F		2		148 33,81	7 0.45%	6 2A F
Boulevard Bo	oulevard		W-2A, W-2B, W- 2C, W-2D, W-2E	27,912 4AD	D			12 27,924	0.04% 4AD	D				36	27,948	0.13% 4	AD D			20	0 27,93	32 0.07%	4AD D				2	20 27,93	2 0.07% 4AD	D		2		36 27,95	0.14%	4AD D
Av	venue	A-3, A-4, O-3, O-4, BP-1 A-1,O-1	W-1A, W-2A, W-3A,	42,948 6AD	D		1	42,948	6AD	D					42,948	6	AD D				42,94	48	6AD D					42,94	8 6AD	D				42,94	В	6AD D
Boulevard			W-4A, W-5A, W-6A, W-7A	14,554 2A	D			14,554	2A	D					14,554	2	A D				14,55	54	2A D					14,55	4 2A	D				14,55	4	2A D
	arton Road to A-F	0-1, 0-2, 0-3, 0-4,																																		
Douglas Ba	arton to Sierra	BP-1	W-1C, W-2C, W- 1D, W-2D, W-1E,	44,373 4AD	F			24 44,397	0.05% 4AD	F				72	44,445	0.16% 4				40	0 44,41	13 0.09%	4AD F				4	44,41			16	4 4		104 44,50	0.29%	
Boulevard Co	olleg Blvd. Jak Avenue		W-6D, W-6E	51,317 4AD	F			51,317	4AD	F						4	AD F				-	+	4AD F				-		4AD	F			\vdash	51,31	7	4AD F
Va	alley Road/East	BP-2, BP3		21,525 4AD	D	4	2 52	12 21,603	0.36% 4AD		60	45	6 49	20	21,714	0.88% 4	AD D			116 13	21 21 65	59 0.62%	1440		42	4	20	12 21,60	3 0.36% 4AD		60	2 2	10	12 21,62	5 0.46%	(1400
East Natoma St Ci	atoma Street immaron Circle to olsom Dam Road		W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E	18,324 4AU	D	4 0 2		216 18,540			09	40	0 49			3.32% 4			3 3	376					42	4	37				09	3 3	15	372 18,69		
East Natoma St Fo	olsom Dam Road	BP-2, BP3	W-7A, 7B, 7C, 1D,2D,3D,4D,5D,6D																																	
	oad		,7D, 1E, 2E, 3E, 4E, 5E, 6E	29,914 4AU	F	4 8 2	2 52	244 30,224	1.04% 4AU	F	69	45	6 49	672	30,755	2.81% 4	AU F		3 3	116 420	0 30,45	56 1.81%	4AU F		42	4	20 42	20 30,40	0 1.62% 4AL	F	69	3 3	13	408 30,41	1.66%	4AU F
Road to	ast Natoma Street / Sophia Parkway lazel Avenue to	·	W-1E, W-2E, W-3E, W-4E, W-5E, W-6E W-4B, W-4C, W-	35,321 4AU	F			35,321	4AU	1 1	69	3	2		,	0.56% 4					35,32		4AU F					35,32			69	3 1		220 35,61		
East Bidwell CI	ladison Avenue larksville Road to	A-5, A-6, O-5, O-6,	4D, W-4E W-6D, W-6E	26,602 4AME	DC			96 26,698								0.99% 4				168			4AMDC				16	26,77						288 26,89		6 4AMD C
Oak Avenue Bl	on Point Road lue Ravine Road to ast Bidwell Street	BP-2, BP-3	W-6D, W-6E	43,379 4AD 24,505 6AD	F	8 2 52	2 132	8 43,581 8 24,513			45	2	52 132			0.58% 4		3	3 116	244 12	2 43,75 2 24,51		6AD C	4	2 4	20	132	12 43,58 12 24,51			3	3 13	176	12 43,58 12 24,51	0.48% 0.05%	
	outh of White Rock	A-5, A-6, BP-2, BP-		1,826 2C	A/B	4	52	1,882		A/B	69		49	20	1.944		C A/B			12	1.82		2C A/B	3				1.82		A/B				1.82		2C A/B
White Rock be Road (so	etween Scott Road A south) and Scott	A-5, A-6, BP-2, BP- 3																																		
	oad (north) orth of White Rock	A-5, A-6, BP-2, BP-		10,031 2C 6,982 2C	F	4	52	10,087		F	69	45	49		7.033	- 1	C F				10,03		2C F					10,03		F				10,03		2C F
US50 Ha	azel Avenue to olsom Boulevard	O-5, O-6	W-5A, W-5B, W- 5C, W-5D, W-5E	##### 4FA	F	8 2	2	96 129,027	0.14% 2C	F		45	6	264 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.24% 4			3 3	168	8 129,09		4FA F		42	4	16	6,96		F		3 3		288 129,21		64FA F
US50 Fo	olsom Boulevard Prairie City Road		W-6A, W-6B, W-6C	##### 4F	F	8 2	2	109,284	0.01% 4F	F		45	6	1	109,325	0.05% 4	F F		3 3		109,28	80 0.01%	4F F		42	4		109,32	0 0.04% 4F	F		3 3		12 109,29	2 0.02%	6 4F F
Ea	rairie City Road to 0 ast Bidwell Street	O-5, O-6	W-6A, W-6B, W-6C	79,251 4F	Е	8 2	2	79,261	0.01% 4F	Е		45	6		79,302	0.06% 4	F E		3 3		79,25	57 0.01%	4F E		42	4		79,29	7 0.06% 4F	E		3 3		12 79,26	9 0.02%	4F E
	ast Bidwell St to county Line		W-6A, W-6B, W- 6C, W-6D, W-6E	90,399 4F	F		1	96 90,495	0.11% 4F	F				20		0.02% 4	F F	outes		12	2 90,41	11 0.01%	4F F	1				12 90,41	1 0.01% 4F	F				24 90,42	3 0.03%	4F F
	orth of N. Beale	A-1, A-2														Ť																				
Road	oad			9,982 2C	F			9,982							9,982		C F				9,98		2C F					9,98						9,98		2C F
Feather River so	outh of H-S Road //			30,690 4AU	F			30,690	4AU	F					30,690	4	AU F				30,69	90	4AU F					30,69	0 4AL	F				30,69	D	4AU F
	uba County, east	Δ-1 Δ-2																																		
of	f Feather River	n-1, n-2																						1												
Highway 65 Ro	terchange oseville, northeast	A-1, A-2		71,426 4AMD	D F			71,426							71,426		AMD F				71,42		4AMDF					71,42		1D F			\vdash	71,42		4AMD F
Highway 65 Lir	f Route 80 incoln, northeast of / th Street	A-1, A-2		##### 4F 27,970 2A	F		++	126,307 27,970		1 1			+		27.970	- 1	F F A F				126,30		4F F	1	1 1			126,30 27,97	1	+ + -				126,30 27,97		4F F
Highway 65 W	th Street /heatland, ortheast of	A-1, A-2						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																												1
Ev	vergreen Drive			29,323 2A	F			29,323	2A	F					29,323	2	A F				29,32	23	2A F					29,32	3 2A	F				29,32	3	2A F
of	oseville, northeast /			##### 4FA	F		\Box	141,283	4FA	F				1	141,283	4	FA F				141,28	83	4FA F	1				141,28	3 4FA	F		2	4	141,28	9 0.00%	4FA F
Si	ocklin, south of ierra College oulevard	A-1, A-2, O-1, O-2		##### 4FA	F			116,924	4FA	F				1	116,924	4	FA F				116,92	24	4FA F	1				116,92	4 4FA	F				116,92	4	4FA F

Table 3.9-83 2012 Daily Project Impacts Alternatives 1 through 5

	_	DOUTE	ı	1						2012 Daily	Project Impa	acts Alterna	tives 1 through	5			2042														
		ROUTE DESIGNATIONS		No Action/No P	ojec	Alter	rnative 1					Alte	rnative 2				2012 Alternative 3				1	Alte	ernative 4					Alterna	tive 5		
		Materials/ Fauls			New New New		New		,	New	New New	New		0/	New New		New New				New New		/ New	%			ew New	New Ne		%	
Roadway	Location	Materials/ Equip. Routes	Worker Routes	ADT code	Aggregat Offsite Equi	ipme BP rips Trips	Worker No Trips Al	ew i	% ncrease code LC	Aggregat S e Trips	Offsit Equip	ips Trips	Worker New Trips ADT	increase code LOS	Aggregat Offs e Trips Trip			New %	crease co	ode LOS	Aggregat Offsite e Trips Trips	Equipmen BP t Trips Trip	Worke New s r Trips ADT	increas e		Aggregat Of e Trips Tri	ips t Trips		orker New rips ADT	increas e	code LOS
Folsom Boulevard	Natoma Street to Blue Ravine Road		W-3A, W-5A, W-6A, W- 3B, W-5B, W-6B, W-																												
	itaville itoad		3C, W-5C, W-6C, W-	42,560 4AD			108	42,668	0.25% 4AD F				180 42 7	10 0.42% 4AD F			400	42,740	0.400/ 4.	۰. ۲			180 42.	740 0 400	%4AD F				460 43.0	20 1.08%	440 -
Folsom Boulevard	Leidesdorff Street to		3D, W-5D, W-3E, W- W-3A, W-5A, W-6A, W-		ř .		108	42,008	0.25% 4AD F				180 42,7	10 0.42% 4AD F			180	42,740	0.42% 4/	AD F			180 42,	740 0.429	% 4AD F			+++	460 43,0	20 1.08%	4AD F
	Greenback Lane		3B, W-5B, W-6B, W- 3C, W-5C, W-6C	36,704 4AD	Ε			36,704	4AD E				36.7	04 4AD E				36.704	4,	AD E			36,	704	4AD E				156 36,8	60 0.43%	4AD E
Folsom-Auburn Ro	ad Oak Hill Drive to	A-4, O-4, BP-1	W-1C, 2C, 3C, 4C, 5C,																												
	Folsom Dam Road		6C, 7C, 1D,2D, 2E, W- 3A, 5A, 6A, 3B, 5B,																												l L I
Folsom-Auburn Ro	ad Folsom Dam Road to		6B,1E W-3A, 5A, 6A, 7A, 3B,	45,374 2A	F _		24	45,398	0.05% 2A F	_			40 45,4	14 0.09% 2A F		_	40	45,414 (0.09% 2	A F		+	40 45,4	114 0.09%	% 2A F	16	4	2	348 45,74	44 0.82%	2A F
	Oak Avenue		4B, 5B, 6B, 7B, 1E, 2E, 5C	24,096 4AU				24,096	4AU D				24,0	96 4AU D				24,096	4	AU D			24,0	196	4AU D				180 24,2	76 0.75%	14AII D
Auburn-Folsom (A		A-2,A-3,A-4, O-2, O-3,	W-3A, 5A, 6A, 7A, 1B,	21,000 1110				21,000					21,0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				2 1,000		.0 0			2.,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					100 21,2	0.7070	,,,,,
Road	Eureka Road	O-4, BP-1	2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D,	38,618 4AU	F		24	38,642	0.06% 4AU F				40 38,6	58 0.10% 4AU F			40	38,658	0.10% 4	AU F			40 38,6	658 0.10%	% 4AU F	16	4	2	172 38,8	12 0.50%	4AU F
Auburn-Folsom (A Road	F) Eureka Road to Oak Hill Drive	A-2, A-3, O-2, O-3, BP-	W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B, 5B, 6B,																												
Olares Oallana			7B, 1C, 2C, 1D, 2D,	34,341 2A	F		24	34,365	0.07% 2A F				40 34,3	31 0.12% 2A F			40	34,381	0.12% 2	A F			40 34,	381 0.12%	% 2A F				172 34,5	13 0.50%	2A F
Sierra College Boulevard	north of Douglas Boulevard		W-2A, W-2B, W-2C, W-2D, W-2E	28,471 4AD	D		12	28,483	0.04% 4AD D				20 28,4	91 0.07% 4AD D			20	28,491	0.07% 4	AD D			20 28,4	191 0.07%	% 4AD D				48 28,5	19 0.17%	4AD D
Eureka Road	east of N. Sunrise Avenue	A-3, A-4, O-3, O-4, BP- 1		43,807 6AD	D			43,807	6AD D				43,8	07 6AD D				43,807	6/	AD D	<u> </u>	<u> </u>	43,8	307	6AD D				43,8	07	6AD D
Douglas Boulevard	east of A-F Road	A-1,O-1	W-1A, W-2A, W-3A, W- 4A, W-5A, W-6A, W-	14.846 2A	D			14.846	2A D				14.8	16 2A D				14.846	2	A D			14.8	346	2A D				14.8	46	2A D
Douglas Boulevard			W-1A, W-2A, W-4A, W-					1 1,0 10					,,0	27. 2				1 1,0 10		, ,			1,	, , ,	2 2				11,0		
	Road	1, O-2, O-3, O-4, BP-1	1C, W-2C, W-1D, W-																												1 L
Douglas Boulevard	Barton to Sierra Colle		2D, W-1E, W-2E	45,261 4AD	F			45,285	0.05% 4AD F				40 45,3				40		0.09% 4				40 45,3		% 4AD F	16	4	2	128 45,4		
Blue Ravine Road	Blvd.	~	W.ED. W.EE	52,344 4AD	F			52,344	4AD F					4AD F				52,344	4,	AD F			52,3	344	4AD F				52,3	44	4AD F
Bide Raville Road	to Green Valley	2, BP3	W-OD, W-OL																												
	Road/East Natoma Street			21,956 4AD	D 5 2	2	12	21,977	0.10% 4AD D	21	21	6 1	12 22,0	17 0.28% 4AD D	3	3	6 3 12	21,983	0.12% 4	AD D	10	6 6	12 21,9	990 0.15%	% 4AD D	12	6	8	20 22,0	0.21%	4AD D
East Natoma St	Cimmaron Circle to Folsom Dam Road		W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E	18,691 4AU	D		216	18,907	1.16% 4AU D				360 19,0	51 1.93% 4AU D			360	19,051 1	1.93% 4	AU D			360 19,0	051 1.93%	% 4AU D				612 19,3	03 3.27%	4AU D
East Natoma St		A-5, A-6,O-5, O-6, BP- 2, BP3						30,757	0.80% 4AU F	21	21	. 1	404 30,9		1	2			1.37% 4		10		404 30,9		% 4AU F	10	-	0	688 31,2		
Green Valley Road	East Natoma Street to		W-1E, W-2E, W-3E, W-		-					21	21	6 1			3	3	6 3 404				10	0 0				12	0	0			
Greenback Lane	Sophia Parkway Hazel Avenue to		4E, W-5E, W-6E W-4B, W-4C, W-4D,	36,028 4AU	F	_		36,028	4AU F	-			36,0		+			36,028	4,	AU F			36,0		4AU F			-	96 36,1	24 0.27%	4AU F
East Bidwell Stree	Madison Avenue	* A F A C O F O C BD	W-4E	27,135 4AMD	C		96	27,231	0.35% 4AMD C				160 27,2	95 0.59% 4AMD C			160	27,295	0.59% 4	AMD C			160 27,2	295 0.59%	% 4AMD C				400 27,5	35 1.47%	4AMD C
		n A-5, A-6, O-5, O-6, BP- 2, BP-3		44,247 4AD	F 2 2	18	8	44,277	0.07% 4AD F	21	2	18	12 44,3	00 0.12% 4AD F	3	6	3 30 12	44,301	0.12% 4	AD F	6	6	14 12 44,	315 0.15%	% 4AD F	6	8	52	20 44,3	33 0.19%	4AD F
Oak Avenue Parky	East Bidwell Street		W-6D, W-6E	24,996 6AD	c		8	25,004	0.03% 6AD C				12 25,0	08 0.05% 6AD C			12	25,008	0.05% 6	AD C			12 25,0	0.05%	% 6AD C				20 25,0	16 0.08%	6AD C
Scott Road (south)	south of White Rock Road	A-5, A-6, BP-2, BP-3		1,863 2C	A/B 5			1.868	0.27% 2C A/I	3 21		1	1.8	35 2C A/B				1.863	20	C A/B			1,8	363	2C A/B				1,8	63	2C A/B
White Rock Road	between Scott Road (south) and Scott Roa	A-5, A-6, BP-2, BP-3		,,,,,,														, , , , ,													
	(north)			10,232 2C	F 5			10,237	0.05% 2C F	21		1	10,2	54 2C F				10,232	20	C F			10,2	232	2C F				10,2	32	2C F
Scott Road (north)	north of White Rock Road	A-5, A-6, BP-2, BP-3		7,122 2C	D 2	2		7,126	0.06% 2C D		21	6	7,1	19 2C D				7,122	20	C D			7,	122	2C D				7,12	22	2C D
US50	Hazel Avenue to Folsom Boulevard	O-5, O-6	W-5A, W-5B, W-5C, W-5D, W-5E	##### 4FA	F 2	2	96 1	131.600	0.08% 4FA F		21	6	160 131.6	37 0.14% 4FA F		3	6 160 1	131.669	0.13% 4	FA F		6 6	160 131.0	672 0.13%	% 4FA F		6	8	400 131.9	14 0.31%	4FA F
US50	Folsom Boulevard to	O-5, O-6	W-6A, W-6B, W-6C	##### 4F	F 2	2		111.464	0.00% 4F F		21	6	111.4	37 0.02% 4F F		3	6 1	111 469 (0 01% 4			6 6	111.4	172 0.01%	2/ 4E E		6	Q	12 111 4	86 0.02%	4E E
US50	Prairie City Road Prairie City Road to	O-5, O-6	W-6A, W-6B, W-6C								21	0	,.					,	0.0170 11						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-		,,	0.0270	
US50	East Bidwell Street East Bidwell St to		W-6A, W-6B, W-6C,	80,837 4F	2	2		80,841	0.00% 4F F		21	ь	80,8	1 1 1	+ +	3	0		0.01% 4		 	ь 6	80,8				6	В	12 80,8		
-	County Line		W-6D, W-6E	92,207 4F	F		96	92,303	0.10% 4F F					19 0.01% 4F F			12	92,219	0.01% 4	F			12 92,	219 0.01%	% 4F F				32 92,2	39 0.03%	4F F
	and all 5	104.00																													
Hammonton- Smartville (H-S) R		*		10,181 2C	F			10,181	2C F				10,1					10,181	20	C F			10,		2C F				10,18		2C F
N Beale Road Feather River Blvd	south of H-S Road south of N. Beale	A-1, A-2 A-1, A-2		31,304 4AU	F			31,304	4AU F				31,3	04 4AU F				31,304	4,	AU F			31,3	304	4AU F				31,3	04	4AU F
Ramp	Street	,																													
Highway 70	Yuba County, east of	A-1, A-2																													
	Feather River Boulevard interchange			75,712 4AMD	F			75,712	4AMD F				75,7	12 4AMDF				75,712	4.	AMD F			75,	712	4AMD F				75,7	12	4AMD F
Highway 65	Roseville, northeast of			##### 4F	F			133.886	4F F				133.8				 	133.886	41				133.8		4F F				133.8		4F F
Highway 65	Route 80 Lincoln, northeast of	A-1, A-2			-							-	,-		+ +	-		,				+ +			+						
Highway 65	7th Street Wheatland, northeast			29,649 2A	F			29,649	2A F				29,6	1 1 1	+			29,649	2/			+ +	29,6		2A F				29,6		2A F
5 -,	of Evergreen Drive	<u> </u>		31,083 2A	F			31,083	2A F				31,0	33 2A F				31,083	2	A F			31,0	083	2A F				31,0		2A F
Interstate 80		f A-1, A-2, O-1, O-2																													
Interstate 80	Route 65 Rocklin, south of Sierr	ra A-1, A-2, O-1, O-2		##### 4FA	F			144,109	4FA F	-		-	144,1	+ + +	+-+	_		144,109		FA F		+	144,		4FA F	-		+++	144,1		4FA F
	College Boulevard	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		##### 4FA	F		1	119,263	4FA F				119,2	63 4FA F				119,263	41	FA F			119,	263	4FA F				119,2	63	4FA F

Table 3.9-84
13 Daily Project Impacts Alternatives 1 through

						Pable 3.9-84 2013 Daily Project Impacts Alternatives 1 through 5				
		ROUTE DESIGNATIONS	No Action/No Pro	viect	Alternative 1	Alternative 2		2013 Alternative 3	Alternative 4	Alternative 5
				New New New	New New	New New New New	New	New New New New	New New New New	New New New New New
Roadway	Location	Materials/ Equip. Routes	Worker Routes ADT code L	Aggregat Offsite Equipme OS e Trips Trips t Trips	en BP Worker New % Trips Trips ADT increase code LOS	Aggregat Offsite Equipme BP Worker New 9 E Trips Trips nt Trips Trips Trips ADT in	Aggr acrease code LOS e Tri	regat Offsite Equipmen BP Worke New % ps Trips t Trips Trips r Trips ADT increase code LOS	Aggregat Offsite Equipme BP Worker New e Trips Trips nt Trips Trips Trips ADT	% Aggregat Offsite Equipme BP Worker New % increase code LOS e Trips Trips nt Trips Trips Trips ADT increase code LOS
Folsom Boulevard	Natoma Street to Blue Ravine Road		W-3A, W-5A, W-6A, W- 3B, W-5B, W-6B, W-							
			3C, W-5C, W-6C, W- 3D, W-5D, W-3E, W-5E 43,412 4AD F		72 43,484 0.17% 4AD F	284 43,696	0.65% 4AD F	180 43,592 0.41% 4AD F	344 43.75	56 0.79% 4AD F 388 43,800 0.89% 4AD F
Folsom Boulevard	Leidesdorff Street to Greenback Lane		W-3A, W-5A, W-6A, W- 3B, W-5B, W-6B, W-		13,707	20.1 13,000		333 333 333 333	377 1377	
Edward Ashara Band		110101	3C, W-5C, W-6C 37,439 4AD F		37,439 4AD F	104 37,543	0.28% 4AD F	37,439 4AD F	164 37,60	03 0.44% 4AD F 164 37,603 0.44% 4AD F
Folsom-Auburn Road	Oak Hill Drive to Folsom Dam Road	A-4, O-4, BP-1	W-1C, 2C, 3C, 4C, 5C, 6C, 7C, 1D,2D, 2E, W-							
			3A, 5A, 6A, 3B, 5B, 6B,1E 46,282 2A E		16 46,298 0.03% 2A F	144 46,426	0.31% 2A F	40 46,322 0.09% 2A F	204 46,48	36 0.44% 2A F 212 46,494 0.46% 2A F
Folsom-Auburn Road	Folsom Dam Road to Oak Avenue		W-3A, 5A, 6A, 7A, 3B, 4B, 5B, 6B, 7B, 1E, 2E,							
Auburn-Folsom (A-F)		A-2,A-3,A-4, O-2, O-3,	5C 24,578 4AU I)	24,578 4AU D	160 24,738	0.65% 4AU D	24,578 4AU D	220 24,79	98 0.90% 4AU D 232 24,810 0.94% 4AU D
Road		O-4, BP-1	2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E 39,391 4AU F	,	16 39,407 0.04% 4AU F	1 2 2 216 39,612	0.56% 4AU F	40 39,431 0.10% 4AU F	2 280 39,67	73 0.72% 4AU F 5 2 2 288 39,688 0.75% 4AU F
Auburn-Folsom (A-F)	Eureka Road to Oak Hill	A-2, A-3, O-2, O-3, BP-	W-3A, 5A, 6A, 7A, 1B,		10 00,107 0.07% 1.10	1 2 2 210 00,012	0.0070 1.10	10 00,101 0.1070 1.10	2 200 00,07	5 6.12.70 1/10 1
Road	Drive	1	2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E 35,028 2A F	1	16 35,044 0.05% 2A F	1 2 2 216 35,249	0.63% 2A F	40 35,068 0.11% 2A F	2 280 35,31	10 0.81% 2A F 5 2 2 288 35,325 0.85% 2A F
Sierra College Boulevard	north of Douglas Boulevard	A-1, A-2, O-1, O-2	W-2A, W-2B, W-2C, W- 2D, W-2E 29,041 4AD I)	8 29,049 0.03% 4AD D	4 8 10 32 29,095	0.19% 4AD D	20 29,061 0.07% 4AD D	6 10 40 29,09	97 0.19% 4AD D 41 14 10 44 29,150 0.38% 4AD D
Eureka Road	east of N. Sunrise Avenue	A-3, A-4, O-3, O-4, BP- 1	44,684 6AD I)	44,684 6AD D	44,684	6AD D	44,684 6AD D	44,68	34 6AD D 44,684 6AD D
Douglas Boulevard	east of A-F Road	A-1,O-1	W-1A, W-2A, W-3A, W- 4A, W-5A, W-6A, W-7A 15,143 2A I	,	15,143 2A D	3 6 8 92 15,252	0.72% 2A D	15,143 2A D	6 8 220 15,37	77 1.55% 2A D 36 12 8 220 15,419 1.82% 2A D
Douglas Boulevard	Barton Road to A-F Road	A-1, A-2, A-3, A-4, O-1, O-2, O-3, O-4, BP-1	, W-1A, W-2A, W-4A, W- 1B, W-2B, W-4B, W-							
	riodd	2,00,01,511	1C, W-2C, W-1D, W- 2D, W-1E, W-2E 46,167 4AD F	,	16 46,183 0.03% 4AD F	4 8 10 148 46,337	0.37% 4AD F	40 46,207 0.09% 4AD F	6 10 212 46,39	95 0.49% 4AD F 41 14 10 220 46,452 0.62% 4AD F
Douglas Boulevard	Barton to Sierra Colleg		53,391 4AD	.	53.391 4AD F	53.391	4AD F	53.391 4AD F	0 10 212 40,00	4AD F 53.391 4AD F
Blue Ravine Road	Oak Avenue Parkway to	A-5, A-6,O-5, O-6, BP-			33,391 4AD F	33,391	4AD F	55,591 4AD F		9AD F 33,391 4AD F
	Green Valley Road/East Natoma Street	2, BP3	22,396 4AD I) 1	1 11 4 22,413 0.08% 4AD D	19 22 3 5 12 22,457	0.27% 4AD D	1 1 4 1 12 22,415 0.08% 4AD D	5 7 3 4 12 22,42	27 0.14% 4AD D 6 7 3 4 16 22,432 0.16% 4AD D
East Natoma St	Cimmaron Circle to Folsom Dam Road		W-1D, 3D, 4D, 5D, 1E, 2E, 3E, 4E, 5E 19,065 4AU I		144 19,209 0.76% 4AU D	360 19,425	1.89% 4AU D	360 19,425 1.89% 4AU D	360 19,42	25 1.89% 4AU D 452 19,517 2.37% 4AU D
East Natoma St	Folsom Dam Road to Green Valley Road	A-5, A-6,O-5, O-6, BP- 2, BP3	W-7A, 7B, 7C, 1D,2D,3D,4D,5D,6D,7D							
Green Valley Road	·	A-6, O-6	, 1E, 2E, 3E, 4E, 5E, 6E 31,124 4AU F W-1E, W-2E, W-3E, W-	1	1 11 160 31,297 0.56% 4AU F	19 22 3 5 412 31,585	1.48% 4AU F	1 1 4 1 404 31,535 1.32% 4AU F	5 7 3 4 416 31,55	
Greenback Lane	Sophia Parkway Hazel Avenue to	7. 0, 0 0	4E, W-5E, W-6E 36,749 4AU F W-4B, W-4C, W-4D, W-		36,749 4AU F	36,749	4AU F	36,749 4AU F	36,74	49 4AU F 96 36,845 0.26% 4AU F
	Madison Avenue	45.40.05.00.00	4E 27,678 4AMD 0		64 27,742 0.23% 4AMD C	208 27,886	0.75% 4AMD C	160 27,838 0.58% 4AMD C	208 27,88	36 0.75% 4AMD C 248 27,926 0.90% 4AMD C
East Bidwell Street	Point Road	A-5, A-6, O-5, O-6, BP- 2, BP-3	W-6D, W-6E 45,132 4AD F	1 1	11 26 4 45,175 0.10% 4AD F	22 1 11 26 12 45,204	0.16% 4AD F	1 4 1 14 12 45,164 0.07% 4AD F	7 3 4 38 12 45,19	96 0.14% 4AD F 7 3 4 40 16 45,202 0.16% 4AD F
Oak Avenue Parkway	Blue Ravine Road to East Bidwell Street		W-6D, W-6E 25,496 6AD 0	2	4 25,500 0.02% 6AD C	12 25,508	0.05% 6AD C	12 25,508 0.05% 6AD C	12 25,50	08 0.05% 6AD C 16 25,512 0.06% 6AD C
Scott Road (south)	south of White Rock Road	A-5, A-6, BP-2, BP-3	1,901 2C	A/B	11 1,912 0.58% 2C A/B	19 5 1,925	2C A/B	1,901 2C A/B	1,90	01 2C A/B 1,901 2C A/B
White Rock Road	between Scott Road (south) and Scott Road	A-5, A-6, BP-2, BP-3								
Scott Road (north)	(north) north of White Rock	A-5, A-6, BP-2, BP-3	10,437 2C F		11 10,448 0.11% 2C F	19 5 10,461	2C F	10,437 2C F	10,43	
USSO	Road Hazel Avenue to	O-5, O-6	7,265 2C I W-5A, W-5B, W-5C, W-) 1	1 7,267 0.03% 2C D	22 3 7,290	2C D	7,265 2C D	7,26	55 2C D 7,265 2C D
11950	Folsom Boulevard Folsom Boulevard to	O-5, O-6	5D, W-5E 134,130 4FA F W-6A, W-6B, W-6C	1	1 64 134,196 0.05% 4FA F	22 3 246 134,401	0.20% 4FA F	1 4 160 134,295 0.12% 4FA F	7 3 292 134,43	32 0.23% 4FA F 7 3 332 134,472 0.25% 4FA F
11050	Prairie City Road Prairie City Road to	0-5, 0-6	W-6A, W-6B, W-6C 113,690 4F F	1	1 113,692 0.00% 4F F	22 3 8 113,723	0.03% 4F F	1 4 113,695 0.00% 4F F	7 3 12 113,71	12 0.02% 4F F 7 3 12 113,712 0.02% 4F F
11050	East Bidwell Street	3-3, 0-0	82,454 4F F	1	1 82,456 0.00% 4F F	22 3 8 82,487	0.04% 4F F	1 4 82,459 0.01% 4F F	7 3 12 82,47	76 0.03% 4F F 7 3 12 82,476 0.03% 4F F
0550	East Bidwell St to County Line		W-6A, W-6B, W-6C, W- 6D, W-6E 94,052 4F F		4 94,056 0.00% 4F F		0.02% 4F F	12 94,064 0.01% 4F F	24 94,07	76 0.03% 4F F 28 94,080 0.03% 4F F
						Regional	Access Routes			
Hammonton-Smartville (H-S) Road	north of N. Beale Road	A-1, A-2	10,385 2C F		10,385 2C F	8 10,393	0.08% 2C F	10,385 2C F	10,38	35 2C F 82 10,467 0.79% 2C
N Beale Road Feather River Blvd.	south of H-S Road south of N. Beale Street	A-1, A-2	31,930 4AU F		31,930 4AU F		0.03% 4AU F	31,930 4AU F	31,93	
Ramp	South of N. Deale Stiett	N-1, N-2				8				82
Highway 70	Yuba County, east of	A-1, A-2								
	Feather River Boulevard interchange		80,255 4AMD F	. []	80,255 4AMD F	8 80,263	0.01% 4AMD F	80,255 4AMD F	80,25	55 4AMD F 82 80,337 0.10% 4AMD
Highway 65	Roseville, northeast of Route 80	A-1, A-2	141,920 4F F		141,920 4F F	8 141,928	0.01% 4F F	141,920 4F F	141,92	20 4F F 82 142,002 0.06% 4F
Highway 65	Lincoln, northeast of 7th Street	A-1, A-2	31,428 2A	.	31,428 2A F		0.03% 2A F	31,428 2A F	31,42	
Highway 65	Wheatland, northeast of	A-1, A-2	32,948 2A F		32,948 2A F	 	0.02% 2A F	32,948 2A F	32,94	
	Evergreen Drive		32,7 4 0 2A 1		02,540 ZA F	5 32,930	5.5275271	02,540 ZA F	32,94	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Interstate 80	Roseville, northeast of Route 65		146,992 4FA		146,992 4FA F	8 10 44 147,054	0.04% 4FA F	146,992 4FA F	6 10 32 147,04	40 0.03% 4FA F 14 10 130 147,146 0.10% 4FA F
Interstate 80	Rocklin, south of Sierra College Boulevard	A-1, A-2, O-1, O-2	121,649 4FA F		121,649 4FA F	8 10 121,667	0.01% 4FA F	121,649 4FA F	6 121,65	55 0.00% 4FA F 121,649 4FA F
		•								

F-65

Table 3.9-85

												2014 Da	I a ly Project Im	able 3.9- pacts Al		through	5																				
		ROUTE DESIGNATIONS		No Action/N	o Project			Δlte	ernative 1				-		Alternation	ve 2			1		201		native 3					Altern	ative 4						Iternative 5		
		DESIGNATIONS	1	TAO ACION/IN	Nev	w New	v New	New	New			New	New N	lew	New Nev				New	New	New	1	lew			New	New New	1 1	New		T	New	New	New Ne	w New		
		Materials/ Equip.			Agg	gregat Offsi	site Equipme	en BP	Worker N	ew %			at Offsite E				%		Aggregat			BP \	Vorker New	%		Aggregat	Offsite Equipm	ent BP \	Vorker New	%	1	Aggrega	at Offsite	Equipment BP	Worke	r New ADT	%
Roadway Folsom Boulevard	Location Natoma Street to Blue	Routes	Worker Routes W-3A, W-5A, W-6A, W-	AD1 cod	le LOS e Ti	rips Trips	s t Trips	Trips	Trips Al	DI Inc	crease code	LOS e Trips	Trips n	it I rips	Trips Trip	s ADI	increa	ase code LO	S e Trips	Trips	t Trips	Trips	rips ADT	increase	code LC	OS e Trips	Trips Trips	Trips	rips ADT	increas	e code L	OS e Trips	Trips	Trips Trij	os Trips	ADI	increase code LOS
	Ravine Road		3B, W-5B, W-6B, W-3C, W-5C, W-6C, W-3D, W-																																		1
Falson Davidson	Laideadad Oraca		5D, W-3E, W-5E	44,715 4AI	D F					44,715	4AD	F				44,	715	4AD F					44,71	5	4AD	F			44,7	15	4AD	F			23	6 44,951	0.53% 4AD F
Folsom Boulevard	Leidesdorff Street to Greenback Lane		W-3A, W-5A, W-6A, W- 3B, W-5B, W-6B, W-3C,									1_1												_		_					1	_					1
Folsom-Auburn Road	Oak Hill Drive to Folsom	A-4, O-4, BP-1	W-5C, W-6C W-1C, 2C, 3C, 4C, 5C,	38,563 4AI	D F				+ +	38,563	4AD	F				38,	563	4AD F				-	38,56	3	4AD	F		-	38,5	63	4AD	F			16	4 38,727	0.43% 4AD F
	Dam Road	, - ,	6C, 7C, 1D,2D, 2E, W- 3A, 5A, 6A, 3B, 5B,	47.671 2A	F					47.671	2A	F				47	671	2A F					47.67	1	2A	F			47.6	71	2A	F			18	0 47.851	0.38% 2A F
Folsom-Auburn Road	Folsom Dam Road to		W-3A, 5A, 6A, 7A, 3B,	25,316 4AU	II D				+ +	25.316	4AU						316	4AU D					25.31	+	4AU				25.3		4AU	D				4 25.540	
Auburn-Folsom (A-F)	Oak Avenue Douglas Boulevard to	A-2,A-3,A-4, O-2, O-3, C		23,310 4AC					+ +	25,516	440		+ +			23,	310	4A0 D					25,51	0	440	1			25,5	10	440	D			22	4 25,540	0.86% 4AU D
Road	Eureka Road	4, BP-1	2B, 3B, 4B, 5B, 6B, 7B, 1C, 2C, 1D, 2D, 1E, 2E	40,573 4AU	U F					40,573	4AU	F				40.	573	4AU F					40,57	3	4AU	F			40,5	73	4AU	F	41 14	10	25	6 40,894	0.79% 4AU F
Auburn-Folsom (A-F)		A-2, A-3, O-2, O-3, BP-1	W-3A, 5A, 6A, 7A, 1B, 2B, 3B, 4B, 5B, 6B, 7B,																																		
rtodd			1C, 2C, 1D, 2D, 1E, 2E	36,079 2A	F					36,079	2A	F				36,	079	2A F					36,07	9	2A	F			36,0	79	2A	F	41 12	8	25	6 36,396	0.88% 2A F
Sierra College Boulevard	north of Douglas Boulevard	A-1, A-2, O-1, O-2	W-2A, W-2B, W-2C, W- 2D, W-2E	29,913 4AI	D D					29,913	4AD	D				29,	913	4AD D					29,91	3	4AD	D			29,9	13	4AD	D	41 14	10	2	8 30,006	0.31% 4AD D
Eureka Road	east of N. Sunrise Avenue	A-3, A-4, O-3, O-4, BP-1		46,025 6AI	D D					46,025	6AD	D				46,	025	6AD D					46,02	5	6AD	D			46,0	25	6AD	D				46,025	6AD D
Douglas Boulevard	east of A-F Road	A-1,O-1	W-1A, W-2A, W-3A, W- 4A, W-5A, W-6A, W-7A	15.598 2A	D					15,598	2A	D				15	598	2A D					15.59	8	2A	D			15.5	98	2A	D	36 12	8	22	0 15,874	1.77% 2A D
Douglas Boulevard	Barton Road to A-F Road		W-1A, W-2A, W-4A, W-	10,000						,						1.0	-						,						,.							10,011	
		O-2, O-3, O-4, BP-1	1B, W-2B, W-4B, W-1C, W-2C, W-1D, W-2D, W-									1_1												_		_					1	_					1
Douglas Boulevard	Barton to Sierra Colleg		1E, W-2E	47,553 4AI				_		47,553	4AD	F	-				553	4AD F					47,55		4AD	F	+		47,5		4AD	F	41 14	10	18	8 47,806	
Blue Ravine Road	Blvd.	A-5, A-6,O-5, O-6, BP-2,	W-6D W-6F	54,993 4AI	D F				1	54,993	4AD	F				54,	993	4AD F					54,99	3	4AD	F		_	54,9	93	4AD	F				54,993	4AD F
Dido Navillo Noda	Green Valley Road/East			23,068 4AI	D D					23,068	4AD					22	068	4AD D					23,06		4AD				23,0	60	4AD	_	10	2	2	4 23,087	0.08% 4AD D
East Natoma St	Natoma Street Cimmaron Circle to		W-1D, 3D, 4D, 5D, 1E,										+ +													2	+ +				4AU	-	10	- 2	3		
East Natoma St	Folsom Dam Road Folsom Dam Road to	A-5, A-6,O-5, O-6, BP-2,	2E, 3E, 4E, 5E W-7A, 7B, 7C,	19,637 4AU	U D				+ +	19,637	4AU	D				19,	637	4AU D				-	19,63	7	4AU	D		-	19,6	37	4AU	D			14	4 19,781	0.73% 4AU D
	Green Valley Road	BP3	W-7A, 7B, 7C, 1D,2D,3D,4D,5D,6D,7D, 1E, 2E, 3E, 4E, 5E, 6E	32.058 4AI	II F					32.058	4AU	F				32.	058	4AU F					32.05	8	4AU	F			32.0	58	4AU	F	10	2	3 17	2 32,245	0.58% 4AU F
Green Valley Road	East Natoma Street to	A-6, O-6	W-1E, W-2E, W-3E, W- 4E, W-5E, W-6E	37,852 4AU	(I E					37.852	4AU	-				27	852	4AU F					37.85	2	4AU	-			37.8	52	4AU	_				37.852	4AII F
Greenback Lane	Sophia Parkway Hazel Avenue to Madisor		W-4B, W-4C, W-4D, W-							28.509	4AM	+ - +					509						28.50	1		_	†		28.5		4AMD	_				6 28,705	1 1 1 1
East Bidwell Street	Avenue Clarksville Road to Iron	A-5, A-6, O-5, O-6, BP-2	4E P, W-6D, W-6E	28,509 4AN						,								4AMD C						_	4AMD	3	+ +					C	+		19		
Oak Avenue Parkway	Point Road Blue Ravine Road to Eas	BP-3	W-6D, W-6E	46,486 4AI						46,486	4AD	F			 		486	4AD F	1				46,48		4AD	F	+	-	46,4		4AD	F	10 2	3	30	4 46,535	0.11% 4AD F
Scott Road (south)	Bidwell Street south of White Rock	A-5, A-6, BP-2, BP-3		26,261 6AI	D C					26,261	6AD	С				26,	261	6AD C					26,26	1	6AD	0	-		26,2	61	6AD	С				4 26,265	0.02% 6AD C
	Road			1,959 2C	A/B					1,959	2C	A/B				1,	959	2C A/I	3				1,95	9	2C A	/B			1,9	59	2C A	VΒ				1,959	2C A/B
White Rock Road	between Scott Road (south) and Scott Road	A-5, A-6, BP-2, BP-3																																			1
Scott Road (north)	(north) north of White Rock	A-5, A-6, BP-2, BP-3		10,751 2C 7,483 2C	F D					10,751 7,483	2C 2C	F D					751 483	2C F				-	10,75 7,48		2C 2C	F D		-	10,7 7.4		2C 2C	F D				10,751 7,483	
US50	Hazel Avenue to Folsom	O-5, O-6	W-5A, W-5B, W-5C, W- 5D, W-5E	138.154 4FA						38,154	4FA	F					154	4FA F					138.15		4FA	F			138.1	54	4FA	F	10	2	10	6 138.362	
US50	Boulevard Folsom Boulevard to	O-5, O-6	W-6A, W-6B, W-6C	117.101 4F	· ·					17.101	45	1:1				117		4E E					117.10		4E	-			117.1		4F	-	10	2		2 117,125	
US50	Prairie City Road Prairie City Road to East	O-5, O-6	W-6A, W-6B, W-6C		r		_	+	+ +		45	-	+					4F F	1			\vdash			4F	' 		+ +			4F	-	10	- 4			
US50	Bidwell Street East Bidwell St to County		W-6A, W-6B, W-6C, W-	84,928 4F	F				+ +	84,928	4F	F					928	7' '				-	84,92		71	F		-	84,9		+~-+	F	10	2		2 84,952	
	Line		6D, W-6E	96,874 4F	F					96,874	4F	F					874	4F F					96,87	4	4F	F			96,8	74	4F	F			1	6 96,890	0.02% 4F F
																več	,.Jiiai Acce	TOURES																			
Hammonton-Smartville (H-S) Road	north of N. Beale Road	A-1, A-2		10,593 2C						10,593	2C	F					593	2C F			Ţ		10,59		2C	F			10,5		2C	F			82	10,675	
N Beale Road Feather River Blvd.	south of H-S Road south of N. Beale Street	A-1, A-2 A-1, A-2		32,569 4AU	U F					32,569	4AU	F				32,	569	4AU F					32,56	9	4AU	F			32,5	69	4AU	F			82	32,651	0.25% 4AU F
Ramp	South of N. Deale Street	D-1, M2																													\perp						\Box
Highway 70	Yuba County, east of	A-1, A-2																																			
,	Feather River Boulevard interchange			85,071 4AN	MDF					85,071	4AMI	F				85	071	4AMD F					85,07	1	4AMD	F			85,0	71	4AMD	F			82	85,153	0.10% 4AME F
Highway 65	Roseville, northeast of	A-1, A-2		150,436 4F	E				+ +	50,436	4E	F					436	4F F	1				150.43	1	4F	F			150.4		4F	F			82	150.518	
Highway 65	Lincoln, northeast of 7th	A-1, A-2									4F	 	+ +					-+1 F	1						71	_		+ +			71	_			02		
Highway 65	Street Wheatland, northeast of	A-1, A-2		33,314 2A	F		+	-		33,314	2A	F	+				314	2A F	1		-	\vdash	33,31	4	2A	-	+ + -	+	33,3		2A	F	+		82	33,396	
5 ,	Evergreen Drive			34,925 2A	F					34,925	2A	F				34,	925	2A F					34,92	5	2A	F			34,9	25	2A	F			82	35,007	0.23% 2A F
Interstate 80	Roseville, northeast of	A-1, A-2, O-1, O-2		140.000 ::::						49.932	45.					4.00	932	450 -					149.93		454	_			149.9	00	4FA	-	44 43		120	450.000	0.400/.454
Interstate 80	Route 65 Rocklin, south of Sierra	A-1, A-2, O-1, O-2	-	149,932 4FA			+			,	4FA	F	+		 	1.14		4FA F	+				,		4FA	+	+ + -	+ +	, .			r	14 10		130	150,086	
	College Boulevard	<u> </u>		124,082 4FA	A F				1 1	24,082	4FA	F				124,	082	4FA F	1				124,08	2	4FA	F			124,0	82	4FA	F	14 10		130	124,236	0.12% 4FA F

New Aggregate trips are those trips hauling aggregate materials (fine & coarse filters, road base and asphalt)

New Offsite trips are those trips hauling offsite materials (slope u/s, toe drain, hdpe pipe, pipe filter, u/s filter, seeding, rebar)

New BP trips are those trips hauling aggregate materials (cement, fine & coarse aggregates) fine & coarse aggregates) and plants. This does not include trips from the batch plants to the project features

New Equipment trips are those trips hauling in equipment to each project feature staging area (staging area assumed adjacent to project feature for hauling evaluation).

Appendix G Noise Methodology and Assumptions

Appendix G Noise Methodology and Assumptions

This appendix describes the methodologies used to assess the potential construction and haul vehicle noise impacts. Attachment 1 presents the results of the construction noise impact analysis. The details behind results of the traffic noise modeling analysis are presented in Attachment 2.

G.1 Construction Noise Impact Assessment Methodology

As part of the construction noise impact analysis, a Best Available Control Technology (BACT) analysis of noise mitigation measures was prepared to determine noise mitigation measures and noise exposure limits. A construction noise impact analysis was conducted for construction activities by evaluating the potential for noise level increase over ambient noise levels at noise-sensitive receptors associated with the closest construction activity to the receptor. The results of the construction noise analysis were based on the type and number of pieces construction equipment and operations; the distance to the receptor location, and the effects of terrain and atmospheric absorption.

BACT was used to determine mitigation measures and construction noise limits. The BACT requirement is defined as maximum achievable noise reduction available from a noise source taking into account energy, environmental and economic impacts of a noise control measure. Inherently, this definition includes economic costs of each noise control measure evaluated. The definition of BACT does not necessarily mean that all-available noise control technology be implemented to achieve BACT. The problem with implementing all available noise control is the potential for significant cost increases for a small incremental decrease in noise. Therefore, we have defined BACT taking into consideration this potential for diminishing returns as follows:

- BACT is achieved when all reasonable noise control approaches have been applied, or
- BACT is achieved when community noise levels during construction would be substantially unchanged from the pre-construction noise levels.

The construction operations, such as concrete and rock crushing and screening operations and blasting activities, and the types of construction equipment that is expected to be used is presented in Table G-1. This table was based on information provided in the U.S. Army Corps of Engineers (Corps), *Folsom Dam Raise and Auxiliary Spillway Alternative PASS II Draft Report*, February 2006. It also presents

the L_{max} sound level and percent of time the equipment is operated at full power (usage factor) for each piece of construction equipment used. The L_{max} sound levels represent typical maximum noise that normally occurs during full power operation of the equipment. These levels typically only occur for a short duration, since the equipment is not operated at full power for an entire workday.

Table G-1 Construction Operations, E and Their Noise		Types
	Usage	Lmax
Equipment types	Factor	@ 50'
Scrapers	40%	81
Dozers	40%	82
Vibratory Compactors	20%	83
Haul Trucks	40%	76
Excavator	40%	81
Small Crane	16%	81
Drill Rigs	20%	84
Loaders	40%	79
Blasting	1%	94
Rock/Screening Crushing		
Operations	80%	94
Concrete Batch Plant	15%	83

Sources:

U.S. Army Corps, Folsom Dam Raise and Auxiliary Spillway Alternative PASSII Draft Report, February 2006.

FHWA, Roadway Construction Noise Model, January 2006.

P. Yastrow, Laku Landing Sound Level Analysis, April 1990.

Noise emissions and usage factors for each piece of equipment were obtained from literature research and the recently released FHWA Roadway Construction Noise Model¹. Construction noise impacts were estimated based on the following parameters, assuming that construction activities would occur 18 hours per day:

- Type of equipment expected to be used;
- Quantity of equipment expected to be used;
- Maximum sound level (L_{max}) for full power operation of each type of equipment;
- Percentage of the time equipment typically operates at full power, and

U.S. DOT, FHWA Roadway Construction Noise Model User's Guide, Final Report, January 2006.

 Noise attenuation from portable and temporary barriers adjacent to construction sites.

The L_{eq} noise levels were calculated for each construction activity using the following equations:

Equation 1:

$$L_{\text{eq (equipment)}} = L_{\text{max}} + 10 \log_{10} (UF/100\%)$$

Where:

L_{max} is the maximum sound level for each type of equipment, and

UF is the daily usage fraction of time that equipment is used at full power

The individual contributions of each piece of equipment were combined to obtain the overall maximum construction L_{max} and L_{eq} noise level at each construction activity location using:

Equation 2:

$$L_{\text{max}}/L_{\text{eq (overall)}} = 10 \, log_{\text{10}} \sum \ 10^{(L \, \text{max}/Leq(\textit{equipment})/10)}$$

The L_{max} and L_{eq} noise levels calculated at each noise-sensitive receptor were performed using the following equation:

Equation 3:

$$L_{\text{max}}/L_{\text{eq (receptor)}} = EL -25 \log_{10} (d/50) -A_1 _A_2$$

Where:

EL is the estimated overall L_{max}/L_{eq} noise level at 50 feet (dBA) for each construction activity

d is the distance from the center of the construction activity site to the noisesensitive receptor (feet)

 A_1 is the site-specific excess attenuation due to terrain effects

A₂ is the excess attenuation due to atmospheric absorption

This formula results in a 7.5-dBA loss for each doubling of distance. This formula includes the effect of geometrical spreading of noise with distance as well as excess

attenuation due to soft ground conditions.² The distances were measured from the center of the nearest construction activity to the adjacent noise-sensitive receptor.

The change in ground elevation between noise sensitive receptors and the edge of Folsom Reservoir where much of construction activity and continuous materials and concrete processing would occur ranges from 10 to 120 feet. These changes in elevation can act as barrier or shield between noise sources and noise-sensitive receptors. The potential noise reductions due to changes in terrain were calculated using barrier insertion loss equations. Noise losses associated with the change in elevations were calculated for each octave band frequency ranging from 31.5 hertz (Hz) to 16,000 Hz. According to U.S. EPA⁴, the typical construction equipment noise frequency is 250 hertz. Therefore, noise reductions at 250 Hz were used to represent the noise level reductions associated with the changes in elevations. The projected noise losses due to changes in terrain ranged from 10 dBA to 20 dBA. The only noise-sensitive receptor that would not receive a benefit from changes in terrain is noise-sensitive receptor 1 (Natoma Street residences). Attachment 1 presents the results of the noise level reductions due to changes in terrain.

Excess attenuation associated with atmospheric absorption is strongly dependent on temperature, relative humidity and frequency. It should be noted that as humidity decreases, the atmospheric attenuation increases because dry air is a poor conductor of sound compared to humid air. Based on a daytime average air temperature of 68°F and 50 percent humidity sound attenuates at 1.3 dB per kilometer at 250 Hz, and based on a nighttime average temperature of 50°F and 50 percent humidity sound attenuates at 1.1 dB per kilometer at 250 Hz.³ These atmospheric absorption rates were used in the construction noise impact analysis.

The methodology used to compare each alternative's construction noise impacts was based on the projected L_{dn} noise level at each sensitive receptor and the duration of the construction. Since there would be no major changes in number of pieces of construction equipment or processing sites between each alternative, the only change between alternatives would be the duration of construction based on the number of days of construction for each construction phase. For major construction phases that would be adjacent to noise-sensitive receptors, the construction duration, in total number of days and the projected L_{dn} noise level at each noise-sensitive receptor, was used to calculate a construction period average L_{dn} noise level for each alternative using the following equation:

² FHWA, Noise Fundamentals Training Document, Highway Noise Fundamentals, September 1980...

³ C.M. Harris, Handbook of Acoustic Measurements and Noise Control, 3rd Edition, 1991.

U.S. Environmental Protection Agency, Noise From Construction Equipment and Operations, Building Equipment, and Home Appliances, U.S. Environmental Protection Agency Report NTID 300.1, December 31, 1971.

Equation 4:

$$L_{dn_const} = 10log \ 10 \left(\frac{Xi}{XT} \sum_{i=1}^{XT} 10^{(L_{dn}/10)} + 10^{(L_{dn_ex}/10)} \right)$$

Where:

L_{dn const.} is the average L_{dn} noise level for the construction period

X_T is the total potential number of days of construction

X_i is the total number of days of construction for each alternative

L_{dn} is the projected day-night noise level at each noise-sensitive receptor

L_{dn_ex} is the existing day-night noise level at each noise-sensitive receptor

G.2 Rock Blasting Noise and Vibration Impact Assessment Methodology

Construction and rock blasting activities have the potential to produce noise and vibration levels that may be annoying or disturbing to humans and may cause damage to structures. The rock blasting noise impacts were addressed in the construction noise impact analysis. A blast noise level of 94 dBA at 50 feet and usage factor of 1 percent referenced in the FWHA Roadway Construction Model was used to assess rock blasting noise impacts at noise-sensitive receptors.

Vibration from construction projects is caused by general equipment operations, and is usually highest during pile driving, soil compacting, jack hammering and construction related demolition and blasting activities. Although the vibration is sometimes noticeable outdoors, it is almost exclusively an indoor problem. Although it is conceivable for ground-borne vibration from construction projects to cause building damage, the vibration from construction activities is almost never of sufficient amplitude to cause even minor cosmetic damage to buildings. The primary concern is that the vibration can be intrusive and annoying to people inside buildings.

Measurements of vibration are expressed in terms of the peak particle velocity (PPV) in the unit of inches per second (ips). The PPV, a quantity commonly used for vibration measurements, is the maximum velocity experienced by any point in a structure during a vibration event. It is an indication of the magnitude of energy

transmitted through vibration. PPV is an indicator often used in determining potential damage to buildings from stress associated with blasting and other construction activities.

Table G-2 summarizes the levels of vibration and the usual effect on people and buildings. The U.S. Department of Transportation (U.S. DOT) provides guidelines for vibration levels from construction-related activities. Vibration levels associated with blasting are site-specific and are dependent on the amount of explosive used, soil conditions between the blast site and the receptor, and the elevation where blasting would take place (specifically, the below surface elevation where bedrock would be encountered). Blasting below the surface would produce lower vibration levels at a receptor due to additional attenuation provided by distance and transmission through soil and rock. Under the proposed action, blasting procedures would be dictated by site-specific conditions as determined by the construction contractor prior to construction, through monitoring during construction. Therefore, a quantitative assessment of potential vibration impacts from blasting is not provided. Rather, blasting is discussed in the context of protective measures that would be put in place to minimize or avoid adverse vibration effects in the mitigation measures section.

Summ	Table G-2 nary of Vibration Levels and Effects	on Humans and Buildings
Peak Particle Velocity (in/sec)	Effects on Humans	Effects on Buildings
<0.005	Imperceptible	No effect on buildings
0.005 to 0.015	Barely perceptible	No effect on buildings
0.02 to 0.05	Level at which continuous vibrations begin to annoy in buildings	No effect on buildings
0.1 to 0.5	Vibrations considered unacceptable for people exposed to continuous or long-term vibration	Minimal potential for damage to weak or sensitive structures.
0.5 to 1.0	Vibrations considered bothersome by most people, however tolerable if short-term in length	Threshold at which there is a risk of architectural damage to buildings with plastered ceilings and walls. Some risk to ancient monuments and ruins.
1.0 to 2.0	Vibrations considered unpleasant by most people	U.S. Bureau of Mines data indicates that blasting vibration in this range will not harm most buildings. Most construction vibration limits are in this range.
>3.0	Vibration is unpleasant	Potential for architectural damage and possible minor structural damage.

Source: Michael Minor & Associates, Vibration Primer http://www.drnoise.com/ PDF_files/Vibration%20Primer.pdf, downloaded May 2006.

The methodology used to assess construction equipment vibration impacts was based on construction equipment vibration levels at a reference distance of 25 feet and the following equation provided in a Federal Transit Authority reference document:⁵

Equation 5:
$$PPVequip = PPVref \times (\frac{25}{D})^{1.5}$$

Where:

 $PPV_{(equip)}$ is the peak particle velocity in inches per second of the equipment adjusted for distance

PPV_(ref) is the reference vibration level in inches per second at 25 feet

D is the distance from the equipment to the receiver

Table G-3 presents the vibration levels for typical construction equipment.

Ta Vibration Levels for Typ	able G-3 pical Construction	n Equipment
Equipment		PPV at 25 (in./sec)
Pile Driver (impact)	upper range	1.518
The Briver (impact)	typical	0.644
Pile Driver (sonic)	upper range	0.734
The Briver (30rile)	typical	0.170
Clam Shovel Drop (slurry wall)		0.202
Hydromill (slurry wall)	in soil	0.008
Trydroniii (Sidiry Wall)	in rock	0.017
Large Bulldozer		0.089
Caisson Drilling		0.089
Loaded Trucks		0.076
Jackhammer		0.035
Small Bulldozer		0.003

Source: FTA, Transit Noise and Vibration Impact Assessment, April 1995.

Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment, April 1995.

G.3 Transportation Noise Impact Methodology

G.3.1 Transportation Noise Impact Methodology

G.3.1.1 Local Roads Traffic Noise

Traffic noise levels were estimated for construction workers' commuting vehicles, delivery trucks and trucks hauling aggregate materials using the FHWA Traffic Noise Model, Version 2.5 (TNM2.5). As of January 15, 2005, Caltrans requires all new projects to use TNM2.5 to model potential noise impacts for highway projects. TNM2.5 was used to estimate noise levels for the existing, No-Action and action alternatives along the proposed truck haul routes. TNM2.5 is capable of modeling noise impacts from automobiles, medium trucks (2 axles), heavy trucks (3 or more axles), buses and motorcycles factoring in vehicle volume, vehicle speed, roadway configuration, distance to the noise-sensitive receptors, atmospheric absorption and ground attenuation characteristics. When predicting noise levels, TNM2.5 accounts for the effects of different pavement types, changes in roadway grades and attenuation due to rows of buildings and dense vegetation.

TNM2.5 is used to predict hourly L_{eq} noise levels for both free-flowing and interrupted-flow conditions (i.e., intersections, and traffic control devices). The model is generally considered to be accurate within +/- 3 dB. TNM2.5 is also capable of predicting L_{dn} noise levels daily traffic volume. Inputs to the TNM2.5 model when calculating L_{dn} levels include average daily traffic (ADT) volume, daytime/nighttime traffic distribution of vehicle classes (i.e., automobiles medium and heavy truck, buses and motorcycle percentages and average vehicle speed.

Existing, No-Action and Folsom DS/FDR-related ADT volumes were obtained from Section 3.9. Vehicle classification data by vehicle type was based on actual traffic data for Folsom-Auburn Road provided by the City of Folsom. These vehicle distributions were applied to all local roadway ADT volumes. The daytime/nighttime traffic distributions presented in the Bureau of Reclamation (Reclamation), Folsom Dam Road Access Restriction, Final Environmental Impact Statement, April 2005 (herein referred to as Folsom Dam Road FEIS) were used to represent the Folsom DS/FDR area of analysis. TNM2.5 is capable of calculating L_{dn} noise levels based on an even distribution of hourly traffic volumes over a 24-hour period. However, because the ADT volumes for the study area are distributed approximately 82 percent during the daytime and 18 percent during the nighttime, TNM2.5 was used to estimate daytime and nighttime hourly L_{eq} noise levels. These L_{eq} noise levels were then assumed to be distributed evenly throughout the each time period to calculate the L_{dn} noise level outside TNM2.5 for each noise-sensitive receptor.

Additional assumptions used in the traffic noise modeling analysis included:

- Existing and No-Action ADT volumes were converted to peak hour traffic volumes assuming that peak-hour traffic volumes are 10 percent of the ADT volumes⁶.
- All Folsom DS/FDR-related new traffic, including workers and truck trips, are assumed to occur during daytime hours.
- Folsom DS/FDR-related truck ADT volumes would occur from 7:00 a.m. to 4:00 p.m. or eight hours per day. The ADT volumes were divided by 8 to obtain peak hour truck traffic volumes and added to the No-Action peak hour traffic volumes.
- Folsom DS/FDR-related construction workers ADT volumes were based on two shifts per day. The ADT volumes were divided by 4 to obtain peak hour construction worker volumes and added to the No-Action peak hour traffic volumes.
- All new truck trips are assumed to consist of heavy trucks, those with 3 axles or greater for use in the TNM2.5 model.
- Speeds were estimated using posted speed limits and guidelines in the FHWA Highway Capacity Manual on estimating speeds based on speed limits. For speed limits of 40 and 45 add 7 mph to get free-flow speed. For speed limits of 50 and 55 add 5mph to get free-flow speed.
- Equal volumes of traffic on each roadway direction were assumed except for receiver locations 1 and 4 where there were different numbers of lanes in each direction. For these roadway sections we divided the total peak hour traffic according to the ratio of lanes in each direction.

Model Calibration

TNM2.5 was calibrated based on the noise level and traffic data collected in the field in order to make any necessary adjustments to the Existing Year (2006) and peak construction year modeling results based on the results of the calibration modeling analysis. CDM used traffic and noise data for two Folsom-Auburn Road receptors presented in the Folsom Dam Road FEIS. The calibration modeling analysis was conducted for these two receptor locations since they are close to the Folsom-Auburn noise-sensitive receptor evaluated in this traffic noise impact analysis. The other noise-sensitive receptors presented in the Folsom Dam Road FEIS were located in

⁶ CDM, Email Correspondence between Lisa Sherman, CDM and Darrow Mathew, Sacramento County, April 24, 2006.

downtown Folsom, and were not included in the proposed routes for the Folsom DS/FDR.

Table G-4 presents the traffic data and results of the calibration modeling analysis. It shows that TNM2.5 reasonably predicted traffic noise levels at both receptor locations. Similar to the calibration modeling conducted in the Folsom Dam Road FEIS, the predicted L_{eq} noise level was 3 dBA lower than the measured L_{eq} noise level at receptor 1, but the predicted noise level was identical to the measured noise level at receptor 2. According to the Folsom Dam Road FEIS, the difference in noise levels was attributed to the reasonably assumption that vehicle travel speeds were probably higher than the posted speed limit used in the model. Although the predicted L_{eq} noise level was higher than the measured noise level at receptor 1, it was within the accuracy of the model. Therefore, no adjustments were made to the other TNM2.5 model results.

		Cali	Tab bration M	ole G-4 lodeling	Results			
Receptor ID	Receptor Description	Distance (feet)	Posted Speed (mph)	Obse Autos	rved Vehicl Medium Trucks	es/hour Heavy Trucks	L _{eq} Level Measured	ls (dBA) TNM2.5 Results
1	Folsom-Auburn Road (Lake Pointe Apartments)	70	50	1,428	52	0	71	68
2	Folsom-Auburn (north of Oak Avenue Parkway)	70	50	2,072	24	4	69	69

Sources: USBR, Folsom Dam Road Access Restriction, Final Environmental Impact Statement, April 2005. CDM, 2006.

Peak Year Analysis

Traffic noise modeling for the alternatives was conducted only for those construction years with the highest projected number of construction worker vehicles and truck trips, since these would be the years that would generate the highest Folsom DS/FDR-related traffic noise impacts. Based on the projected ADT volumes for each alternative, it is projected that 2009 would have the highest combined construction workers and truck ADT volumes for all alternatives, except for Alternative 5. For Alternative 5, the highest number of combined ADT volumes would occur in 2013. The No-Action alternative was modeled for both years. Table G-5 presents a summary of the ADT volumes by year for each alternative.

G-10

Projec	cted Cons	=	able G-5 nployee and	Truck ADT	/olumes
		Folse	om DS/FDR Al	ternatives	
Year	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
2007	1,004	960	496	976	1,064
2008	3,805	3,270	3,252	3,615	3,451
2009	5,393	5,592	4,275	5,049	3,377
2010	4,411	4,238	2,913	3,834	3,315
2011	1,284	2,736	1,952	1,056	1,438
2012	1,051	1,816	1,594	1,636	4,206
2013	716	3,248	1,534	3,558	4,860
2014	0	0	0	0	3,822

Source: CDM, 2006.

Selecting Noise Receptor Locations

For this traffic noise analysis, a single reference point based on a 50-foot distance from the roadway centerline to each noise-sensitive receptor was used. This distance was selected because the distances from the roadway centerlines to the noise-sensitive receptors ranged from 40 to 70 feet, and the incremental difference in predicted noise levels at this range of distance is less than 3 dBA. This difference in noise levels is considered to be barely perceptible by humans. Therefore, the 50-foot distance was selected as a median distance and will represent a uniform evaluation of noise impacts for all nine noise-sensitive receptor locations. In addition, since this analysis is primarily compares traffic noise levels with and without the proposed action, those differences between receptors would remain constant. The most significant variable between alternatives is the projected traffic volume.

G.3.1.1.2 Regional Haul Routes Noise

The proposed regional haul routes in the Cities of Marysville, Wheatland, Lincoln, Rocklin and Roseville include Highway 70 and 65, Interstate 80 and US 50. The existing and future No-Action ADT volumes along these highways are significantly higher than those projected for the Folsom DS/FDR. The combined construction workers and haul truck ADT volumes represent less than one percent of the total ADT volume along these proposed regional haul routes. In order to project an appreciable noise level increase of 3 dBA or greater would require the Folsom DS/FDR-related traffic volumes to double the existing or No-Action traffic volumes. The projected increase in ADT volumes due to the proposed actions would generate less than 0.3 dBA increase in existing noise levels. Therefore, a detailed traffic noise modeling analysis was not conducted for the regional haul routes.

The details behind results of the traffic noise modeling analysis are presented in Attachment 2.

Attachment 1 Construction Noise Impact Analysis

README FILE 1 Sep-06

Folsom Dam Integrated Federal Project EIS/EIR Construction Noise Impact Analysis

Workbook Table of Contents

This construction noise impact analysis includes the following worksheet project information and calculations:

Table A-1: Estimated background noise levels for six noise-sensitive receptors surrounding Folsom Dam

Table A-2: Applicable community noise standards

Table A-3: Project construction schedule bar chart.

Table A-4: Summary of construction noise levels for each construction activity.

Table A-5: Ground topography noise reduction calculations

Tables A-6, A-7, A-8: Daytime, nighttime and 24-hour noise calculations at each noise-sensitive receptor

Table A-9:Summary of Best Available Control Technology (BACT) Noise Calculations

Table A-10: Comparison of construction noise impacts to applicable community noise standards

Table A-11: Summary of construction noise impacts for each project alternative.

Estimated Background Noise Levels

Data provided in the the U.S. EPA, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, March 1974 was used to define ambient daytime and nighttime L_{eq} and L_{dn} noise conditions around the Folsom Dam project site. The L_{dn} noise levels are based on the various land use descriptors. The daytime and nighttime L_{eq} noise levels were estimated based on the L_{dn} noise levels. According this EPA document, typically, there is a 10-dBA change in noise levels between the daytime and nighttime.

Community Noise Standards

Projected construction noise levels were also compared with exterior noise standards for the City of Folsom, Sacramento County, El Dorado County, Placer County and the Granite Bay Community to assess potential noise impacts, and identify and evaluate noise control measures to reduce noise impacts

Construction Schedule Bar Chart

Presents a summary of the construction schedule from 2007 through 2014 for each phase of the project. Sources are Bureau of

Construction Noise Impacts at Each Noise Sensitive Receptor

Using the construction noise levels calculated for each construction activity (See README FILE 2 - Construction Activity Noise Level Calculations), the Lmax/Leq noise level calculated at each noise-sensitve receptor was performed using the following equations:

$$L_{max}/L_{eq}$$
 (equipment) = EL - 25 $log_{10}(d/50)$ - A_1 - A_2

Where:

EL is the estimated overall L_{max}/L_{eq} noise level at 50 feet (dBA)

d is the distance from the center of the construction activity site to noise-sensitive receptor (feet)

A₁ is the site-specific excess attenuation due to ground and/or barrier effects

A2 is the excess attenuation due to atmospheric absorption

Ground Topography Noise Reduction Calculations

Topography noise reductions calculations were conducted to evaluate the potential noise reductions associated with differences in elevations between noise sources and receivers. Since the majority of construction and materials processing will be occurring near the Folsom Lake shoreline, there is difference in elevation between the Lake and receivers at the majority of the sites. These differences range from 0 to 120 feet. CDM calculated the potential noise reduction due to changes in topography using a barrier model developed by Cavanuagh Tocci Associates, Inc., 1993. This model is based on barrier insertion loss equations presented in C.M. Harris, Handbook of Acoustic Measurements and Noise Control, 3rd Ed., 1991.

BACT Noise Calculations

There are two principal criteria for evaluating noise impacts of a project: evaluating the increase in noise levels above the existing ambient levels as a result of the project, and compliance with relevant standards and regulations. The following general guidelines were used to assess construction noise impacts, as compared to existing ambient levels:

- Less than a 3 dBA increase in sound level is considered no impact;
- A 3 to 5 dBA increase in sound level is a slight impact;
- A 6 to 10 dBA increase in sound level is a moderate impact; and
- -A greater than 10 dBA increase in sound level is a severe impact.

Sep-06

The applicable CEQA significance criteria for noise include: a substantial increase in ambient noise levels in the project vicinity above existing levels, or a substantial temporary or periodic increase in ambient noise levels in the project vicinity.

Established BACT noise limits based on the following mitigation measures:

For quasi-stationary and stationary sources, such as drill rigs, blasting and rock crushing/screening operations, portable and stationary barriers will be used to partially enclose these noise sources. These barriers will be designed to reduce noise levels a minimum of 10 dBA.

Portable barrier design will consist of a concrete base for stability and a steel frame to support noise control fabric. Fabric sections will overlap and securely attach each other on the steel frame support. The height of the barrier will be no less than 12 feet above ground level. The noise barrier fabric will meet the following requirements:

- Minimum noise reduction coefficient (NRC) rating of 0.85
- Minimum sound transmission coefficient (STC) rating of 32
- Minimum thickness of 1.5 inches
- Weight of 1.5 lbs/sq ft.
- Minimum height of 12 feet

Stationary barrier design will constructed of sound absorption material, such as foam or mineral fiber, which will be a minimum of 4 inches thick. The absorption material will be covered with perforated 24-gauge sheet metal, plywood or equivalent material. The barrier will be designed with no gaps between panels or the ground. The height of the barrier will be no less than 12 feet

- Minimum noise reduction coefficient (NRC) rating of 0.95
- Minimum sound transmission coefficient (STC) rating of 33
- Minimum thickness of 4 inches
- Weight of 5 lbs/sq ft.
- Minimum height of 12 feet

Comparison of Construction Noise Impacts to Applicable Community Noise Standards

Compared L_{max} , L_{eq} , L_{50} and L_{dn} construction noise levels to applicable city and county noise standards to determine potential noise impacts.

Summary of Construction Noise Impacts for Each Project Alternative.

There were no major changes in number of pieces of construction equipment or processing sites between each project alternative. The only change between alternatives would be the duration of construction based on the number of days of construction for each construction phase. For major construction phases that would be adjacent to noise-sensitive receptors, the construction duration, in total number of days and the projected L_{dn} noise level at each noise-sensitive receptor were used to calculate a construction period average L_{dn} noise level for each project alternative using the following equation:

$$L_{\text{dn_const}} = 10 \log 10 \left(\frac{X_i}{XT} \sum_{i}^{XT} 10^{(Ldn/10)} + 10^{(Ldn_ex/10)} \right)$$

Where:

 L_{dn_const} = average Ldn noise level for the construction period

 X_T = total potential number of days of construction

X_i = total number of days of construction for each alternative

L_{dn} = projected day-night noise level at each receptor

L_{dn ex} = existing day-night noise level at each receptor

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		Summary of E	Table A-1 stimated Ambient	Noise Con	ditions
Re	eceptor Locations	Am	bient Noise Level	s	Distance from Center of Construction/Processing
Receptor Id.	Description	Daytime L _{eq}	Nighttime L _{eq}	L_{dn}	Activity
1	East Natoma St. Residential Area, Folsom	60	50	60	1,640 feet from Dike 7 Construction Site to homes on Mountain View Drive
2	Haley Drive Near Granite Beach, Granite Bay	45	35	45	1,800 feet from Granite Bay Borrow Site to homes off of Haley Drive
3	Vista Mar Drive, El Dorado Hills	50	40	50	4,100 feet from MIAD Construction Site to homes on Kipps Lane
4	400 Lake Ridge Courtt, El Dorado Hills	50	40	50	2,000 feet from MIAD Left Abutment Borrow Area to homes on Lakeridge Court
5	Oak Leaf and Auburn-Folsom Road	60	50	60	1,900 feet from South Beal's Point Borrow Area to residential area off of Auburn-Folsom Road
6	Lake Shore Drive, Granite Bay	45	35	45	900 feet from North Beals Point Borrow Area

Note: Ambient noise levels are estimates based on land use conditions.

Source: U.S. EPA, Information on Levels of Environmental Noise Requisite to Protect Public Health 35

able A-2		11/15			
				oise Level	s
			_		ttime
				•	- 7 a.m.
					urly
					L _{max}
50	70	50	70	45	65
Element p 7 a.m. or a	rovided tha after 6 p.m.	at construct during we	tion does n	ot take pla	ce before
Ho	urly	Но	urly	Но	urly
L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
55	75	50	65	45	60
50	60	45	55	40	50
_	90				75
					70
65	75	60	70	60	70
		L	·dn		
		_	-		
		_			
		_	-		
		_	-		
	Constructive Element program. Constructive Element program. Tame of a fitter 5 p.n. Constructive Element program. House Element program. Leg 55	Maximum A Daytime 7a.m 7p.m. Hourly L ₅₀ L _{max} 50 70 Construction noise is Element provided tha 7 a.m. or after 6 p.m. after 5 p.m on weeks Hourly L _{eq} L _{max} 55 75 50 60 70 90 65 75	Noise Standards (dB Maximum Allowable Daytime Eve 7a.m 7p.m. 7 p.m	Maximum Allowable Exterior No.	Maximum Allowable Exterior Noise Level

Notes:

Sources:

County of Sacramento General Plan Noise Element (December 1993, amended 1998)

City of Folsom Municipal Code, Chapter 8.42 Noise Control

El Dorado County General Plan, Public Health, Safety and Noise Element (July 2004)

Placer County General Plan Update, Section 9 Noise (August 1994)

Granite Bay Community Plan Noise Element (Amended 1996)

¹ Non-transportation construction noise standards.

 $^{^2}$ Single event impulsive noise levels produced by blasting shall not exceed a peak linear overpressure of 122 dB, or a C-weighted Sound Exposure Level (SEL) of 98 dBC. The cumulative noise level from blasting shall not exceed 60 dB LC_{dn} or CNELC on any given day.

Project Feature		2007	2008	2009	2010	2011	2012	2013	2014
Main Dam Staging	Alt 1								
Area - Concrete Dam	Alt 2								
Raise, Tendons and	Alt 3								
Shear Keys, Tunnel	Alt 4								
Construction	Alt 5								
	Alt 1								
	Alt 2								
Beal's Point Staging	Alt 3								
Area, Borrow, RWD,	Alt 4								
Dike 4, Dike 5, Dike 6	Alt 5								
	Alt 1								
Mooney Ridge	Alt 2								
Stripping/Excavation	Alt 3								
and Construction	Alt 4								
	Alt 5								
	Alt 1								
Dike 7/Folsom Point	Alt 2								
Staging, Auxilliary	Alt 3								
Spillway, MIAD, LWD,	Alt 4								
Dike 7, Dike 8	Alt 5								
	A 14 4								
<u> </u>	Alt 1								
<u> </u>	Alt 2								
Cranita Bay Staging	Alt 3								
Granite Bay Staging,	Alt 4								
Borrow, Dikes 1, 2, 3	Alt 5								

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Table A-4
Summary of Construction Activity Noise Levels (dBA)

		Alternativ	e 1			Alterna	tive 2			Δltarn	ative 3		ı	Δltern	ative 4		ı	Δltern	ative 5	
1	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total		BACT Total	Total	BACT Total	Total	BACT Total
	Lmax	Lmax	L _{eq}	L _{eq}	Lmax	Lmax	L _{eq}	L _{eq}	Lmax	Lmax	L _{eq}	L _{eq}	Lmax	Lmax	L _{eq}	L _{eq}	Lmax	Lmax	L _{eq}	L _{eq}
Construction Activities	@ 50'	@ 50'	—eq @ 50'	—eq @ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	—eq @ 50'	@ 50'	@ 50'	@ 50'	—eq @ 50'	@ 50'	@ 50'	@ 50'	—eq @ 50'	—eq @ 50'
Auxiliary Spillway Borrow		9 11				3 11		0.11		311				011		0.11		0.11		
Development Period (Alt. 1, 2, 3																				
& 4)	101	97	96	93	100	95	95	91	100	95	95	91	100	95	95	91	0	0	0	0
																				1
Auxiliary Spillway Construction																				
(Alt. 1, 2, 3 & 4)	98	96	95	92	96	93	94	89	96	93	94	89	96	93	94	89	0	0	0	0
Tunnel Construction																				
(Alternative 2 only)	0	0	0	0	98	94	94	89	0	0	0	0	0	0	0	0	0	0	0	0
RWD Stripping, Excavation &																				
Construction (All Alt.)	96	93	94	89	97	94	94	90	97	94	94	90	97	94	94	89	97	94	94	89
LWD Stripping, Excavation &																				
Construction (All Alt.)	96	93	0	94	96	93	94	89	96	93	94	89	96	93	94	89	96	93	94	89
Beals Point Borrow	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89
Development (All Alt.)	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89
Dike 5 & 6 Stripping, Excavation																				
& Construction (All Alts.)	96	93	94	89	96	93	94	89	96	93	94	89	96	93	94	89	97	94	94	89
Mooney Ridge Stripping,		- 00	- 0.	- 55		- 00	0.	- 00		- 55			- 00	- 55	0.		<u> </u>			+
Excavation & Construction (Alt.																				
2, 4 & 5)	0	0	0	0	96	93	94	90	0	0	0	0	95	91	94	88	97	94	95	90
MIAD - Stripping/Excavation &																				
Construction (All Alt.)	96	91	94	88	96	92	94	88	96	92	94	88	96	92	94	88	96	92	94	88
MIAD - Shell & Raise																				
Foundation (Alt. 1, 3 & 4)	93	93	88	88	0	0	0	0	93	93	88	88	93	93	88	88	0	0	0	0
MIAD Jet Grouting (Alt. 1, 3 &						_		_										_		-
4)	92	90	87	86	0	0	0	0	92	90	87	86	92	90	87	86	0	0	0	0
Dike 7 & 8 Stripping, Excavation																				
& Construction (Alt. 2, 3, 4 & 5)	0	0	0	0	95	91	94	87	95	91	94	87	95	91	94	87	95	91	94	87
	0	U	U	0	95	91	94	07	90	91	94	01	95	91	94	01	95	91	94	- 07
Granite Bay Borrow																				
Development (Alt. 2, 3, 4 & 5)	0	0	0	0	100	94	97	91	100	94	97	91	101	95	98	92	100	95	97	91
Dike 1, 2 & 3 Stripping,	-	-	-	1						1										1
Excavation & Construction (Alt.																				
2, 3, 4 & 5)	0	0	0	0	96	91	94	88	96	91	94	88	96	91	94	88	96	92	94	88
Dike 4 Stripping, Excavation &																				
Construction (All Alt.)	96	92	94	88	95	90	94	87	95	90	94	87	95	90	94	87	95	90	94	87
Main Concrete Dam Raise (Alt.					·														·	
2, 3, 4 & 5)	0	0	0	0	87	87	81	81	87	87	81	81	87	87	81	81	87	87	81	81
Main Concrete Dam Tendons																				
and Shears (All Alts.)	91	90	87	96	02	01	88	87	93	91	88	87	02	91	00	87	93	91	88	87
· · · · · ·	91	90	87	86	93	91	88	8/	93	91	88	8/	93	91	88	87	93	91	88	87
Folsom Point Area Borrow Area (Alt. 5 only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	94	94	89
(AIL J UIIIY)	U	U	U	U	U	U	U	U	U	U	U			U	U		100	J+	34	OS

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Table A-5 **Topography Attenuation**

Receptor ID.	Receptor Height (ft)	Receptor Elevation (ft)	Source Height (ft)	Source Elevation (ft)
1	5	450	10	450
2	5	450	10	440
3	5	600	10	500
4	5	600	10	400
5	5	450	10	400
6	5	600	10	480

Source: USGS topographic maps

Source:	Front End	Loader	Rec.:	Receptor 1		Barrier:	Earthen E	Berm			_
X	у	z	Х	y	z	x1	y1	z1	x2	y2	z2
0	0	140.2	0	500	138.7	-50	0	137.2	50	0	137.2
	•				Octave Cente	r Band Fr	requency (l	lz)		•	
		31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)		0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source:	Front End	l Loader	Rec.:	Receptor 2	2	Barrier:	Earthen E	Berm			
X	у	z	×	y	z	x1	y1	z 1	x2	y2	z2
0	0	137	0	671	138.5	-50	0	138	50	0	138
	•			(Octave Cente	er Band F	requency (Hz)			
		31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)		5.4	6.4	7.8	9.9	12.4	15.3	18.3	21.3	24.0	24.0

Source:	Front	End I	Loader	Rec.:	Receptor 3	3	Barrier:	Earthen B	Berm			
X	[у		z	Х	l y	z	x1	 y1	z1	x2	y2	z2
0	0		153.4	0	1250	184.5	-50	0	183	50	0	183
	•					Octave Cente	r Band F	requency (l	Hz)			
			31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)			11.8	14.8	17.8	20.8	23.8	24.0	24.0	24.0	24.0	24.0

Source:	Front End	Loader	Rec.:	Receptor 4		Barrier:	Earthen B	erm			
X	у у	z	Х] у	z	x1	y1	z1	x2	y2	z2
0	0	153.4	0	610	184.5	-50	0	183	50	0	183
				(Octave Cente	r Band F	requency (l	lz)			
		31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)		11.8	14.8	17.8	20.8	23.8	24.0	24.0	24.0	24.0	24.0

Source:	Front End	Loader	Rec.:	Receptor	5	Barrier:	Earthen E	Berm			
X	у	z	Х	у	z	x1	y1	z1	x2	y2	z2
0	0	125	0	580	139	-50	0	137	50	0	137
	•			1	Octave Cente	r Band F	requency (l	Hz)			
		31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)		9.8	12.6	15.5	18.6	21.6	24.0	24.0	24.0	24.0	24.0
		-									

Source:	Front End	Loader	Rec.:	Receptor	6	Barrier:	Earthen E	Berm			
X	у	Z	Х	у	Z	x1	y1	z1	x2	y2	z2
0	0	149	0	275	184.5	-50	0	183	50	0	183
	·		_		Octave Cente	r Band F	requency (I	Hz)			
		31.5	63	125	250	500	1000	2000	4000	8000	16000
Attenuation (dB)		12.1	15.1	18.1	21.1	24.0	24.0	24.0	24.0	24.0	24.0

Based on a barrier model developed by Cavanuagh Tocci Associates, Inc., 1993.

Coordinates and elevations are in meters.

The 250 Hz octave band frequency was selected to represent topograhic attenuation because according to EPA construction equipment noise frequency is 250 Hz..

Source: U.S. EPA, Noise From Construction Equipment and Operations Building and Home Appliances, December 1971.

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Table A-6

CONSTRUCTION NOISE MODELING ANALYSIS **Daytime Projected Noise Levels**

	Construction	Activity Noise Le	evels (dBA)		
		Unmitigated L _{max} Levels @	BACT L _{max} Levels	Unmitigated L _{eq} Levels @	BACT L _{eq} Levels
Project Feature	Alternative ID.	50'	@ 50'	50'	@ 50'
Auxiliary Spillway Borrow	1	101	97	96	93
Development Period (Alts. 1, 2, 3	2	100	95	95	91
& 4)	3	100	95	95	91
u +)	4	100	95	95	91
	1	100	94	95	89
	2	100	94	95	89
Beals Point Borrow Dev. (All Alts.)	3	100	94	95	89
,	4	100	94	95	89
	5	100	94	95	89
	1	96	91	94	88
MAD Out a few of Feet and the second	2	96	92	94	88
MIAD Stripping/Excavation &	3	96	92	94	88
Construction (All Alts.)	4	96	92	94	88
	5	96	92	94	88
	2	100	94	97	91
Granite Bay Borrow Dev. (Alts. 2,	3	101	95	98	92
3, 4 & 5)	4	101	95	98	92
•	5	100	95	97	91
	2	95	91	94	87
Dike 7 & 8 Stripping, Excavation &	3	95	91	94	87
Construction (Alt. 2, 3, 4 & 5)	4	95	91	94	87
, , , , , , , , , , , , , , , , , , , ,	5	95	91	94	87

Note: These construction activities represent those that would generate the highest noise impacts at receptors.

					PR	OJECTED UNM	ITIGATED NO	DISE LEVEL	.s								
			Distance from				Alterna	tive 1	Altern	native 2	Altern	ative 3	Altern	native 4	Altern	ative 5	
Receptor ID.	Receptor Location	Existing Daytime L _{eq} (dBA)	Nearest Construction Site (ft)	Distance Divergence (dBA)	Topography Shielding (dBA)	Atmospheric Attenuation (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	Major Project Feature Impacting Receptor
1	East Natoma St. Residential Area, Folsom	60	1,640	38	0	2	63	61	63	61	63	61	63	61	61	61	Alts 1 -4: Auxiliary Spillway Borrow & Alt. 5: Dike 8 Construction
2	Haley Drive Near Granite Beach, Granite Bay*	45	2,200	41	10	3	45	45	48	47	49	48	49	48	49	47	Alt. 1 - Beals Pt. Borrow Dev. & Alt. 2, 3, 4 & 5 - Granite Bay Borrow Dev.
3	Vista Mar Drive, El Dorado Hills	50	4,100	48	20	5	50	50	50	50	50	50	50	50	50	50	All AltsMIAD Stripping, Excavation & Construction
4	400 Lakeridge Ct, El Dorado Hills	50	2,000	40	20	3	50	50	50	50	50	50	50	50	50	50	All AltsMIAD Stripping, Excavation & Construction
5	Oak Leaf and Auburn-Folsom Road	60	1,900	39	20	2	60	60	60	60	60	60	60	60	60	60	All Alts Beals Pt. Borrow Dev.
6	Lake Shore Drive, Granite Bay	45	935	32	20	1	49	47	49	47	49	47	49	47	49	47	All Alts Beals Pt. Borrow Dev.

Table A-6
CONSTRUCTION NOISE MODELING ANALYSIS

Daytime Projected Noise Levels

					P	ROJECTED MIT	IGATED NOI	SE LEVELS									
			Distance from				Alterna	tive 1	Altern	ative 2	Altern	ative 3	Altern	native 4	Altern	ative 5	
Receptor ID.	Receptor Location	Existing Daytime L _{eq} (dBA)	Nearest Construction Site (ft)	Distance Divergence (dBA)	Topography Shielding (dBA)	Atmospheric Attenuation (dBA)	L _{max} (dBA)	L _{eq} (dBA)	Major Project Feature Impacting Receptor								
1	East Natoma St. Residential Area, Folsom	60	1,640	38	0	2	62	61	61	61	61	61	61	61	60	60	Alts 1 -4: Auxiliary Spillway Borrow & Alt. 5: Dike 8 Construction
2	Haley Drive Near Granite Beach, Granite Bay*	45	2,200	41	10	3	45	45	46	46	46	46	46	46	46		Alt. 1 - Beals Pt. Borrow Dev. & Alt. 2, 3, 4 & 5 - Granite Bay Borrow Dev.
3	Vista Mar Drive, El Dorado Hills	50	4,100	48	20	5	50	50	50	50	50	50	50	50	50	50	All AltsMIAD Stripping, Excavation & Construction
4	400 Lakeridge Ct, El Dorado Hills	50	2,000	40	20	3	50	50	50	50	50	50	50	50	50	50	All AltsMIAD Stripping, Excavation & Construction
5	Oak Leaf and Auburn-Folsom Road	60	1,900	39	20	2	60	60	60	60	60	60	60	60	60	60	All Alts Beals Pt. Borrow Dev.
6	Lake Shore Drive, Granite Bay	45	935	32	20	1	46	46	47	46	47	46	47	46	47	46	All Alts Beals Pt. Borrow Dev.

Note: * For Alternative 1 the distance from the Beals Point Borrow Point to Receptor 2 is 9,940 feet; therefore, the noise reduction due to distance is 57 dBA.

			Altern	native 1	Alterr	native 2	Alterna	tive 3	Altern	ative 4	Altern	ative 5
Receptor ID.	Receptor Location	Existing Daytime L _{eq}	Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	Daytime	Increase Above Existing Daytime L ₅₀ /L _{eq}	Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}
	East Natoma St. Residential Area,											
1	Folsom	60	61	1	61	1	61	1	61	1	61	1
2	Haley Drive Near Granite Beach, Granite Bay	45	45	0	47	2	48	3	48	3	47	2
3	Vista Mar Drive, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0
4	400 Lakeridge Ct, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0
5	Oak Leaf and Auburn-Folsom Road	60	60	0	60	0	60	0	60	0	60	0
6	Lake Shore Drive, Granite Bay	45	47	2	47	2	47	2	47	2	47	2

			COMPARIS	ON OF MITIGATE	D NOISE LEVE	ELS (dBA)						
			Alteri	native 1	Alterr	native 2	Alterna	tive 3	Altern	ative 4	Alteri	native 5
Receptor ID.	Receptor Location	Existing Daytime L _{eq}	BACT Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	BACT Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	BACT Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	BACT Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}	BACT Daytime L _{eq}	Increase Above Existing Daytime L ₅₀ /L _{eq}
	East Natoma St. Residential Area,											
1	Folsom	60	61	1	61	1	61	1	61	1	60	0
2	Haley Drive Near Granite Beach, Granite Bay	45	45	0	46	1	46	1	46	1	46	1
3	Vista Mar Drive, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0
4	400 Lakeridge Ct, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0
5	Oak Leaf and Auburn-Folsom Road	60	60	0	60	0	60	0	60	0	60	0
6	Lake Shore Drive, Granite Bay	45	46	1	46	1	46	1	46	1	46	1

C.M. Harris, 1991, Atmospheric attenuation based on 1.3 dB/km reduction at 68°F and 50% humidity for 250 Hz.

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Table A-7

CONSTRUCTION NOISE MODELING ANALYSIS Nighttime Projected Noise Levels

	Constructio	n Activity Noise Lev	rels (dBA)		
Project Feature	Alternative ID.	Unmitigated L _{max} Levels @ 50'	BACT L _{max} Levels @ 50'	Unmitigated L _{eq} Levels @ 50'	BACT L _{eq} Levels @ 50'
Auxiliary Spillway Borrow	1	101	97	96	93
Development Period (Alts. 1, 2, 3	2	100	95	95	91
& 4)	4	100	95	95	91
	1	100	94	95	89
	2	100	94	95	89
Beals Point Borrow Dev. (All Alts.)	3	100	94	95	89
	4	100	94	95	89
	5	100	94	95	89
	1	96	91	94	88
MIAD Chinaina/Evanuation 8	2	96	92	94	88
MIAD Stripping/Excavation & Construction (All Alts.)	3	96	92	94	88
Construction (All Aits.)	4	96	92	94	88
	5	96	92	94	88
	2	100	94	97	91
Granite Bay Borrow Dev. (Alts. 2,	3	101	95	98	92
3, 4 & 5)	4	101	95	98	92
	5	100	95	97	91
	2	95	91	94	87
Dike 7 & 8 Stripping, Excavation &	3	95	91	94	87
Construction (Alt. 2, 3, 4 & 5)	4	95	91	94	87
	5	95	91	94	87

Note: These construction activities represent those that would generate the highest noise impacts at receptors.

			Distance from		FR	OJECTED UNMI	Altern			ative 2	Altern	ative 3	Altern	native 4	Altern	ative 5	
Receptor ID.	Receptor Location	Existing Nighttime L _{ec} (dBA)	Nearest Construction Site (ft)	Distance Divergence (dBA)	Topography Shielding (dBA)	Atmospheric Attenuation (dBA)	L _{max} (dBA)	L _{eq}	L _{max}	L _{eq}	L _{max} (dBA)	L _{eq}	L _{max} (dBA)	L _{eq}	L _{max} (dBA)	L _{eq}	Major Project Feature Impacting Receptor
1	East Natoma St. Residential Area, Folsom	50	1,640	38	0	2	61	57	61	56	61	56	61	56	56	55	Alts 1 -4: Auxiliary Spillw Borrow & Alt. 5: Dike 8 Construction
2	Haley Drive Near Granite Beach, Granite Bay*	35	2,200	41	10	3	35	35	46	44	47	45	47	45	46	44	Alt. 1 - Beals Pt. Borrow Dev. & Alt. 2, 3, 4 & 5 - Granite Bay Borrow Dev
3	Vista Mar Drive, El Dorado Hills	40	4,100	48	20	5	40	40	40	40	40	40	40	40	40	40	All AltsMIAD Stripping Excavation & Constructi
4	400 Lakeridge Ct, El Dorado Hills	40	2,000	40	20	3	41	41	41	41	41	41	41	41	41	41	All AltsMIAD Stripping, Excavation & Construction
5	Oak Leaf and Auburn-Folsom Road	50	1,900	39	20	2	50	50	50	50	50	50	50	50	50	50	All Alts Beals Pt. Borro Dev.
6	Lake Shore Drive, Granite Bay	35	935	32	20	1	47	42	47	42	47	42	47	42	47	42	All Alts Beals Pt. Borro Dev.

Table A-7
CONSTRUCTION NOISE MODELING ANALYSIS
Nighttime Projected Noise Levels

					PI	ROJECTED MITI	GATED NO	ISE LEVEL	S								
			Distance from				Altern	ative 1	Altern	ative 2	Altern	ative 3	Altern	native 4	Altern	ative 5	
Receptor ID.	Receptor Location	Existing Nighttime L _{ec} (dBA)	Nearest Construction Site (ft)	Distance Divergence (dBA)	Topography Shielding (dBA)	Atmospheric Attenuation (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	L _{max} (dBA)	L _{eq} (dBA)	Major Project Feature Impacting Receptor
1	East Natoma St. Residential Area, Folsom	50	1,640	38	0	2	58	54	56	53	56	53	56	53	53	52	Alts 1 -4: Auxiliary Spillway Borrow & Alt. 5: Dike 8 Construction
2	Haley Drive Near Granite Beach, Granite Bay*	35	2,200	41	10	3	35	35	41	39	42	40	42	40	42	39	Alt. 1 - Beals Pt. Borrow Dev. & Alt. 2, 3, 4 & 5 - Granite Bay Borrow Dev.
3	Vista Mar Drive, El Dorado Hills	40	4,100	48	20	5	40	40	40	40	40	40	40	40	40	40	All AltsMIAD Stripping, Excavation & Construction
4	400 Lakeridge Ct, El Dorado Hills	40	2,000	40	20	3	40	40	40	40	40	40	40	40	40	40	All AltsMIAD Stripping, Excavation & Construction
5	Oak Leaf and Auburn-Folsom Road	50	1,900	39	20	2	50	50	50	50	50	50	50	50	50	50	All Alts Beals Pt. Borrow Dev.
6	Lake Shore Drive, Granite Bay	35	935	32	20	1	42	39	42	39	42	39	42	39	42	39	All Alts Beals Pt. Borrow Dev.

Note: * For Alternative 1 the distance from the Beals Point Borrow Point to Receptor 2 is 9,940 feet; therefore, the noise reduction due to distance is 57 dBA.

	1	COMPARISO	N OF UNMITIGATE									
Receptor ID.	Receptor Location	Existing Nighttime Lea	Alternati Nighttime L _{ea}	Increase Above Existing Nighttime L ₅₀ /L _{eq}	Nighttime	Increase Above Existing Nighttime L ₅₀ /L _{eq}		Increase Above Existing Nighttime L ₅₀ /L _{eq}	Nighttime	Increase Above Existing Nighttime L ₅₀ /L _{eq}		ative 5 Increase Above Existing Nighttime L ₅₀ /L _{eq}
Receptor ib.	East Natoma St. Residential Area,		- eq	⊏50/ ⊏eq	- eq	⊏50/ ⊏eq	-eq	-su -eq	-eq	-50 -eq	-eq	-50 -eq
1	Folsom	50	57	7	56	6	56	6	56	6	55	5
2	Haley Drive Near Granite Beach, Granite Bay	35	35	0	44	9	45	10	45	10	44	9
3	Vista Mar Drive, El Dorado Hills	40	40	0	40	0	40	0	40	0	40	0
4	400 Lakeridge Ct, El Dorado Hills	40	41	1	41	1	41	1	41	1	41	1
5	Oak Leaf and Auburn-Folsom Road	50	50	0	50	0	50	0	50	0	50	0
6	Lake Shore Drive, Granite Bay	35	42	7	42	7	42	7	42	7	42	7

		COMPARIS	Alternati	ve 1	Altern	ative 2	Altern	ative 3	Altern	ative 4	Altern	ative 5
Receptor ID.	Receptor Location	Existing Nighttime Leg	BACT Nighttime Lea	Increase Above Existing Nighttime L ₅₀ /L _{eq}	BACT Nighttime L _{eq}	Increase Above Existing Nighttime L ₅₀ /L _{eq}	BACT Nighttime L _{eq}	Increase Above Existing Nighttime L ₅₀ /L _{eq}	BACT Nighttime L _{ea}	Increase Above Existing Nighttime L ₅₀ /L _{eq}	BACT Nighttime L _{eq}	Increase Above Existing Nighttime L ₅₀ /L _{eq}
	East Natoma St. Residential Area,			50 cq	- 54	00 0q	- vq	00 00	- Gq	00 cq	- Oq	00 00
1	Folsom	50	54	4	53	3	53	3	53	3	52	2
2	Haley Drive Near Granite Beach, Granite Bay	35	35	0	39	4	40	5	40	5	39	4
3	Vista Mar Drive, El Dorado Hills	40	40	0	40	0	40	0	40	0	40	0
4	400 Lakeridge Ct, El Dorado Hills	40	40	0	40	0	40	0	40	0	40	0
5	Oak Leaf and Auburn-Folsom Road	50	50	0	50	0	50	0	50	0	50	0
6	Lake Shore Drive, Granite Bay	35	39	4	39	4	39	4	39	4	39	4

C.M. Harris, 1991, Atmospheric attenuation based on 1.3 dB/km reduction at 68°F and 50% humidity for 250 Hz.

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Table A-8
CONSTRUCTION NOISE MODELING ANALYSIS
Day-Night Projected Noise Levels

	Constructi	on Activity Noise Le	vels (dBA)		
Project Feature	Alternative ID.	Unmitigated L _{eq} Levels @ 50'	BACT L _{eq} Levels @ 50'	Unmitigated L _{dn} Levels @ 50'	BACT L _{dn} Levels @ 50'
Austrian Caillean Barrers	1	96	93	98	95
Auxiliary Spillway Borrow Development Period (Alts. 1, 2, 3	2	95	91	98	94
& 4)	3	95	91	98	94
& 4)	4	95	91	98	94
	1	95	89	97	92
	2	95	89	97	92
Beals Point Borrow Dev. (All Alts.)	3	95	89	97	92
	4	95	89	97	92
	5	95	89	97	92
	1	94	88	97	91
MIAD Stripping/Excavation &	2	94	88	97	91
Construction (All Alts.)	3	94	88	97	91
Construction (All Alts.)	4	94	88	97	91
	5	94	88	97	91
	2	97	91	100	93
Granite Bay Borrow Dev. (Alts. 2,	3	98	92	101	94
3, 4 & 5)	4	98	92	101	94
	5	97	91	100	94
	2	94	87	96	90
Dike 7 & 8 Stripping, Excavation &	3	94	87	96	90
Construction (Alt. 2, 3, 4 & 5)	4	94	87	96	90
	5	94	87	96	90

Note: These construction activities represent those that would generate the highest noise impacts at receptors.

			PROJE	CTED UNMITIGATI	ED NOISE LEVEL	S						
			Distance from				Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	
			Nearest			Atmospheric						
Receptor		Existing L _{dn}	Construction Site	Distance	Topography	Attenuation			L_{dn}			Major Project Feature
ID.	Receptor Location	(dBA)	(ft)	Divergence (dBA)	Shielding (dBA)	(dBA)	L _{dn} (dBA)	L _{dn} (dBA)	(dBA)	L _{dn} (dBA)	L _{dn} (dBA)	Impacting Receptor
												Alts 1 -4: Auxiliary Spillway
	East Natoma St. Residential Area,											Borrow & Alt. 5: Dike 8
1	Folsom	60	1,640	38	0	2	62	62	62	63	62	Construction
												Alt. 1 - Beals Pt. Borrow
	Haley Drive Near Granite Beach,											Dev. & Alt. 2, 3, 4 & 5 -
2	Granite Bay*	45	2,200	41	10	3	45	48	49	49	48	Granite Bay Borrow Dev.
												All AltsMIAD Stripping,
3	Vista Mar Drive, El Dorado Hills	50	4,100	48	20	5	50	50	50	50	50	Excavation & Construction
												All AltsMIAD Excavate &
4	400 Lakeridge Ct, El Dorado Hills	50	2,000	40	20	3	50	50	50	50	50	Repl. Foundation
	Oak Leaf and Auburn-Folsom											All Alts Beals Pt. Borrow
5	Road	60	1,900	39	20	2	60	60	60	60	60	Dev.
		•				•						All Alts Beals Pt. Borrow
6	Lake Shore Drive, Granite Bay	45	935	32	20	1	48	48	48	48	48	Dev.

CONSTRUCTION NOISE MODELING ANALYSIS Day-Night Projected Noise Levels

				PROJECTED MIT	IGATED NOISE L	EVELS						
			Distance from				Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	
			Nearest			Atmospheric						
Receptor			Construction Site	Distance	Topography	Attenuation			L_{dn}			Major Project Feature
ID.	Receptor Location	Existing L _{dn}	(ft)	Divergence (dBA)	Shielding (dBA)	(dBA)	L _{dn} (dBA)	L _{dn} (dBA)	(dBA)	L _{dn} (dBA)	L _{dn} (dBA)	Impacting Receptor
												Alts 1 -4: Auxiliary Spillway
	East Natoma St. Residential Area,											Borrow & Alt. 5: Dike 8
1	Folsom	60	1,640	38	0	2	61	61	61	61	60	Construction
												Alt. 1 - Beals Pt. Borrow
	Haley Drive Near Granite Beach,											Dev. & Alt. 2, 3, 4 & 5 -
2	Granite Bay	45	2,200	41	10	3	45	46	46	46	46	Granite Bay Borrow Dev.
												All AltsMIAD Stripping,
3	Vista Mar Drive, El Dorado Hills	50	4,100	48	20	5	50	50	50	50	50	Excavation & Construction
												All AltsMIAD Excavate &
4	400 Lakeridge Ct, El Dorado Hills	50	2,000	40	20	3	50	50	50	50	50	Repl. Foundation
	Oak Leaf and Auburn-Folsom											All Alts Beals Pt. Borrow
5	Road	60	1,900	39	20	2	60	60	60	60	60	Dev.
												All Alts Beals Pt. Borrow
6	Lake Shore Drive, Granite Bay	45	935	32	20	1	46	46	46	46	46	Dev.

Note: * For Alternative 1 the distance from the Beals Point Borrow Point to Receptor 2 is 9,940 feet; therefore, the noise reduction due to distance is 57 dBA.

C.M. Harris, 1991, Atmospheric attenuation based on 1.3 dB/km reduction at 68 °F and 50% humidity for 250 Hz.

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Table A-9 Summary of BACT Analysis

			Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5		
Receptor ID.	Receptor Location	Existing Daytime L _{eq}	BACT Daytime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Daytime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Daytime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Daytime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Daytime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	Noise Impact Descriptor
	East Natoma St. Residential												
1	Area, Folsom	60	61	1	61	1	61	1	61	1	60	0	None
2	Haley Drive Near Granite Beach, Granite Bay	45	45	0	46	1	46	1	46	1	46	1	None
3	Vista Mar Drive, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0	None
4	400 Lakeridge Ct, El Dorado Hills	50	50	0	50	0	50	0	50	0	50	0	None
5	Oak Leaf and Auburn- Folsom Road	60	60	0	60	0	60	0	60	0	60	0	None
6	Lake Shore Drive, Granite	45	46	1	46	1	46	1	46	1	46	1	None

Projected Nighttime Noise Levels

			Alter	native 1	Alter	native 2	Alter	native 3	Alteri	native 4	Alter	native 5	
Receptor ID.	Receptor Location	Existing Nighttime L _{eq}	BACT Nighttime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Nighttime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Nighttime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Nighttime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	BACT Nighttime L _{eq} (dBA)	Increase Above Existing L _{eq} (dBA)	Noise Impact Descriptor
1	East Natoma St. Residential Area, Folsom	50	54	4	53	3	53	3	53	3	52	2	None to Slight
2	Haley Drive Near Granite Beach, Granite Bay	35	35	0	39	4	40	5	40	5	39	4	None to Slight
3	Vista Mar Drive, El Dorado Hills	40	40	0	40	0	40	0	40	0	40	0	None
4	400 Lakeridge Ct, El Dorado Hills	40	40	0	40	0	40	0	40	0	40	0	None
5	Oak Leaf and Auburn- Folsom Road	50	50	0	50	0	50	0	50	0	50	0	None
6	Lake Shore Drive, Granite Bay	35	39	4	39	4	39	4	39	4	39	4	Slight

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Table A-10

Comparison of Mitigated Construction Noise Levels to Community Noise Standards

	Receptor Locations	L _{max} Lev	rel (dBA)	Exceedance	L ₅₀ /L _{eq} l	evel (dBA)	Exceedance
Station Id.	Description	Daytime	Standard	Yes/No	Daytime	Standard	Yes/No
	Natoma St. Residential Area,						
1	Folsom	62	70	No	61	50	Yes
	Haley Drive Near Granite						
2	Beach, Granite Bay	46			46		
3	Vista Mar Drive, El Dorado Hills	50	75	No	50	55	No
	400 Lakeridge Ct, El Dorado						
4	Hills	50	75	No	50	55	No
	Oak Leaf and Auburn-Folsom						
5	Road	60		No	60		No
6	Lake Shore Drive, Granite Bay	47			46		

	Receptor Locations	L _{max} Lev	rel (dBA)	Exceedance	L ₅₀ /L _{eq} L	evel (dBA)	Exceedance
Station Id.	Description	Nighttime	Standard	Yes/No	Nighttime	Standard	Yes/No
	Natoma St. Residential Area,						
1	Folsom	58	65	No	54	45	Yes
	Haley Drive Near Granite						
2	Beach, Granite Bay	42			40		
3	Vista Mar Drive, El Dorado Hills	40	60	No	40	45	No
	400 Lakeridge Ct, El Dorado						
4	Hills	40	60	No	40	45	No
	Oak Leaf and Auburn-Folsom						
5	Road	50		No	50		No
6	Lake Shore Drive, Granite Bay	42			39		

	Receptor Locations	L _{dn} Lev	el (dBA)	Exceedance
Station Id.	Description	Projected	Standard	Yes/No
	Natoma St. Residential Area,			
1	Folsom			
	Haley Drive Near Granite			
2	Beach, Granite Bay	46	50	No
3	Vista Mar Drive, El Dorado Hills			
4	400 Lakeridge Ct, El Dorado Hills			
5	Oak Leaf and Auburn-Folsom Road	60	50	Yes
6	Lake Shore Drive, Granite Bay	46	50	No

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Table A-11
Comparison of Project Alternatives Construction Noise Impacts

Receptor Locations			Project	Construction Schedule Duration (total days)								
Station Id.	Description	Major Construction Phase	Years	Potential	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5			
1		Alts 1 -4: Auxiliary Spillway Borrow & Alt. 5: Dike 8 Construction	2007-2009	780	780	600	600	600	0			
•	Folsom		2012	300					150			
2	Reach Granite Bay	Alt. 1 - Beals Pt. Borrow Dev. & Alt. 2, 3, 4 & 5 -Granite Bay Borrow Dev.	2007-2009	900	600							
			2013-2014	600		80	330	330	520			
3	Vista Mar Drive, El Dorado Hills	All Alt MIAD Stripping,	2008-2010	900	700		700	440				
Ü	7.0.0 2	Excavation & Construction	2008-2011	1200		840			840			
4	400 Lakeridge Ct, El Dorado	All Alt MIAD Stripping, Excavation & Construction	2008-2010	900	700		700	440				
7	Hills		2008-2011	1200		840			840			
5	Oak Leaf and Auburn-Folsom	All Alts Beals Pt. Borrow Dev.	2007-2009	900	600	600	600	720				
	Road	7 III 7 III S. Beals I I. Bollow Bev.	2007-2012 1200						1200			
6	Lake Shore Drive, Granite Bay	All Alte - Reals Pt Borrow Dev	2007-2009	900	600	600	600	720				
	Lake Glore Drive, Granite Day	All Alts Deals I t. Bollow Dev.	2007-2012	1200					1200			

	Receptor Locations		Impact Evaluation*						
Station Id.	Description	No-Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Lower	Higher
	Natoma St. Residential Area,								
1	Folsom	60	65	64	64	65	63	Alt. 5	Alt. 1 & 4
	Haley Drive Near Granite								
2	Beach, Granite Bay	45	47	49	50	50	51	Alt. 1	Alt. 5
3	Vista Mar Drive, El Dorado Hills	50	53	52	53	52	52	Alt. 2, 4 & 5	Alt. 1 & 3
	400 Lakeridge Ct, El Dorado								
4	Hills	50	53	52	53	52	52	Alt. 2, 4 & 5	Alt. 1 & 3
	Oak Leaf and Auburn-Folsom								
5	Road	60	62	62	62	63	63	Alt. 1, 2 & 3	Alt. 4 & 5
6	Lake Shore Drive, Granite Bay	45	50	50	50	50	51	Alt. 1, 2, 3 & 4	Alt. 5

Note: * Impact evaluation compares alternatives 1 through 5 amongst each other.

Folsom Dam Integrated Federal Project EIS/EIR Construction Noise Impact Analysis

Construction Activity Noise Level Calculations

The type and quantity of construction equipment that is expected to be used for each type of activity based on information provided in the USACE, Folsom Dam Raise and Auxiliary Spillway Alternative PASS II Draft Report, February 2006 and by the Bureau of Reclamation. It also presents the L_{max} sound level and percent of time the equipment is operated at full power (usage factor) for each piece of construction equipment used. The L_{max} sound levels represent typical maximum noise that normally occurs during full power operation of the equipment. These levels typically only occur for a short duration, since the equipment is not operated at full power for an entire workday. The effects of both the L_{max} noise level and duration are included in the L_{eq} impact assessment.

The L_{eq} noise levels were calculated for each construction activity using the folloiwng equations

$$L_{\rm eq~(equipment)} = L_{\rm max} + 10~log_{10}~(UF/100\%)$$

Where:

The individual contributions of each piece of equipment were combined to obtain the overall maximum construction noise level for each construction phase using:

$$L_{\text{max}}/L_{\text{eq (overall)}} = 10 \, log_{10} \sum \ 10^{(L \, \text{max}/L_{eq (equipmen)}/10)}$$

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Alternative 1 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

	I	Estimated		Equipment	BACT	Add to Single	Total	BACT Total Equipment		Total	BACT Total
		Equipment	Usage		L _{max}	Source Level	Lmax	Lmax			
		Numbers Per	Usage	L _{max}	⊢max	Source Level	LIIIax	LIIIdX	L _{eq}	L_{eq}	L _{eq}
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	3	40%	82	82	5	87	87	78	83	83
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Drill Rigs	2	20%	84	74	3	87	77	77	80	70
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0
	Scrapers	10	40%	84	84	10	94	94	80	90	90
Auxiliary Spillway Borrow	Loaders	2	40%	79	79	3	82	82	75	78	78
Development Period (Alt. 1,	Dump Trucks	7	40%	76	76	8	84	84	72	80	80
2, 3 & 4)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
	Blasting	2	1%	94	84	3	97	87	74	77	67
	Onsite Hauling Trucks	11	40%	76	76	10	86	86	72	83	83
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75
	Total		400/	0.0		_	101	97	70	96	93
	Dozers	3	40%	82	82	5	87	87	78	83	83
	Water Truck	1	40%	76	76	0	76	76	72	72	72
	Concrete Transit Mixers	5	20%	80 84	80 84	7	87	87	73	80 87	80 87
	Scrapers	5 0	40% 40%	81	81	0	91 0	91 0	80 0	0	0
	Excavators Loaders	2	40%	79	79	3	82	82	75	78	78
Auxiliary Spillway	Small Crane	1	16%	81	81	0	81	81	73	73	73
Construction (Alt. 1, 2, 3 &	Compactors	1	20%	83	83	0	83	83	76	76	76
4)	Concrete Trucks	2	40%	79	79	3	82	82	75	78	78
I '	Dump Trucks	8	40%	76	76	9	85	85	72	81	81
	Onsite Hauling Trucks	11	40%	76	76	10	86	86	72	82	82
	Offsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75
	Total						98	96		95	92
	Drill Rigs	0	20%	85	75	0	0	0	0	0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0
	Small Crane	0	16%	81	81	0	0	0	0	0	0
	Compactors	0	20%	83	83	0	0	0	0	0	0
Tunnel Construction	Dump Trucks	0	40%	76	76	0	0	0	0	0	0
(Alternative 2 only)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
	Blasting	0	1%	94	84	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Rock Crushing/Screening Concrete Batch Plant	0	80% 15%	94 83	84 83	0	0	0	0	0	0
	Total	U	13%	63	03	U	0	0	U	0	0
	Dozers	2	40%	82	82	3	85	85	78	81	81
	Water Truck	1	40%	76	76	0	76	76	72	72	72
	Excavators	1	40%	81	81	0	81	81	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75
	Small Crane	0	16%	81	81	0	0	0	0	0	0
DIMD Chrispin - Francis	Dump Trucks	10	40%	76	76	10	86	86	72	82	82
RWD Stripping, Excavation	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
& Construction (All Alt.)	Compactors	2	20%	83	83	3	86	86	76	79	79
	Onsite Hauling Trucks	5	40%	76	76	7	83	83	72	79	79
	Offsite Hauling Trucks	3	40%	76	76	4	80	80	72	76	76
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	11	15%	83	83	0	83	83	75	75	75
	Total						96	93		94	89
	Dozers	1	40%	82	82	0	82	82	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72
	Compactor	1	20%	83	80	0	83	80	76	76	73
	Scrapers	2	40%	84	84	3	87	87	80	83	83
	Loaders	2	40%	79	79	3	82	82	75 72	78	78
LWD Stripping, Excavation &	Small Crane	1	16%	81	81	0	81	81	73	73	73
Construction (All Alt.)	Dump Trucks	6	40%	76	76	8	84	84	72	80	80
i	Concrete Trucks Onsite Hauling Trucks	3	40% 40%	79 76	79 76	0 4	0 80	0 80	0 72	76	0 76
	Offsite Hauling Trucks Offsite Hauling Trucks	3	40%	76	76	4	80	80	72	76	76
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75
	Total	_	13/0	03	03	U	96	93	73	94	89
1	I I I I I I I I I I I I I I I I I I I I						20	/5		/7	3,

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Alternative 1 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

DETAIL Const. NoiseAnalysis

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Fauinment	Total	BACT Total
		Equipment	Usage	L _{max}	L _{max}	Source Level	Lmax	Lmax	L _{eq}	L _{eq}	Leq
		Numbers Per	osage	-max	-max	Course Lever	Liliux	Linux	-eq	-eq	-eq
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Drill Rigs	2	20%	84	74	3	87	77	77	80	70
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	84
	Scrapers	2	40%	84	84	3	87	87	80	83	83
	Loaders	2	40%	79	79	3	82	82	75	78	78
Beals Point Borrow	Dump Trucks	4	40%	76	76	6	82	82	72	78	78
Development (All Alt.)	Concrete Trucks	0	40%	79 94	79	0	0	0	0 74	77	0
	Blasting Onsite Hauling Trucks	<u>2</u> 6	1% 40%	76	84 76	3 7	97 83	87 83	72	80	67 80
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total	,	1070	55	00	Ů	100	94	, and the second	95	89
	Dozers	2	40%	82	82	3	85	85	78	81	81
	Water Truck	1	40%	76	76	0	76	76	72	72	72
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Loaders	1	40%	79	79	0	79	79	75	75	75
	Small Crane	0	16%	81	81	0	0	0	0	0	0
Dike 5 & 6 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76
Excavation & Construction	Dump Trucks	7	40%	76	76	8	84	84	72	80	80
(All Alts.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
	Onsite Hauling Trucks	7	40%	76	76	8	84	84	72	80	80
	Offsite Hauling Trucks	4	40%	76	76	5	81	81	72	77	77
	Rock Crushing/Screening Concrete Batch Plant	1	80% 15%	94 83	84 83	0	94 83	84 83	93 75	93 75	83 75
		'	15%	83	83	U	96	93	75	94	89
	Total	0	40%	82	82	0	0	0	0	0	0
	Dozers Scrapers	0	40%	84	84	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0
Mooney Ridge Stripping,	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
Excavation & Construction	Onsite Hauling Trucks	0	40%	84	84	0	0	0	0	0	0
Alt. 2, 4 & 5)	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						0	0		0	0
	Dozers	2	40%	82	82	3	85	85	78	81	81
	Water Truck	2	40%	76	76	3	79	79	72	75	75
	Grader with Rippers	0	40%	85	85	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Loaders	2	40% 20%	79 83	79 83	3	82	82	75 76	78 76	78 76
MIAD - Excavate & Replace	Compactors Dump Trucks	1 4	40%	76	76	6	83 82	83 82	76	78	78
Foundation (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
	Onsite Hauling Trucks	4	40%	76	76	6	82	82	72	78	78
	Offsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						96	91		94	88
	Dozers	1	40%	82	82	0	82	82	78	78	78
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	84
	Excavators	2	40%	81	81	3	84	84	77	80	80
MIAD - Shell & Raise	Loaders	5	40%	79	79	7	86	86	75	82	82
Foundation (Alt. 1, 3 & 4)	Compactors	1	20%	83	83	0	83	83	76	76	76
	Dump Trucks	4	40%	76	76	6	82	82	72	78	78
	Concrete Trucks	0	40%	79	79	0	93	93	0	0 88	0 88
	Total	2	400/	02	92	2			70		
	Dozers Graders with Rippers	1	40% 40%	82 85	82 85	0	85 85	85 85	78 81	81 81	81 81
	Loaders with Rippers	1	40%	79	79	0	79	79	75	75	75
	Dump Trucks	5	40%	76	76	7	83	83	72	79	79
MIAD Jet Grouting (Alt. 1, 3	Drill Rigs	2	20%	85	75	3	88	78	78	81	71
& 4)	Pumps (Jet Grouting)	2	50%	77	77	3	80	80	74	77	77
Ī '	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
								76			72
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	12
	Offsite Hauling Trucks Concrete Batch Plant	0	40% 15%	83	83	0	0	0	0	0	0

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Alternative 1 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

DETAIL Const. NoiseAnalysis

		Estimated Equipment Numbers Per	Usage	Equipment L _{max}	BACT L _{max}	Add to Single Source Level	Total Lmax	BACT Total Lmax	Equipment L _{eq}	Total L _{eq}	BACT Total L _{eq}
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	0	40%	82	82	0	0	0	0	0	0
	Water Truck	0	40%	76	76	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Loaders	0	40% 20%	79 83	79 83	0	0	0	0	0	0
Dike 7 & 8 Stripping,	Compactors Dump Trucks	0	40%	76	76	0	0	0	0	0	0
Excavation & Construction	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						0	0		0	0
	Drill Rigs	0	20%	84	74	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0
	Scrapers	0	40%	84	84 79	0	0	0	0	0	0
Granite Bay Borrow	Loaders Dump Trucks	0	40% 40%	79 84	84	0	0	0	0	0	0
Development (Alt. 2, 3, 4 &	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
5)	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
•	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Blasting	0	1%	94	84	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0
	Total						0	0		0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0
Dilea 4 O. 9. O Chrimmian	Compactors	0	20%	83	83 79	0	0	0	0	0	0
Dike 1, 2 & 3 Stripping, Excavation & Construction	Concrete Trucks Dump Trucks	0	40% 40%	79 76	76	0	0	0	0	0	0
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
(All: 2, 0, 4 & 0)	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						0	0		0	0
	Dozers	2	40%	82	82	3	85	85	78	81	81
	Water Truck	1	40%	76	76	0	76	76	72	72	72
	Compactors	2	20%	83	80	3	86	83	76	79	76
	Excavators	1	40%	81	81	0	81	81	77	77	77
	Loaders Compactors	1	40% 20%	79 83	79 83	0	79 83	79 83	75 76	75 76	75 76
Dike 4 Stripping, Excavation	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
& Construction (All Alt.)	Dump Trucks	7	40%	76	76	8	84	84	72	80	80
	Onsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						96	92		94	88
	Small Crane	0	16%	81	81	0	0	0	0	0	0
Main Concrete Dam Raise	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
(Alt. 2, 3, 4 & 5)	Dump Trucks	0	40%	76	76	0	0	0	0	0	0
	Concrete Batch Plant Total	0	15%	83	83	0	0	0	0	0	0
	Drill Rigs	0	20%	84	7.4	0	0	0	0	0	0
	Dozers Dozers	2	40%	82	82	3	85	85	78	81	81
	Scrapers	0	40%	84	84	0	0	0	0	0	0
	Loaders	2	40%	79	79	3	82	82	75	78	78
Main Concrete Dam	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
Tendons and Shears (All	Dump Trucks	4	40%	76	76	6	82	82	72	78	78
Alts.)	Onsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	75
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72
	Pumps (Jet Grouting)	2	50%	81	77	3	84	80	78	81	77
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75
	Total	-	0007	6.1	7.		91	90		87	86
	Drill Rigs Graders with Pippers	0	20%	84	74	0	0	0	0	0	0
	Graders with Rippers Scrapers	0	40% 40%	85 84	85 84	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0
Folsom Point Area Borrow	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0
Area (Alt. 5 only)	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0
	Blasting	0	1%	94	84	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0
	Total						0	0		0	0

Notes:

Dump trucks category represent quarry, articulated and belly dump trucks.

Number of round trucktrips per hour estimated were based on on- and off-site haul and concrete truck projections over an 18-hour construction day. Yellow highlighted noise levels are based on the installation of either portable or stationary barriers capable of reducing noise levels by 10 dBA (See Readme file for barrier design information).

U.S. Army Corps, Folsom Dam Raise and Auxiliary Spillway Alternative PASSII Draft Report, Feburary 2006. FHWA, Roadway Construction Noise Model, January 2006.

P. Yastrow, Laku Landing Sound Level Analysis, April 1990.

CDM, 2006

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Alternative 2 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L_{max}	Source Level	Lmax	Lmax	L _{eq}	L_{eq}	L_{eq}	L _{eq}
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers Scrapers	3	40% 40%	85 84	85 84	5 5	90 89	90 89	81 80	86 85	81 80	86 85
Auxiliary Spillway Borrow	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Development Period (Alt. 1,	Dump Trucks	7	40%	76	76	8	84	84	72	80	72	80
2, 3 & 4)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	8 1	40% 80%	76 94	76 84	9	85 94	85 84	72	81 93	72	81 83
	Rock Crushing/Screening Concrete Batch Plant	1	15%	83	83	0	83	83	93 75	75	83 75	75
	Total		1370	0.5	00	Ů	100	95	75	95	73	91
	Dozers	2	40%	82	82	3	85	85	78	81	78	81
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Concrete Transit Mixers	0	20%	80	80	0	0	0	0	0	0	0
	Scrapers	0 2	40% 40%	84	84 81	3	0 84	0 84	77	0 80	77	0 80
	Excavators Loaders	2	40%	81 79	79	3	82	82	77 75	78	75	78
Auxiliary Spillway	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Construction (Alt. 1, 2, 3 &	Compactors	2	20%	83	83	3	86	86	76	79	76	79
4)	Concrete Trucks	1	40%	79	79	1	80	80	75	76	75	76
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Onsite Hauling Trucks Offsite Hauling Trucks	3	40% 40%	76 76	76 76	5	0 81	0 81	0 72	77	72	77
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						96	93		94		89
	Drill Rigs	1	20%	85	75	0	85	75	78	78	68	68
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Excavators Loaders	2	40% 40%	81 79	81 79	3	84 82	84 82	77 75	80 78	77 75	80 78
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
	Compactors	2	20%	83	83	3	86	86	76	79	76	79
Tunnel Construction	Dump Trucks	3	40%	76	76	5	81	81	72	77	72	77
(Alternative 2 only)	Concrete Trucks	2	40%	79	79	3	82	82	75	78	75	78
	Blasting	1	1%	94	84	0	94	84	74	74	64	64
	Onsite Hauling Trucks Offsite Hauling Trucks	3 1	40% 40%	76 76	76 76	5	81 76	81 76	72 72	77 72	72 72	77 72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						98	94		94		89
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Excavators Loaders	2	40% 40%	81 79	81 79	3	84 82	84 82	77 75	80 78	77 75	80 78
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
PWD Stripping Everyotics	Dump Trucks	10	40%	76	76	10	86	86	72	82	72	82
RWD Stripping, Excavation & Construction (All Alt.)	Concrete Trucks	1	40%	79	79	0	79	79	75	75	75	75
	Compactors	2	20%	83	83	3	86	86	76	79	76	79
	Onsite Hauling Trucks Offsite Hauling Trucks	7	40% 40%	76 76	76 76	8	84 82	84 82	72 72	80 78	72 72	80 78
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						97	94		94		90
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactor Scrapers	2	20% 40%	83 84	80 84	3	0 87	0 87	0 80	0 83	0 80	0 83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
LWD Outside 5	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
LWD Stripping, Excavation & Construction (All Alt.)	Dump Trucks	6	40%	76	76	8	84	84	72	80	72	80
Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Offsite Hauling Trucks Rock Crushing/Screening	3 1	40% 80%	76 94	76 84	5 0	81 94	81 84	72 93	77 93	72 83	77 83
	Concrete Batch Plant	1	15%	83	83	0	83	83	93 75	75	75	75
	Total		.570	30	30	Ĭ	96	93	. 0	94	. 0	89
	Total						-0			, ,		37

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Alternative 2 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

Beals Point Borrow Development (All Alt.) Dozense Beals Point Borrow Development (All Alt.) Dozense Beals Point Borrow Dozense Beals Dozense	uipment types ill Rigs aders with Rippers rapers aders aders unp Trucks uncrete Trucks asting site Hauling Trucks uck Crushing/Screening uncrete Batch Plant Total sizers ater Truck cavators aders anall Crane unpactors unp Trucks uncrete Trucks aders anall Crane unpactors un	Equipment Numbers Per Site 2 2 2 2 2 4 4 0 0 2 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Usage Factor 20% 40% 40% 40% 40% 40% 50% 40% 40% 40% 40% 15%	Equipment L _{max} @ 50' 84 85 84 79 76 79 94 76 94 83	L _{max} @ 50' 74 85 84 79 76 79 84 83	Add to Single Source Level (dBA) 3 3 3 6 0 0 0 0 0	Emax @ 50' 87 88 87 82 82 0 97 82 94 83 100	BACT Total Lmax @ 50' 77 88 87 82 82 0 87 82 84 83 94	© 50' 77 81 80 75 72 0 74 72 93 75	L _{eq} @ 50' 80 84 83 78 0 77 78 93 75 95	L _{eq} @ 50' 67 81 80 75 72 0 64 72 83 75	L _{eq} @ 50' 70 84 83 78 78 0 67 78 83 75
Beals Point Borrow Development (All Alt.) Bila On: Roo Cor Do Wa Excavation & Construction (All Alts.)	ill Rigs aders with Rippers rapers aders amp Trucks imp Trucks	Site 2 2 2 4 0 2 4 1 1 1 1 1 1 1	20% 40% 40% 40% 40% 40% 1% 40% 80% 15% 40% 40% 40%	84 85 84 79 79 79 94 76 94 83	74 85 84 79 76 79 84 76 84 83	3 3 3 3 6 0 0	87 88 87 82 82 0 97 82 94 83	77 88 87 82 82 0 87 87 82 84	77 81 80 75 72 0 74 72 93	80 84 83 78 78 0 77 78 93 75	67 81 80 75 72 0 64 72 83	70 84 83 78 78 0 67 78 83
Beals Point Borrow Development (All Alt.) Doi No No No No No No No No No No No No No	ill Rigs aders with Rippers rapers aders amp Trucks imp Trucks	2 2 2 4 0 2 4 1 1 1 1 1 1	40% 40% 40% 40% 40% 1% 40% 80% 15% 40% 40% 40%	85 84 79 76 79 94 76 94 83	85 84 79 76 79 84 76 84 83	3 3 3 6 0 3 6 0	88 87 82 82 0 97 82 94 83	88 87 82 82 0 87 82 84 83	81 80 75 72 0 74 72 93	84 83 78 78 0 77 78 93 75	81 80 75 72 0 64 72 83	84 83 78 78 0 67 78 83
Beals Point Borrow Development (All Alt.) Beals Point Borrow Development (All Alt.) Do: Wa Exc Loa Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	rapers aders aders imp Trucks increte Trucks asting isite Hauling Trucks oke Crushing/Screening increte Batch Plant Total izers atter Truck cavators aders anall Crane impactors imp Trucks	2 2 4 0 2 4 1 1 1 1 1 1	40% 40% 40% 40% 1% 40% 80% 15% 40% 40% 40%	84 79 76 79 94 76 94 83 82 76	84 79 76 79 84 76 84 83	3 3 6 0 3 6 0	87 82 82 0 97 82 94 83 100	87 82 82 0 87 82 84 83	80 75 72 0 74 72 93	83 78 78 0 77 78 93 75	80 75 72 0 64 72 83	83 78 78 0 67 78 83
Beals Point Borrow Development (All Alt.) Bial On: Roc Cor Do: Wa Exc Loc Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	aders Imp Trucks Imp T	2 4 0 2 4 1 1 1 1 1 1	40% 40% 40% 1% 40% 80% 15% 40% 40% 40%	79 76 79 94 76 94 83 82 76	79 76 79 84 76 84 83	3 6 0 3 6 0	82 82 0 97 82 94 83	82 82 0 87 82 84 83	75 72 0 74 72 93	78 78 0 77 78 93 75	75 72 0 64 72 83	78 78 0 67 78 83
Beals Point Borrow Development (All Alt.) Bla On: Rori Wa Exc Los Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	Imp Trucks Imp Trucks Increte Trucks Insite Hauling Trucks Increte Batch Plant Increte	4 0 2 4 1 1 1 1 1 1 1	40% 40% 1% 40% 80% 15% 40% 40% 40%	76 79 94 76 94 83 82 76	76 79 84 76 84 83	6 0 3 6 0	82 0 97 82 94 83 100	82 0 87 82 84 83	72 0 74 72 93	78 0 77 78 93 75	72 0 64 72 83	78 0 67 78 83
Development (All Alt.) Bla On: Roo Cor Do: Wa Exx Loa Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	norrete Trucks asting asting sisite Hauling Trucks ock Crushing/Screening oncrete Batch Plant Total ozers ater Truck cavators aders anall Crane impactors imp Trucks	0 2 4 1 1 1 1 1 1 1 1	40% 1% 40% 80% 15% 40% 40% 40%	79 94 76 94 83 82 76	79 84 76 84 83	0 3 6 0	0 97 82 94 83 100	0 87 82 84 83	0 74 72 93	0 77 78 93 75	0 64 72 83	0 67 78 83
Development (All Alt.) Discription of the control	asting site Hauling Trucks ck Crushing/Screening wherete Batch Plant Total szers ater Truck cavators aders anall Crane impactors imp Trucks	2 4 1 1 1 1 1 1 1 1	1% 40% 80% 15% 40% 40% 40% 40%	94 76 94 83 82 76	84 76 84 83	3 6 0 0	97 82 94 83 100	87 82 84 83	74 72 93	77 78 93 75	64 72 83	67 78 83
Ons Roc Cor Doz Wa Exc Los Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	usite Hauling Trucks uck Crushing/Screening uncrete Batch Plant Total uzers ater Truck cavators aders anall Crane umpactors ump Trucks	4 1 1 1 1 1 1 1 1	40% 80% 15% 40% 40% 40% 40%	76 94 83 82 76	76 84 83 82	6 0 0	82 94 83 100	82 84 83	72 93	78 93 75	72 83	78 83
Roc Cor Wa Exc Loa Sm Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	inck Crushing/Screening increte Batch Plant Total izers ater Truck cavators aders nall Crane impactors imp Trucks	1 1 1 1 1 1 1 1	80% 15% 40% 40% 40% 40%	94 83 82 76	84 83 82	0	94 83 100	84 83	93	93 75	83	83
Dive 5 & 6 Stripping, Excavation & Construction (All Alts.)	Total Increte Batch Plant Total Increte Batch Plant Increte Batch Pl	1 1 1 1 1 1	15% 40% 40% 40% 40%	83 82 76	83 82	0	83 100	83		75		
Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	Total szers ater Truck cavators aders nall Crane impactors imp Trucks	1 1 1 1	40% 40% 40% 40%	82 76	82		100		70		70	70
Wa Exc Loa Dike 5 & 6 Stripping, Cori Excavation & Construction (All Alts.)	ozers ater Truck cavators aders anall Crane impactors imp Trucks	1 1 1	40% 40% 40%	76		0						89
Wa Exc Loa Dike 5 & 6 Stripping, Cori Excavation & Construction (All Alts.)	ater Truck cavators aders nall Crane impactors imp Trucks	1 1 1	40% 40% 40%	76			82	82	78	78	78	78
Dike 5 & 6 Stripping, Cor (All Alts.)	cavators aders nall Crane mpactors imp Trucks	1	40% 40%			0	76	76	72	72	72	72
Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	nall Crane Impactors Imp Trucks	1			81	0	81	81	77	77	77	77
Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)	mpactors Imp Trucks		4.00/	79	79	0	79	79	75	75	75	75
Excavation & Construction Dur (All Alts.)	imp Trucks	1	10%	81	81	0	81	81	73	73	73	73
(All Alts.)			20%	83	83	0	83	83	76	76	76	76
	ncrete Trucks	10	40%	76	76	10	86	86	72	82	72	82
Ons		0	40%	79	79	0	0	0	0	0	0	0
. —	site Hauling Trucks	10	40%	76	76	10	86	86	72	82	72	82
	fsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	ock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
Cor	ncrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						96	93		94		89
	zers	1	40%	82	82	0	82	82	78	78	78	78
I	rapers	2	40%	84	84	3	87	87	80	83	80	83
	aders Imp Trucks	2	40% 40%	79 76	79	3	82	82 81	75 70	78 77	75	78 77
Mooney Ridge Stripping —	ncrete Trucks	3 0	40%	79	76 79	5 0	81 0	0	72 0	0	72 0	0
Excavation & Construction	nsite Hauling Trucks	3	40%	84	84	5	89	89	80	85	80	85
I(Alt. 2. 4 & 5)	fsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	ock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	ncrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
-	Total	-					96	93	_	94		90
Do:	zers	1	40%	82	82	0	82	82	78	78	78	78
	ater Truck	1	40%	76	76	0	76	76	72	72	72	72
I	ader with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	cavators	2	40%	81	81	3	84	84	77	80	77	80
Loa	aders	2	40%	79	79	3	82	82	75	78	75	78
MIAD - Excavate & Replace	mpactors	1	20%	83	83	0	83	83	76	76	76	76
Foundation (All Alt)	ımp Trucks	4	40%	76	76	6	82	82	72	78	72	78
Cor	ncrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	site Hauling Trucks	4	40%	76	76	6	82	82	72	78	72	78
	fsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
	ock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
Cor	ncrete Batch Plant	0	15%	83	83	0	9 6	0 92	0	94	0	0 88
Da	Total	0	400/	00	00	0			0		0	
	zers aders with Rippers	0	40% 40%	82 85	82 85	0	0	0	0	0	0	0
	cavators	0	40%	81	81	0	0	0	0	0	0	0
I	cavators aders	0	40%	79	79	0	0	0	0	0	0	0
	mpactors	0	20%	83	83	0	0	0	0	0	0	0
	imp Trucks	0	40%	76	76	0	0	0	0	0	0	0
	ncrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Total	,				Ů	0	0		0		0
IDo:	zers	0	40%	82	82	0	0	0	0	0	0	0
	aders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	aders	0	40%	79	79	0	0	0	0	0	0	0
	Imp Trucks	0	40%	76	76	0	0	0	0	0	0	0
	ill Rigs	0	20%	85	75	0	0	0	0	0	0	0
	mps (Jet Grouting)	0	50%	77	77	0	0	0	0	0	0	0
	ncrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	fsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
Cor	ncrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						0	0		0		0

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Alternative 2 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Fauinment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L _{max}	Source Level	Lmax	Lmax	L _{eq}	L _{eq}	Leq	L _{eq}
Comptunation Activities	Facilities and forman	Numbers Per	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
Construction Activities	Equipment types Dozers	Site 1	40%	@ 50 82	@ 50 82	(GBA)	@ 50	@ 50 82	₩ 50 78	₩ 50 78	₩ 50 78	@ 50
	Water Truck	0	40%	76	76	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 7 & 8 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Excavation & Construction	Dump Trucks Concrete Trucks	0	40% 40%	76 79	76 79	3 0	79 0	79 0	72 0	75 0	72 0	75 0
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	5	40%	76	76	7	83	83	72	79	72	79
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant Total	0	15%	83	83	0	0 95	0 91	0	0 94	0	0 87
	Drill Rigs	1	20%	84	74	0	84	74	77	77	67	67
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Granite Bay Borrow	Dump Trucks	0	40% 40%	84 79	84 79	3 0	87 0	87 0	80 0	83 0	80	83
Development (Alt. 2, 3, 4 & 5)	Concrete Trucks Onsite Hauling Trucks	2	40%	79	79	3	79	79	72	75	72	75
Ī ,	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting	1	1%	94	84	0	94	84	74	74	64	64
	Rock Crushing/Screening	2	80%	94	84	3	97	87	93	96	83	86
	Total		4001	00	00		100	94	70	97	70	91
	Dozers	1	40% 40%	82 81	82 81	0	82 81	82 81	78 77	78 77	78 77	78 77
	Excavators Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Dike 1, 2 & 3 Stripping,	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Excavation & Construction	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	7	40% 40%	76 76	76 76	8 7	84 83	84 83	72 72	80 79	72 72	80 79
	Offsite Hauling Trucks Rock Crushing/Screening	<u>6</u> 1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	91		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactors Excavators	0	20% 40%	83 81	80 81	0	0 81	0 81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Diles 4 Chinaina Evenuation	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Dike 4 Stripping, Excavation & Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
a conduction (7 in 7 iii)	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Onsite Hauling Trucks Offsite Hauling Trucks	0	40% 40%	76 76	76 76	0	76 0	76 0	72 0	72 0	72 0	72 0
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						95	90		94		87
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Main Concrete Dam Raise	Concrete Trucks	2	40% 40%	79 76	79 76	3 0	82	82 76	75	78 72	75 72	78 72
(Alt. 2, 3, 4 & 5)	Dump Trucks Concrete Batch Plant	1	15%	83	83	0	76 83	83	72 75	75	72 75	75
	Total			-			87	87		81		81
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Scrapers Loaders	2	40% 40%	84 79	84 79	3	87 82	87 82	80 75	83 78	80 75	83 78
Main Concrete Dam	Concrete Trucks	1	40%	79	79 79	3 0	79	79	75 75	78 75	75 75	78
Tendons and Shears (All	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Alts.)	Onsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Pumps (Jet Grouting) Concrete Batch Plant	2	50% 15%	81 83	77 83	3 0	84 83	80 83	78 75	81 75	74 75	77 75
	Total	'	1370	US	US	J	93	91	10	88	10	87
	Drill Rigs	0	20%	84	74	0	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Folsom Point Area Borrow	Dump Trucks Concrete Trucks	0	40% 40%	76 79	76 79	0	0	0	0	0	0	0
Area (Alt. 5 only)	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting	0	1%	94	84	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant Total	0	15%	83	83	0	0	0	0	0	0	0

Notes:

Dump trucks category represent quarry, articulated and belly dump trucks.

Number of round trucktrips per hour estimated were based on on- and off-site haul and concrete truck projections over an 18-hour construction day. Yellow highlighted noise levels are based on the installation of either portable or stationary barriers capable of reducing noise levels by 10 dBA (See Readme file for barrier design information).

Sources:

U.S. Army Corps, Folsom Dam Raise and Auxiliary Spillway Alternative PASSII Draft Report, Feburary 2006.

FHWA, Roadway Construction Noise Model, January 2006.

P. Yastrow, Laku Landing Sound Level Analysis, April 1990.

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Alternative 3 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

Total

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L_{max}	Source Level	Lmax	Lmax	L _{eq}	L_{eq}	L_{eq}	L _{eq}
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
Construction Activities	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers	3	40%	85	85	5	90	90	81	86	81	86
	Scrapers	3	40%	84	84	5	89	89	80	85	80	85
Auxiliary Spillway Borrow	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Development Period (Alt. 1, 2, 3 & 4)	Dump Trucks Concrete Trucks	7	40% 40%	76 79	76 79	8	84 0	84 0	72 0	80 0	72 0	80
2, 3 & 4)	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						100	95		95		91
	Dozers	2	40%	82	82	3	85	85	78	81	78	81
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Concrete Transit Mixers	0	20% 40%	80 84	80 84	0	0	0	0	0	0	0
	Scrapers Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Auxiliary Spillway	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Construction (Alt. 1, 2, 3 &	Compactors	2	20%	83	83	3	86	86	76	79	76	79
4)	Concrete Trucks	1	40%	79	79	1	80	80	75	76	75	76
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40% 40%	76 76	76 76	0	0	0 81	72	77	0	77
	Offsite Hauling Trucks Rock Crushing/Screening	3 1	80%	94	84	5 0	81 94	84	93	93	72 83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total		1070			Ů	96	93		94	- 10	89
	Drill Rigs	0	20%	85	75	0	0	0	0	0	0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
	Small Crane	0	16% 20%	81 83	81 83	0	0	0	0	0	0	0
Tunnel Construction	Compactors Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
(Alternative 2 only)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
, , , , , , , , , , , , , , , , , , , ,	Blasting	0	1%	94	84	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total Dozers	1	40%	82	92	0	82	82	78	78	78	78
	Water Truck	1	40%	76	82 76	0	76	76	78	78	78	72
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
RWD Stripping, Excavation	Dump Trucks	10	40%	76	76	10	86	86	72	82	72	82
& Construction (All Alt.)	Concrete Trucks	1	40%	79	79	0	79	79	75	75	75	75
] ` ´	Compactors Opeito Hauling Trucks	7	20%	83 76	83 76	3 8	86 84	86 84	76 72	79 80	76 72	79 80
	Onsite Hauling Trucks Offsite Hauling Trucks	4	40% 40%	76	76	6	84 82	82	72	78	72	78
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						97	94		94		90
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactor	0	20%	83	80	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders Small Crane	1	40% 16%	79 81	79 81	3 0	82 81	82 81	75 73	78 73	75 73	78 73
LWD Stripping, Excavation &	Dump Trucks	6	40%	76	76	8	84	84	72	80	72	80
Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Offsite Hauling Trucks	3	40%	76	76	5	81	81	72	77	72	77
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75

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Alternative 3 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

	I	Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Fauinment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L _{max}	Source Level	Lmax	Lmax	L _{eq}	L _{eq}	L _{eq}	L _{eq}
		Numbers Per	•									
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers	2	40% 40%	85 84	85 84	3	88 87	88 87	81 80	84 83	81 80	84 83
	Scrapers Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Beals Point Borrow	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Development (All Alt.)	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total		100/	20			100	94	70	95	70	89
	Dozers Weter Truel	1	40% 40%	82 76	82 76	0	82 76	82	78	78	78	78
	Water Truck Excavators	1	40%	81	81	0	81	76 81	72 77	72 77	72 77	72 77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Dike 5 & 6 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Excavation & Construction	Dump Trucks	10	40%	76	76	10	86	86	72	82	72	82
(All Alts.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	10	40%	76	76	10	86	86	72	82	72	82
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening Concrete Batch Plant	1	80% 15%	94 83	84 83	0	94 83	84 83	93 75	93 75	83 75	83 75
	Total	1	1376	03	03	U	96	93	75	94	70	89
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Managar Didan Chrimaina	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
Mooney Ridge Stripping, Excavation & Construction	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Alt. 2, 4 & 5)	Onsite Hauling Trucks	0	40%	84	84	0	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant Total	0	15%	83	83	0	0	0	0	0	0	0
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Grader with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
MIAD - Excavate & Replace	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Foundation (All Alt.)	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Concrete Trucks	0	40%	79	79	0	0	0	0 70	0 70	0	0 70
	Onsite Hauling Trucks Offsite Hauling Trucks	2	40% 40%	76 76	76 76	6	82 79	82 79	72 72	78 75	72 72	78 75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	92		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
MIAD - Shell & Raise	Loaders	5	40%	79	79	7	86	86	75	82	75	82
Foundation (Alt. 1, 3 & 4)	Compactors	1	20%	83	83	0	83	83	76	76	76	76
	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Concrete Trucks Total	0	40%	79	79	0	93	93	0	0 88	0	0 88
	Dozers	2	40%	82	82	3	9 3 85	85	78	81	78	81
	Graders with Rippers	1	40%	85	85	0	85	85	81	81	81	81
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Dump Trucks	5	40%	76	76	7	83	83	72	79	72	79
MIAD Jet Grouting (Alt. 1, 3	Drill Rigs	2	20%	85	75	3	88	78	78	81	68	71
& 4)	Pumps (Jet Grouting)	2	50%	77	77	3	80	80	74	77	74	77
	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						92	90		87		86

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Alternative 3 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated Equipment	Usage	Equipment L _{max}	BACT L _{max}	Add to Single Source Level	Total Lmax	BACT Total Lmax	Equipment L _{eq}	Total L _{eq}	BACT L _{eq}	BACT Total
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	0	40%	76	76	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 7 & 8 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Excavation & Construction	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
•	Onsite Hauling Trucks	5	40%	76	76 76	7	83 76	83	72	79	72 72	79 72
	Offsite Hauling Trucks	1	40% 80%	76 94	84	0	94	76 84	72 93	72 93	83	83
	Rock Crushing/Screening Concrete Batch Plant	0		83	83	0	0	0	0	0	0	0
	Total	U	15%	83	83	U	95	91	0	94	U	87
		4	200/	0.4	7.1	0		74	77		67	67
	Drill Rigs	1	20%	84	74 85	0	84 88		77	77 84	67 81	84
	Graders with Rippers	2	40% 40%	85 84	84	3	87	88 87	81 80	83	80	83
	Scrapers Loaders	2	40%	79	79	3	82	82	75	 78	75	78
Granite Bay Borrow	Dump Trucks	2	40%	84	84	3	87	87	80	83	80	83
Development (Alt. 2, 3, 4 &	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
5)	Onsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
-′	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting	1	1%	94	84	0	94	84	74	74	64	64
	Rock Crushing/Screening	2	80%	94	84	3	97	87	93	96	83	86
	Total	_	3370	3-1		J	100	94	30	97	30	91
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Dike 1, 2 & 3 Stripping,	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Excavation & Construction	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	7	40%	76	76	8	84	84	72	80	72	80
, , , , , , ,	Offsite Hauling Trucks	6	40%	76	76	7	83	83	72	79	72	79
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	91		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactors	0	20%	83	80	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dika 4 Stripping Evacuation	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Dike 4 Stripping, Excavation & Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
d Construction (All Ait.)	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Onsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						95	90		94		87
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Main Concrete Dam Raise	Concrete Trucks	2	40%	79	79	3	82	82	75	78	75	78
(Alt. 2, 3, 4 & 5)	Dump Trucks	1	40%	76	76	0	76	76	72	72	72	72
, , , , , , = = ,	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						87	87		81		81
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Main Concrete Dam	Concrete Trucks	1	40%	79	79	0	79	79	75	75	75	75
Tendons and Shears (All	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Alts.)	Onsite Hauling Trucks	2	40%	76 76	76	3	79	79	72	75	72	75
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Pumps (Jet Grouting)	2	50%	81	77	3	84	80	78	81	74	77
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total	-	0007	0.		6	93	91		88		87
	Drill Rigs	0	20%	84	74	0	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Folsom Point Area Borrow	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
Area (Alt. 5 only)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
, ,,	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting Book Cruphing/Sersoning	0	1%	94	84	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						0	0		0		0

Dump trucks category represent quarry, articulated and belly dump trucks.

Number of round trucktrips per hour estimated were based on on- and off-site haul and concrete truck projections over an 18-hour construction day. Yellow highlighted noise levels are based on the installation of either portable or stationary barriers capable of reducing noise levels by 10 dBA (See Readme file for barrier design information).

U.S. Army Corps, Folsom Dam Raise and Auxiliary Spillway Alternative PASSII Draft Report, Feburary 2006. FHWA, Roadway Construction Noise Model, January 2006. P. Yastrow, Laku Landing Sound Level Analysis, April 1990.

CDM, 2006

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Alternative 4 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment Numbers Per	Usage	L _{max}	L_{max}	Source Level	Lmax	Lmax	L _{eq}	L_{eq}	L _{eq}	L _{eq}
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators Drill Rigs	2	40% 20%	81 84	81 74	3	0 87	77	0 77	0 80	0 67	70
	Graders with Rippers	3	40%	85	85	5	90	90	81	86	81	86
	Scrapers	3	40%	84	84	5	89	89	80	85	80	85
Auxiliary Spillway Borrow	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Development Period (Alt. 1, 2, 3 & 4)	Dump Trucks Concrete Trucks	7	40% 40%	76 79	76 79	8	84 0	84 0	72 0	80 0	72 0	80 0
2, 3 & 4)	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total	2	400/	00	00	2	100	95	70	95	70	91
	Dozers Water Truck	1	40% 40%	82 76	82 76	0	85 76	85 76	78 72	81 72	78 72	81 72
	Concrete Transit Mixers	0	20%	80	80	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
Auxilian/ Spillway	Loaders Small Crano	2	40% 16%	79 81	79 81	3 0	82 81	82 81	75 73	78 73	75 73	78 73
Auxiliary Spillway Construction (Alt. 1, 2, 3 &	Small Crane Compactors	2	20%	83	83	3	86	86	73	73 79	73	73
4)	Concrete Trucks	1	40%	79	79	1	80	80	75	76	75	76
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Offsite Hauling Trucks Rock Crushing/Screening	3 1	40% 80%	76 94	76 84	5	81 94	81 84	72 93	77 93	72 83	77 83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total		1070	- 55	- 00	Ü	96	93		94		89
	Drill Rigs	0	20%	85	75	0	0	0	0	0	0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40% 40%	81 79	81 79	0	0	0	0	0	0	0
	Loaders Small Crane	0	16%	81	81	0	0	0	0	0	0	0
	Compactors	0	20%	83	83	0	0	0	0	0	0	0
Tunnel Construction	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
(Alternative 2 only)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	1% 40%	94 76	84 76	0	0	0	0	0	0	0
	Onsite Hauling Trucks Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						0	0		0		0
	Dozers Water Truck	1	40% 40%	82 76	82 76	0	82 76	82 76	78 72	78 72	78 72	78 72
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
RWD Stripping, Excavation	Dump Trucks	10	40%	76	76	10	86	86	72	82	72	82
& Construction (All Alt.)	Concrete Trucks Compactors	2	40% 20%	79 83	79 83	3	0 86	0 86	0 76	0 79	0 76	0 79
	Onsite Hauling Trucks	7	40%	76	76	8	84	84	72	80	72	80
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total Dozers	1	40%	82	82	0	97 82	94 82	78	94 78	78	89 78
	Water Truck	1	40%	76	76	0	76	76	78	78	78	78
	Compactor	0	20%	83	80	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
LWD Stripping, Excavation 8	Small Crane Dump Trucks	1 6	16% 40%	81 76	81 76	0 8	81 84	81 84	73 72	73 80	73 72	73 80
Construction (All Alt.)	Concrete Trucks	0	40%	76	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	7	40%	76	76	8	84	84	72	80	72	80
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant Total	1	15%	83	83	0	83 96	83 93	75	75 94	75	75 89
<u> </u>	Total						70	73		/7		37

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Alternative 4 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated Equipment	Usage	Equipment L _{max}	BACT L _{max}	Add to Single Source Level	Total Lmax	BACT Total Lmax	Equipment L _{eq}	Total L _{eq}	BACT L _{eq}	BACT Total
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Beals Point Borrow	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Development (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Zovolopinom (zm. zm.)	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83 100	83 94	75	75 95	75	75 89
	Total	4	400/	00	00	0			70		70	
	Dozers Water Truck	1	40%	82	82	0	82	82	78	78	78	78
			40%	76	76	0	76	76	72 77	72	72	72 77
	Excavators Loaders	1	40% 40%	81 79	81 79	0	81 79	81 79	75	77 75	77 75	75
		1	16%	81	81	0	81	81		73	73	73
Dike 5 & 6 Stripping,	Small Crane Compactors	1	20%	83	83	0	83	83	73 76	73 76	76	76
Excavation & Construction	Dump Trucks	12	40%	76	76	11	87	87	70	83	72	83
(All Alts.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
(Cili Alto.)	Onsite Hauling Trucks	12	40%	76	76	11	87	87	72	83	72	83
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total		1070			Ü	96	93		94		89
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Dump Trucks	3	40%	76	76	5	81	81	72	77	72	77
Mooney Ridge Stripping,	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Excavation & Construction	Onsite Hauling Trucks	0	40%	84	84	0	0	0	0	0	0	0
Alt. 2, 4 & 5)	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0.1	15%	83	83	0	0	0	0	0	0	0
	Total						95	91		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Grader with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
MIAD Francista & Danlasa	Compactors	1	20%	83	83	0	83	83	76	76	76	76
MIAD - Excavate & Replace Foundation (All Alt.)	Dump Trucks	5	40%	76	76	7	83	83	72	79	72	79
Foundation (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	5	40%	76	76	7	83	83	72	79	72	79
	Offsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	92		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
MIAD - Shell & Raise	Loaders	5	40%	79	79	7	86	86	75	82	75	82
Foundation (Alt. 1, 3 & 4)	Compactors	1	20%	83	83	0	83	83	76	76	76	76
	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Total						93	93		88		88
	Dozers	2	40%	82	82	3	85	85	78	81	78	81
	Graders with Rippers	1	40%	85	85	0	85	85	81	81	81	81
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
l	Dump Trucks	5	40%	76	76	7	83	83	72	79	72	79
MIAD Jet Grouting (Alt. 1, 3		2	20%	85	75	3	88	78	78	81	68	71
& 4)	Pumps (Jet Grouting)	2	50%	77	77	3	80	80	74	77	74	77
	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
		0	15%		U2	0	0		0	0	0	0
	Concrete Batch Plant Total	-	1370	83	83	U	92	90	U	87	U	86

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Alternative 4 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated Equipment	Usage	Equipment L _{max}	BACT L _{max}	Add to Single Source Level	Total Lmax	BACT Total Lmax	Equipment L _{eq}	Total L _{eq}	BACT L _{eq}	BACT Total
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	0	40%	76	76	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 7 & 8 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Excavation & Construction	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
,	Onsite Hauling Trucks	5	40%	76	76	7	83	83	72	79	72	79
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant Total	0	15%	83	83	0	0 95	0 91	0	94	0	87
		4	000/	0.4	7.4	^			77		07	
	Drill Rigs	1	20%	84	74	0	84	74	77	77	67	67
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
O'1- B B	Loaders	3	40% 40%	79 84	79 84	3	82 89	82 89	75	78 85	75 80	78 85
Granite Bay Borrow	Dump Trucks	0	40%	79	79	5 0	0	0	80 0	0	0	0
Development (Alt. 2, 3, 4 & 5)	Concrete Trucks Onsite Hauling Trucks	3	40%	79 76	79 76	5	81	81	72	77	72	77
٠,	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting	1	1%	94	84	0	94	84	74	74	64	64
	Rock Crushing/Screening	3	80%	94	84	5	99	89	93	98	83	88
	Total	,	0070	57	UT		101	95	33	98	33	92
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Dike 1, 2 & 3 Stripping,	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Excavation & Construction	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	6	40%	76	76	8	84	84	72	80	72	80
, , , , , , , , , , , , , , , , , , , ,	Offsite Hauling Trucks	6	40%	76	76	7	83	83	72	79	72	79
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	91		94		88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactors	0	20%	83	80	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 4 Stripping, Excavation	Compactors	1	20%	83	83	0	83	83	76	76	76	76
& Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
a construction (All Alt.)	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Onsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						95	90		94		87
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Main Concrete Dam Raise	Concrete Trucks	2	40%	79	79	3	82	82	75	78	75	78
(Alt. 2, 3, 4 & 5)	Dump Trucks	1	40%	76	76	0	76	76	72	72	72	72
, -, -, -,	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total	_				_	87	87		81		81
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
Main Company Down	Loaders Truelle	2	40%	79	79	3	82	82	75 75	78	75	78
Main Concrete Dam	Concrete Trucks	4	40%	79 76	79	0	79	79 82	75 72	75	75	75 78
Tendons and Shears (All Alts.)	Dump Trucks	2	40% 40%	76	76 76	6 3	82 79	79	72	78 75	72 72	78 75
nito.)	Onsite Hauling Trucks Offsite Hauling Trucks	1	40%	76	76	0	79	79	72	75 72	72	75
	Pumps (Jet Grouting)	2	50%	81	77	3	84	80	78	81	74	77
	Concrete Batch Plant	1	15%	81	83	0	83	83	78 75	75	75	75
	Total	'	13/0	00	00	0	93	91	,,,	88	7.5	87
		0	200/	84	74	0	0	0	0	0	0	0
	Drill Rigs Graders with Rippers	0	20% 40%	84 85	85	0	0	0	0	0	0	0
		0	40%	85	84	0	0	0	0	0	0	0
	Scrapers Loaders	0	40%	79	79	0	0	0	0	0	0	0
		0	40%		79	0	0	0	0	0	0	0
Folsom Point Area Borrow	Dump Trucks Concrete Trucks	0	40%	76 79	76 79	0	0	0	0	0	0	0
Area (Alt. 5 only)	Onsite Hauling Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Blasting	0	1%	94	76 84	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total		1370	03	US	0	0	0	U	0	U	0
							U	ı U		U		4 0

Dump trucks category represent quarry, articulated and belly dump trucks.

Number of round trucktrips per hour estimated were based on on- and off-site haul and concrete truck projections over an 18-hour construction day. Yellow highlighted noise levels are based on the installation of either portable or stationary barriers capable of reducing noise levels by 10 dBA (See Readme file for barrier design information).

Sources

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Alternative 5 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L _{max}	Source Level	Lmax	Lmax	L _{eq}	L _{eq}	L _{eq}	L _{eq}
		Numbers Per	osage	−max	- max	Source Level	Liliax	Liliax	-eq	-eq	-eq	—eq
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Drill Rigs	0	20%	84	74	0	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
Auxiliary Spillway Borrow	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Development Period (Alt. 1,	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
2, 3 & 4)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Blasting	0	1%	94	84	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0		0		0
	Concrete Batch Plant Total	U	15%	83	83	0	0	0	0	0	0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Water Truck	0	40%	76	76	0	0	0	0	0	0	0
	Concrete Transit Mixers	0	20%	80	80	0	0	0	0	0	0	0
	Scrapers	0	40%	84	84	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Auxiliary Spillway	Small Crane	0	16%	81	81	0	0	0	0	0	0	0
Construction (Alt. 1, 2, 3 &	Compactors	0	20%	83	83	0	0	0	0	0	0	0
4)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						0	0		0		0
	Drill Rigs	0	20%	85	75	0	0	0	0	0	0	0
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Excavators	0	40%	81	81	0	0	0	0	0	0	0
	Loaders Small Crane	0	40% 16%	79 81	79 81	0	0	0	0	0	0	0
	Compactors	0	20%	83	83	0	0	0	0	0	0	0
Tunnel Construction	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
(Alternative 2 only)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
(Anternative 2 only)	Blasting	0	1%	94	84	0	0	0	0	0	0	0
	Onsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	0	80%	94	84	0	0	0	0	0	0	0
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						0	0		0		0
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
RWD Stripping, Excavation	Dump Trucks	10	40%	76	76	10	86	86	72	82	72	82
& Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0 76	0
, ,	Compactors Opeits Hauling Trucks	7	20% 40%	83 76	83 76	3 8	86 84	86	76 72	79 80	76 72	79 80
	Onsite Hauling Trucks Offsite Hauling Trucks	2	40%	76	76	3	79	84 79	72	75	72	75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total		.570	30	30	, i	97	94	. 0	94	. 0	89
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactor	0	20%	83	80	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
LWD Stripping Francist - 0	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
LWD Stripping, Excavation &	Dump Trucks	6	40%	76	76	8	84	84	72	80	72	80
Construction (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	I Dook Cruphing/Corooning	1	80%	94	84	0	94	84	93	93	83	83
	Rock Crushing/Screening											
	Concrete Batch Plant Total	1	15%	83	83	0	83 96	83 93	75	75 94	75	75 89

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Alternative 5 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment Numbers Per	Usage	L _{max}	L_{max}	Source Level	Lmax	Lmax	L _{eq}	L_{eq}	L_{eq}	L_{eq}
Construction Activities	Equipment types	Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Beals Point Borrow	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Development (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Blasting	2	1%	94	84	3	97	87	74	77	64	67
	Onsite Hauling Trucks	1	40%	76	76	6	82	82	72	78	72	78
	Rock Crushing/Screening Concrete Batch Plant	1	80% 15%	94 83	84 83	0	94 83	84 83	93 75	93 75	83 75	83 75
	Total		1370	0.5	03	U	100	94	73	95	13	89
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
	Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Dike 5 & 6 Stripping,	Compactors	1	20%	83	83	0	83	83	76	76	76	76
Excavation & Construction	Dump Trucks	13	40%	76	76	11	87	87	72	83	72	83
(All Alts.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	13	40%	76	76	11	87	87	72	83	72	83
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	1	15%	83	83	0	83	83	75	75	75	75
	Total						97	94		94		89
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Mooney Ridge Stripping,	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Excavation & Construction	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
(Alt. 2, 4 & 5)	Onsite Hauling Trucks	4	40%	84	84	6	90	90	80	86	80	86
	Offsite Hauling Trucks	1	40% 80%	76 94	76 84	0	76 94	76 84	72	72 93	72 83	72 83
	Rock Crushing/Screening Concrete Batch Plant	0	15%	83	83	0	0	0	93	0	0	0
	Total	U	1370	65	03	0	97	94	0	95	- 0	90
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Grader with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Excavators	2	40%	81	81	3	84	84	77	80	77	80
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
	Compactors	1	20%	83	83	0	83	83	76	76	76	76
MIAD - Excavate & Replace	Dump Trucks	4	40%	76	76	6	82	82	72	78	72	78
Foundation (All Alt.)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Onsite Hauling Trucks	4	40%	76	76	6	82	82	72	78	72	78
	Offsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						96	92		94		88
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
MIAD Obell & Dele	Excavators	0	40%	81	81	0	0	0	0	0	0	0
MIAD - Shell & Raise	Loaders	0	40%	79	79	0	0	0	0	0	0	0
Foundation (Alt. 1, 3 & 4)	Compactors Dump Trucks	0	20% 40%	83 76	83 76	0	0	0	0	0	0	0
	Concrete Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Total		70 /0	13	13	0	0	0	J	0	U	0
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Graders with Rippers	0	40%	85	85	0	0	0	0	0	0	0
	Loaders	0	40%	79	79	0	0	0	0	0	0	0
	Dump Trucks	0	40%	76	76	0	0	0	0	0	0	0
MIAD Jet Grouting (Alt. 1, 3	Drill Rigs	0	20%	85	75	0	0	0	0	0	0	0
& 4)	Pumps (Jet Grouting)	0	50%	77	77	0	0	0	0	0	0	0
	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Concrete Batch Plant Total	0	15%	83	83	0	0	0	0	0	0	0

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Alternative 5 - Construction Equipment for Each Construction Activity Noise Levels (dBA)

		Estimated		Equipment	BACT	Add to Single	Total	BACT Total	Equipment	Total	BACT	BACT Total
		Equipment	Usage	L _{max}	L _{max}	Source Level	Lmax	Lmax	L _{eq}	L _{eq}	L _{eq}	L _{eq}
Construction Activities	Equipment types	Numbers Per Site	Factor	@ 50'	@ 50'	(dBA)	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
Construction Activities	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	0	40%	76	76	0	0	0	0	0	0	0
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders Compactors	1	40% 20%	79 83	79 83	0	79 83	79 83	75 76	75 76	75 76	75 76
Dike 7 & 8 Stripping,	Dump Trucks	2	40%	76	76	3	79	79	72	75	72	75
Excavation & Construction (Alt. 2, 3, 4 & 5)	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
(Onsite Hauling Trucks Offsite Hauling Trucks	5 1	40% 40%	76 76	76 76	7	83 76	83 76	72 72	79 72	72 72	79 72
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0	0	0	0	0	0
	Total						95	91		94		87
	Drill Rigs Graders with Rippers	2	20% 40%	84 85	74 85	3	84 88	74 88	77 81	77 84	67 81	67 84
	Scrapers Scrapers	2	40%	84	84	3	87	87	80	83	80	83
	Loaders	2	40%	79	79	3	82	82	75	78	75	78
Granite Bay Borrow	Dump Trucks	3 0	40% 40%	84 79	84 79	5 0	89	89	80	85 0	80	85 0
Development (Alt. 2, 3, 4 & 5)	Concrete Trucks Onsite Hauling Trucks	3	40%	79	79	5	81	81	72	77	72	77
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Blasting	1	1%	94	84	0	94	84	74	74	64	64
	Rock Crushing/Screening Total	2	80%	94	84	3	97 100	87 95	93	96 97	83	86 91
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Excavators	1	40%	81	81	0	81	81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 1, 2 & 3 Stripping,	Compactors Concrete Trucks	0	20% 40%	83 79	83 79	0	83	83	76 0	76 0	76 0	76 0
Excavation & Construction	Dump Trucks	2	40%	79	79	3	79	79	72	75	72	75
(Alt. 2, 3, 4 & 5)	Onsite Hauling Trucks	8	40%	76	76	9	85	85	72	81	72	81
	Offsite Hauling Trucks	6	40%	76	76	7	83	83	72	79	72	79
	Rock Crushing/Screening Concrete Batch Plant	0	80% 15%	94 83	84 83	0	94	84 0	93 0	93 0	83	83
	Total	U	1370	0.5	83	0	96	92	U	94	0	88
	Dozers	1	40%	82	82	0	82	82	78	78	78	78
	Water Truck	1	40%	76	76	0	76	76	72	72	72	72
	Compactors Excavators	0	20% 40%	83 81	80 81	0	0 81	0 81	77	77	77	77
	Loaders	1	40%	79	79	0	79	79	75	75	75	75
Dike 4 Stripping, Excavation	Compactors	1	20%	83	83	0	83	83	76	76	76	76
& Construction (All Alt.)	Concrete Trucks	0	40% 40%	79	79	7	0 83	0 83	0 70	0 79	72	79
	Dump Trucks Onsite Hauling Trucks	5 1	40%	76 76	76 76	0	76	76	72 72	79	72	79
	Offsite Hauling Trucks	0	40%	76	76	0	0	0	0	0	0	0
	Rock Crushing/Screening	1	80%	94	84	0	94	84	93	93	83	83
	Concrete Batch Plant	0	15%	83	83	0	0 95	90	0	0 94	0	0 87
	Total Small Crane	1	16%	81	81	0	81	81	73	73	73	73
Main Occasion Barry Bain	Concrete Trucks	2	40%	79	79	3	82	82	75	78	75	78
Main Concrete Dam Raise (Alt. 2, 3, 4 & 5)	Dump Trucks	1	40%	76	76	0	76	76	72	72	72	72
, _, .,,	Concrete Batch Plant	1	15%	83	83	0	83 87	83 87	75	75 91	75	75 91
	Total Drill Rigs	2	20%	84	74	3	8 7	87 77	77	81	67	81 70
	Dozers	0	40%	82	82	0	0	0	0	0	0	0
	Scrapers	2	40%	84	84	3	87	87	80	83	80	83
Main Concrete Dam	Loaders Concrete Trucks	2	40%	79	79	3	82	82	75 75	78	75 75	78
Main Concrete Dam Tendons and Shears (All	Concrete Trucks Dump Trucks	1 4	40% 40%	79 76	79 76	6	79 82	79 82	75 72	75 78	75 72	75 78
Alts.)	Onsite Hauling Trucks	2	40%	76	76	3	79	79	72	75	72	75
	Offsite Hauling Trucks	1	40%	76	76	0	76	76	72	72	72	72
	Pumps (Jet Grouting) Concrete Batch Plant	2	50% 15%	81 83	77 83	0	84 83	80 83	78 75	81 75	74 75	77 75
	Total		13/0	03	UJ	U	93	91	13	88	13	87
	Drill Rigs	2	20%	84	74	3	87	77	77	80	67	70
	Graders with Rippers	2	40%	85	85	3	88	88	81	84	81	84
	Scrapers	2	40% 40%	84 79	84 79	3	87 82	87 82	80 75	83 78	80 75	83 78
L	Loaders Dump Trucks	2	40%	79	79	3	79	79	75	78 75	75	75
Folsom Point Area Borrow	Concrete Trucks	0	40%	79	79	0	0	0	0	0	0	0
Area (Alt 5 only)			40%	76	76	3	79	79	72	75	72	75
Area (Alt. 5 only)	Onsite Hauling Trucks	2								-		
Area (Alt. 5 only)	Blasting	2 2	1%	94	84	3	97	87 84	74	77	64	67
Area (Alt. 5 only)								87 84 0	74 93 0	77 93 0		67 83 0

Notes:

Dump trucks category represent quarry, articulated and belly dump trucks.

Number of round trucktrips per hour estimated were based on on- and off-site haul and concrete truck projections over an 18-hour construction day.

Yellow highlighted noise levels are based on the installation of either portable or stationary barriers capable of reducing noise levels by 10 dBA (See Readme file for barrier design information).

Sources

U.S. Army Corps, Folsom Dam Raise and Auxiliary Spillway Alternative PASSII Draft Report, Feburary 2006.

FHWA, Roadway Construction Noise Model, January 2006.

P. Yastrow, Laku Landing Sound Level Analysis, April 1990.

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All Alternatives - Summary of Construction Activity Noise Levels (dBA)

DETAIL Const. NoiseAnalysis

		Alternativ	e 1			Alterna	tive 2			Alterna	ative 3			Altern	ative 4			Alter	native 5	
	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total	Total	BACT Total
	Lmax	Lmax	L_{eq}	L_{eq}	Lmax	Lmax	L_{eq}	L _{eq}	Lmax	Lmax	L_{eq}	L_{eq}	Lmax	Lmax	L_{eq}	L _{eq}	Lmax	Lmax	L_{eq}	L_{eq}
Construction Activities	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'	@ 50'
Auxiliary Spillway Borrow																				
Development Period (Alt. 1, 2, 3 & 4)	101	97	96	93	100	95	95	91	100	95	95	91	100	95	95	91	0	0	0	0
	101	31	30	95	100	93	33	31	100	33	33	31	100	95	90	31	-	0	0	0
Auxiliary Spillway Construction (Alt. 1, 2, 3 & 4)																				
, , , ,	98	96	95	92	96	93	94	89	96	93	94	89	96	93	94	89	0	0	0	0
Tunnel Construction (Alternative 2 only)	0	0	0	0	98	94	94	89	0	0	0	0	0	0	0	0	0	0	0	0
RWD Stripping, Excavation &	U	U	U	U	90	34	34	69	- 0	0	U	U	U	0	U	U	- 0	U	- 0	0
Construction (All Alt.)	96	93	94	89	97	94	94	90	97	94	94	90	97	94	94	89	97	94	94	89
LWD Stripping, Excavation &																				
Construction (All Alt.)	96	93	0	94	96	93	94	89	96	93	94	89	96	93	94	89	96	93	94	89
Beals Point Borrow Development (All Alt.)	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89	100	94	95	89
<u> </u>	.00	0.			100	0.		- 00	100	1		- 00	100	Ŭ.		- 55		· ·		- 55
Dike 5 & 6 Stripping, Excavation & Construction (All Alts.)																				
, ,	96	93	94	89	96	93	94	89	96	93	94	89	96	93	94	89	97	94	94	89
Mooney Ridge Stripping, Excavation & Construction (Alt.																				
2, 4 & 5)	0	0	0	0	96	93	94	90	0	0	0	0	95	91	94	88	97	94	95	90
MIAD - Stripping, Excavation &																				
Construction (All Alt.)	96	91	94	88	96	92	94	88	96	92	94	88	96	92	94	88	96	92	94	88
MIAD - Shell & Raise Foundation (Alt. 1, 3 & 4)	93	93	88	88	0	0	0	0	93	93	88	88	93	93	88	88	0	0	0	0
MIAD Jet Grouting (Alt. 1, 3 &						-		-												
4)	92	90	87	86	0	0	0	0	92	90	87	86	92	90	87	86	0	0	0	0
Dike 7 & 8 Stripping, Excavation																				
& Construction (Alt. 2, 3, 4 & 5)	0	0	0	0	95	91	94	87	95	91	94	87	95	91	94	87	95	91	94	87
One site Day Day	-	_	_	 																
Granite Bay Borrow Development (Alt. 2, 3, 4 & 5)																				
	0	0	0	0	100	94	97	91	100	94	97	91	101	95	98	92	100	95	97	91
Dike 1, 2 & 3 Stripping, Excavation & Construction (Alt.																				
2, 3, 4 & 5)	0	0	0	0	96	91	94	88	96	91	94	88	96	91	94	88	96	92	94	88
Dike 4 Stripping, Excavation &																				
Construction (All Alt.)	96	92	94	88	95	90	94	87	95	90	94	87	95	90	94	87	95	90	94	87
Main Concrete Dam Raise (Alt. 2, 3, 4 & 5)	0	0	0	0	87	87	81	81	87	87	81	81	87	87	81	81	87	87	81	81
	U	Ü	U	0	01	0,	01	01	U1	01	01	01	01	07	01	01	01	01	01	01
Main Concrete Dam Tendons and Shears (All Alts.)																				
	91	90	87	86	93	91	88	87	93	91	88	87	93	91	88	87	93	91	88	87
Folsom Point Area Borrow Area (Alt. 5 only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	94	94	89
(Ait. 5 Only)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	100	94	94	89

Attachment 2 Traffic Noise Impact Analysis

TNM CALIBRATION MODEL RUNS

				OBSE	RVED VEHIC	LES PER HO	UR PER DIRE	ECTION							
													Calil	bration	
Sensitive Noise Receiver	Local Roadway	Description	Source of data for comparison		Medium Trucks	Heavy Trucks	Buses	Motorcycles	Speed (mph)	Lanes	Receiver Distance	Monitored L _{eq}	Modeled Leq (dBA)	CDM Modeled L _{eq} (dBA)	Adjustment factor
1		Folsom-Auburn Road, south of Folsom Dam Road	Monitored Leq from Folsom Dam Road EIS - traffic data is both ways	714	26	-	-	-	50	4 lanes divided	70 feet	71	68	67.5	3.5
3		7013 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	Monitored Leq from Folsom Dam Road EIS - traffic data is both ways	1,036	12	2	-		50	4 lanes divided	70 feet	69	69	68.7	0.3

2006 EXISTING CONDITIONS Traffic Inputs for TNM Modeling

Sensitive Noise Receiver	Local Roadway	Description	2006 Total ADT	2006 One direction ADT	2006 PM Peak Hour	Ca Hourly \			Trucks: Volumes		Trucks: /olumes	Bus Hourly \			cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
			36,371	18,186	1,819	PM Peak	1,777	PM Peak	13	PM Peak	17	PM Peak	0	PM Peak	3	` ' '		,
				•	3 south	DAY 82%	1,748	DAY 82%	12	DAY 82%	16	DAY 82%	0	DAY 82%	3			
4	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT		NIGHT		NIGHT		NIGHT	0	NIGHT		50	5 lanes divided: 3	40
1	Street	south bound lanes in Folsom		its for ing Ldn:		18%	384	18%	3	18%	4	18%	0	18%	1	52	south, 2 north, tree-lined median	40
		roisoni		9	2 north bound	DAY 82%	1,166	DAY 82%	8	DAY 82%	11	DAY 82%	0	DAY 82%	2			
					lanes	NIGHT 18%	256	NIGHT 18%	2	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		Along Thorndike Way,	18,586	9,293	929	PM Peak	908	PM Peak	6	PM Peak	8	PM Peak	0	PM Peak	2			
2	Oak Avenue Parkway	residential area adjacent to north bound lanes in		fll		DAY 82%	744	DAY 82%	5	DAY 82%	7	DAY 82%	0	DAY 82%	1	52	6 lanes divided, tree-lined median	50
	· uy	Folsom	inputs 1	for calculat	ing Lan:	NIGHT 18%	163	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		ti oo iiiloa iiiloalari	
		Parking lot adjacent to		10.044	4.004	PM Peak		PM Peak		PM Peak		PM Peak		PM Peak				
3	Green Valley	residential area along Kipps Lane, north of	26,681	13,341	1,334		1,303		9		12		0		2	52	2 lanes undivided	50
3	Road	Green Valley Road in El Dorado Hills, El Dorado	Inputs t	for calculat	ing Ldn:	DAY 82% NIGHT	1,069	DAY 82% NIGHT	8	DAY 82% NIGHT	10	DAY 82% NIGHT	0	DAY 82% NIGHT	2	32	Z laries unulvided	30
		County		r		18%	235	18%	2	18%	2	18%	0	18%	0			
			18,054	9,027	903	PM Peak	882	PM Peak	6	PM Peak	8	PM Peak	0	PM Peak	2			
				=	2 east	DAY 82%	964	DAY 82%	7	DAY 82%	9	DAY 82%	0	DAY 82%	2		3 lanes	
4	East Natoma	End of Pomine Court, residential area along east			bound lanes	NIGHT 18%	212	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0	42	undivided: 2 east	60
	Road	bound lanes in Folsom		its for ing Ldn:	1 west	DAY 82%		DAY 82%		DAY 82%		DAY 82%		DAY 82%			bound, 1 west bound	
					bound lane	NIGHT	482	NIGHT	3	NIGHT	4	NIGHT	0	NIGHT	1			
						18%	106	18%	1	18%	1	18%	0	18%	0			
_	Folsom-	7550 Folsom-Auburn Road is in a residential area	32,292	16,146	1,615	PM Peak	1,577	PM Peak	11	PM Peak	15	PM Peak	0	PM Peak	3		4 lanes divided,	
5	Auburn Road	along the south bound lanes in Folsom	Inputs t	for calculat	ing Ldn:	DAY 82% NIGHT	1,294	DAY 82% NIGHT	9	DAY 82% NIGHT	12	DAY 82% NIGHT	0	DAY 82% NIGHT	2	55	paved median	50
		ianes in Foisom		ī		18%	284	18%	2	18%	3	18%	0	18%	1			
	Dive Devise	Blackberry Circle,	19,122	9,561	956	PM Peak	934	PM Peak	7	PM Peak	9	PM Peak	0	PM Peak	2		6 lanes divided,	
6	Blue Ravine Road	residential area along north bound lanes in	Inputs 1	for calculat	ing Ldn:	DAY 82%	766	DAY 82%	5	DAY 82%	7	DAY 82%	0	DAY 82%	1	52	including 2 turning lanes,	50
		Folsom				NIGHT 18%	168	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		tree-lined median	
	0'	End of Kilmartin Court,	24,548	12,274	1,227	PM Peak	1,199	PM Peak	8	PM Peak	11	PM Peak	0	PM Peak	2			
7	Sierra College	residential street adjacent to south bound lanes in		fll		DAY 82%	983	DAY 82%	7	DAY 82%	9	DAY 82%	0	DAY 82%	2	52	3 lanes divided (1 northbound)	70
	Boulevard	Rocklin, Placer County	inputs	for calculat	ing Lan:	NIGHT	216	NIGHT	2	NIGHT	2	NIGHT	0	NIGHT	0		(1 Horalbound)	
		4600-4699 Rolling Oaks		45 ==-		18% PM Peak		18% PM Peak		18% PM Peak		18% PM Peak	U	18% PM Peak				
	Douglas	Drive, residential area	37,452	18,726	1,873		1,830		13		17		0		3	50	4 lanes divided,	40
8	Boulevard	adjacent to west bound lanes in Granite Bay,	Inputs 1	for calculat	ing Ldn:	DAY 82%	1,500	DAY 82%	11	DAY 82%	14	DAY 82%	0	DAY 82%	3	52	tree-lined median	40
		Placer County				NIGHT 18%	329	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		1445 Eureka Road, multi- family residential	37,773	18,887	1,889	PM Peak	1,845	PM Peak	13	PM Peak	17	PM Peak	0	PM Peak	3		6 lanes divided	
9	Eureka Road	development (225 units)				DAY 82%	1,513	DAY 82%	11	DAY 82%	14	DAY 82%	0	DAY 82%	3	52	with bike lanes, shrub-lined	50
		on north bound lanes in Roseville, Placer County	Inputs f	for calculat	ing Ldn:	NIGHT		NIGHT	ĺ	NIGHT		NIGHT		NIGHT		1	median	

2006 EXISTING CONDITIONS Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise			Daytime	Night	Ldn
Receiver Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	72.5	66	74.2
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	68.9	62.4	70.6
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	71.6	65	73.2
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	66.8	60.2	68.4
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	72.5	66	74.2
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	69.3	62.7	70.9
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	70.6	64	72.2
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	72.5	65.9	74.1
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.4	65.8	74.0

Sensitive Noise Receiver	Local Roadway	Description	2009 Total ADT	2009 One direction ADT	2009 PM Peak Hour	Ca Hourly \			Trucks:		Trucks: Volumes	Bus Hourly \	ses: /olumes		cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
			41,694	20,847	2,085	PM Peak	2,037	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4	((1223)
					3 south	DAY 82%	2.004	DAY 82%	14	DAY 82%	19	DAY 82%	0	DAY 82%	4			
	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT	, , , , , ,	NIGHT		NIGHT		NIGHT		NIGHT			5 lanes divided: 3	
1	Street	south bound lanes in Folsom	Inpu	its for ing Ldn:		18%	440	18%	3	18%	4	18%	0	18%	1	52	south, 2 north, tree-lined median	40
		POISOIII	Calculat	ing Luii.	2 north bound	DAY 82%	1,336	DAY 82%	9	DAY 82%	12	DAY 82%	0	DAY 82%	2			
					lanes	NIGHT 18%	293	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		Along Thorndike Way,	23,552	11,776	1,178	PM Peak	1,151	PM Peak	8	PM Peak	11	PM Peak	0	PM Peak	2			
2	Oak Avenue Parkway	residential area adjacent to north bound lanes in				DAY 82%	943	DAY 82%	7	DAY 82%	9	DAY 82%	0	DAY 82%	2	52	6 lanes divided, tree-lined median	50
	Turknuy	Folsom	Inputs	for calculat	ing Ldn:	NIGHT 18%	207	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		tice inica median	
		Parking lot adjacent to				PM Peak		PM Peak		PM Peak		PM Peak	-	PM Peak				
3	Green Valley	residential area along Kipps Lane, north of Green	33,949	16,975	1,697		1,658		12		15		0		3	52	2 lanes undivided	50
3	Road	Valley Road in El Dorado		for calculat	ing Ldn:	DAY 82% NIGHT	1,360	DAY 82% NIGHT	10	DAY 82% NIGHT	13	DAY 82% NIGHT	0	DAY 82% NIGHT	3	52	z iaries undivided	50
		Hills, El Dorado County			1	18%	299	18%	2	18%	3	18%	0	18%	1			
			28,751	14,376	1,438	PM Peak	1,404	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3			
					2 east	DAY 82%	1,536	DAY 82%	11	DAY 82%	14	DAY 82%	0	DAY 82%	3		3 lanes	
4	East Natoma	End of Pomine Court, residential area along east			bound lanes	NIGHT 18%	337	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1	42	undivided: 2 east	60
	Road	bound lanes in Folsom		its for ing Ldn:	1 west	DAY 82%		DAY 82%		DAY 82%		DAY 82%		DAY 82%		1	bound, 1 west bound	
					bound	NIGHT	768	NIGHT	5	NIGHT	7	NIGHT	0	NIGHT	1	-		
				ı	lane	18%	169	18%	1	18%	2	18%	0	18%	0			
	Folsom-	7550 Folsom-Auburn Road is in a residential area	42,755	21,378	2,138	PM Peak	2,089	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4	_	A lawara distributa d	
5	Auburn Road	along the south bound	Inputs	for calculat	ing Ldn:	DAY 82% NIGHT	1,713	DAY 82% NIGHT	12	DAY 82% NIGHT	16	DAY 82% NIGHT	0	DAY 82% NIGHT	3	55	4 lanes divided, paved median	50
		lanes in Folsom			1	18%	376	18%	3	18%	4	18%	0	18%	1			
		Blackberry Circle,	20,688	10,344	1,034	PM Peak	1,011	PM Peak	7	PM Peak	9	PM Peak	0	PM Peak	2		6 lanes divided,	
6	Blue Ravine Road	residential area along north	Inputs	for calculat	ina I dn·	DAY 82%	829	DAY 82%	6	DAY 82%	8	DAY 82%	0	DAY 82%	2	52	including 2 turning lanes,	50
		bound lanes in Folsom	puto		9	NIGHT 18%	182	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		tree-lined median	
		End of Kilmartin Court.	26,827	13,414	1,341	PM Peak	1,310	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2			
7	Sierra College	residential street adjacent				DAY 82%	1.075	DAY 82%		DAY 82%	10	DAY 82%		DAY 82%	2	52	3 lanes divided	70
	Boulevard	to south bound lanes in Rocklin, Placer County	Inputs	for calculat	ing Ldn:	NIGHT	,	NIGHT		NIGHT		NIGHT	0	NIGHT		1	(1 northbound)	
		4000 4000 B III				18%	236	18%	2	18%	2	18%	0	18%	0			
	Douglas	4600-4699 Rolling Oaks Drive, residential area	42,649	21,325	2,132	PM Peak	2,083	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4		4 lanes divided,	
8	Boulevard	adjacent to west bound lanes in Granite Bay,	Innute	for calculat	ina Ldn·	DAY 82%	1,708	DAY 82%	12	DAY 82%	16	DAY 82%	0	DAY 82%	3	52	tree-lined median	40
		Placer County			g = 4	NIGHT 18%	375	NIGHT 18%	3	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		1445 Eureka Road, multi-	41,279	20,640	2,064	PM Peak	2,016	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4		6 lanes divided	
9	Eureka Road	family residential development (225 units) on			_,	DAY 82%	1,654	DAY 82%	12	DAY 82%	15	DAY 82%	0	DAY 82%	3	52	with bike lanes,	50
		north bound lanes in Roseville, Placer County		for calculat	ing Ldn:	NIGHT		NIGHT		NIGHT		NIGHT		NIGHT		1	shrub-lined median	
		Noseville, Fracer County				18%	363	18%	3	18%	3	18%	0	18%	1			

2009 NO ACTION/NO PROJECT Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Least		Daytime	Night	Ldn
Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	73.1	66.5	74.7
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70	63.3	71.5
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	72.7	66.1	74.3
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	68.9	62.3	70.5
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	73.8	67.3	75.5
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	69.7	63	71.2
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71	64.3	72.5
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73	66.4	74.6
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.7	66.2	74.4

Sensitive Noise Receiver	Local Roadway	Description	2013 Total ADT	2013 One direction ADT	2013 PM Peak Hour	Car Hourly V			Trucks:		Trucks: Volumes	Bus Hourly V		Motoro Hourly \	cycles:	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
		2000	45,132	22,566	2,257	PM Peak	2,205	PM Peak	16	PM Peak	21	PM Peak	0	PM Peak	4	\p,	ou.u.io	(1001)
					3 south	DAY 82%	2.169	DAY 82%	15	DAY 82%	20	DAY 82%	0	DAY 82%	4	1		
	Fact Ridwall	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT	2,109	NIGHT	13	NIGHT	20	NIGHT	0	NIGHT	7	1	5 lanes divided: 3	
1	Street	south bound lanes in	Inpu	its for ting Ldn:	laties	18%	476	18%	3	18%	4	18%	0	18%	1	52	south, 2 north, tree-lined median	40
		Folsom	Calculat	ing Lun.	2 north bound	DAY 82%	1,446	DAY 82%	10	DAY 82%	13	DAY 82%	0	DAY 82%	3			
					lanes	NIGHT 18%	317	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		Along Thorndike Way,	25,496	12,748	1,275	PM Peak	1,245	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2			
2	Oak Avenue Parkway	-				DAY 82%	1,021	DAY 82%	7	DAY 82%	10	DAY 82%	0	DAY 82%	2	52	6 lanes divided, tree-lined median	50
	Faikway	Folsom	Inputs	for calculat	ing Ldn:	NIGHT		NIGHT		NIGHT		NIGHT		NIGHT	0		nee-ineu meulan	
		Parking lot adjacent to				18% PM Peak	224	18% PM Peak		18% PM Peak	2	18% PM Peak	0	18% PM Peak	U			
	Green Valley	residential area along	36,749	18,375	1,837		1,795		13		17		0		3			
3	Road	Kipps Lane, north of Green Valley Road in El Dorado		for calculat	ing Ldn:	DAY 82%	1,472	DAY 82%	10	DAY 82%	14	DAY 82%	0	DAY 82%	3	52	2 lanes undivided	50
		Hills, El Dorado County				NIGHT 18%	323	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
			31,124	15,562	1,556	PM Peak	1,520	PM Peak	11	PM Peak	14	PM Peak	0	PM Peak	3			
					2 east	DAY 82%	1,662	DAY 82%	12	DAY 82%	15	DAY 82%	0	DAY 82%	3		0.1	
4	East Natoma	End of Pomine Court, residential area along east			bound lanes	NIGHT	·	NIGHT	12	NIGHT	10	NIGHT	0	NIGHT	4	42	3 lanes undivided: 2 east	60
7	Road	bound lanes in Folsom		its for ting Ldn:	4	18% DAY 82%	365	18% DAY 82%	3	18% DAY 82%	3	18% DAY 82%	0	18% DAY 82%	1		bound, 1 west bound	00
				· ·	1 west bound	NIGHT	831	NIGHT	6	NIGHT	8	NIGHT	0	NIGHT	2			
					lane	18%	182	18%	1	18%	2	18%	0	18%	0			
		7550 Folsom-Auburn Road	46,282	23,141	2,314	PM Peak	2,261	PM Peak	16	PM Peak	21	PM Peak	0	PM Peak	4			
5	Folsom- Auburn Road	is in a residential area along the south bound	Inputs	for calculat	ina Ldn:	DAY 82%	1,854	DAY 82%	13	DAY 82%	17	DAY 82%	0	DAY 82%	3	55	4 lanes divided, paved median	50
		lanes in Folsom	,		3 "	NIGHT 18%	407	NIGHT 18%	3	NIGHT 18%	4	NIGHT 18%	0	NIGHT 18%	1			
		District Circle	22,396	11,198	1,120	PM Peak	1,094	PM Peak	8	PM Peak	10	PM Peak	0	PM Peak	2		6 lanes divided,	
6	Blue Ravine Road	Blackberry Circle, residential area along north		f = = = = = = = d		DAY 82%	897	DAY 82%	6	DAY 82%	8	DAY 82%	0	DAY 82%	2	52	including 2 turning lanes,	50
	Nodu	bound lanes in Folsom	Inputs	for calculat	ing Lan:	NIGHT 18%		NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT	0	1	tree-lined median	
		- 1 (1/1)	29,041	14,521	1,452	PM Peak	197 1,419	PM Peak	10	PM Peak	13	PM Peak	0	18% PM Peak	3			
7	Sierra College	End of Kilmartin Court, residential street adjacent		·		DAY 82%	·	DAY 82%		DAY 82%		DAY 82%		DAY 82%		52	3 lanes divided (1	70
,	Boulevard	to south bound lanes in Rocklin, Placer County	Inputs	for calculat	ing Ldn:	NIGHT	1,163	NIGHT	8	NIGHT	11	NIGHT	0	NIGHT	2	32	northbound)	70
		•		1		18%	255	18%	2	18%	2	18%	0	18%	0			
		4600-4699 Rolling Oaks Drive, residential area	46,167	23,084	2,308	PM Peak	2,255	PM Peak	16	PM Peak	21	PM Peak	0	PM Peak	4]		
8	Douglas Boulevard	adjacent to west bound	In most -	for colerates		DAY 82%	1,849	DAY 82%	13	DAY 82%	17	DAY 82%	0	DAY 82%	3	52	4 lanes divided, tree-lined median	40
		lanes in Granite Bay, Placer County	inputs	for calculat	ing Lan:	NIGHT 18%	406	NIGHT 18%	3	NIGHT 18%	1	NIGHT 18%	0	NIGHT 18%	1	1		
		1445 Eureka Road, multi-	44.55:	00.045	6.00:	PM Peak		PM Peak	3	PM Peak	4	PM Peak	-	PM Peak				
9	Fureka Road	family residential development (225 units) on	44,684	22,342	2,234	DAY 82%	2,183	DAY 82%	15	DAY 82%	20	DAY 82%	0	DAY 82%	4	52	6 lanes divided with bike lanes,	50
3	Lui eka itoau	north bound lanes in		for calculat	ing Ldn:	NIGHT	1,790	NIGHT	13	NIGHT	17	NIGHT	0	NIGHT	3	J2	shrub-lined median	30
		Roseville, Placer County				18%	393	18%	3	18%	4	18%	0	18%	1			

2013 NO ACTION/NO PROJECT Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Least		Daytime	Night	Ldn
Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	73.4	66.8	75.0
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.3	63.7	71.9
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	73	66.4	74.6
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.2	62.6	70.8
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	74.1	67.6	75.8
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70	63.4	71.6
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71.3	64.6	72.8
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.3	66.8	75.0
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	73.1	66.5	74.7

Sensitive Noise Receiver	Local Roadway	Description	2009 Total ADT	2009 One direction ADT	2009 PM Peak Hour	Ca Hourly \			Trucks: Volumes		Trucks: Volumes	Bus Hourly \			cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
			41,694	20,847	2,085	PM Peak	2,037	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4			
				-	3 south	DAY 82%	2,004	DAY 82%	14	DAY 82%	70	DAY 82%	0	DAY 82%	4			
	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT		NIGHT		NIGHT		NIGHT	-	NIGHT		1	5 lanes divided: 3	
1	Street	south bound lanes in		calculating	lunes	18%	440	18%	3	18%	4	18%	0	18%	1	52	south, 2 north, tree-lined median	40
		Folsom		un.	2 north bound	DAY 82%	1,336	DAY 82%	9	DAY 82%	63	DAY 82%	0	DAY 82%	2			
					lanes	NIGHT 18%	293	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
			23,552	11,776	1,178	PM Peak	1,151	PM Peak	8	PM Peak	11	PM Peak	0	PM Peak	2			
	Oak Avenue	Along Thorndike Way, residential area adjacent to		,	1,170	DAY 82%	,	DAY 82%		DAY 82%		DAY 82%		DAY 82%	_	50	6 lanes divided,	50
2	Parkway	north bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT	948	NIGHT	7	NIGHT	9	NIGHT	0	NIGHT	2	52	tree-lined median	50
		roisoili			T	18%	212	18%	1	18%	2	18%	0	18%	0			
		Parking lot adjacent to residential area along Kipps	33,949	16,975	1,697	PM Peak	1,658	PM Peak	12	PM Peak	15	PM Peak	0	PM Peak	3			
3	Green Valley Road	Lane, north of Green Valley				DAY 82%	1.370	DAY 82%	10	DAY 82%	64	DAY 82%	0	DAY 82%	2	52	2 lanes undivided	50
		Road in El Dorado Hills, El Dorado County	Inputs	for calculati	ing Ldn:	NIGHT	, , , , , , , , , , , , , , , , , , , ,	NIGHT		NIGHT		NIGHT		NIGHT		1		
						18%	309	18%	2	18%	3	18%	0	18%	1			
			28,751	14,376	1,438	PM Peak	1,404	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3			
		End of Pomine Court,			2 east bound	DAY 82%	1,685	DAY 82%	11	DAY 82%	34	DAY 82%	0	DAY 82%	3		3 lanes undivided:	
4	East Natoma Road	residential area along east	Innute for	calculating	lanes	NIGHT 18%	486	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1	42	2 east bound, 1	60
		bound lanes in Folsom		dn:	1 west	DAY 82%	917	DAY 82%	5	DAY 82%	27	DAY 82%	0	DAY 82%	1		west bound	
					lane	NIGHT 18%	318	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		7550 Folsom-Auburn Road	42,755	21,378	2,138	PM Peak	2,089	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4			
5	Folsom-	is in a residential area along				DAY 82%	1,762	DAY 82%	12	DAY 82%	16	DAY 82%	0	DAY 82%	3	55	4 lanes divided,	50
	Auburn Road	the south bound lanes in Folsom	Inputs	for calculati	ing Ldn:	NIGHT		NIGHT	12	NIGHT	10	NIGHT	0	NIGHT	,	1	paved median	
			20,688	10,344	1,034	18% PM Peak	425 1,011	18% PM Peak	7	18% PM Peak	9	18% PM Peak	0	18% PM Peak	2			
	Blue Ravine	Blackberry Circle,	20,000	10,044	1,004	DAY 82%	1,011	DAY 82%	,	DAY 82%		DAY 82%		DAY 82%			6 lanes divided, including 2 turning	
6	Road	residential area along north bound lanes in Folsom	Inputs	for calculat	ing Ldn:		834		6		28		0		2	52	lanes, tree-lined	50
						NIGHT 18%	187	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		median	
	0.	End of Kilmartin Court,	26,827	13,414	1,341	PM Peak	1,310	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2			
7	Sierra College	residential street adjacent to south bound lanes in				DAY 82%	1,087	DAY 82%	8	DAY 82%	10	DAY 82%	0	DAY 82%	2	52	3 lanes divided (1 northbound)	70
	Boulevard	Rocklin, Placer County	Inputs	for calculati	ing Ldn:	NIGHT		NIGHT	-	NIGHT		NIGHT	-	NIGHT			northbound)	
						18%	248	18%	2	18%	2	18%	0	18%	0			
	December	4600-4699 Rolling Oaks Drive, residential area	42,649	21,325	2,132	PM Peak	2,083	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4	1		
8	Douglas Boulevard	adjacent to west bound lanes in Granite Bay, Placer	lanuta	for coloulat		DAY 82%	1,740	DAY 82%	12	DAY 82%	19	DAY 82%	0	DAY 82%	3	52	4 lanes divided, tree-lined median	40
		County	inputs	for calculati	ing Lan:	NIGHT	407	NIGHT	3	NIGHT	3	NIGHT	0	NIGHT	1			
		1445 Eureka Road, multi-				18% PM Peak		18% PM Peak		18% PM Peak		18% PM Peak	0	18% PM Peak	 	 		
	Funder Deet	family residential	41,279	20,640	2,064		2,016		14		19		0		4	F0	6 lanes divided with bike lanes,	F0
9	Eureka Road	development (225 units) on north bound lanes in	Inputs	for calculati	ing Ldn:	DAY 82% NIGHT	1,654	DAY 82% NIGHT	12	DAY 82% NIGHT	18	DAY 82% NIGHT	0	DAY 82% NIGHT	3	52	shrub-lined median	50
		Roseville, Placer County				18%	363	18%	3	18%	3	18%	0	18%	1		median	

Sensitive Noise Receiver	Local Roadway	Description	2009 Total ADT	2009 One direction ADT	2009 PM Peak Hour	Ca Hourly V			n Trucks: Volumes		Trucks: Volumes	Bus Hourly	ses: Volumes		cycles:	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
110001101	Houanay	2000.ipuon	41,694	20,847	2,085	PM Peak	2,037	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4	(modiano	(1001)
					3 south	DAY 82%	2,004	DAY 82%	14	DAY 82%	70	DAY 82%	0	DAY 82%	4			
1	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT 18%	440	NIGHT 18%	3	NIGHT	10	NIGHT 18%	0	NIGHT 18%	1	52	5 lanes divided: 3 south, 2 north,	40
'	Street	south bound lanes in Folsom		its for ing Ldn:	2 north	DAY 82%		DAY 82%		18% DAY 82%	4	DAY 82%	0	DAY 82%	'	32	tree-lined median	40
					bound lanes	NIGHT	1,336	NIGHT	9	NIGHT	63	NIGHT	0	NIGHT	2			
			23,552	11,776	1,178	18% PM Peak	293 1,151	18% PM Peak	2	18% PM Peak	11	18% PM Peak	0	18% PM Peak	1 2			
_	Oak Avenue	Along Thorndike Way, residential area adjacent to		11,776	1,178	DAY 82%	1,151	DAY 82%	8	DAY 82%	111	DAY 82%	U	DAY 82%			6 lanes divided,	
2	Parkway	north bound lanes in Folsom		for calculat	ing Ldn:	NIGHT	948	NIGHT	7	NIGHT	9	NIGHT	0	NIGHT	2	52	tree-lined median	50
		POISOIII		_		18%	212	18%	1	18%	2	18%	0	18%	0			
		Parking lot adjacent to residential area along	33,949	16,975	1,697	PM Peak	1,658	PM Peak	12	PM Peak	15	PM Peak	0	PM Peak	3			
3	Green Valley Road	Kipps Lane, north of Green Valley Road in El Dorado	l			DAY 82%	1,391	DAY 82%	10	DAY 82%	18	DAY 82%	0	DAY 82%	3	52	2 lanes undivided	50
		Hills, El Dorado County	Inputs	for calculat	ing Lan:	NIGHT 18%	330	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
			28,751	14,376	1,438	PM Peak	1,404	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3			
				,	2 east	DAY 82%	1,697	DAY 82%	11	DAY 82%	36	DAY 82%	0	DAY 82%	2	1		
	East Natoma	End of Pomine Court,			bound lanes	NIGHT		NIGHT		NIGHT		NIGHT	0	NIGHT	3	42	3 lanes undivided: 2 east	60
4	Road	residential area along east bound lanes in Folsom		its for ing Ldn:		18%	498	18%	2	18%	3	18%	0	18%	1	42	bound, 1 west bound	60
			Calculat	ing Lun.	1 west bound	DAY 82%	929	DAY 82%	5	DAY 82%	29	DAY 82%	0	DAY 82%	1		bound	
					lane	NIGHT 18%	330	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		7550 Folsom-Auburn Road	42,755	21,378	2,138	PM Peak	2,089	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4			
5	Folsom- Auburn Road	is in a residential area along the south bound	Innute	for calculat	ina Ldn:	DAY 82%	1,760	DAY 82%	12	DAY 82%	16	DAY 82%	0	DAY 82%	3	55	4 lanes divided, paved median	50
		lanes in Folsom	IIIputs	ioi calculat	ing Luii.	NIGHT 18%	423	NIGHT 18%	3	NIGHT 18%	4	NIGHT 18%	0	NIGHT 18%	1		,	
			20,688	10,344	1,034	PM Peak	1,011	PM Peak	7	PM Peak	9	PM Peak	0	PM Peak	2		6 lanes divided,	
6	Blue Ravine Road	Blackberry Circle, residential area along north				DAY 82%	834	DAY 82%	6	DAY 82%	30	DAY 82%	0	DAY 82%	2	52	including 2 turning lanes,	50
	Noau	bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT 18%	187	NIGHT 18%	1	NIGHT	2	NIGHT 18%	0	NIGHT 18%	0		tree-lined median	
			26,827	13,414	1,341	PM Peak	1,310	PM Peak	9	18% PM Peak	12	PM Peak	0	PM Peak	2			
7	Sierra College	End of Kilmartin Court, residential street adjacent		· ·		DAY 82%		DAY 82%		DAY 82%		DAY 82%		DAY 82%		52	3 lanes divided	70
	Boulevard	to south bound lanes in Rocklin, Placer County	Inputs	for calculat	ing Ldn:	NIGHT	1,088	NIGHT	8	NIGHT	10	NIGHT	0	NIGHT	2	1 52	(1 northbound)	,,,
			-			18%	249	18%	2	18%	2	18%	0	18%	0	1		
	Davida	4600-4699 Rolling Oaks Drive, residential area	42,649	21,325	2,132	PM Peak	2,083	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4		A lawara albatal	
8	Douglas Boulevard	adjacent to west bound lanes in Granite Bay,	Innute	for calculat	ina I dn·	DAY 82%	1,742	DAY 82%	12	DAY 82%	25	DAY 82%	0	DAY 82%	3	52	4 lanes divided, tree-lined median	40
		Placer County	inputs	ioi caiculat	ing Luii.	NIGHT 18%	409	NIGHT 18%	3	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		1445 Eureka Road, multi-	41.279	20,640	2.064	PM Peak	2.016	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4		6 lanes divided	
9	Eureka Road	family residential development (225 units) on	41,273	20,070	2,004	DAY 82%	1,654	DAY 82%	12	DAY 82%	24	DAY 82%	0	DAY 82%	2	52	with bike lanes,	50
		north bound lanes in Roseville, Placer County	Inputs	for calculat	ing Ldn:	NIGHT		NIGHT		NIGHT		NIGHT		NIGHT	3	1	shrub-lined median	
		Mosevine, I lacer county				18%	363	18%	3	18%	3	18%	0	18%	1			

Sensitive Noise Receiver	Local Roadway	Description	2009 Total ADT	2009 One direction ADT	2009 PM Peak Hour		rs: Volumes		Trucks: Volumes	,	Trucks: Volumes		ses: Volumes		cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet
		•	41,694	20,847	2,085	PM Peak	2,037	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4			,
					3 south	DAY 82%	2.004	DAY 82%	14	DAY 82%	66	DAY 82%	0	DAY 82%	4		5 lanes divided: 3 south, 2 north, tree-lined median	40
	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT	,,,,	NIGHT		NIGHT		NIGHT		NIGHT		50		
1	Street	south bound lanes in Folsom		calculating In:		18%	440	18%	3	18%	4	18%	0	18%	1	52		
		i disdili			2 north bound	DAY 82%	1,336	DAY 82%	9	DAY 82%	59	DAY 82%	0	DAY 82%	2	2		
				lanes		NIGHT 18%	293	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		Along Thorndike Way,	23,552	11,776	1,178	PM Peak	1,151	PM Peak	8	PM Peak	11	PM Peak	0	PM Peak	2	2		
2	Oak Avenue Parkway	residential area adjacent to north bound lanes in				DAY 82%	948	DAY 82%	7	DAY 82%	9	DAY 82%	0	DAY 82%	2	52	6 lanes divided, tree-lined median	50
	Tarkway	Folsom	Inputs for calcula		ing Ldn:	NIGHT 18%	212	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0		tree-lined median	
		Parking lot adjacent to	00.040	40.075	4 007	PM Peak		PM Peak	10	PM Peak	4.5	PM Peak	0	PM Peak				
3	Green valley	residential area along Kipps Lane, north of Green Valley		16,975	1,697	DAY 82%	1,658	DAY 82%	12	DAY 82%	15	DAY 82%	0	DAY 82%	3		52 2 lanes undivided	50
	Road	Road in El Dorado Hills, El		for calculat	ing Ldn:	NIGHT	1,411	NIGHT	10	NIGHT	14	NIGHT	0	NIGHT	3	3		
		Dorado County				18%	350	18%	2	18%	3		0	18%	1			
			28,751	14,376	1,438	PM Peak	1,404	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3	3		
					2 east	DAY 82%	1,683	DAY 82%	11	DAY 82%	30	DAY 82%	0	DAY 82%	3	3	3 lanes	
4	East Natoma Road	End of Pomine Court, residential area along east	In most of fam.		bound lanes	NIGHT 18%	484	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1	42	undivided: 2 east bound, 1 west bound	60
	itodu	bound lanes in Folsom	Inputs for Ld	calculating In:	1 west	DAY 82%	915	DAY 82%	-	DAY 82%	47	DAY 82%	0	DAY 82%		1		
					bound lane	NIGHT		NIGHT	3	NIGHT	17	NIGHT	0	NIGHT	1	1		
			42,755	21,378	2,138	18% PM Peak	316 2,089	18% PM Peak	15	18% PM Peak	19	18% PM Peak	0	18% PM Peak	0	1		
5	Folsom-	7550 Folsom-Auburn Road is in a residential area	12,100		_,	DAY 82%		DAY 82%	10	DAY 82%		DAV 82%		DAY 82%		55	4 lanes divided,	50
	Auburn Road	along the south bound lanes in Folsom	Inputs for calculation		lating Ldn:	NIGHT	1,731	NIGHT	12	NIGHT	16	NIGHT	0	NIGHT	3	3 33	paved median	
			20,688	10,344	1,034	18% PM Peak	394 1,011	18% PM Peak	7	18% PM Peak	9	18% PM Peak	0	18% PM Peak	2	,		
	Blue Ravine	Blackberry Circle,	20,000	10,044	1,004	DAY 82%	1,011	DAY 82%	,	DAY 82%	3	DAY 82%		DAY 82%		1	6 lanes divided, including 2	
6	Road	residential area along north bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT	834	NIGHT	6	NIGHT	24	NIGHT	0	NIGHT	2	52	turning lanes, tree	50
						18%	187	18%	1	18%	2	18%	0	18%	0)	iirica median	
	Sierra	End of Kilmartin Court,	26,827	13,414	1,341	PM Peak	1,310	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2	2		
7	College	residential street adjacent to south bound lanes in	Innuts	for calculat	ina I dn·	DAY 82%	1,084	DAY 82%	8	DAY 82%	12	DAY 82%	0	DAY 82%	2	52	3 lanes divided (1 northbound)	70
	Boulevard	Rocklin, Placer County	puto	or carcarac	9	NIGHT 18%	245	NIGHT 18%	2	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		4600-4699 Rolling Oaks	42,649	21,325	2,132	PM Peak	2,083	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4	ı		
8	Douglas	Drive, residential area adjacent to west bound	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	, -	DAY 82%		DAY 82%		DAY 82%		DAY 82%	-	DAY 82%		- 52	4 lanes divided,	40
	Boulevard	lanes in Granite Bay, Placer County	Inputs	for calculat	ing Ldn:	NIGHT	1,735	NIGHT	12	NIGHT	18	NIGHT	0	NIGHT	3	3	tree-lined median	
		•	 			18%	402		3	18%	3	18%	0	18%	1	1		
		1445 Eureka Road, multi- family residential	41,279	20,640	2,064	PM Peak	2,016	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4	<u> </u>	6 lanes divided with bike lanes,	
9	Eureka Road	development (225 units) on north bound lanes in	n DAY	DAY 82%	1,654	DAY 82%	12	DAY 82%	15	DAY 82%	0	DAY 82%	3	52	shrub-lined	50		
		Roseville, Placer County		valoulat		NIGHT 18%	363	NIGHT 18%	3	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1		median	

Sensitive Noise Receiver	Local Roadway	Description	2009 Total ADT	2009 One direction ADT	2009 PM Peak Hour	Ca Hourly \			Trucks: Volumes		Trucks: Volumes		ses: Volumes		cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
		•	41,694	20,847	2,085	PM Peak	2,037	PM Peak	14	PM Peak	19	PM Peak	0	PM Peak	4			
				-	3 south	DAY 82%	2,004	DAY 82%	14	DAY 82%	62	DAY 82%	0	DAY 82%	4		5 lanes divided: 3 south, 2 north, tree-lined median	40
1	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT 18%	440	NIGHT 18%	3	NIGHT 18%	4	NIGHT 18%	0	NIGHT 18%	1	52		
'	Street	south bound lanes in Folsom	Inpu calculat	its for ing Ldn:	2 11		440		3	DAY 82%	4	DAY 82%	0	DAY 82%	'	52		
		roisoni		J	2 north bound	DAY 82%	1,336	DAY 82%	9		55		0		2			
					lanes	NIGHT 18%	293	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		Along Thorndike Way,	acent to		1,178	PM Peak	1,151	PM Peak	8	PM Peak	11	PM Peak	0	PM Peak	2		6 lanes divided, tree-lined median	
2	Oak Avenue Parkwav	residential area adjacent to north bound lanes in			ing I dn:	DAY 82%	948	DAY 82%	7	DAY 82%	9	DAY 82%	0	DAY 82%	2	52		50
		Folsom	iliputs	nputs for calculating Ldn:		NIGHT 18%	212	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		Parking lot adjacent to	33,949	16,975	1,697	PM Peak	1,658	PM Peak	12	PM Peak	15	PM Peak	0	PM Peak	3			
3	Green Valley	residential area along Road Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County		10,070	1,007	DAY 82%		DAY 82%	12	DAY 82%		DAY 82%	0	DAY 82%	0	52	2 lanes undivided	50
	Road		Inputs	Inputs for calculating L		NIGHT	1,411	NIGHT	10	NIGHT	20	NIGHT	0	NIGHT	3			00
				Ī	1	18%	350	18%	2	18%	3	18%	0	18%	1			
		st Natoma Road End of Pomine Court, residential area along east bound lanes in Folsom	28,751	14,376	1,438	PM Peak	1,404	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3			
				2 east bound	DAY 82% NIGHT	1,685	DAY 82% NIGHT	11	DAY 82% NIGHT	30	DAY 82% NIGHT	0	DAY 82% NIGHT	3		3 lanes		
4	East Natoma Road		Inpu	its for	lanes	18%	486	18%	2	18%	3	18%	0	18%	1	42	undivided: 2 east bound, 1 west	60
			calculat	ating Ldn:	1 west	DAY 82%	917	DAY 82%	5	DAY 82%	23	DAY 82%	0	DAY 82%	1		bound	
					bound lane	NIGHT 18%	318	NIGHT 18%	1	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		7550 Folsom-Auburn Road	42,755	21,378	2,138	PM Peak	2,089	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4			
5	Folsom-	is in a residential area	n a residential area		DAY 82%	1,754	DAY 82%	12	DAY 82%	16	DAY 82%	0	DAY 82%	3	55	4 lanes divided,	50	
	Auburn Road	along the south bound Inp	Inputs for calculating		or calculating Ldn:		417	NIGHT	3	NIGHT	10	NIGHT	0	NIGHT	1	<u> </u>	paved median	
			20,688	10,344	1,034	18% PM Peak	1,011	18% PM Peak	7	18% PM Peak	9	18% PM Peak	0	18% PM Peak	2			
6	Blue Ravine	Blackberry Circle, residential area along north				DAY 82%		DAY 82%		DAY 82%		DAY 82%		DAY 82%	_	52	6 lanes divided, including 2	50
	Road	bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT	834	NIGHT	6	NIGHT	24	NIGHT	0	NIGHT	2	02	turning lanes, tree-lined median	00
			00.007	40.444	4.044	18%	187	18%	1	18%	2	18%	0	18%	0			
	Sierra	End of Kilmartin Court, residential street adjacent	26,827	13,414	1,341	PM Peak	1,310	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2		3 lanes divided	
7	College Boulevard	to south bound lanes in	Inputs	for calculat	ing Ldn:	DAY 82% NIGHT	1,087	DAY 82% NIGHT	8	DAY 82% NIGHT	10	DAY 82% NIGHT	0	DAY 82% NIGHT	2	52	(1 northbound)	70
		Rocklin, Placer County				18%	248	18%	2	18%	2	18%	0	18%	0			
		4600-4699 Rolling Oaks Drive, residential area	42,649	21,325	2,132	PM Peak	2,083	PM Peak	15	PM Peak	19	PM Peak	0	PM Peak	4			
8	Douglas	adjacent to west bound		-	-	DAY 82%	1,740	DAY 82%	12	DAY 82%	19	DAY 82%	0	DAY 82%	2	52	4 lanes divided, tree-lined median	40
		lanes in Granite Bay, Placer County	Inputs	for calculat	ing Ldn:	NIGHT		NIGHT		NIGHT		NIGHT		NIGHT	3			
		1445 Eureka Road, multi-		l		18%	407	18%	3	18%	3	18% PM Peak	0	18% PM Peak	1			
	Formulas Do. 1	family residential	41,279	20,640	2,064	PM Peak	2,016	PM Peak	14	PM Peak	19		0		4	50	6 lanes divided with bike lanes,	
9	∟ ureка Road	development (225 units) on north bound lanes in		for calculat	ing Ldn:	DAY 82% NIGHT	1,654	DAY 82% NIGHT	12	DAY 82% NIGHT	17	DAY 82% NIGHT	0	DAY 82% NIGHT	3	52	52 with bike lanes, shrub-lined median	
	Roseville, Placer County				18%	363	18%	3	18%	3	18%	0	18%	1		modan		

Sensitive Noise Receiver	Local Roadway	Description	2013 Total ADT	2013 One direction ADT	2013 PM Peak Hour	Ca Hourly \			Trucks:		Trucks: /olumes		ses: Volumes	Motore Hourly	cycles: Volumes	Speed (mph)	Lanes and Medians	Distance to Receiver (feet)
110001701	Houandy	2000.ip.io.i	45,132	22,566	2,257	PM Peak	2,205	PM Peak	16	PM Peak	21	PM Peak	0	PM Peak	4	(mountaino	(1001)
					3 south	DAY 82%	2,169	DAY 82%	15	DAY 82%	27	DAY 82%	0	DAY 82%	4			
	East Bidwell	Along Albrighton Drive, residential area adjacent to			bound lanes	NIGHT	,	NIGHT		NIGHT	2,	NIGHT		NIGHT			5 lanes divided: 3 south, 2 north, tree-lined median	
1	Street	south bound lanes in Folsom	Inpu	its for ing Ldn:		18%	476	18%	3	18%	4	18%	0	18%	1	52		40
		FOISOIII	Jaiouras	9 =	2 north bound	DAY 82%	1,446	DAY 82%	10	DAY 82%	20	DAY 82%	0	DAY 82%	3			
					lanes	NIGHT 18%	317	NIGHT 18%	2	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1			
		Along Thorndike Way,	25,496	12,748	1,275	PM Peak	1,245	PM Peak	9	PM Peak	12	PM Peak	0	PM Peak	2			
2	Oak Avenue Parkway	residential area adjacent to north bound lanes in		for coloulat	ina I da.	DAY 82%	1,025	DAY 82%	7	DAY 82%	10	DAY 82%	0	DAY 82%	2	52	6 lanes divided, tree-lined median	50
		Folsom	inputs	for calculat	ing Lan:	NIGHT 18%	228	NIGHT 18%	2	NIGHT 18%	2	NIGHT 18%	0	NIGHT 18%	0			
		Parking lot adjacent to	36.749	18,375	1,837	PM Peak	1,795	PM Peak	13	PM Peak	17	PM Peak	0	PM Peak	2			
3	Green Valley	residential area along Kipps Lane, north of Green	,	10,373	1,037	DAY 82%		DAY 82%		DAY 82%		DAY 82%	0	DAY 82%	3	52	2 lanes undivided	50
	Road	Valley Road in El Dorado Hills, El Dorado County		for calculat	ing Ldn:	NIGHT	1,496	NIGHT	10	NIGHT	14	NIGHT	0	NIGHT	3			
		Hills, El Dorado County		1		18%	347	18%	2	18%	3	18%	0	18%	1			
			31,124	15,562	1,556	PM Peak	1,520	PM Peak	11	PM Peak	14	PM Peak	0	PM Peak	3			
		End of Pomine Court,			2 east bound	DAY 82%	1,790	DAY 82%	12	DAY 82%	18	DAY 82%	0	DAY 82%	3		3 lanes	60
4	East Natoma Road	residential area along east	Inpu	ıts for	lanes	NIGHT 18%	493	NIGHT 18%	3	NIGHT 18%	3	NIGHT 18%	0	NIGHT 18%	1	42	undivided: 2 east bound, 1 west	
		bound lanes in Folsom		ing Ldn:	1 west	DAY 82%	959	DAY 82%	6	DAY 82%	11	DAY 82%	0	DAY 82%	2		bound	
					bound lane	NIGHT		NIGHT		NIGHT		NIGHT		NIGHT				
		7550 Folsom-Auburn Road	46.282	23,141	2,314	18% PM Peak	310 2,261	18% PM Peak	16	18% PM Peak	21	18% PM Peak	0	18% PM Peak	0			
5	Folsom-	is in a residential area	10,202		_,_,	DAY 82%	1,912	DAY 82%	13	DAY 82%	17	DAY 82%	0	DAY 82%	2	55	4 lanes divided,	50
	Auburn Road	along the south bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT	,	NIGHT		NIGHT	- 17	NIGHT	0	NIGHT	3	00	paved median	
			22,396	11,198	1,120	18% PM Peak	465 1,094	18% PM Peak	3 8	18% PM Peak	10	18% PM Peak	0	18% PM Peak	2			
6	Blue Ravine	Blackberry Circle, residential area along north		, , , , ,	,	DAY 82%		DAY 82%		DAY 82%		DAY 82%		DAY 82%		52	6 lanes divided, including 2	50
	Road	bound lanes in Folsom	Inputs	for calculat	ing Ldn:	NIGHT	900	NIGHT	6	NIGHT	12	NIGHT	0	NIGHT	2	32	turning lanes, tree-lined median	50
			22.244	44.504	4.450	18%	200	18%	1	18%	2	18%	0	18%	0			
	Sierra	End of Kilmartin Court, residential street adjacent	29,041	14,521	1,452	PM Peak	1,419	PM Peak	10	PM Peak	13	PM Peak	0	PM Peak	3		3 lanes divided	
7	College Boulevard	to south bound lanes in	Inputs	for calculat	ing Ldn:	DAY 82% NIGHT	1,174	DAY 82% NIGHT	8	DAY 82% NIGHT	19	DAY 82%	0	DAY 82%	2	52	(1 northbound)	70
		Rocklin, Placer County				18%	266	18%	2	18%	2	NIGHT 18%	0	NIGHT 18%	0			
		4600-4699 Rolling Oaks	46,167	23,084	2,308	PM Peak	2,255	PM Peak	16	PM Peak	21	PM Peak	0	PM Peak	4			
8	Douglas Boulevard	Drive, residential area adjacent to west bound				DAY 82%	1.004	DAY 82%	40	DAY 82%	25	DAY 82%		DAY 82%	2	52	4 lanes divided, tree-lined median	40
	o Boulevard	lanes in Granite Bay, Placer County	Inputs	for calculat	ing Ldn:	NIGHT	1,904	NIGHT	13	NIGHT	25	NIGHT	0	NIGHT	3		tree-linea median	
		1445 Eureka Road, multi-				18%	461	18%	3	18%	4	18%	0	18%	1			
		family residential	44,684	22,342	2,234	PM Peak	2,183	PM Peak	15	PM Peak	20	PM Peak	0	PM Peak	4		6 lanes divided with bike lanes,	
9	Eureka Road	eka Road development (225 units) on		for calculat	culating Ldn:	DAY 82% NIGHT	1,790	DAY 82% NIGHT	13	DAY 82% NIGHT	17	DAY 82% NIGHT	0	DAY 82% NIGHT	3	52	shrub-lined	
		north bound lanes in Roseville, Placer County				18%	393	18%	3	18%	4	18%		18%	1		median	

Daily Truck and Worker Trips

					20	09				20)13
		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5	
Sensitive Noise Receiver	Local Roadway	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers
1	East Bidwell Street	410	0	410	0	377	0	342	0	54	0
2	Oak Avenue Parkway	0	20	0	20	0	20	0	20	0	16
3	Green Valley Road	80	204	40	124	4	204	56	204	0	96
4	East Natoma Road	163	596	175	644	126	588	131	596	20	512
5	Folsom-Auburn Road	0	196	0	188	0	72	0	164	0	232
6	Blue Ravine Road	163	20	175	20	126	20	131	20	20	16
7	Sierra College Boulevard	0	48	2	52	13	36	2	48	65	44
8	Douglas Boulevard	20	128	74	136	16	108	21	128	65	220
9	Eureka Road	20	0	72	0	3	0	19	0	0	0

Hourly Truck and Worker Trips

					20	09				20	13
		Alternative 1		Alternative 2		Altern	ative 3	Alternative 4		Alternative 5	
Sensitive Noise Receiver	Local Roadway	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers	New Trucks	New Workers
1	East Bidwell Street	51	0	51	0	47	0	43	0	7	0
2	Oak Avenue Parkway	0	5	0	5	0	5	0	5	0	4
3	Green Valley Road	10	51	5	31	1	51	7	51	0	24
4	East Natoma Road	20	149	22	161	16	147	16	149	3	128
5	Folsom-Auburn Road	0	49	0	47	0	18	0	41	0	58
6	Blue Ravine Road	20	5	22	5	16	5	16	5	3	4
7	Sierra College Boulevard	0	12	0	13	2	9	0	12	8	11
8	Douglas Boulevard	3	32	9	34	2	27	3	32	8	55
9	Eureka Road	3	0	9	0	0	0	2	0	0	0

ALTERNATIVE 1 RESULTS - 2009 Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Least		Daytime	Night	Ldn
Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	74.0	66.5	75.1
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.3	63.7	71.9
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	73.8	66.2	74.9
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.9	63.9	71.9
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	73.9	67.7	75.7
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70.5	63.2	71.7
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71.5	65	73.2
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.1	66.7	74.8
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.8	66.2	74.4

ALTERNATIVE 2 RESULTS- 2009 Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Least		Daytime	Night	Ldn
Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	74.0	66.5	75.1
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.3	63.7	71.9
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	72.9	66.5	74.6
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.9	64.1	72.0
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	73.9	67.7	75.7
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70.5	63.2	71.7
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71.5	65.1	73.2
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.3	66.7	74.9
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.9	66.2	74.4

ALTERNATIVE 3 RESULTS - 2009 Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise	Local		Daytime	Night	Ldn
Receiver Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	73.9	66.5	75.1
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.3	63.7	71.9
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	72.8	66.7	74.7
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.7	63.9	71.8
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	73.8	67.4	75.5
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70.3	63.2	71.6
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71.6	65	73.2
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.1	66.7	74.8
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.8	66.2	74.4

ALTERNATIVE 4 RESULTS - 2009 Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Least		Daytime	Night	Ldn
Number	Local Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	73.9	66.5	75.1
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.3	63.7	71.9
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	73.0	66.7	74.8
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.7	63.9	71.8
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	73.9	67.7	75.7
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70.3	63.2	71.6
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	71.5	65.0	73.2
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.1	66.7	74.8
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	72.8	66.2	74.4

ALTERNATIVE 5 RESULTS - 2013 Ldn Noise Levels

Sensitive			50 ft	50 ft	50 ft
Noise Receiver	Local		Daytime	Night	Ldn
Number	Roadway	Description	(Leq)	(Leq)	
1	East Bidwell Street	Along Albrighton Drive, residential area adjacent to south bound lanes in Folsom	73.6	66.8	75.1
2	Oak Avenue Parkway	Along Thorndike Way, residential area adjacent to north bound lanes in Folsom	70.6	64.1	72.3
3	Green Valley Road	Parking lot adjacent to residential area along Kipps Lane, north of Green Valley Road in El Dorado Hills, El Dorado County	73.1	66.7	74.8
4	East Natoma Road	End of Pomine Court, residential area along east bound lanes in Folsom	69.6	63.9	71.7
5	Folsom-Auburn Road	7550 Folsom-Auburn Road is in a residential area along the south bound lanes in Folsom	74.2	68.1	76.1
6	Blue Ravine Road	Blackberry Circle, residential area along north bound lanes in Folsom	70.2	63.4	71.7
7	Sierra College Boulevard	End of Kilmartin Court, residential street adjacent to south bound lanes in Rocklin, Placer County	72.1	65.3	73.6
8	Douglas Boulevard	4600-4699 Rolling Oaks Drive, residential area adjacent to west bound lanes in Granite Bay, Placer County	73.6	67.3	75.4
9	Eureka Road	1445 Eureka Road, multi- family residential development (225 units) on north bound lanes in Roseville, Placer County	73.1	66.5	74.7

Appendix H Public Health & Safety Record Search



EDR DataMapTM Corridor Study

Folsom Dam Folsom, CA 95630

March 23, 2006

Inquiry number 01637093.1r

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR).

TARGET PROPERTY INFORMATION

ADDRESS

FOLSOM, CA 95630 FOLSOM, CA 95630

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

NPL..... National Priority List

Proposed NPL Proposed National Priority List Sites

Delisted NPL National Priority List Deletions

NPL PECOVERY Federal Superfund Lines

NPL RECOVERY...... Federal Superfund Liens
CERCLIS...... Comprehensive Environmental Response, Compensation, and Liability Information

System

CERCLIS No Further Remedial Action Planned

CORRACTS...... Corrective Action Report

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls
DOD Department of Defense Sites
FUDS Formerly Used Defense Sites
US BROWNFIELDS A Listing of Brownfields Sites

CONSENT...... Superfund (CERCLA) Consent Decrees

TRIS...... Toxic Chemical Release Inventory System

MINES..... Mines Master Index File

RAATS....... RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

NFE..... Properties Needing Further Evaluation

REF...... Unconfirmed Properties Referred to Another Agency

SCH..... School Property Evaluation Program

Toxic Pits _____ Toxic Pits Cleanup Act Sites WMUDS/SWAT _____ Waste Management Unit Database

Notify 65 Proposition 65 Records

CLEANERS..... Cleaner Facilities

WIP..... Well Investigation Program Case List

EMI..... Emissions Inventory Data

TRIBAL RECORDS

INDIAN RESERV..... Indian Reservations

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

INDIAN UST..... Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants ... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/15/2005 has revealed that there are 5 RCRA-SQG sites within the searched area.

Site	Address	Map ID	Page
BUDS GIANITE BAY CLEANERS	8613 AUBURN FOLSOM BLVD	9	12
JOSEPH D LOPEZ	6812 BRANDY CIRCLE	9	23
RALEYS DRUG CTR 492	6845 DOUGLAS BLVD	9	35
CALIFORNIA DEPT FOOD & AGRIC	600 E NATOMA	39	119
FOLSOM CORDOVA USD BLANCHE SPR	249 FLOWER CIRCLE	47	128

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/2005 has revealed that there are 10 ERNS sites within the searched area.

Site	Address	Map ID	Page
8779 AUBURN FOLSOM RD	8779 AUBURN FOLSOM RD	9	8
DOUGLAS BLVD/AUBURN AND FOLSOM	DOUGLAS BLVD/AUBURN AND	9	23
8715 SPOONER CT	8715 SPOONER CT	13	39
9242 PURDY LANE	9242 PURDY LANE	20	49
FOLSOM LAKE NEAR TOWN OF FOLSO	FOLSOM LAKE NEAR TOWN O	33	89
FOLSOM DAM ROAD FOLSOM SUBSTAT	FOLSOM DAM ROAD FOLSOM	33	89
FOLSOM DAM RD, FOLSOM SUBSTATI	FOLSOM DAM RD, FOLSOM S	33	89
FOLSOM SOUTH CANAL BETW HWY 50	FOLSOM SOUTH CANAL BETW	33	90
FOLSOM PRISON	FOLSOM PRISON	33	90
FOLSOM STATE PRISON, BETWEEN B	FOLSOM STATE PRISON, BE	33	90

FTTS: FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act) over the previous five years. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS list, as provided by EDR, and dated 01/17/2006 has revealed that there is 1 FTTS site within the searched area.

Site	Address	Map ID	Page
BUREAU OF RECLAMATION-FOLSOM D	7794 FOLSOM DAM RD	28	<i>75</i>

SSTS: Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

A review of the SSTS list, as provided by EDR, and dated 12/31/2003 has revealed that there is 1 SSTS site within the searched area.

Site	Address	Map ID	Page
PRISON IND AUTH CHEMICAL DIV	560 E NATOMA ST	38	115

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 01/09/2006 has revealed that there are 14

FINDS sites within the searched area.

Site	Address	Map ID	Page
CAVITT (WILLMA) JUNIOR HIGH SC	7200 FULLER DR.	9	12
BUDS GIANITE BAY CLEANERS	8613 AUBURN FOLSOM BLVD	9	12
JOSEPH D LOPEZ	6812 BRANDY CIRCLE	9	23
USA GASOLINE CORPORATION FACIL	6990 DOUGLAS BLVD	9	<i>2</i> 7
RALEY S #412	6845 DOUGLAS BLVD	9	35
ROSEVILLE WATER TREATMENT PLAN	9342 BARTON RD.	22	51
SAN JUAN WATER DISTRICT	9935 AUBURN FOLSOM ROAD	27	58
BUREAU OF RECLAMATION-FOLSOM D	7794 FOLSOM DAM RD	<i>28</i>	<i>75</i>
SUNDAHL (CARL H.) ELEMENTARY	9932 INWOOD ROAD	35	95
PRISON INDUSTRY AUTHORITY	560 E NATOMA ST	38	118
CALIFORNIA DEPT FOOD & AGRIC	600 E NATOMA	39	119
FOLSOM HILLS ELEMENTARY	106 MANSEAU DR.	43	122
FOLSOM CORDOVA USD BLANCHE SPR	249 FLOWER CIRCLE	47	128
SPRENTZ (BLANCHE) ELEMENTARY	249 FLOWER DR.	47	128

STATE AND LOCAL RECORDS

NFA: This category contains properties at which DTSC has made aclear determination that the property does not pose a problem to the environment or to public health.

A review of the NFA list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 NFA site within the searched area.

Site	Address	Map ID	Page
HAAG PROPERTY	9232 BARTON ROAD	19	46

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, and dated 12/08/2005 has revealed that there is 1 SWF/LF site within the searched area.

Site	Address	Map ID	Page
FOLSOM MATERIALS RECOVERY & CO	N OF NEW FOLSOM PRISON	41	121

WDS: California Water Resources Control Board - Waste Discharge System.

A review of the CA WDS list, as provided by EDR, and dated 12/19/2005 has revealed that there is 1 CA WDS site within the searched area.

Site	Address	Map ID	Page
ROSEVILLE WATER TREATMENT PLAN	9595 BARTON RD	24	53

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 9 Cortese sites within the searched area.

Site	Address	Map ID	Page
HIDDEN VALLEY MAINTENANCE YARD	7077 PINE GATE WAY	3	3
ARCO #2140	8555 AUBURNFOLSOM	9	12
BEACON #3642 (FORMER)	6990 DOUGLAS BLVD	9	27
KIRBY, CHARLES R. & NORMA	8380 AUBURN FOLSOM	9	37
SEATERS, MARION & KATHLEE	7430 BASCOU	13	41
FOLSOM DAM	7794 FOLSOM DAM RD	28	70
SIERRA LIFE CHURCH	64 MARY	30	80
GREEN VALLEY GAS & FOOD	369 GREEN VALLEY RD	32	82
COUNTRY BOY GENERAL STORE	7530 FOLSOM-AUBURN BLVD	34	94

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 01/05/2006 has revealed that there is 1 SWRCY site within the searched area.

Site	Address	Map ID	Page
WEIS RECYCLE CENTERS INC/RALEY	6847 DOUGLAS BLVD	9	34

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/09/2006 has revealed that there are 7 LUST sites within the searched area.

Site	Address	Map ID	Page
HIDDEN VALLEY MAINTENANCE YARD Facility Status: Case Closed	7077 PINE GATE WAY	3	3
ARCO #2140 Facility Status: Post remedial action monitoring	8555 AUBURN-FOLSOM RD	9	20
BEACON #3642 (FORMER) Facility Status: Remedial action (cleanup) Unde	6990 DOUGLAS BLVD rway	9	27
SAN JUAN SUBURBAN WATER DIST Facility Status: Case Closed	9925 AUBURN-FOLSOM RD	27	62
FOLSOM DAM Facility Status: Case Closed	7794 FOLSOM DAM RD	28	70
GREEN VALLEY GAS & FOOD Facility Status: Pollution Characterization	381 GREEN VALLEY RD	32	84
COUNTRY BOY GENERAL STORE Facility Status: Case Closed	7530 FOLSOM-AUBURN BLVD	34	94

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 9 CA FID UST sites within the searched area.

Site	Address	Map ID	Page
ARCO FACILITY #2140	8555 AUBURN FOLSOM RD	9	17
BEACON #642	6990 DOUGLAS BLVD	9	25
SAN JUAN SUBURBAN WATER DIST	9965 AUBURN FOLSOM RD	<i>27</i>	<i>57</i>
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	<i>2</i> 7	<i>59</i>
AMERICAN RIVER DISTRICT	7806 FOLSOM AUBURN RD	28	66
FOLSOM DAM	7794 FOLSOM DAM RD	<i>28</i>	70
FOLSOM SUBSTATION	FOLSOM DAM	<i>28</i>	<i>76</i>
GREEN VALLEY MARKET	381 GREEN VALLEY RD	29	<i>78</i>
COUNTRY BOY MARKET	7530 FOLSOM AUBURN RD	34	92

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 01/09/2006 has revealed that there is 1 SLIC site within the searched area.

Site	Address	Map ID	Page
CDFA FOLSOM FACILITY	600 E. NATOMA	39	119
Facility Status: Case Open			

CS: Contaminated Sites.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 02/02/2006 has revealed that there are 7 Sacramento Co. CS sites within the searched area.

Site	Address	Map ID	Page
FOLSOM DAM Date Closed: 07/28/1992 Date Closed: 02/02/1999	7794 FOLSOM DAM RD	28	70
WAPA-FOLSOM SUBSTATION COUNTRY BOY GENERAL STORE Date Closed: 02/18/1998	FOLSOM DAM RD	33	88
	7530 FOLSOM AUBURN RD	34	91
CITY OF FOLSOM/SOLID WASTE DIV	<i>560 E NATOMA ST</i>	38	105
CALIFORNIA STATE PRISON GARAGE	560 E NATOMA ST	38	107
FOLSOM STATE PRISON	<i>560 E NATOMA</i>	38	108
FOLSOM PRISON-GREEN VALLEY	560 E NATOMA ST	38	115

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 01/09/2006 has revealed that there are 2 UST sites within the searched area.

Site	Address	Map ID	Page
ARCO #2140, AM/PM GRANITE BAY	8555 AUBURN FOLSOM RD	9	20
KIENER, DAVE	8940 WAGON WAY	16	42

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 15 HIST UST sites within the searched area.

Site	Address	Map ID	Page
HVCA EQUIPMENT YARD	7077 PINEGATE WAY	3	5
STATION #3	7047 LAIRD ROAD	4	6
T MARC KNUTSEN	8555 AUBURN FOLSOM RD	9	15
ARCO AM/PM #2140	8555 AUBURN FOLSOM RD	9	16
THE CORNER	6990 DOUGLAS BLVD	9	23
JOSEPH H. PIERCE	8800 WAGON WAY	14	41
JOSEPH R. GALLARDO	6237 EUREKA RD	17	42
OTOW ORCHARD	6232 EUREKA RD	17	43
STATION #1	6900 EUREKA RD	18	43
KEN ROBERTS	9230 AUBURN FOLSOM RD.	21	51
AMERICAN RIVER DISTRICT	7806 FOLSOM AUBURN RD	28	65
PINEBROOK VILLAGE	7900 FOLSOM AUBURN RD	<i>28</i>	68
U.S. BUREAU OF RECLAMATION FOL	7794 FOLSOM DAM RD	28	73
GREEN VALLEY MARKET	381 GREEN VALLEY RD	32	83
FOLSOM SUBSTATION	FOLSOM DAM	33	88

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 01/30/2006 has revealed that there are 4 AST sites within the searched area.

Site	Address	Map ID	Page
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	27	61
FOLSOM LAKE	7806 FOLSOM-AUBURN RD.	28	66
FOLSOM SUBSTATION	FOLSOM DAM	<i>28</i>	<i>76</i>
FOLSOM WATER TREATMENT PLANT	194 RANDALL DRIVE	44	123

CA MS: Placer County Master List of Facilities includes Aboveground Hazardous Material tanks, Underground Storage tanks, Site Clean-up sites.

A review of the CA PLACER CO. MS list, as provided by EDR, and dated 01/18/2006 has revealed that there are 23 CA PLACER CO. MS sites within the searched area.

Site	Address	Map ID	Page
METRO PCS #135 (MADRID BOULDER	6525 BOULDER RD	1	3
HIDDEN VALLEY COMMUNITY ASSOC.	7077 PINE GATE WAY	3	5
STATION #3	7047 LAIRD RD	4	5
ROCK CREEK MOBILE HOME PARK	8045 MORNINGSIDE DR	7	7
VARAKUTA, BEN	8377 OAK KNOLL DR	8	8
BP WEST COAST PRODUCTS LLC 021	8555 AUBURN FOLSOM RD	9	14
USA GASOLINE #3642	6990 DOUGLAS BLVD	9	27
BEACON #3642 (FORMER)	6990 DOUGLAS BLVD	9	<i>2</i> 7
GRANITE BAY AÙTO PARTS	7110 DOUGLAS BLVD	9	32
LONGS DRUG STORE #526	8455 AUBURN FOLSOM RD	9	37
METRO PCS #137 (HIDDEN LAKES)	7955 W HIDDEN LAKES DR	10	38
KIENER, DAVE	8940 WAGON WAY	16	42
JOSEPH R. GALLARDO	6237 EUREKA RD	17	42
STATION #1	6900 EUREKA RD	18	43
AT & T WIRELESS SVCS-EUREKA RD	6900 EUREKA RD	18	44
1X SO PLACER FIRE DIST/STA. #	6900 EUREKA RD	18	45
ROSEVILLE, CITY OF, WATER TREA	9342 BARTON RD	22	52
ROSEVILLE WATER TREATMENT PLAN	9595 BARTON RD	24	<i>53</i>
GRANITE BAY GOLF CLUB	9580 BARTON RD	24	56
NEXTEL COMM (SITE 1781)	9651 AUBURN FOLSOM RD	25	56
LOVEALL, JACK AND PATRICIA	9145 OAK LEAF WAY	26	56
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	27	<i>59</i>
PINEBROOK VILLAGE	7900 FOLSOM AUBURN RD	28	<i>68</i>

SWEEPS: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 16 SWEEPS UST sites within the searched area.

Site	Address	Map ID	Page
HVCA EQUIPMENT YARD	7077 PINEGATE WAY	3	5
STATION #3	7047 LAIRD RD	4	5
ARCO FACILITY #2140	8555 AUBURN FOLSOM RD	9	17
BEACON #642	6990 DOUGLAS BLVD	9	<i>2</i> 5
MR. LOVEALL PROPERTY	9145 OAK LEAF WAY	26	57
SAN JUAN SUBURBAN WATER DIST	9965 AUBURN FOLSOM RD	<i>2</i> 7	<i>57</i>
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSON RD	27	58
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	<i>2</i> 7	<i>59</i>
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	<i>2</i> 7	61
AMERICAN RIVER DISTRICT	7806 FOLSOM AUBURN RD	<i>28</i>	66
FOLSOM DAM	7794 FOLSOM DAM RD	<i>28</i>	70
FOLSOM SUBSTATION	FOLSOM DAM	<i>28</i>	<i>76</i>
GREEN VALLEY MARKET	381 GREEN VALLEY RD	29	<i>78</i>
GREEN VALLEY GAS & FOOD	381 GREEN VALLEY RD	<i>32</i>	84
COUNTRY BOY MARKET	7530 FOLSOM AUBURN RD	34	92

Site	Address	Map ID	Page
FOLSOM STATE PRISON	560 E NATOMA	38	108

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2004 has revealed that there are 9 CHMIRS sites within the searched area.

Site	Address	Map ID	Page
Not reported	7200 FULLER ROAD	9	9
Not reported	FULLER DR. / AUBURN/FOL	9	11
Not reported	8715 SPOONER CT	13	39
Not reported Date Completed: 16-FEB-91	9242 PURDY WAY	20	47
Not reported	9237 PURDY LANE	20	49
Not reported	9500 BARTON RD	23	52
Not reported	103 HOLLYANN DR.	31	80
Not reported	560 EAST NATUMA STREET	38	113
Not reported	194 RANDALL DR.	44	123

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 01/03/2006 has revealed that there is 1 DEED site within the searched area.

Site	Address	Map ID	Page
FOLSOM PRISON	N OF FOLSOM CITY; ADJ T	37	96

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 VCP site within the searched area.

Site	Address	Map ID	Page
FOLSOM PRISON	N OF FOLSOM CITY; ADJ T	<i>37</i>	96

CDL: A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

A review of the CDL list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 CDL sites within the searched area.

Site	Address	Map ID	Page
Not reported	7855 MORNING SIDE DRIVE	6	7
Not reported	6981 DOUGLAS BLVD	9	34

CA ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 02/02/2006 has revealed that there are 22 Sacramento Co. ML sites within the searched area.

Site	Address	Map ID	Page
THE DAM NURSERY	7700 FOLSOM AUBURN	28	64
AMERICAN RIVER DISTRICT	7806 FOLSOM AUBURN RD	<i>28</i>	66
PINEBROOK VILLAGE	7900 FOLSOM AUBURN RD	<i>28</i>	68
M A NANGLE, DC	7940 FOLSOM AUBURN	28	69
BUREAU OF REC - DRILL YARD	7794 FOLSOM DAM RD	28	70
CENTRAL CALIF AREA OFFICE	7794 FOLSOM DAM RD	28	75
FOLSOM SUBSTATION	FOLSOM DAM	28	<i>76</i>
DOUGLAS REKERS DDS	8008 FOLSOM AUBURN RD	28	<i>77</i>
EARNEST J HOOK DPM	8018 FOLSOM AUBURN RD	28	78
WAPA-FOLSOM SUBSTATION	FOLSOM DAM RD	33	88
BROTHERS BOATS	7450 FOLSOM AUBURN RD	34	90
COUNTRY BOY GENERAL STORE	7530 FOLSOM AUBURN	34	92
CITY OF FOLSOM/SOLID WASTE DIV	560 E NATOMA ST	38	105
FOLSOM CORRECTIONAL RESOURCE	560 E NATOMA ST	38	108
CALIF STATE PRISON-SACRAMENTO	560 E NATOMA ST	38	114
RALPH'S #988	25000 BLUE RAVINE RD	40	120
SUMMIT DENTAL	25004 BLUE RAVINE RD, #	40	120
EMPIRE RANCH GOLF CLUB	1620 E NATOMAS ST	42	122
CITY OF FOLSOM WATER TREATMENT	194 RANDALL DR	44	124
TOM HOWARD MOVING SERVICE	236 SPENCER ST	45	126
CINGULAR WIRELESS	771 OAK AV PKWY	46	126
BLANCHE SPRENTZ ELEM. SCHOOL	249 FLOWER CR	47	128

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2003 has revealed that there are 42 HAZNET sites within the searched area.

Site	Address	Map ID	Page
EMC MORTGAGE COMPANY	6590 AUBURN FOLSOM RD	2	3
BOB ERICKSON	7500 MORNINGSIDE DR	5	7
JACK-LINSSEN ENTERPRISES LLC	8769 AUBURN-FOLSOM RD	9	8
GRANITE BAY MEDICAL CINIC	8757 AUBURN-FOLSOM RD	9	8
BUDS GIANITE BAY CLEANERS	8613 AUBURN FOLSOM BLVD	9	12
BP WEST COAST PRODUCTS LLC 021	8555 AUBURN FOLSOM RD	9 9	14
ARCO PRODUCTS COMPANY	8555 AUBURN FOLSOM RD	9	21
USA GASOLINE CORPORATION FACIL	6990 DOUGLAS BLVD	9	<i>2</i> 7
BEACON #3642 (FORMER)	6990 DOUGLAS BLVD	9 9	<i>2</i> 7
ULTRAMAR INC 3642	6990 DOUGLAS BLVD	9	29
KEVEN R MILLS DDS	6910 DOUGLAS BLVD STE B	9	31
ROBERT WALLER	7150 DOUGLAS BLVD	9 9	32
BECK CHIROPRACTIC/GRANITE BAY	6910 DOUGLAS BLVD.	9	33
RITE AID CORPORATION	7005 DOUGLAS BLVD	9	34
RALEY'S #412/492	6845 DOUGLAS BLVD	9	35
LONGS DRUGS STORE #526	8435 AUBURN-FOLSOM RD	9	37
GRANITE BAY VETERINARY CLINIC	6500 DOUGLAS BLVD	11	38
AAA MOBILE OIL CHANGE SERVICE	7460 DOUGLAS BLVD	12	38
REX HALL	7792 LAKESHORE DR	15	41
DAVID KIENER	8940 WAGON WY	16	41
SOUTH PLACER FIRE DISTRICT	6900 EUREKA ROAD	18	44
1X SO PLACER FIRE DIST/STA. #	6900 EUREKA RD	18	45
SAN JUAN WATER DISTRICT	9935 AURBURN- FOLSOM RD	21	50
ROSEVILLE WATER TREATMENT PLAN	9595 BARTON RD	24	<i>53</i>
SAN JUAN WATER DISTRICT	9935 AUBURN FOLSOM RD	27	58
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	27	59
SAN JUAN SUBURBAN WATER DIST	9935 AUBURN FOLSOM RD	27	61
DPR FOLSOM LAKES	7806 FOLSOM AUBURN RD	28	64
U S BUREAU OF RECLAMATION	7794 FOLSOM DAM RD	28	73
ANDY BOHART	7794 FOLSOM DAM RD	28	75
DOUGLAS REKERS DDS	8008 FOLSOM AUBURN RD	28	<i>77</i>
ZACH ENTERPRISES	410 DANIELLE	31	81
IRVIN BINGHEM	321 GREEN VALLEY RD	32	82
GREEN VALLEY GAS & FOOD	369 GREEN VALLEY RD	32	<i>82</i>
GREEN VALLEY TIRE AND BRAKE	390 GREEN VALLEY RD	32	87
BROTHERS BOATS	7450 FOLSOM AUBURN RD	34	90
JENNIFER BRINITZER	9824 OAK PLACE WEST	36	96
CITY OF FOLSOM/SOLID WASTE DIV	560 E NATOMA ST	38	105
FOLSOM COMMUNITY CORRECTIONAL	570 E NATOMA ST	39	118
CALIFORNIA DEPT FOOD & AGRIC	600 E NATOMA	39	119
CITY OF FOLSOM WATER TREATMENT	194 RANDALL DR	44	124
BLANCHE SPRENTZ ELEMENTARY SCH	249 FLOWER DR	47	127

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

	Database	Total Plotted
FEDERAL RECORDS		
	NPL Proposed NPL Delisted NPL NPL RECOVERY CERCLIS CERC-NFRAP CORRACTS RCRA TSD RCRA Lg. Quan. Gen. RCRA Sm. Quan. Gen. ERNS HMIRS US ENG CONTROLS US INST CONTROL DOD FUDS US BROWNFIELDS CONSENT ROD UMTRA ODI TRIS TSCA FTTS SSTS PADS MLTS MINES FINDS RAATS	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
STATE AND LOCAL RE	CORDS	
	AWP Cal-Sites CA Bond Exp. Plan NFA NFE REF SCH Toxic Pits State Landfill CA WDS WMUDS/SWAT Cortese SWRCY LUST CA FID UST	0 0 0 1 0 0 0 0 1 1 1 0 9 1 7

MAP FINDINGS SUMMARY

	Database	Total Plotted
	SLIC Sacramento Co. CS UST HIST UST AST PLACER CO. MS SWEEPS UST CHMIRS Notify 65 DEED VCP DRYCLEANERS WIP CDL Sacramento Co. ML HAZNET EMI	1 7 2 15 4 23 16 9 0 1 1 0 0 2 22 42 0
TRIBAL RECORDS		
	INDIAN RESERV INDIAN LUST INDIAN UST	0 0 0
EDR PROPRIETARY REC	ORDS	
	Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID Direction Distance Distance (ft.)Site

rection EDR ID Number

Database(s) EPA ID Number

1 METRO PCS #135 (MADRID BOULDER) 6525 BOULDER RD GRANITE BAY, CA 95746 CA PLACER CO. MS S106534249 N/A

Placer MS:

Facility ID: PR0009979
District Code: 50
Program Elements: 2105
Facility Status: 1

Facility ID: PR0009980
District Code: 50
Program Elements: 2115
Facility Status: 1

2 EMC MORTGAGE COMPANY HAZNET S103668398 6590 AUBURN FOLSOM RD N/A LOOMIS, CA 95650

HAZNET:

Gepaid: CAC001057384 TSD EPA ID: CAT080022148

Gen County: Placer

Tsd County: San Bernardino

Tons: .1251 Facility Address 2: Not reported

Waste Category: Off-specification, aged, or surplus organics

Disposal Method: Transfer Station

Contact: EMC MORTGAGE COMPANY

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: C-O TOM DABES LYON REALTY

FAIR OAKS, CA 95628

County Placer

3 HIDDEN VALLEY MAINTENANCE YARD LUST S101307938
7077 PINE GATE WAY Cortese N/A

LOOMIS, CA 95650 State LUST:

Cross Street: Not reported Not reported Qty Leaked: Case Number Not reported Reg Board: Not reported Chemical: Gasoline Lead Agency: Local Agency Local Agency: 31000 Case Type: Soil only Status: **Case Closed**

Review Date: 1991-07-09 00:00:00 Confirm Leak: 1991-07-09 00:00:00
Workplan: Not reported Prelim Assess: Not reported

Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 1991-11-22 00:00:00
Release Date: Not reported

Release Date: Not reported
Cleanup Fund Id: Not reported
Discover Date: Not reported
Enforcement Dt: 1965-01-01 00

Enforcement Dt: 1965-01-01 00:00:00 Enf Type: None Taken

Remed Plan:

Not reported

TC01637093.1r Page 3 of 128

Map ID Direction Distance Distance (ft.)Site

rection EDR ID Number

Database(s) EPA ID Number

S101307938

HIDDEN VALLEY MAINTENANCE YARD (Continued)

Enter Date: Not reported Funding: Not reported DAV Staff Initials: How Discovered: Not reported How Stopped: Not reported Not reported Interim: Leak Cause: Not reported Leak Source: Not reported MTBE Date: Not reported

Max MTBE GW: Not reported

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

Priority: Low priority. Priority ranking can change over time.

Local Case # : Not reported
Beneficial: Not reported
Staff : PRS
GW Qualifier : Not reported
Max MTBE Soil : Not reported

Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: UNNAMED BASIN
Operator : Not reported

Oversight Prgm: LUST

Review Date: 1998-09-02 00:00:00

Stop Date: Not reported

Work Suspended :No

Responsible PartyHIDDEN VALLEY HOMEOWNERS ASSOC

RP Address: Not reported
Global Id: T0606100115
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 0 Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported

Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

Substance: GASOLINE
Case Type: Soil only
Program: LUST

Staff Initials: PRS Case Number: 310139

Status: Case Closed

MTBE Code: N/A Lead Agency: Local

CORTESE:

Region: CORTESE Fac Address 2: Not reported

EDR ID Number

Owner Name:

Container Num:

Tank Construction: 12 gauge

Year Installed:

Telephone:

Other Type:

STATE

1977

(916) 791-4978 Not reported

Region:

Distance (ft.)Site Database(s) **EPA ID Number**

3 HIDDEN VALLEY COMMUNITY ASSOC. 7077 PINE GATE WAY

CA PLACER CO. MS S101331541

N/A

LOOMIS, CA 95650

Placer MS:

Facility ID: PR0004387

District Code: 11 Program Elements: 2350 Facility Status:

3 **HVCA EQUIPMENT YARD 7077 PINEGATE WAY LOOMIS, CA 95650**

HIST UST U001613259 **SWEEPS UST** N/A

HIDDEN VALLEY COMMUNITY ASSOC

UST HIST:

Facility ID:

49299 Total Tanks:

Owner Address: 7072 PINEGATE WAY

LOOMIS, CA 95650

Tank Used for: **PRODUCT**

Tank Num:

00000500 Tank Capacity: REGULAR Type of Fuel:

Leak Detection: None

Contact Name: **FARL GRUNDY** Facility Type: Gas Station

SWEEPS:

Status: Α Comp Number: 49299 Number: 9

Board Of Equalization: 44-017228 Ref Date : 07-01-85 Act Date : Not reported Created Date: 02-29-88

Tank Status: Owner Tank Id:

Swrcb Tank Id: 31-000-049299-000001

Actv Date : 07-01-85 Capacity: 500 M.V. FUEL Tank Use: Stg: LEADED Content:

Number Of Tanks:

CA PLACER CO. MS S106447381 **SWEEPS UST**

STATION #3 7047 LAIRD RD **LOOMIS, CA 95678**

Placer MS:

Facility ID: PR0003493 District Code: 19

Program Elements: 2105 Facility Status:

SWEEPS:

Status: Α Comp Number: 13519 Number:

Board Of Equalization: Not reported Ref Date: 07-01-85

N/A

Map ID Direction Distance Distance (ft.)Site

EDR ID Number

STATION #3 (Continued) S106447381

Database(s)

EPA ID Number

Act Date: Not reported 02-29-88 Created Date: Tank Status: Α Owner Tank Id: 5

31-000-013519-000001 Swrcb Tank Id:

Actv Date : 07-01-85 Capacity: 550 Tank Use : M.V. FUEL Stg: Content: **LEADED** Number Of Tanks: 2

Status: Α Comp Number: 13519 Number:

Board Of Equalization: Not reported 07-01-85 Ref Date: Not reported Act Date: Created Date: 02-29-88 Tank Status: Α

Owner Tank Id: 6

31-000-013519-000002 Swrcb Tank Id:

Actv Date : 07-01-85 Capacity: 550 M.V. FUEL Tank Use: Stg: Content: **DIESEL** Number Of Tanks: Not reported

STATION #3 HIST UST U001613878 4 7047 LAIRD ROAD N/A **LOOMIS, CA 95678**

UST HIST:

13519 SOUTH PLACER FIRE DISTRICT Facility ID: Owner Name:

Region:

Total Tanks: 2 Region: STATE

Owner Address: 6900 EUREKA RD

ROSEVILLE, CA 95678

PRODUCT Tank Used for:

Tank Num:

Container Num: 5 00000550 1962 Tank Capacity: Year Installed: Type of Fuel: **REGULAR** Tank Construction: Not Reported

Leak Detection: Stock Inventor

(916) 791-7059 Contact Name: LT. ELLINGFORD Telephone: Facility Type: Other Other Type: **FIRE STATION**

Facility ID: 13519 Owner Name:

Total Tanks: Owner Address: 6900 EUREKA RD

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Container Num: 00000550 Tank Capacity: Year Installed: 1962 DIESEL Tank Construction: Not Reported Type of Fuel:

Leak Detection: Stock Inventor

Contact Name: LT. ELLINGFORD Telephone: (916) 791-7059 **FIRE STATION** Facility Type: Other Other Type:

SOUTH PLACER FIRE DISTRICT

STATE

Distance (ft.)Site Database(s) EPA ID Number

5 BOB ERICKSON HAZNET S105086750 7500 MORNINGSIDE DR N/A

HAZNET:

GRANITE BAY, CA 95746

Gepaid: CAC002284369 TSD EPA ID: CAD009466392

Gen County: Placer
Tsd County: 7
Tons: 1.5000
Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Recycler
Contact: BOB ERICKSON
Telephone: (916) 791-0758
Mailing Name: Not reported

Mailing Address: 7500 MORNINGSIDE DR

GRANITE BAY, CA 95746

County Placer

Gepaid: CAC002284369 TSD EPA ID: CAD044003556

Gen County: Placer
Tsd County: Yolo
Tons: 1.8765
Facility Address 2: Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station
Contact: BOB ERICKSON
Telephone: (916) 791-0758
Mailing Name: Not reported

Mailing Address: 7500 MORNINGSIDE DR

GRANITE BAY, CA 95746

County Placer

6 CDL \$107536348 7855 MORNING SIDE DRIVE N/A

GRANITE BAY, CA 95678

CA CDL:

Facility ID: 199708027
Date: 08/12/97
Abandoned Waste: Not reported
Illegal Drug Lab: Yes
Mobile Lab: Not reported

Woodle Lab. Not reported

7 ROCK CREEK MOBILE HOME PARK 8045 MORNINGSIDE DR AUBURN, CA 95650

Placer MS:

Facility ID: PR0003410
District Code: 10
Program Elements: 2105
Facility Status: 2

CA PLACER CO. MS S105708903 N/A

EDR ID Number

MAP FINDINGS

Map ID Direction Distance Distance (ft.)Site

virection EDR ID Number

Database(s)

EPA ID Number

8 VARAKUTA, BEN CA PLACER CO. MS S106534300 8377 OAK KNOLL DR N/A

8377 OAK KNOLL DR GRANITE BA, CA 95650

Placer MS:

Facility ID: PR0009886

District Code: 11
Program Elements: 2301
Facility Status: 2

9 8779 AUBURN FOLSOM RD ERNS 92251437 8779 AUBURN FOLSOM RD N/A ROSEVILLE, CA 95661

<u>Click this hyperlink</u> while viewing on your computer to access additional ERNS detail in the EDR Site Report.

9 JACK-LINSSEN ENTERPRISES LLC HAZNET S107146731 8769 AUBURN-FOLSOM RD N/A

HAZNET:

GRANITE BAY, CA 95746

Gepaid: CAL000195341 TSD EPA ID: CAL000175030

Gen County: Placer
Tsd County: Placer
Tons: 0.02

Facility Address 2: Not reported

Waste Category: Other inorganic solid waste

Disposal Method: Transfer Station
Contact: JEANETTE KRANTZ
Telephone: (916) 791-4719
Mailing Name: Not reported

Mailing Address: 8769 AUBURN-FOLSOM RD GRANITE BAY, CA 95746

County Placer

9 GRANITE BAY MEDICAL CINIC HAZNET S103674875 8757 AUBURN-FOLSOM RD N/A

HAZNET:

GRANITE BAY, CA 95746

Gepaid: CAL000081370 TSD EPA ID: NVD981639826

Gen County: Placer
Tsd County: 99
Tons: .0790
Facility Address 2: Not reported

Waste Category: Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium,

beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum,

nickel, selenium, silver, thallium, vanadium, and zinc)

Disposal Method: Recycler

Contact: STEPHEN SMOOKLER MD INC

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 8757 AUBURN FOLSOM RD

Distance
Distance (ft.)Site
Database(s) EPA ID Number

GRANITE BAY MEDICAL CINIC (Continued)

S103674875

EDR ID Number

GRANITE BAY, CA 95746

County Placer

Gepaid: CAL000081370 TSD EPA ID: NVD981639826

Gen County: Placer
Tsd County: 99
Tons: .0000
Facility Address 2: Not reported

Waste Category:

Disposal Method: Not reported

Contact: STEPHEN SMOOKLER MD INC

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 8757 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

Gepaid: CAL000081370 TSD EPA ID: NVD981639826

Gen County: Placer
Tsd County: 99
Tons: .0000
Facility Address 2: Not reported

Waste Category:
Disposal Method: *

Contact: STEPHEN SMOOKLER MD INC

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 8757 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

9 CHMIRS S105677947 7200 FULLER ROAD N/A

7200 FULLER ROAD GRANITE BAY, CA

CHMIRS:

OES Control Number: 01-0053

Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Time Completed: Not reported Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 01-0053 Time Notified Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Not reported Special Studies 3: Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated : Not reported Others Number Of Decontaminated: Not reported

MAP FINDINGS

Map ID
Direction
Distance

Distance (ft.)Site Database(s) EPA ID Number

(Continued) S105677947

Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Not reported Company Name: Reporting Officer Name/ID: Not reported Report Date: Not reported Comments: Not reported Facility Telephone Number: Not reported

Waterway Involved: No

Waterway: Not reported Spill Site Not reported Cleanup By: Fire Dept. Containment: Not reported Not reported What Happened: Type: Not reported Other: Not reported Substance: Unknown Oil;;;

Quantity Released:

E Date : Not reported

Contained: Yes

Site Type : Residence

Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time : Not reported

Year : 2001

Agency: Placer CO OES

BBLS: Cups: 0 CUFT: 0 Gallons: 15 0 Grams: Pounds: 0 Liters: 0 0 Ounces: 0 Pints: 0 Quarts: Sheen: 0 Tons: 0 Unknown:

Description: Looks like it could be used motor oil, someone sat the unknown

oil containers next to a dumpster then another layed a Christmas

tree nearby and the container got bumped spilling the oil.

Incident date: 1/3/200112:00:00 AM

Admin Agency: Placer County Health Department

OES date : Not reported OES time : Not reported

OES notification: 1/3/200104:17:44 PM

Amount: Not reported

EDR ID Number

9

Distance (ft.)Site Database(s) EPA ID Number

CHMIRS

EDR ID Number

S105648114

N/A

FULLER DR. / AUBURN/FOLSOM RD GRANITE BAY, CA

CHMIRS:

OES Control Number: 97-4927
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported Time Completed: Not reported Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 97-4927 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated: Not reported Others Number Of Decontaminated: Not reported Not reported Others Number Of Injuries: Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported Not reported Report Date: Not reported Comments: Facility Telephone Number: Not reported Waterway Involved: No Not reported Waterway: Spill Site: Not reported Cleanup By: Contractor Containment: Not reported What Happened: Not reported Type: Not reported Other: Not reported UNKNOWN Substance: Quantity Released: E Date: Not reported Yes

Contained: Yes
Site Type: Other
Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time:
Year:
Agency:
BBLS:
Not reported
1997
CO OES
0

MAP FINDINGS

Map ID Direction Distance Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

(Continued) S105648114

Cups: 0 CUFT: 0 Gallons: 17 Grams: 0 Pounds: 0 Liters: 0 Ounces: 0 Pints: 0 Quarts: 0 Sheen: 0 Tons: 0

Description: SUBSTANCE LOCATED AND REPORTED BY PRIVATE CITIZEN.

Incident date: 12/13/199712:00:00 AM

Admin Agency: Placer County Health Department

OES date : Not reported OES time : Not reported

OES notification : 12/13/199710:47:02 AM

Amount: Not reported

9 CAVITT (WILLMA) JUNIOR HIGH SCHOOL 7200 FULLER DR. GRANITE BAY, CA 95746

Unknown:

FINDS 1008259844 110021517615

N/A

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL CENTER FOR EDUCATION STATISTICS

ARCO #2140 Cortese S105025925

8555 AUBURNFOLSOM ROSEVILLE, CA 95661

9

CORTESE:

ROSEVILLE, CA 95678

Region: CORTESE Fac Address 2: Not reported

9 BUDS GIANITE BAY CLEANERS 8613 AUBURN FOLSOM BLVD

RCRA-SQG 1000374882 FINDS CAD981638745 HAZNET

MAP FINDINGS

Map ID
Direction
Distance

Distance (ft.)Site Database(s) EPA ID Number

BUDS GIANITE BAY CLEANERS (Continued)

1000374882

EDR ID Number

RCRAInfo:

Owner: KITCHELL DAVE

(415) 555-1212

EPA ID: CAD981638745
Contact: Not reported

Classification: Small Quantity Generator

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

HAZNET:

Gepaid: CAD981638745 TSD EPA ID: CAT000613950

Gen County: Placer
Tsd County: Sacramento
Tons: .1950

Facility Address 2: Not reported

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l

Disposal Method: Transfer Station

Contact: DAVID/CYNTHIA KITCHELL

Telephone: (916) 782-1564 Mailing Name: Not reported

Mailing Address: 8613 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

Gepaid: CAD981638745 TSD EPA ID: CA0000084517

Gen County: Placer
Tsd County: Sacramento
Tons: .5475

Facility Address 2: Not reported

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l

Disposal Method: Transfer Station

Contact: DAVID/CYNTHIA KITCHELL

Telephone: (916) 782-1564 Mailing Name: Not reported

Mailing Address: 8613 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

 Gepaid:
 CAD981638745

 TSD EPA ID:
 CAT000613893

 Gen County:
 Placer

Tsd County: Los Angeles
Tons: .4100
Facility Address 2: Not reported

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l

Disposal Method: Transfer Station

Contact: DAVID/CYNTHIA KITCHELL

Telephone: (916) 782-1564 Mailing Name: Not reported

Mailing Address: 8613 AUBURN FOLSOM RD

Distance (ft.)Site Database(s) EPA ID Number

BUDS GIANITE BAY CLEANERS (Continued)

1000374882

EDR ID Number

GRANITE BAY, CA 95746

County Placer

 Gepaid:
 CAD981638745

 TSD EPA ID:
 CAT000613893

 Gen County:
 Placer

Tsd County: Los Angeles
Tons: .1950
Facility Address 2: Not reported

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l

Disposal Method: Not reported

Contact: DAVID/CYNTHIA KITCHELL

Telephone: (916) 782-1564 Mailing Name: Not reported

Mailing Address: 8613 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

Gepaid: CAD981638745 TSD EPA ID: CAT000613893

Gen County: Placer
Tsd County: Los Angeles
Tons: .4875
Facility Address 2: Not reported

Waste Category: Liquids with halogenated organic compounds > 1000 mg/l

Disposal Method: Transfer Station

Contact: DAVID/CYNTHIA KITCHELL

Telephone: (916) 782-1564 Mailing Name: Not reported

Mailing Address: 8613 AUBURN FOLSOM RD

GRANITE BAY, CA 95746

County Placer

<u>Click this hyperlink</u> while viewing on your computer to access 4 additional CA HAZNET record(s) in the EDR Site Report.

9 BP WEST COAST PRODUCTS LLC 02140 8555 AUBURN FOLSOM RD GRANITE BAY, CA 95661

HAZNET S102285799
CA PLACER CO. MS N/A

HAZNET:

Gepaid: CAL000244235
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.41
Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Recycler
Contact: JACK OMAN
Telephone: (714) 670-5402
Mailing Name: Not reported
Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038

County Not reported

Placer MS:

Facility ID: PR0001091
District Code: 17
Program Elements: 2304

Map ID Direction Distance Distance (ft.)Site

EDR ID Number

BP WEST COAST PRODUCTS LLC 02140 (Continued)

S102285799

EPA ID Number

Database(s)

Facility Status:

PR0003007 Facility ID: District Code: 17 Program Elements: 2114 Facility Status:

Facility ID: PR0004206 District Code: 17 Program Elements: 2350 Facility Status:

Facility ID: PR0006594 District Code: 17 Program Elements: 2115 Facility Status:

Facility ID: PR0008542 District Code: 17 2268 Program Elements: Facility Status: 1

9 T MARC KNUTSEN 8555 AUBURN FOLSOM RD ROSEVILLE, CA 95678

U001613883 HIST UST

UST HIST:

Facility ID: 27018

Total Tanks:

515 SOUTH FLOWER STREET Owner Address:

LOS ANGELES, CA 90071

Tank Used for: **PRODUCT**

Tank Num:

Tank Capacity: 00006000

Type of Fuel: 06

Leak Detection: Stock Inventor Contact Name: Not reported

Facility Type: Gas Station

27018 Facility ID: Total Tanks: Owner Address: 515 SOUTH FLOWER STREET

LOS ANGELES, CA 90071

PRODUCT

Tank Used for: Tank Num:

Tank Capacity: 00006000

Type of Fuel: 06

Leak Detection: Stock Inventor

Contact Name: Not reported Facility Type: Gas Station

Facility ID: 27018 Total Tanks:

Owner Address: 515 SOUTH FLOWER STREET

LOS ANGELES, CA 90071

Tank Used for: **PRODUCT**

Tank Num: 3 Tank Capacity: 00006000

Type of Fuel: 06 N/A

Owner Name: ARCO PETROLEUM PRODUCTS CO. Region: STATE

Container Num: 000000001 1968 Year Installed:

Tank Construction: 0000240 inches

Telephone: (000) 000-0000

Other Type: Not reported

ARCO PETROLEUM PRODUCTS CO. Owner Name:

Region: STATE

0000000002 Container Num: Year Installed: 1968

Tank Construction: 0000240 inches

(000) 000-0000 Telephone: Other Type: Not reported

Owner Name: ARCO PETROLEUM PRODUCTS CO.

Region: STATE

000000003 Container Num:

1968 Year Installed:

Tank Construction: 0000240 inches

Map ID Direction Distance Distance (ft.)Site

EDR ID Number

Database(s) **EPA ID Number**

T MARC KNUTSEN (Continued)

U001613883

Leak Detection: Stock Inventor Contact Name: Not reported

(000) 000-0000 Telephone: Gas Station Facility Type: Other Type: Not reported

ARCO PETROLEUM PRODUCTS CO. Facility ID: 27018 Owner Name:

Total Tanks: Region: STATE Owner Address: 515 SOUTH FLOWER STREET

LOS ANGELES, CA 90071

Tank Used for: **PRODUCT**

Tank Num: Container Num: 000000004 Year Installed: Tank Capacity: 00006000 1971

Type of Fuel: Tank Construction: 0000240 inches 06

Leak Detection: Stock Inventor Contact Name: Not reported

Telephone: (000) 000-0000 Facility Type: Gas Station Other Type: Not reported

ARCO AM/PM #2140 9 8555 AUBURN FOLSOM RD ROSEVILLE, CA 95678

U001613811 **HIST UST** N/A

UST HIST:

Facility ID: 23487 Owner Name: ATLANTIC RICHFIELD CO.

Total Tanks: Region:

Owner Address: P.O. BOX 5811

SAN MATEO, CA 94402

Tank Used for: **PRODUCT**

Tank Num: Container Num: #1 Tank Capacity: 00006000 Year Installed: 1968

Tank Construction: Not Reported Type of Fuel: **REGULAR**

Not reported Leak Detection:

MARK KNUTSEN Contact Name: (916) 791-3343 Telephone: Facility Type: Gas Station Other Type: Not reported

Facility ID: ATLANTIC RICHFIELD CO. 23487 Owner Name:

#2

Total Tanks: Region: STATE

Owner Address: P.O. BOX 5811

SAN MATEO, CA 94402

Tank Used for: **PRODUCT** Tank Num:

Container Num: Tank Capacity: 00006000 Year Installed: Not reported Type of Fuel: **REGULAR** Tank Construction: Not Reported

Leak Detection: Not reported Contact Name: MARK KNUTSEN Telephone: (916) 791-3343 Facility Type: Gas Station Other Type: Not reported

ATLANTIC RICHFIELD CO. Facility ID: 23487 Owner Name:

Total Tanks: Region: STATE P.O. BOX 5811 Owner Address:

SAN MATEO, CA 94402

Tank Used for: **PRODUCT**

Container Num: Tank Num: #3 Tank Capacity: 00006000 Year Installed: 1968 Type of Fuel: **PREMIUM** Tank Construction: Not Reported

Not reported Leak Detection:

Contact Name: MARK KNUTSEN Telephone: (916) 791-3343 Facility Type: Gas Station Other Type: Not reported

ATLANTIC RICHFIELD CO. Facility ID: 23487 Owner Name:

Total Tanks: 4 Region: STATE

Distance (ft.)Site Database(s) EPA ID Number

ARCO AM/PM #2140 (Continued)

U001613811

EDR ID Number

Owner Address: P.O. BOX 5811

SAN MATEO, CA 94402

Tank Used for: PRODUCT

Tank Num: 4 Container Num: 4
Tank Capacity: 00006000 Year Installed: 1971

Type of Fuel: UNLEADED Tank Construction: Not Reported

Leak Detection: Not reported

Contact Name: MARK KNUTSEN Telephone: (916) 791-3343
Facility Type: Gas Station Other Type: Not reported

9 ARCO FACILITY #2140 8555 AUBURN FOLSOM RD ROSEVILLE, CA 95661 CA FID UST S101627997 SWEEPS UST N/A

FID:

Facility ID: 31000918 Regulate ID: 00023487

Reg By: Active Underground Storage Tank Location

Cortese Code: Not reported SIC Code: Not reported Status: Active Facility Tel: (916) 791-3343

Mail To: Not reported

17315 STUDEBAKER RD ROSEVILLE, CA 95678

Contact:Not reportedContact Tel:Not reportedDUNs No:Not reportedNPDES No:Not reportedCreation:10/22/93Modified:00/00/00

EPA ID: Not reported Comments: Not reported

SWEEPS:

Not reported Status: 23487 Comp Number: Number: Not reported Board Of Equalization: 44-000506 Ref Date: Not reported Not reported Act Date: Not reported Created Date: Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank ld: 31-000-023487-000001

 Actv Date :
 Not reported

 Capacity :
 6000

 Tank Use :
 M.V. FUEL

 Stg :
 PRODUCT

 Content :
 REG UNLEADED

Number Of Tanks: 5

Status: Not reported Comp Number: 23487 Number: Not reported 44-000506 Board Of Equalization: Ref Date: Not reported Act Date : Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank Id: 31-000-023487-000002

Actv Date : Not reported Capacity : 6000 Tank Use : M.V. FUEL

Distance (ft.)Site Database(s) EPA ID Number

ARCO FACILITY #2140 (Continued)

S101627997

EDR ID Number

Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported 23487 Comp Number: Not reported Number: Board Of Equalization: 44-000506 Ref Date: Not reported Act Date: Not reported Created Date: Not reported Not reported Tank Status: Not reported Owner Tank Id:

Swrcb Tank Id: 31-000-023487-000003

Actv Date: Not reported
Capacity: 6000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 23487

Number: Not reported
Board Of Equalization: 44-000506
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported

Swrcb Tank ld: 31-000-023487-000004

Actv Date: Not reported
Capacity: 6000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: PRM UNLEADED
Number Of Tanks: Not reported

Not reported Status: Comp Number: 23487 Number: Not reported Board Of Equalization: 44-000506 Ref Date: Not reported Not reported Act Date: Not reported Created Date: Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank ld: 31-000-023487-000005

Actv Date: Not reported
Capacity: 500
Tank Use: OIL
Stg: WASTE

Content : WASTE OIL
Number Of Tanks : Not reported

Status: A Comp Number: 23487 Map ID Direction Distance (ft.)Site

EDR ID Number Distance Database(s) **EPA ID Number**

ARCO FACILITY #2140 (Continued)

S101627997

Number:

Board Of Equalization: 44-000506 Ref Date : 06-25-93 Act Date : 03-14-94 Created Date: 02-29-88 Tank Status:

Owner Tank Id:

31-000-023487-000006 Swrcb Tank Id:

Actv Date : 06-25-93 Capacity: 10000 Tank Use: M.V. FUEL

Stg:

REG UNLEADED Content:

Number Of Tanks:

Status: Α 23487 Comp Number: Number:

Board Of Equalization: 44-000506 06-25-93 Ref Date: 03-14-94 Act Date: Created Date: 02-29-88 Tank Status: Α Owner Tank Id:

31-000-023487-000007 Swrcb Tank Id:

Actv Date : 06-25-93 Capacity: 10000 Tank Use: M.V. FUEL

Stg:

REG UNLEADED Content: Number Of Tanks: Not reported

Status: Α Comp Number: 23487 Number:

Board Of Equalization: 44-000506 Ref Date: 06-25-93 Act Date: 03-14-94 02-29-88 Created Date: Tank Status: Α Owner Tank Id: 3

Swrcb Tank Id: 31-000-023487-000008

Actv Date : 06-25-93 10000 Capacity: Tank Use: M.V. FUEL

Stg:

Content: **REG UNLEADED** Number Of Tanks: Not reported

Status: Α Comp Number: 23487 Number:

Board Of Equalization: 44-000506 Ref Date: 06-25-93 03-14-94 Act Date : Created Date: 02-29-88 Tank Status:

MAP FINDINGS

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

ARCO FACILITY #2140 (Continued)

S101627997

EDR ID Number

Owner Tank Id:

Swrcb Tank Id: 31-000-023487-000009

Actv Date : 06-25-93
Capacity : 10000
Tank Use : M.V. FUEL

Stg: F

Content: PRM UNLEADED Number Of Tanks: Not reported

9 ARCO #2140, AM/PM GRANITE BAY 8555 AUBURN FOLSOM RD GRANITE BAY, CA 95678 UST U003937662

N/A

State UST:

Facility ID: FA0000721
Total Tanks: Not reported
Region: STATE
Local Agency: 31000

9 ARCO #2140 LUST S104403237 8555 AUBURN-FOLSOM RD N/A GRANITE BAY, CA 95661

Confirm Leak:

Prelim Assess:

Remed Plan:

Not reported

Not reported

1993-07-21 00:00:00

State LUST:

Cross Street: Not reported
Qty Leaked: Not reported
Case Number Not reported
Reg Board: Not reported
Chemical: Gasoline
Lead Agency: Regional Board

Local Agency: 31000

Case Type: Drinking Water Aquifer affected Status: Post remedial action monitoring

Review Date: Not reported
Workplan: Not reported
Pollution Char: 1993-07-21 00:00:00

Remed Action: Not reported

Monitoring: 2003-10-15 00:00:00
Close Date: Not reported
Release Date: Not reported
Cleanup Fund Id: 09565
Discover Date: Not reported

Enforcement Dt: 2000-08-16 00:00:00
Enf Type: None Taken
Enter Date: Not reported

Funding: Not reported Staff Initials: DAV

How Discovered: Not reported Not reported Interim: Not reported Leak Cause: Not reported Leak Source: Not reported

MTBE Date: 2001-03-23 00:00:00
Max MTBE GW: 844.00 Parts per Billion

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected

Priority: High priority
Local Case #: Not reported
Beneficial: Not reported

Map ID Direction Distance Distance (ft.)Site

Direction EDR ID Number

Database(s) EPA ID Number

S104403237

ARCO #2140 (Continued)

Staff: PRS GW Qualifier: =

Max MTBE Soil: Not reported Soil Qualifier: Not reported

Hydr Basin #: SACRAMENTO VALLEY (5

Operator : Not reported Oversight Prgm: LUST

Review Date: 2002-01-30 00:00:00

Stop Date : Not reported

Work Suspended :No Responsible PartyARCO

RP Address: 2155 BASCOM AVE, CAMPBELL, CA 95008

Global Id: T0606100026
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 10 Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported

Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

Substance: GASOLINE

Case Type: Drinking Water Aquifer affected

Program: LUST Staff Initials: PRS

Staff Initials: PRS Case Number: 310032

Status: Post remedial action monitoring

MTBE Code: 5 Lead Agency: Regional

9 ARCO PRODUCTS COMPANY 8555 AUBURN FOLSOM RD ROSEVILLE, CA 95661

HAZNET:

 Gepaid:
 CAL000009863

 TSD EPA ID:
 CAD980883177

 Gen County:
 Los Angeles

 Tsd County:
 Kern

 Tons:
 2.1684

 Facility Address 2:
 Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Not reported

Contact: ATLANTIC RICHFIELD CORP

Telephone: (714) 670-5366 Mailing Name: Not reported Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038

County Los Angeles

HAZNET S103674434

N/A

Distance (ft.)Site Database(s) EPA ID Number

ARCO PRODUCTS COMPANY (Continued)

S103674434

EDR ID Number

Gepaid: CAL000009863
TSD EPA ID: CAT080013352
Gen County: Los Angeles
Tsd County: Los Angeles
Tons: .2293
Facility Address 2: Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Recycler

Contact: ATLANTIC RICHFIELD CORP

Telephone: (714) 670-5366 Mailing Name: Not reported Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038

County Los Angeles

Gepaid: CAL000009863

TSD EPA ID: CAT080013352

Gen County: Los Angeles

Tsd County: Los Angeles

Tons: 2.0850

Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Recycler

Contact: ATLANTIC RICHFIELD CORP

Telephone: (714) 670-5366 Mailing Name: Not reported Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038

 County
 Los Angeles

 Gepaid:
 CAL000009863

 TSD EPA ID:
 CAT080013352

 Con County:
 Los Angeles

Gen County: Los Angeles
Tsd County: Los Angeles
Tons: 1.0842
Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Recycler

County

Contact: ATLANTIC RICHFIELD CORP

Telephone: (714) 670-5366 Mailing Name: Not reported Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038 Los Angeles

Gepaid: CAL000009863
TSD EPA ID: CAT080013352
Gen County: Los Angeles
Tsd County: Los Angeles
Tons: 6.2966
Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Recycler

Contact: ATLANTIC RICHFIELD CORP

Telephone: (714) 670-5366 Mailing Name: Not reported Mailing Address: PO BOX 6038

ARTESIA, CA 90702 - 6038

Map ID Direction Distance Distance (ft.)Site

EDR ID Number

ARCO PRODUCTS COMPANY (Continued)

S103674434

1000984934

CAR000000430

EPA ID Number

Database(s)

FINDS

County

Los Angeles

Click this hyperlink while viewing on your computer to access 5 additional CA HAZNET record(s) in the EDR Site Report.

RCRA-SQG

JOSEPH D LOPEZ 9 **6812 BRANDY CIRCLE GRANITE BAY, CA 95746**

RCRAInfo:

Owner:

JOSEPH D LOPEZ (916) 792-6592

EPA ID: Contact: CAR000000430 JOSEPH LOPEZ

(916) 792-6592

Classification: **Small Quantity Generator**

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

DOUGLAS BLVD/AUBURN AND FOLSOM 9 **DOUGLAS BLVD/AUBURN AND FOLSOM** ROSEVILLE, CA

ERNS 92258358 N/A

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

9 THE CORNER 6990 DOUGLAS BLVD **ROSEVILLE, CA 95678** **HIST UST** U001613887

UST HIST:

Facility ID: Total Tanks:

47943

Owner Address: 6990 DOUGLAS BLVD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num:

Tank Capacity: 00010000 Type of Fuel: **REGULAR**

Leak Detection: Visual, Stock Inventor

Contact Name: G. HICKS Facility Type: Gas Station

Facility ID: 47943 Total Tanks:

Owner Address: 6990 DOUGLAS BLVD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT** N/A

LEWIS K. UHLER & IAN H. HARRIS

Region: STATE

Container Num: Year Installed:

Owner Name:

Not reported Tank Construction: Not Reported

Telephone: (916) 791-1931 Other Type: Not reported

Owner Name: LEWIS K. UHLER & IAN H. HARRIS

STATE Region:

Distance (ft.)Site Database(s) **EPA ID Number**

THE CORNER (Continued) U001613887

2

Tank Num: 2 Container Num:

00010000 Tank Capacity: Year Installed: Not reported Type of Fuel: UNLEADED Tank Construction: Not Reported

Leak Detection: Visual, Stock Inventor

Contact Name: G. HICKS Telephone: (916) 791-1931 Not reported Facility Type: Gas Station Other Type:

Facility ID: 47943 Owner Name: LEWIS K. UHLER & IAN H. HARRIS

Total Tanks: Region: STATE

Owner Address: 6990 DOUGLAS BLVD.

ROSEVILLE, CA 95678 **PRODUCT**

Tank Used for:

Tank Num: Container Num: 3

Tank Capacity: 00010000 Year Installed: Not reported Type of Fuel: **PREMIUM** Tank Construction: Not Reported

Leak Detection: Visual, Stock Inventor Contact Name: G. HICKS

(916) 791-1931 Telephone: Facility Type: Gas Station Other Type: Not reported

47943 LEWIS K. UHLER & IAN H. HARRIS Facility ID: Owner Name:

Total Tanks: Region: STATE

Owner Address: 6990 DOUGLAS BLVD. ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Container Num:

Tank Capacity: 00004000 Year Installed: Not reported Type of Fuel: DIESEL Tank Construction: Not Reported

Leak Detection: Visual, Stock Inventor

(916) 791-1931 Contact Name: G. HICKS Telephone: Facility Type: Gas Station Other Type: Not reported

Facility ID: 9514 Owner Name: IAN H. HARRIS & LEWIS K. ULER

Total Tanks: Region: STATE

Owner Address: 6990 DOUGLAS BLVD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Container Num: 04 Tank Num:

Tank Capacity: 00004000 Year Installed: Not reported DIESEL Type of Fuel: Tank Construction: Not Reported

Leak Detection: None

Contact Name: LYNN HARRIS, MGR. Telephone: (916) 791-1931 Not reported Facility Type: Gas Station Other Type:

IAN H. HARRIS & LEWIS K. ULER Facility ID: 9514 Owner Name:

Total Tanks: STATE Region:

6990 DOUGLAS BLVD. Owner Address:

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT** Tank Num: Container Num: 01

Tank Capacity: 00010000 Year Installed: Not reported Type of Fuel: **REGULAR** Tank Construction: Not Reported

Leak Detection: None LYNN HARRIS, MGR. (916) 791-1931 Contact Name: Telephone:

Facility Type: Not reported Gas Station Other Type:

Facility ID: 9514 Owner Name: IAN H. HARRIS & LEWIS K. ULER

Total Tanks: Region: STATE 4

EDR ID Number

EDR ID Number

Database(s) **EPA ID Number**

THE CORNER (Continued)

U001613887

Owner Address: 6990 DOUGLAS BLVD.

ROSEVILLE, CA 95678

PRODUCT Tank Used for:

Container Num: Tank Num: 02

Tank Capacity: 00010000 Year Installed: Not reported Tank Construction: Not Reported Type of Fuel: UNLEADED

Leak Detection: None

Contact Name: LYNN HARRIS, MGR. Telephone: (916) 791-1931 Facility Type: Gas Station Other Type: Not reported

IAN H. HARRIS & LEWIS K. ULER Facility ID: 9514 Owner Name:

Total Tanks: STATE Region:

6990 DOUGLAS BLVD. Owner Address:

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Container Num: 03

Tank Capacity: 00010000 Year Installed: Not reported Type of Fuel: **PREMIUM** Tank Construction: Not Reported

Leak Detection: None

LYNN HARRIS, MGR. Telephone: (916) 791-1931 Contact Name: Facility Type: Gas Station Other Type: Not reported

9 **BEACON #642** 6990 DOUGLAS BLVD ROSEVILLE, CA 95661

S101589721 CA FID UST **SWEEPS UST** N/A

FID:

Facility ID: 31000184 Regulate ID: 00009514

Reg By: Active Underground Storage Tank Location

SIC Code: Cortese Code: Not reported Not reported Active Facility Tel: (916) 791-1931 Status:

Mail To: Not reported 525 W 3RD ST

ROSEVILLE, CA 95661

Contact: Not reported Contact Tel: Not reported NPDES No: DUNs No: Not reported Not reported 00/00/00 Creation: 10/22/93 Modified:

EPA ID: Not reported Not reported Comments:

SWEEPS:

Status: Comp Number: 9514 Number:

Board Of Equalization: 44-017046 Ref Date: 05-17-91 Act Date : 05-17-91 Created Date: 02-29-88 Tank Status: Α

642-1 Owner Tank Id:

31-000-009514-000001 Swrcb Tank Id:

Actv Date: 05-22-91 Capacity: 10000 Tank Use: M.V. FUEL Stg: LEADED Content:

Number Of Tanks:

Α Status:

Map ID Direction Distance

Distance (ft.)Site Database(s) **EPA ID Number**

BEACON #642 (Continued)

S101589721

EDR ID Number

Comp Number: 9514 Number: 1

Board Of Equalization: 44-017046 Ref Date: 05-17-91 Act Date: 05-17-91 Created Date: 02-29-88 Tank Status: Α Owner Tank Id: 642-2

Swrcb Tank Id: 31-000-009514-000002

Actv Date : 05-22-91 10000 Capacity: Tank Use: M.V. FUEL

Stg:

Content: **REG UNLEADED** Number Of Tanks: Not reported

Α Status: Comp Number: 9514 Number:

Board Of Equalization: 44-017046 Ref Date: 05-17-91 Act Date : 05-17-91 Created Date: 02-29-88 Tank Status: Α

Owner Tank Id: 642-3

Swrcb Tank Id: 31-000-009514-000003

05-22-91 Actv Date : Capacity: 10000 Tank Use: M.V. FUEL

Stg:

REG UNLEADED Content: Number Of Tanks: Not reported

Status: Comp Number: 9514 Number:

Board Of Equalization: 44-017046 Ref Date: 05-17-91 Act Date: 05-17-91 Created Date: 02-29-88 Tank Status: Α Owner Tank Id: 642-4

Swrcb Tank Id: 31-000-009514-000004

Actv Date: 05-22-91 Capacity: 4000 Tank Use: M.V. FUEL Stg:

Content: **DIESEL** Number Of Tanks: Not reported

rection EDR ID Number

9 USA GASOLINE CORPORATION FACILITY 3642 6990 DOUGLAS BLVD GRANITE BAY, CA 95746 FINDS 1007737777 HAZNET 110018973896

EPA ID Number

Database(s)

FINDS:

Other Pertinent Environmental Activity Identified at Site: HAZARDOUS WASTE TRACKING SYSTEM-DATAMART

HAZNET:

Gen County:

Gepaid: CAR000142240 TSD EPA ID: CAD028409019

Tsd County: Placer
Tons: 0.07
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station

Placer

Contact: C MILLER/MGR USA GASOLINE CORP

Telephone: (818) 865-9200 Mailing Name: Not reported

Mailing Address: 30101 AGOURA CT STE 200

AGOURA HILLS, CA 91301

County Placer

9 USA GASOLINE #3642 CA PLACER CO. MS S107138807 6990 DOUGLAS BLVD N/A GRANITE BA, CA 95746

Placer MS:

Facility ID: PR0000398
District Code: 17
Program Elements: 2304
Facility Status: 1

Facility ID: PR0003022
District Code: 17
Program Elements: 2114
Facility Status: 1

Facility ID: PR0006600
District Code: 17
Program Elements: 2115
Facility Status: 1

Facility ID: PR0008526
District Code: 17
Program Elements: 2268
Facility Status: 1

9 BEACON #3642 (FORMER) 6990 DOUGLAS BLVD GRANITE BAY, CA 95661 HAZNET S101300278
LUST N/A
Cortese
CA PLACER CO. MS

State LUST:

Cross Street: AUBURN-FOLSOM
Qty Leaked: Not reported
Case Number Reg Board: Not reported
Chemical: Gasoline
Lead Agency: Regional Board

Direction EDR ID Number
Distance

BEACON #3642 (FORMER) (Continued)

S101300278

EPA ID Number

Database(s)

Local Agency: 31000

Case Type: Drinking Water Aquifer affected
Status: Remedial action (cleanup) Underway

Review Date: Not reported Confirm Leak: Not reported Workplan: Not reported Pollution Char: Not reported Remed Plan: Not reported

Remed Action: 2003-02-07 00:00:00

Monitoring: Not reported
Close Date: Not reported
Release Date: Not reported
Cleanup Fund Id: Not reported
Discover Date: Not reported
Enforcement Dt: 2000-10-20 00:00:00

Enf Type: WAR
Enter Date: Not reported
Funding: Not reported
Staff Initials: DAV

How Discovered: Not reported
How Stopped: Not reported
Interim: Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date: 2001-01-12 00:00:00

Max MTBE GW: 94.00 Parts per Billion
MTBE Tested: MTBE Detected Site tested

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected Priority: Low priority. Priority ranking can change over time.

Local Case # : Not reported
Beneficial: Not reported
Staff : PRS
GW Qualifier : =

Max MTBE Soil : Not reported Soil Qualifier : Not reported

Hydr Basin #: SACRAMENTO VALLEY (5

Operator: ULTRAMAR INC

Oversight Prgm: LUST
Review Date : Not reported
Stop Date : Not reported

Work Suspended :No

Responsible PartyULTRAMAR

RP Address: 525 3RD ST W,HANFORD,CA 93230

Global Id: T0606100187
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 8
Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: CO. HEALTH NOTICED EVIDENCE OF DIESEL OVERFILL AT TANK. SOIL

BORINGS WERE DILLED AROUND THE TANK TO SHOW LOW LEVELS OF DIESEL

CONTAM. IN SOIL & LIMITED EXTENT.

LUST Region 5:

Substance: GASOLINE

Case Type: Drinking Water Aquifer affected

Program: LUST

Distance (ft.)Site Database(s) EPA ID Number

BEACON #3642 (FORMER) (Continued)

S101300278

EDR ID Number

Staff Initials: PRS Case Number: 310233

Status: Remedial action (cleanup) Underway

MTBE Code: 3 Lead Agency: Regional

HAZNET:

Gepaid: CAL000252694
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: San Bernardino

Tons: 0.04
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Contact: ROBERT HOOVER
Telephone: (253) 896-8801
Mailing Name: Not reported

Mailing Address: 3450 S 344TH ST STE 100

AUBURN, WA 98001 - 5931

County Not reported

CORTESE:

Region: CORTESE Fac Address 2: Not reported

Placer MS:

Facility ID: PR0004227
District Code: 17
Program Elements: 2350
Facility Status: 1

radiity diatus.

9 ULTRAMAR INC 3642 6990 DOUGLAS BLVD ROSEVILLE, CA 95661

HAZNET:

Gepaid: CAL000129028 TSD EPA ID: CAD981402522

Gen County: Placer
Tsd County: Kern
Tons: .1876
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Not reported
Contact: ULTRA MAR INC
Telephone: (209) 583-3298
Mailing Name: Not reported
Mailing Address: 525 W 3RD ST

HANFORD, CA 93230 - 5016

County Placer

Gepaid: CAL000129028 TSD EPA ID: CAD981402522

Gen County: Placer
Tsd County: Kern
Tons: .5129
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Recycler

Contact: ULTRA MAR INC Telephone: (209) 583-3298

HAZNET

S104578732

N/A

Distance (ft.)Site Database(s) **EPA ID Number**

ULTRAMAR INC 3642 (Continued)

S104578732

EDR ID Number

Mailing Name: Not reported Mailing Address: 525 W 3RD ST

HANFORD, CA 93230 - 5016

County Placer

Gepaid: CAL000129028 TSD EPA ID: Not reported Placer Gen County: Tsd County: San Bernardino

Tons: 0.25

Facility Address 2: Not reported Waste Category: Other organic solids Transfer Station Disposal Method:

Contact: **DENNIS SMITH O & E SPECIALIST**

Telephone: (559) 583-3398 Mailing Name: Not reported Mailing Address: 685 W THIRD ST

HANFORD, CA 93230 - 5016

County Not reported CAL000129028 Gepaid: TSD EPA ID: CAD009466392

Gen County: Placer Tsd County: Tons: 17.0000 Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Recycler Contact: **ULTRA MAR INC** Telephone: (209) 583-3298 Mailing Name: Not reported Mailing Address: 525 W 3RD ST

HANFORD, CA 93230 - 5016

Placer County

Gepaid: CAL000129028 TSD EPA ID: CAD044003556

Gen County: Placer Tsd County: Yolo Tons: 1.1467 Facility Address 2: Not reported Waste Category: Tank bottom waste Disposal Method: Transfer Station Contact: **ULTRA MAR INC** Telephone: (209) 583-3298 Mailing Name: Not reported Mailing Address: 525 W 3RD ST

HANFORD, CA 93230 - 5016

County Placer

> Click this hyperlink while viewing on your computer to access 1 additional CA HAZNET record(s) in the EDR Site Report.

Distance (ft.)Site Database(s) EPA ID Number

9 KEVEN R MILLS DDS 6910 DOUGLAS BLVD STE B GRANITE BAY, CA 95746

HAZNET:

Gepaid: CAL000205615
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: Not reported
Facility Address 2: Not reported

Waste Category:

Disposal Method: Recycler

Contact: JENNIFER PATTANI/R D A

Telephone: (916) 791-7227 Mailing Name: Not reported

Mailing Address: 6910 DOUGLAS BLVD STE B

GRANITE BAY, CA 95746

County

Not reported

Gepaid:
CAL000205615

TSD EPA ID:
Not reported
Gen County:
Placer
Tsd County:
Santa Clara
Tons:
Not reported
Facility Address 2:
Not reported

Waste Category:

Disposal Method: Treatment, Tank

Contact: JENNIFER PATTANI/R D A

Telephone: (916) 791-7227 Mailing Name: Not reported

Mailing Address: 6910 DOUGLAS BLVD STE B

GRANITE BAY, CA 95746

County

Gepaid:
CAL000205615
TSD EPA ID:
Not reported
Gen County:
Placer
Tsd County:
Santa Clara
Tons:
0.03
Facility Address 2:
Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Treatment, Tank

Contact: JENNIFER PATTANI/R D A

Telephone: (916) 791-7227 Mailing Name: Not reported

Mailing Address: 6910 DOUGLAS BLVD STE B

GRANITE BAY, CA 95746

County Not reported

Gepaid: CAL000205615
TSD EPA ID: CAL000175030

Gen County: Placer Tsd County: Placer Tons: 0

Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Treatment, Tank

Contact: JENNIFER PATTANI/R D A

Telephone: (916) 791-7227

Mailing Name: KEVEN R MILLS/OWNER

EDR ID Number

S105724188

N/A

HAZNET

Distance (ft.)Site Database(s) EPA ID Number

KEVEN R MILLS DDS (Continued)

S105724188

EDR ID Number

Mailing Address: 6910 DOUGLAS BLVD STE B

GRANITE BAY, CA 95746

County Placer

Gepaid: CAL000205615 TSD EPA ID: CAL000212588

Gen County: Placer
Tsd County: Placer
Tons: Not reported
Facility Address 2: Not reported

Waste Category:

Disposal Method: Recycler

Contact: JENNIFER PATTANI/R D A

Telephone: (916) 791-7227

Mailing Name: KEVEN R MILLS/OWNER
Mailing Address: 6910 DOUGLAS BLVD STE B

GRANITE BAY, CA 95746

County Placer

<u>Click this hyperlink</u> while viewing on your computer to access 5 additional CA HAZNET record(s) in the EDR Site Report.

9 ROBERT WALLER 7150 DOUGLAS BLVD GRANITE BAY, CA 95746

HAZNET:

Gepaid: CAC002293681 TSD EPA ID: CAD981388952

Gen County: Placer
Tsd County: Shasta
Tons: 4.6354
Facility Address 2: Not reported

Waste Category:
Disposal Method:
Contact:
Telephone:
Mailing Address:
Disposal, Land Fill
ROBERT WALLER
(916) 486-9802
Not reported
Malling Address:
4366 AUBURN BLVD

SACRAMENTO, CA 95841

County Placer

9 GRANITE BAY AUTO PARTS 7110 DOUGLAS BLVD GRANITE B, CA 95746

Placer MS:

Facility ID: PR0007551
District Code: 15
Program Elements: 2106
Facility Status: 2

Facility ID: PR0007552
District Code: 15
Program Elements: 2115
Facility Status: 2

Facility ID: PR0008279

District Code: 15

CA PLACER CO. MS S104384548 N/A

HAZNET

S105087274

N/A

irection EDR ID Number

GRANITE BAY AUTO PARTS (Continued)

S104384548

EPA ID Number

Database(s)

Program Elements: 2270 Facility Status: 2

9 BECK CHIROPRACTIC/GRANITE BAY OFFICE HAZNET \$103669232 6910 DOUGLAS BLVD. N/A GRANITE BAY, CA 95746

HAZNET:

Gepaid: CAL000121640
TSD EPA ID: CA0000084517
Gen County: Placer
Tsd County: Sacramento
Tons: .0625
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Recycler
Contact: ALAN C. BECK
Telephone: (916) 369-8844
Mailing Name: Not reported
Mailing Address: 6910 DOUGLAS BLVD.

GRANITE BAY, CA 95746

County Placer

 Gepaid:
 CAL000121640

 TSD EPA ID:
 CA0000084517

 Gen County:
 Placer

Tsd County: Sacramento
Tons: .1876
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Transfer Station
Contact: ALAN C. BECK
Telephone: (916) 369-8844
Mailing Name: Not reported
Mailing Address: 6910 DOUGLAS BLVD.

GRANITE BAY, CA 95746

County Placer

 Gepaid:
 CAL000121640

 TSD EPA ID:
 CA0000084517

 Gen County:
 Placer

 Tsd County:
 Sacramento

Tons: .1876 Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Transfer Station
Contact: ALAN C. BECK
Telephone: (916) 369-8844
Mailing Name: Not reported
Mailing Address: 6910 DOUGLAS BLVD.

GRANITE BAY, CA 95746

County Placer

Map ID Direction Distance

Distance (ft.)Site Database(s) **EPA ID Number**

9 **RITE AID CORPORATION HAZNET** S104566162 7005 DOUGLAS BLVD N/A ROSEVILLE, CA 95746

HAZNET:

CAC001317120 Gepaid: TSD EPA ID: CAT000646117

Gen County: Placer Tsd County: Kings Tons: 0.5 Facility Address 2:

Not reported Waste Category: Other organic solids Disposal, Land Fill Disposal Method: Contact: RITE AID CORPORATION

(000) 000-0000 Telephone: Mailing Name: Not reported Mailing Address: 7005 DOUGLAS BLVD

ROSEVILLE, CA 95746

Placer County

CDL S107535827 9 N/A

6981 DOUGLAS BLVD ROSEVILLE, CA 95630

CA CDL:

200108042 Facility ID: 08/04/01 Date: Abandoned Waste: Yes Illegal Drug Lab: Not reported Mobile Lab: Not reported

9 **WEIS RECYCLE CENTERS INC/RALEY #412** SWRCY \$107138329 **6847 DOUGLAS BLVD** N/A

CA SWRCY

GRANITE BAY, CA 95746

O Certification Status: Facility Phone Number: (916) 781-7845

Whether The Facility Is Grandfathered: Not reported Convenience Zone Where Faciltiy Located: 1569 Convenience Zone Where Facilty Located 2: 3608 Convenience Zone Where Faciltiy Located 3: 0 Convenience Zone Where Facilty Located 4: 0 Convenience Zone Where Faciltiy Located 5: 0 Convenience Zone Where Faciltiy Located 6: 0 Convenience Zone Where Faciltiy Located 7:0 Aluminum Beverage Containers Redeemed: AL Glass Beverage Containers Redeemed: GL Plastic Beverage Containers Redeemed:

Other mat beverage containers redeemed: Not Accepted Refillable Beverage Containers Redeemed: Not Accepted

04/14/04 Date facility became certified: Date facility began operating (no date indicates never operational): 04/28/04 Date facility ceased operating (no date indicates still operating):

EDR ID Number

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

9 RALEYS DRUG CTR 492 6845 DOUGLAS BLVD ROSEVILLE, CA 95661 RCRA-SQG

1000818946 CAD983648841

FINDS 1007739502

HAZNET \$100943178

N/A

110019005324

EDR ID Number

RCRAInfo:

Owner: RALEYS

(916) 373-3333

EPA ID: CAD983648841

Contact: LEE CHRISTENSEN

(916) 791-8011

Classification: Small Quantity Generator

TSDF Activities: Not reported

Violation Status: No violations found

9 RALEY S #412 6845 DOUGLAS BLVD ROSEVILLE, CA 95661

FINDS:

Other Pertinent Environmental Activity Identified at Site:
HAZARDOUS WASTE TRACKING SYSTEM-DATAMART
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

9 RALEY'S #412/492 6845 DOUGLAS BLVD ROSEVILLE, CA 95661

HAZNET:

Gepaid: CAD983648841 TSD EPA ID: CAD070148432

Gen County: Placer
Tsd County: 1
Tons: .1876
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Treatment, Incineration

Contact: RALEY'S A CALIFORNIA CORP

Telephone: (916) 373-3333
Mailing Name: Not reported
Mailing Address: PO BOX 15618

SACRAMENTO, CA 95852 - 1618

County Placer

Gepaid: CAD983648841 TSD EPA ID: CAD070148432

Gen County: Placer
Tsd County: 1
Tons: .4378
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Transfer Station

Contact: RALEY'S A CALIFORNIA CORP

Telephone: (916) 373-3333
Mailing Name: Not reported
Mailing Address: PO BOX 15618

Distance (ft.)Site Database(s) **EPA ID Number**

RALEY'S #412/492 (Continued)

S100943178

EDR ID Number

SACRAMENTO, CA 95852 - 1618

County Placer

CAD983648841 Gepaid: TSD EPA ID: CAD070148432

Gen County: Placer Tsd County: .1876 Tons: Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Not reported

Contact: RALEY'S A CALIFORNIA CORP

Telephone: (916) 373-3333 Not reported Mailing Name: Mailing Address: PO BOX 15618

SACRAMENTO, CA 95852 - 1618

County Placer

CAD983648841 Gepaid: TSD EPA ID: CAD070148432

Gen County: Placer Tsd County: 1 Tons: 1.8765 Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste Disposal Method:

Recycler

Contact: RALEY'S A CALIFORNIA CORP Telephone: (916) 373-3333

Mailing Name: Not reported Mailing Address: PO BOX 15618

SACRAMENTO, CA 95852 - 1618

County Placer

Gepaid: CAD983648841 TSD EPA ID: CAD070148432

Placer Gen County: Tsd County: 1 Tons: .6671 Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Treatment, Incineration Contact: RALEY'S A CALIFORNIA CORP

Telephone: (916) 373-3333 Mailing Name: Not reported Mailing Address: PO BOX 15618

SACRAMENTO, CA 95852 - 1618

County Placer

> Click this hyperlink while viewing on your computer to access 11 additional CA HAZNET record(s) in the EDR Site Report.

9

rection EDR ID Number (stance)

CA PLACER CO. MS S105211837 N/A

EPA ID Number

Database(s)

LONGS DRUG STORE #526 8455 AUBURN FOLSOM RD GRAN, CA 95746

Placer MS:

Facility ID: PR0008557
District Code: 18
Program Elements: 2160
Facility Status: 1

Facility ID: PR0008558 District Code: 18

Program Elements: 2115 Facility Status: 1

Facility ID: PR0008570 District Code: 18

Program Elements: 2268
Facility Status: 1

9 LONGS DRUGS STORE #526 8435 AUBURN-FOLSOM RD GRANITE BAY, CA 95746

HAZNET:

Gepaid: CAL000219446
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Solano
Tons: 1.16
Facility Address 2: Not reported

Waste Category: Waste oil and mixed oil

Disposal Method: Not reported

Contact: RAQUEL KARNES/ENVIRON COORD

Telephone: (707) 745-1654
Mailing Name: Not reported
Mailing Address: 141 N CIVIC DR

WALNUT CREEK, CA 94596

County Not reported

9 KIRBY, CHARLES R. & NORMA 8380 AUBURN FOLSOM ROSEVILLE, CA 95678

CORTESE:

Region: CORTESE Fac Address 2: Not reported

HAZNET \$106091983 N/A

Cortese \$105025924 N/A

Map ID Direction Distance

EDR ID Number

Distance (ft.)Site Database(s) **EPA ID Number**

10 **METRO PCS #137 (HIDDEN LAKES)** 7955 W HIDDEN LAKES DR GRAN, CA 95746

CA PLACER CO. MS

S106534251 N/A

Placer MS:

Facility ID: PR0009985 District Code: 50 Program Elements: 2105 Facility Status:

Facility ID: PR0009986 District Code: 50 Program Elements: 2115 Facility Status:

GRANITE BAY VETERINARY CLINIC 11 6500 DOUGLAS BLVD **GRANITE BAY, CA 95746**

S103668211 HAZNET N/A

HAZNET:

Gepaid: CAL000060324 CA0000084517 TSD EPA ID: Placer Gen County:

Tsd County: Sacramento Tons: .0625 Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: **Transfer Station**

Contact: R MANSFIELD DVM/R POLLACK DVM/

Telephone: (916) 791-1143 Mailing Name: Not reported Mailing Address: 6500 DOUGLAS BLVD

GRANITE BAY, CA 95746

County Placer

Gepaid: CAL000060324 CA0000084517 TSD EPA ID: Gen County: Placer Tsd County: Sacramento Tons: .1250 Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Transfer Station

Contact: R MANSFIELD DVM/R POLLACK DVM/

Telephone: (916) 791-1143 Mailing Name: Not reported Mailing Address: 6500 DOUGLAS BLVD GRANITE BAY, CA 95746

Placer County

12 AAA MOBILE OIL CHANGE SERVICE 7460 DOUGLAS BLVD **GRANITE BAY, CA 95746**

HAZNET S103671145 N/A

Distance (ft.)Site Database(s) EPA ID Number

AAA MOBILE OIL CHANGE SERVICE (Continued)

S103671145

EDR ID Number

HAZNET:

Gepaid: CAL000174149 TSD EPA ID: CAD981402522

Gen County: Placer
Tsd County: Kern
Tons: .0333
Facility Address 2: Not reported

Waste Category: Photochemicals/photoprocessing waste

Disposal Method: Not reported
Contact: AAA ENTERPRISES
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 7460 DOUGLAS BLVD

GRANITE BAY, CA 95746 - 9501

County Placer

13 8715 SPOONER CT ERNS 98465977 8715 SPOONER CT N/A

8715 SPOONER CT GRANITE BAY, CA

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

13 CHMIRS S106392694 8715 SPOONER CT N/A

GRANITE BAY, CA 95901

CHMIRS:

OES Control Number: 98-5331
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Time Completed: Not reported Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 98-5331 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature : Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated: Not reported Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Not reported Vehicle License Number:

Map ID Direction Distance Distance (ft.)Site

Virection EDR ID Number vistance

(Continued) S106392694

Database(s)

EPA ID Number

Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported Report Date: Not reported Comments: Not reported Facility Telephone Number: Not reported Waterway Involved: Yes Waterway: Creek Spill Site: Not reported Cleanup By: Reporting Party Containment: Not reported What Happened: Not reported Type: Not reported Other: Not reported Substance: Transformer Oil

Quantity Released:

E Date : Not reported

Contained: Yes
Site Type: Residence

Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time: Not reported Year: 1998 PG&E Agency: BBLS: 0 0 Cups: 0 CUFT: Gallons: 2 Grams: 0 Pounds: 0 Liters: 0 0 Ounces: Pints: 0 Quarts: 0

 Sheen:
 0

 Tons:
 0

 Unknown:
 0

Description: Transformer failure, 1 gallon lost in a creek which runs through

the property. Unknown which creek. Cannot mitigate effects in the

creek

Incident date : 11/30/199812:00:00 AM

Admin Agency: Placer County Health Department

OES date : Not reported
OES time : Not reported

OES notification: 12/1/199802:47:04 PM

Amount: Not reported

Map ID Direction Distance

Direction EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

13 SEATERS, MARION & KATHLEE 7430 BASCOU ROSEVILLE, CA 95611

CORTESE:

Region: CORTESE Fac Address 2: Not reported

14 JOSEPH H. PIERCE HIST UST U001613836 8800 WAGON WAY N/A

ROSEVILLE, CA 95678

UST HIST:

Facility ID: 54004 Owner Name:

Total Tanks: 1 Region: STATE

Owner Address: 8800 WAGON WAY

ROSEVILLE, CA 95678

Tank Used for: PRODUCT

Tank Num: 1 Container Num: 1
Tank Capacity: 00000500 Year Installed: 198

Tank Capacity: 00000500 Year Installed: 1980
Type of Fuel: REGULAR Tank Construction: Not Reported

Leak Detection: Visual

Contact Name: Not reported Telephone: (916) 791-0614

Facility Type: Other Other Type: RANCH

15 REX HALL HAZNET \$103672050 7792 LAKESHORE DR N/A

GRANITE BAY, CA 91746

HAZNET:

Gepaid: CAC001057344 TSD EPA ID: CAD982042475

Gen County: Placer
Tsd County: Solano
Tons: 12.6420
Facility Address 2: Not reported

Waste Category: Asbestos-containing waste

Disposal Method: Disposal, Land Fill
Contact: REX HALL
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 7792 LAKESHORE DR

GRANITE BAY, CA 91746

County Placer

16 DAVID KIENER HAZNET S104569671 8940 WAGON WY N/A

GRANITE BAY, CA 95746

TC01637093.1r Page 41 of 128

Cortese

JOSEPH H. PIERCE

S105025926

N/A

rection EDR ID Number

Database(s) EPA ID Number

UST

CA PLACER CO. MS

CA PLACER CO. MS

HIST UST

DAVID KIENER (Continued)

S104569671

U003786407

U001613837

N/A

N/A

HAZNET:

Gepaid: CAC002113320 TSD EPA ID: CAD009466392

Gen County: Placer
Tsd County: 7
Tons: 0.75
Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Recycler
Contact: DAVID KIENER
Telephone: (916) 791-3271
Mailing Name: Not reported
Mailing Address: 8940 WAGON WY

GRANITE BAY, CA 95746

County Placer

16 KIENER, DAVE

8940 WAGON WAY GRANITE BAY, CA 95746

Placer MS:

Facility ID: PR0007114
District Code: 11
Program Elements: 2302
Facility Status: 2

State UST:

Facility ID: FA0004180
Total Tanks: Not reported
Region: STATE
Local Agency: 31000

17 JOSEPH R. GALLARDO 6237 EUREKA RD ROSEVILLE, CA 95678

Placer MS:

Facility ID: PR0000631
District Code: 14
Program Elements: 2301
Facility Status: 2

Facility ID: PR0003099
District Code: 14
Program Elements: 2107
Facility Status: 2

UST HIST:

Facility ID: 46450 Owner Name: JOSEPH R. GALLARDO

Total Tanks: 1 Region: STATE

Owner Address: 6237 EUREKA ROAD

ROSEVILLE, CA 95678

Tank Used for: PRODUCT

Tank Num: 1 Container Num: I
Tank Capacity: 00001000 Year Installed: 1974

Type of Fuel: REGULAR Tank Construction: Not Reported

Leak Detection: Stock Inventor

Contact Name: Not reported Telephone: (916) 791-4751 Facility Type: Other Other RESIDENCE

TC01637093.1r Page 42 of 128

EDR ID Number

Database(s) **EPA ID Number**

17 **OTOW ORCHARD 6232 EUREKA RD ROSEVILLE, CA 95678**

UST HIST:

49239 Facility ID: Total Tanks:

Owner Address: 6232 EUREKA RD.

ROSEVILLE, CA 95678

PRODUCT Tank Used for:

Tank Num:

Tank Capacity: 00000550 Type of Fuel: **UNLEADED**

Leak Detection: Stock Inventor

S. OTOW Contact Name: Facility Type: Other

Facility ID: 49239 Total Tanks:

Owner Address: 6232 EUREKA RD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Tank Capacity: 00000350 Type of Fuel: **REGULAR**

Leak Detection: Stock Inventor

Contact Name: S. OTOW Facility Type: Other

HIST UST U001613849 N/A

SEIICHI OTOW Owner Name:

Region: STATE

Container Num: #1

Year Installed: 1974

Tank Construction: Not Reported

(916) 791-1656 Telephone:

Other Type: FARM

SEIICHI OTOW Owner Name:

STATE Region:

Container Num: #2 Year Installed: 1979

Tank Construction: Not Reported

Telephone: (916) 791-1656

Other Type: **FARM**

STATION #1 18 6900 EUREKA RD **ROSEVILLE, CA 95678**

Placer MS:

PR0001337 Facility ID: District Code: 19 2302 Program Elements: Facility Status: 2

Facility ID: PR0003158 District Code: 19 Program Elements: 2105 Facility Status:

UST HIST:

Facility ID: 13520 Total Tanks:

Owner Address: 6900 EUREKA RD.

ROSEVILLE, CA 95678 **PRODUCT**

Tank Used for: Tank Num:

Tank Capacity: 00001000 Type of Fuel: **REGULAR** Leak Detection: Stock Inventor

CREW CHIEF STEPHENS Contact Name: Facility Type: Other

Facility ID: 13520

Total Tanks: Owner Address: 6900 EUREKA RD.

ROSEVILLE, CA 95678

CA PLACER CO. MS U001613877 **HIST UST** N/A

SOUTH PLACER FIRE DISTRICT Owner Name: Region:

STATE

Container Num: Year Installed: 1979 Tank Construction: 10 gauge

(916) 791-7059 Telephone: Other Type: FIRE STATION

Owner Name: SOUTH PLACER FIRE DISTRICT

Region: STATE

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

STATION #1 (Continued) U001613877

Tank Used for: PRODUCT

Tank Num:2Container Num:2Tank Capacity:00001000Year Installed:1979Type of Fuel:DIESELTank Construction:10 gauge

Leak Detection: Stock Inventor

Contact Name: CREW CHIEF STEPHENS Telephone: (916) 791-7059 Facility Type: Other Other Type: FIRE STATION

18 AT & T WIRELESS SVCS-EUREKA RD CA PLACER CO. MS S105708755
6900 EUREKA RD N/A
GRANITE BAY, CA 95746

Placer MS:

Facility ID: PR0009113
District Code: 15
Program Elements: 2105
Facility Status: 1

Facility ID: PR0009114
District Code: 15
Program Elements: 2115
Facility Status: 1

18 SOUTH PLACER FIRE DISTRICT HAZNET S103988600 6900 EUREKA ROAD N/A

HAZNET:

GRANITE BAY, CA 95661

 Gepaid:
 CAL000038508

 TSD EPA ID:
 CAD044003556

 Gen County:
 Sacramento

 Tsd County:
 Yolo

 Tons:
 0.1251

 Facility Address 2:
 Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Transfer Station

Contact: SOUTH PLACER FIRE DIS

Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 6900 EUREKA RD

GRANITE BAY, CA 95746

County Sacramento

Gepaid: CAL000038508
TSD EPA ID: CAT080013352
Gen County: Sacramento
Tsd County: Los Angeles
Tons: 0.2293
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Recycler

Contact: SOUTH PLACER FIRE DIS

Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 6900 EUREKA RD

GRANITE BAY, CA 95746

County Sacramento

EDR ID Number

rection EDR ID Number

SOUTH PLACER FIRE DISTRICT (Continued)

S103988600

EPA ID Number

Database(s)

Gepaid: CAL000038508
TSD EPA ID: CAD044003556
Gen County: Sacramento
Tsd County: Yolo
Tons: .1876
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Transfer Station

Contact: SOUTH PLACER FIRE DIS

Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 6900 EUREKA RD

GRANITE BAY, CA 95746 Sacramento

Gepaid: CAL000038508
TSD EPA ID: CAT080013352
Gen County: Sacramento
Tsd County: Los Angeles
Tons: .2085
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Recycler

Contact: SOUTH PLACER FIRE DIS

Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 6900 EUREKA RD

GRANITE BAY, CA 95746

County Sacramento

18 1X SO PLACER FIRE DIST/STA. # 1 6900 EUREKA RD GRANITE BAY, CA 95746

County

HAZNET S102801847 CA PLACER CO. MS N/A

HAZNET:

Gepaid: CAC001011376
TSD EPA ID: CAT080013352
Gen County: Placer
Tsd County: Los Angeles
Tons: .2293
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Recycler

Contact: SO. PLACER FIRE DIST.

Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 6900 EUREKA ROAD

GRANITE BAY, CA 95746

County Placer

Gepaid: CAC001011376 TSD EPA ID: CAT080011059

Gen County: Placer
Tsd County: Los Angeles
Tons: .0625
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Recycler

Contact: SO. PLACER FIRE DIST.

Map ID Direction Distance (ft.)Site

Distance

1X SO PLACER FIRE DIST/STA. #1 (Continued)

S102801847

Database(s)

EDR ID Number

EPA ID Number

Telephone: (000) 000-0000 Mailing Name: Not reported Mailing Address: 6900 EUREKA ROAD

GRANITE BAY, CA 95746

County Placer

Placer MS:

PR0009987 Facility ID: District Code: 50 Program Elements: 2105 Facility Status:

Facility ID: PR0009988 District Code: 50 Program Elements: 2115 Facility Status:

19 **HAAG PROPERTY** S104735500 9232 BARTON ROAD N/A **GRANITE BAY, CA 95661**

NFA:

Facility ID 31880001 Dtsc Region Code:

Region Code Definition:

SACRAMENTO

County Code: 31

Site Name Under: HAAG PROPERTY

Current Status Date: 10232000 Current Status Code: NFA

NO FURTHER ACTION FOR DTSC Current Status:

Lead Agency Code: DTSC

Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL

Site Type Code:

Site Type: **RESPONSIBLE PARTY**

National Priorities List: Not reported Not reported Source Of Funding Code: Not reported Staff Member: **TMILES** Supervisor: Not reported

Sic Code: 88

Sic Code Definition: PRIVATE HOUSEHOLDS Site Mitigatn & Brnflds Reuse Prog (SMBR) Code: CC

SMBR Branch: CENTRAL CALIFORNIA

Regional Water Quality Control Board: Not reported **RWQCB** Definition: Not reported Site Access Controlled: Not reported Listed In Haz Wst & Substncs Sites List (CORTESE) Not reported Date Hazard Ranked: Not reported GW Contamination Suspected: Not reported # Of Sources Contributing To Contamination:

0° 0′ 0″ / 0° 0′ 0″ Lat/Long: Direction Lat: Not reported Not reported Direction Long: Lat/long Method: Not reported Entity Lat/long Coordinates Refer To: Not reported

State Assembly Distt Code: 05 State Senate Distt Code: 01

Identifying Code: **CSTAR** ID Value: 101292 Map ID Direction Distance (ft.)Site

EDR ID Number Distance Database(s) **EPA ID Number**

HAAG PROPERTY (Continued)

S104735500

Other ID Desc: CALSTARS CODE

BARTON ROAD DEVELOPMENT Alternate Name(s):

Alternate Name(s): HAAG PROPERTY 9232 BARTON ROAD Address(es):

GRANITE BAY, CA 95661

Background Info: This is a residential property which has had fill material (soil)

contaminated with residual explosive from a blasting operation imported from another site. The explosive is a nitrogen based material (Dyno AP Plus) that is stable by itself. The soil was imported from a nearby expansion of a municipal water treatment

plant. Not reported

The site was referred to DTSC by the County Environmental Health

Department. Not reported

It poses no risk of chemical contamination but does present a

potential risk due to physical contamination of the soil.

Not reported

The property owners have applied for the Voluntary Cleanup

Program to address the site.

Facility Id: Not reported AWP Activities Code: Not reported DTSC Site Activity Code: Not reported Activity Code Def: Not reported AWP Activity Id: Not reported Dt Activity Due For Completion: Not reported Revised Due Date: Not reported Date Activity Completed: Not reported Est # Of Person-years To Complete: Not reported Not reported Est. Size Of An Activity Code: Site Status When Activity Commitment Made: Not reported Status Code Definition: Not reported Cubic Yards Of Solids Removed At Completion: Not reported Gallons Of Liquid Removed Upon Completion: Not reported Cubic Yards Of Solids Treated Upon Completion: Not reported Actvty Deleted Via Commitmnt/Completns Screen: Not reported

Special Program Code: Not reported Special Program: Not reported Comments Date: 09112000

Comments: DTSC has reviewed information provided by the project proponents

and will issue a letter with risk management requirements for

the use of the soil at the site.

It was determined after reviewing information provided by the project proponent that the site could be addressed without DTSC involvement. DTSC provided risk management recommendations to county Environmental Health. This site is No Further Action for

DTSC.

CHMIRS S100277254 20 9242 PURDY WAY N/A

GRANITE BAY, CA 95661

CHMIRS:

OES Control Number: 9115452 Extent of Release: Not reported Property Use: Lake/Pond/River Incident Date: 16-FEB-91

Date Completed: 16-FEB-91

Time Completed: 1217

Distance (ft.)Site Database(s) EPA ID Number

(Continued) S100277254

Agency Id Number: 31150 Agency Incident Number: 736 OES Incident Number: 9115452 Time Notified: 1151 Surrounding Area: 931 Estimated Temperature: 65 Property Management: Κ More Than Two Substances Involved?: Ν

Special Studies 1:

Special Studies 2:

Special Studies 3:

Special Studies 3:

Not reported

Special Studies 4:

Special Studies 5:

Not reported

Special Studies 5:

Not reported

Special Studies 6:

Not reported

Resp Agncy Personel # Of Decontaminated: 0
Others Number Of Decontaminated: 0
Others Number Of Injuries: 0
Others Number Of Fatalities: 0

Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported KEITH BORSON Reporting Officer Name/ID: Report Date: 18-MAR-91

Comments: Yes

Facility Telephone Number: 916 791-7059 Waterway Involved: Not reported Waterway: Not reported Spill Site: Not reported Cleanup By: Not reported Containment: Not reported What Happened: Not reported Not reported Type: Other: Not reported Substance: Not Reported E Date: 15-JUN-92 Contained: Not reported Site Type: Not reported Evacuations: Not reported Num Of Injuries: Not reported Num Of Fatalities: Not reported Date/Time: Not reported 88-92 Year:

Agency: Not reported BBLS: Not reported Cups: Not reported CUFT: Not reported Gallons: Not reported Grams: Not reported Pounds: Not reported Liters: Not reported Not reported Ounces: Pints: Not reported Quarts: Not reported Sheen: Not reported

EDR ID Number

Map ID Direction Distance Distance (ft.)Site

ection EDR ID Number

Database(s) EPA ID Number

(Continued) S100277254

Tons: Not reported Not reported Unknown: Description: Not reported Incident date : Not reported Admin Agency: Not reported OES date: Not reported OES time: Not reported OES notification: Not reported Amount: Not reported

20 9242 PURDY LANE ERNS 91205166 9242 PURDY LANE N/A

Click this hyperlink while viewing on your computer to access

additional ERNS detail in the EDR Site Report.

20 CHMIRS \$105882345 9237 PURDY LANE N/A

9237 PURDY LANE GRANITE BAY, CA

ROSEVILLE, CA 95661

CHMIRS:

OES Control Number: 02-0202
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Time Completed: Not reported Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 02-0202 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated : Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported Report Date: Not reported Not reported Comments:

irection EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

(Continued) S105882345

Facility Telephone Number: Not reported Waterway Involved: Yes Waterway: Linda Creek Spill Site: Not reported Cleanup By: Unknown Containment: Not reported What Happened: Not reported Type: Not reported Other: Not reported

Substance : milky white substance

Quantity Released:

E Date: Not reported Contained: Unknown Site Type: Waterways

Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time : Not reported Year : 2002

Agency: private citizen

BBLS: 0 Cups: 0 CUFT: 0 Gallons: 0 Grams: 0 Pounds: 0 Liters: 0 Ounces: 0 Pints: 0 0 Quarts: 0 Sheen: Tons: 0

Description: 1 hour ago, his wife spotted a colloidal milky white substance in

Linda Creek. Unknown source and unknown where it starts or stops.

Incident date: 1/10/200212:00:00 AM

Admin Agency: Placer County Health Department

OES date : Not reported OES time : Not reported

OES notification: 1/10/200204:28:52 PM

Amount: Not reported

21 SAN JUAN WATER DISTRICT 9935 AURBURN- FOLSOM RD GRANITE BAY, CA 95746

Unknown:

HAZNET \$102286259 N/A

HAZNET:

Gepaid: CAC001028768 TSD EPA ID: CAD009466392

Gen County: Placer
Tsd County: 7
Tons: .8000
Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Recycler

Contact: SAN JUAN WATER DISTRICT

Telephone: (916) 791-0115 Mailing Name: Not reported

Mailing Address: 9935 AURBURN- FOLSOM RD

EDR ID Number

SAN JUAN WATER DISTRICT (Continued)

S102286259

EPA ID Number

Database(s)

GRANITE BAY, CA 95746

County Placer

CAC001028768 Gepaid: TSD EPA ID: CAL000051079 Gen County: Placer Tsd County: Sacramento

.8340 Tons: Facility Address 2: Not reported Waste Category: Waste oil and mixed oil

Disposal Method: **Transfer Station**

Contact:

SAN JUAN WATER DISTRICT

Telephone: (916) 791-0115 Not reported Mailing Name:

Mailing Address: 9935 AURBURN- FOLSOM RD

GRANITE BAY, CA 95746

County Placer

U001613839 21 **KEN ROBERTS** HIST UST 9230 AUBURN FOLSOM RD. ROSEVIL N/A ROSEVILLE, CA 95678

UST HIST:

Facility ID: 44853 Owner Name: KEN ROBERTS

Total Tanks: 2 Region: STATE

Owner Address: 9230 AUBURN FOLSOM RD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Container Num: #1 Tank Capacity: 00002000 Year Installed: 1979 Type of Fuel: **REGULAR** Tank Construction: Not Reported

Leak Detection: Visual, Stock Inventor, GW Monitoring Well

Contact Name: KEN ROBERTS Telephone: (916) 792-4653 Facility Type: Other Other Type: CONSTRUCTION

Owner Name: KEN ROBERTS Facility ID: 44853

Total Tanks: STATE Region:

Owner Address: 9230 AUBURN FOLSOM RD.

ROSEVILLE, CA 95678

Tank Used for: **PRODUCT**

Tank Num: Container Num: #2 2

00000500 Year Installed: Tank Capacity: Not reported Type of Fuel: DIESEL Tank Construction: Not Reported

Leak Detection: Visual, GW Monitoring Well

KEN ROBERTS Contact Name: Telephone: (916) 792-4653 CONSTRUCTION Facility Type: Other Other Type:

22 **ROSEVILLE WATER TREATMENT PLANT** 9342 BARTON RD. **GRANITE BAY, CA 95746**

1007992106 **FINDS** 110000560517

Distance (ft.)Site Database(s) EPA ID Number

22 ROSEVILLE, CITY OF, WATER TREATMENT CA PLACER CO. MS S104915862
9342 BARTON RD N/A
ROSEVILLE, CA 95678

Placer MS:

Facility ID: PR0005872
District Code: 17
Program Elements: 2102
Facility Status: 3

Facility ID: PR0006513
District Code: 17
Program Elements: 2116
Facility Status: 3

23 CHMIRS \$105660722 9500 BARTON RD N/A

GRANITE BAY, CA
CHMIRS:

Comments:

Facility Telephone Number:

Waterway Involved:

OES Control Number: 99-3053
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Not reported Time Completed: Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 99-3053 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Not reported Special Studies 3: Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated: Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported Report Date: Not reported

Waterway: unknown part of linda creek

Not reported

Not reported

Yes

Spill Site:

Cleanup By:

Containment:

What Happened:

Type:

Not reported

Not reported

Not reported

Not reported

Not reported

EDR ID Number

rection EDR ID Number

Database(s) EPA ID Number

(Continued) S105660722

Other: Not reported Substance: aluminum sulfate

Quantity Released:

E Date : Not reported

Contained: Yes

Site Type : Treatment/Sewage Facility

Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time : Not reported Year : 1999
Agency : Roseville FD

BBLS: 0 Cups: 0 CUFT: 0 Gallons: 23 0 Grams: Pounds: 0 Liters: 0 0 Ounces: Pints: 0 Quarts: 0 Sheen: 0 Tons: 0 Unknown:

Description : overpressurization of cylinder holding the aluminum sulfate.. 100

gal went to unknown part of linda creek..where it is trapped and

dykesd

Incident date: 7/20/199912:00:00 AM

Admin Agency: Placer County Health Department

OES date: Not reported
OES time: Not reported

OES notification: 7/20/199906:14:28 PM

Amount: Not reported

24 ROSEVILLE WATER TREATMENT PLAN 9595 BARTON RD

GRANITE BAY, CA 95746

HAZNET:

Gepaid: CAL000217110
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.20
Facility Address 2: Not reported

Masta Catagory

Waste Category: Unspecified oil-containing waste

Disposal Method: Disposal, Other

Contact: JIM MEHL - PLANT OPS

Telephone: (916) 791-4586
Mailing Name: Not reported
Mailing Address: 9595 BARTON RD

GRANITE BAY, CA 95746

County Not reported

HAZNET

CA WDS

CA PLACER CO. MS

S104573745

N/A

rection EDR ID Number

ROSEVILLE WATER TREATMENT PLAN (Continued)

S104573745

EPA ID Number

Database(s)

Gepaid: CAL000217110
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: 8.99
Facility Address 2: Not reported

Waste Category: Liquids with pH <UN-> 2
Disposal Method: Treatment, Tank

Contact: JIM MEHL - PLANT OPS

Telephone: (916) 791-4586
Mailing Name: Not reported
Mailing Address: 9595 BARTON RD

GRANITE BAY, CA 95746

County Not reported

Gepaid: CAC002319017 TSD EPA ID: CAD059494310

Gen County: Placer
Tsd County: Santa Clara
Tons: 15.6375
Facility Address 2: Not reported

Waste Category: Aqueous solution with metals (restricted levels and Alkaline solution (pH

<UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium,

silver, thallium, vanadium, and zinc))

Disposal Method: Disposal, Other
Contact: CITY OF ROSEVILLE
Telephone: (916) 774-5362
Mailing Name: Not reported
Mailing Address: 9595 BARTON RD.

GRANITE BAY, CA 95746

County Placer

 Gepaid:
 CAC002319017

 TSD EPA ID:
 CAD059494310

 Gen County:
 Placer

Gen County: Placer
Tsd County: Santa Clara
Tons: 0.0875
Facility Address 2: Not reported

Waste Category: Other organic solids
Disposal Method: Transfer Station
Contact: CITY OF ROSEVILLE
Telephone: (916) 774-5362
Mailing Name: Not reported
Mailing Address: 9595 BARTON RD.

GRANITE BAY, CA 95746

County Placer

WDS:

Facility ID: 5S 31S950000

Facility Contact MULLIGAN, JIM Facility Telephone (916) 774-5668 SIC Code: Not reported SIC Code 2: Not reported

Agency Name: ROSEVILLE, CITY OF 1

Agency Address: 2005 Hilltop Cir

Roseville 95747 - 9704

Agency Contact: LARRY BUCKLE Agency Phone: (916) 774-5213

Design Flow: Not reported Baseline Flow: Not reported

Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or

rection EDR ID Number

ROSEVILLE WATER TREATMENT PLAN (Continued)

S104573745

EPA ID Number

Database(s)

Solid Waste (Class I, II or III)

Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste

Discharge Requirements.

Agency Type: City

Waste Type: Not reported

Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a

relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent

no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water

dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy

waste ponds.

Reclamation: Not reported POTW: Not reported

NPDES Number: CAS000005 The 1st 2 characters designate the state. The remaining 7 are assigned by the

Regional Board

Subregion: 5S

Facility ID: 5S 31L950000

Facility Contact Jim Mulligan Facility Telephone (916) 774-5668 SIC Code: Not reported SIC Code 2: Not reported

Agency Name: ROSEVILLE, CITY OF 2 Agency Address: 2005 HILLTOP CIRCLE

ROSEVILLE 95747

Agency Contact: ART O'BRIEN Agency Phone: (916) 774-5754

Design Flow: Not reported Baseline Flow: Not reported

Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or

Solid Waste (Class I, II or III)

Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste

Discharge Requirements.

Agency Type: City

Waste Type: Not reported

Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a

relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent

no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water

dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy

waste ponds. Not reported

Reclamation: Not reported POTW: Not reported

NPDES Number: CAS000005 The 1st 2 characters designate the state. The remaining 7 are assigned by the

Regional Board

Subregion: 5S

Placer MS:

Facility ID: PR0010169

District Code: 6
Program Elements: 2102
Facility Status: 1

Facility ID: PR0010170

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

ROSEVILLE WATER TREATMENT PLAN (Continued)

S104573745

EDR ID Number

District Code: 6
Program Elements: 2116
Facility Status: 1

24 GRANITE BAY GOLF CLUB 9580 BARTON RD ROCKLIN, CA 95747 CA PLACER CO. MS S104180851 N/A

Placer MS:

Facility ID: PR0005074
District Code: 50
Program Elements: 2106
Facility Status: 1

Facility ID: PR0006138
District Code: 50
Program Elements: 2115
Facility Status: 1

Facility ID: PR0007349
District Code: 50
Program Elements: 2268
Facility Status: 1

25 NEXTEL COMM (SITE 1781) 9651 AUBURN FOLSOM RD LOOM, CA 95650

Placer MS:

Facility ID: PR0009061
District Code: 15
Program Elements: 2105
Facility Status: 1

Facility ID: PR0009062
District Code: 15
Program Elements: 2115
Facility Status: 1

26 LOVEALL, JACK AND PATRICIA 9145 OAK LEAF WAY ROSEVILLE, CA 95678

Placer MS:

Facility ID: PR0004665

District Code: 17
Program Elements: 2301
Facility Status: 2

Facility ID: PR0004666
District Code: 17
Program Elements: 2107
Facility Status: 2

CA PLACER CO. MS S106447341 N/A

CA PLACER CO. MS S104915430 N/A

EDR ID Number

Database(s) **EPA ID Number**

S106929683

S101590879

N/A

N/A

SWEEPS UST

CA FID UST

SWEEPS UST

26 MR. LOVEALL PROPERTY 9145 OAK LEAF WAY **GRANITE BAY, CA 95746**

SWEEPS:

Not reported Status: Comp Number: 3059 Number: Not reported Board Of Equalization: Not reported Ref Date: Not reported Act Date : Not reported Created Date: Not reported Not reported Tank Status: Not reported Owner Tank Id:

31-000-003059-000001 Swrcb Tank Id:

Actv Date : Not reported Capacity: 250 M.V. FUEL Tank Use: **PRODUCT** Stg: Content: **REG UNLEADED**

Number Of Tanks:

SAN JUAN SUBURBAN WATER DIST 27 9965 AUBURN FOLSOM RD **ROSEVILLE, CA 95678**

FID:

Facility ID: 34007327 Regulate ID: Not reported

Active Underground Storage Tank Location Reg By:

Cortese Code: Not reported SIC Code: Not reported Status: Active Facility Tel: Not reported

Not reported Mail To:

9965 AUBURN FOLSOM RD

ROSEVILLE, CA 95678

Contact: Not reported Contact Tel: Not reported Not reported NPDES No: Not reported DUNs No: 10/22/93 Modified: 00/00/00 Creation:

EPA ID: Not reported Comments: Not reported

SWEEPS:

Status: Comp Number: 131086 Number: 4

Board Of Equalization: 44-019607 Ref Date: 10-17-88 Act Date : 10-17-88 10-17-88 Created Date: Tank Status:

Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-131086-000001

Actv Date : 10-17-88 Capacity: 2000 Tank Use: M.V. FUEL Stg: Content: DIESEL Number Of Tanks:

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Map ID Direction Distance

Distance

Distance (ft.)Site Database(s) EPA ID Number

27 SAN JUAN WATER DISTRICT 9935 AUBURN FOLSOM ROAD GRANITE BAY, CA 95746 FINDS 1007991973

110000523684

EDR ID Number

27 SAN JUAN SUBURBAN WATER DIST 9935 AUBURN FOLSON RD GRANITE BAY, CA 95661 SWEEPS UST \$106931830 N/A

SWEEPS:

Status: A
Comp Number: 807
Number: 4

Board Of Equalization: 44-019607
Ref Date: 07-01-93
Act Date: 07-01-93
Created Date: 07-01-93
Tank Status: A
Owner Tank Id: 1

Swrcb Tank ld: 31-000-000807-000001

Actv Date : 12-18-92
Capacity : 4000
Tank Use : M.V. FUEL

Stg: P
Content: REG UNLEADED

Number Of Tanks: 4

27 SAN JUAN WATER DISTRICT HAZNET 1001935960 9935 AUBURN FOLSOM RD N/A ROSEVILLE, CA 95746

HAZNET:

 Gepaid:
 CAL000073350

 TSD EPA ID:
 CAD982446890

 Gen County:
 Placer

Tsd County: San Joaquin
Tons: .3127
Facility Address 2: Not reported

Waste Category: Waste oil and mixed oil Disposal Method: Transfer Station

Contact: SAN JUAN WATER DISTRICT

Telephone: (916) 969-2279
Mailing Name: Not reported
Mailing Address: PO BOX 2157

GRANITE BAY, CA 95746 - 2157

County Placer

Gepaid: CAL000073350 TSD EPA ID: CAD982446890

Gen County: Placer
Tsd County: San Joaquin
Tons: .1167
Facility Address 2: Not reported

Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station

Contact: SAN JUAN WATER DISTRICT

Telephone: (916) 969-2279 Mailing Name: Not reported

Distance (ft.)Site Database(s) **EPA ID Number**

SAN JUAN WATER DISTRICT (Continued)

EDR ID Number

1001935960

Mailing Address: PO BOX 2157

GRANITE BAY, CA 95746 - 2157

Placer County

Gepaid: CAL000073350 TSD EPA ID: CAT080011059

Gen County: Placer Tsd County: Los Angeles .2085 Tons: Facility Address 2: Not reported

Waste Category: Aqueous solution with 10% or more total organic residues

Disposal Method: Not reported

Contact: SAN JUAN WATER DISTRICT

Telephone: (916) 969-2279 Mailing Name: Not reported Mailing Address: PO BOX 2157

GRANITE BAY, CA 95746 - 2157

County Placer

Gepaid: CAL000073350 NVT330010000 TSD EPA ID:

Gen County: Placer Tsd County: 99 .1377 Tons: Facility Address 2:

Not reported

Waste Category: Polychlorinated biphenyls and material containing PCB's

Disposal Method: Not reported

Contact: SAN JUAN WATER DISTRICT

Telephone: (916) 969-2279 Mailing Name: Not reported Mailing Address: PO BOX 2157

GRANITE BAY, CA 95746 - 2157

County Placer

27 SAN JUAN SUBURBAN WATER DIST 9935 AUBURN FOLSOM RD **ROSEVILLE, CA 95678**

HAZNET S101590878 **CA FID UST** N/A CA PLACER CO. MS

SWEEPS UST

HAZNET:

CAL000073350 Gepaid: TSD EPA ID: CAT080033681

Gen County: Placer Tsd County: Placer Tons: 0.1

Facility Address 2: Not reported Other organic solids Waste Category: Disposal Method: Disposal, Land Fill **BEN MARTINEZ** Contact: Telephone: (916) 791-0153 Mailing Name: Not reported Mailing Address: PO BOX 2157

GRANITE BAY, CA 95746 - 2157

County Placer

Distance
Distance (ft.)Site
Database(s) EPA ID Number

SAN JUAN SUBURBAN WATER DIST (Continued)

S101590878

EDR ID Number

FID:

Facility ID: 34007326 Regulate ID: Not reported

Reg By: Active Underground Storage Tank Location

Cortese Code: Not reported SIC Code: Not reported Status: Active Facility Tel: (915) 791-0115

Mail To: Not reported

9935 AUBURN FOLSOM RD

ROSEVILLE, CA 95678

Contact: Not reported Contact Tel: Not reported DUNs No: Not reported NPDES No: Not reported Creation: 10/22/93 Modified: 00/00/00

EPA ID: Not reported Comments: Not reported

Placer MS:

Facility ID: PR0001283
District Code: 6
Program Elements: 2303
Facility Status: 2

Facility ID: PR0002959
District Code: 6

Program Elements: 2102 Facility Status: 1

Facility ID: PR0005862

District Code: 6
Program Elements: 2350
Facility Status: 2

Facility ID: PR0008735

District Code: 6
Program Elements: 2116
Facility Status: 1

SWEEPS:

Status : A Comp Number : 130986

Number: 4

Board Of Equalization : 44-019607 Ref Date : 10-24-88 Act Date : 10-24-88 Created Date : 10-24-88

Tank Status: A

Owner Tank Id: Not reported

Swrcb Tank ld: 34-000-130986-000001

Actv Date : 10-24-88
Capacity : 2000
Tank Use : M.V. FUEL

Stg: P
Content: DIESEL
Number Of Tanks: 1

Distance (ft.)Site Database(s) EPA ID Number

27 SAN JUAN SUBURBAN WATER DIST 9935 AUBURN FOLSOM RD GRANITE BAY, CA 95661 HAZNET S103986458 AST N/A SWEEPS UST

EDR ID Number

HAZNET:

County

Gepaid: CAC001066288 TSD EPA ID: CAD044003556

Gen County: Placer
Tsd County: Yolo
Tons: 1.3344
Facility Address 2: Not reported
Waste Category: Tank bottom waste
Disposal Method: Transfer Station

Contact: SAN JUAN WATER DISTRICT

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 9935 AUBURN FOLSOM RD GRANITE BAY, CA 95746

Placer

Gepaid: CAC001066288 TSD EPA ID: CAD009466392

Gen County: Placer
Tsd County: 7
Tons: 3.2500
Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Recycler

Contact: SAN JUAN WATER DISTRICT

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 9935 AUBURN FOLSOM RD GRANITE BAY, CA 95746

County Placer

Gepaid: CAC001066288 TSD EPA ID: NVD982358483

Gen County: Placer
Tsd County: 99
Tons: 3.2500
Facility Address 2: Not reported

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Not reported

Contact: SAN JUAN WATER DISTRICT

Telephone: (000) 000-0000 Mailing Name: Not reported

Mailing Address: 9935 AUBURN FOLSOM RD GRANITE BAY, CA 95746

County Placer

SWEEPS:

Status: A
Comp Number: 807
Number: 4

Board Of Equalization: 44-019607
Ref Date: 07-01-93
Act Date: 07-01-93
Created Date: 07-01-93
Tank Status: A

Owner Tank Id: 2

Swrcb Tank Id: 31-000-000807-000002

Distance
Distance (ft.)Site
Database(s) EPA ID Number

SAN JUAN SUBURBAN WATER DIST (Continued)

S103986458

EDR ID Number

Actv Date : 12-18-92
Capacity : 2000
Tank Use : M.V. FUEL
Stg : P
Content : DIESEL
Number Of Tanks : Not reported

Status: A
Comp Number: 807
Number: 4

Board Of Equalization : 44-019607
Ref Date : 07-01-93
Act Date : 07-01-93
Created Date : 07-01-93
Tank Status : A
Owner Tank Id : 3

Swrcb Tank Id: 31-000-000807-000003

Not reported

Actv Date : 12-18-92
Capacity : 550
Tank Use : M.V. FUEL
Stg : P
Content : DIESEL

Status: A
Comp Number: 807

Number Of Tanks:

Number:

Board Of Equalization : 44-019607
Ref Date : 07-01-93
Act Date : 07-01-93
Created Date : 07-01-93
Tank Status : A
Owner Tank Id : 4

Swrcb Tank Id: 31-000-000807-000004

4

Actv Date : 12-18-92
Capacity : 1500
Tank Use : M.V. FUEL
Stg : P
Content : DIESEL
Number Of Tanks : Not reported

AST:

Owner: SAN JUAN WATER DISTRICT

Total Gallons: 6200

27 SAN JUAN SUBURBAN WATER DIST 9925 AUBURN-FOLSOM RD GRANITE BAY, CA 95746

N/A

1001588587

LUST

State LUST:

Cross Street: Not reported
Qty Leaked: Not reported
Case Number Not reported
Reg Board: Not reported
Chemical: Gasoline
Lead Agency: Regional Board
Local Agency: 31000

Case Type: Drinking Water Aquifer affected

Status: Case Closed

rection EDR ID Number

Confirm Leak:

Prelim Assess:

Remed Plan:

Case Number:

310333

Database(s) EPA ID Number

1997-07-08 00:00:00

Not reported

Not reported

SAN JUAN SUBURBAN WATER DIST (Continued)

1001588587

Review Date: 1997-07-08 00:00:00
Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 2000-09-28 00:00:00
Release Date: Not reported

Release Date: Not reported
Cleanup Fund Id: Not reported
Discover Date: Not reported
Enforcement Dt: 2000-08-15 00:00:00
Enf Type: None Taken
Enter Date: Not reported
Funding: Responsible Party

Staff Initials: DAV
How Discovered: Not reported
How Stopped: Not reported
Interim: Yes

Leak Cause: Not reported
Leak Source: Not reported
MTBE Date: 1997-07-08 00:00:00
Max MTBE GW: 1630 Parts per Billion

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
Priority: Low priority. Priority ranking can change over time.

Local Case # : Not reported
Beneficial: Not reported
Staff : PRS
GW Qualifier : =

Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: UNNAMED BASIN
Operator : Not reported

Oversight Prgm: LUST
Review Date : Not reported
Stop Date : Not reported
Not reported

Work Suspended :No

Responsible PartySAN JUAN SUBURBAN WATER DIST RP Address: PO BOX 2157, ROSEVILLE, CA 95661

Global Id: T0606100275
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 1 Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported

Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

Substance: GASOLINE

Case Type: Drinking Water Aquifer affected

Program: LUST Staff Initials: PRS

Status: Case Closed

MTBE Code: 6 Lead Agency: Regional

ection EDR ID Number

Database(s) EPA ID Number

28 THE DAM NURSERY 7700 FOLSOM AUBURN FOLSO, CA 95630

Sacramento ML:

SIC Code:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: Not reported Food Bill Code: Not reported Billing Codes BP: 5203

Billing Codes UST: Not reported

Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported Not reported **CUPA Permit Date: HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported

Facility Id: Not reported

Not reported

Number of Tanks: 0
WG Bill Code: 50
Food Bill Code: 50
Billing Codes BP: Disclaimer
Billing Codes UST: No Tanks

Tier Permitting: Not reported Risk Mgmt Protection Program : Not reported

Target Property Bill Code: 50

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported Not reported **HAZMAT Inspection Date: UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

28 DPR FOLSOM LAKES 7806 FOLSOM AUBURN RD FOLSOM, CA 96530

HAZNET:

Gepaid: CAL000063526
TSD EPA ID: CAD000088252
Gen County: Sacramento
Tsd County: Los Angeles
Tons: .2293
Facility Address 2: Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station

Contact: CAL DEPT OF PARK SERVICESPARKS

Telephone: (916) 653-9962 Mailing Name: Not reported Mailing Address: PO BOX 942896

SACRAMENTO, CA 94296 - 0001

Sacramento Co. ML S104654848 N/A

> HAZNET \$103672105 N/A

EDR ID Number

DPR FOLSOM LAKES (Continued)

EPA ID Number

S103672105

Database(s)

County Sacramento CAL000063526 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Los Angeles

Tons: 0.12 Facility Address 2: Not reported

Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

Disposal Method: Recycler

Contact: HAZMAT COORDINATOR

Telephone: (916) 653-4272 Not reported Mailing Name: Mailing Address: PO BOX 942896

SACRAMENTO, CA 94296 - 0001

County Not reported CAL000063526 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: San Bernardino

Tons: 0.41

Facility Address 2: Not reported

Waste Category: Oil/water separation sludge

Disposal Method: **Transfer Station**

HAZMAT COORDINATOR Contact:

Telephone: (916) 653-4272 Mailing Name: Not reported

Mailing Address: PO BOX 942896

SACRAMENTO, CA 94296 - 0001

County Not reported CAL000063526 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento San Bernardino Tsd County: 0.2

Tons:

Facility Address 2: Not reported

Unspecified oil-containing waste Waste Category:

Disposal Method: **Transfer Station**

Contact: **HAZMAT COORDINATOR**

Telephone: (916) 653-4272 Mailing Name: Not reported Mailing Address: PO BOX 942896

SACRAMENTO, CA 94296 - 0001

Not reported County

28 **AMERICAN RIVER DISTRICT** 7806 FOLSOM AUBURN RD FOLSOM, CA 95630

HIST UST U001612902 N/A

UST HIST:

Facility ID: 40710 Owner Name: DEPT. OF PARKS & RECREATION

Total Tanks: Region: STATE

1416 9TH STREET Owner Address:

SACRAMENTO, CA 95814

Tank Used for: **PRODUCT**

Tank Num: Container Num: 01

Tank Capacity: 00001500 Year Installed: Not reported **REGULAR** Tank Construction: Not Reported Type of Fuel:

EDR ID Number

EPA ID Number

AMERICAN RIVER DISTRICT (Continued)

Database(s)

Leak Detection:

Contact Name: Not reported

Other Facility Type:

Telephone:

Facility ID: 40710 Total Tanks:

DEPT. OF PARKS & RECREATION

Region:

Container Num:

Year Installed:

Telephone:

Other Type:

Owner Name:

Region:

1416 9TH STREET Owner Address: SACRAMENTO, CA 95814

PRODUCT

Tank Used for:

Tank Num:

Tank Capacity: 00000575 Type of Fuel: DIESEL

Stock Inventor

Leak Detection: Contact Name: Not reported

Facility Type: Other

40710

Facility ID: Total Tanks: 3

Owner Address: 1416 9TH STREET

SACRAMENTO, CA 95814

Tank Used for: **PRODUCT**

Tank Num: 3

00000550 Tank Capacity: Type of Fuel: **REGULAR** Leak Detection: Stock Inventor

Contact Name: Not reported Facility Type: Other

Container Num:

Year Installed: Tank Construction: Not Reported

Telephone:

Other Type: CALIF STATE PARK SYS

FOLSOM LAKE 28 7806 FOLSOM-AUBURN RD. FOLSOM, CA

AST:

Owner:

DEPARTMENT OF PARKS AND REC.

Total Gallons: 2500 **AST** N/A

AMERICAN RIVER DISTRICT 28 7806 FOLSOM AUBURN RD FOLSOM, CA 95630

Contact:

Facility ID:

Regulate ID:

Reg By:

Active Underground Storage Tank Location

Not reported

00040710

Cortese Code: Status: Active

SIC Code: Facility Tel:

(916) 988-0205

Mail To: Not reported

7806 FOLSOM AUBURN RD

FOLSOM, CA 95630

Not reported DUNs No: Not reported Modified:

Creation: EPA ID: Not reported Not reported Comments:

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U001612902

Stock Inventor

Other Type:

(916) 988-0205

CALIF STATE PARK SYS

Owner Name:

STATE

02

Not reported Tank Construction: Not Reported

(916) 988-0205

CALIF STATE PARK SYS

DEPT. OF PARKS & RECREATION

STATE

03

Not reported

(916) 988-0205

A100160331

CA FID UST S101627812 Sacramento Co. ML N/A **SWEEPS UST**

FID:

34004973

Not reported

10/22/93

Contact Tel: NPDES No:

Not reported Not reported 00/00/00

Distance (ft.)Site Database(s) **EPA ID Number**

AMERICAN RIVER DISTRICT (Continued)

S101627812

EDR ID Number

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: 5305 Food Bill Code: Not reported

Billing Codes BP: 5204

Billing Codes UST: Not reported Not reported Tier Permitting: Risk Mgmt Protection Program: Not reported FD: Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported Not reported **UST Tank Test Date:** Waste General Insp Date: Not reported Not reported Hazmat Date BP Received: SIC Code: Not reported

SWEEPS:

Status: Α Comp Number: 40710 Number:

Board Of Equalization: 44-031857 Ref Date: 07-01-85 Act Date : Not reported Created Date: 02-29-88

Tank Status: Owner Tank Id:

Swrcb Tank Id: 34-000-040710-000001

Actv Date : 07-01-85 Capacity: 1500 Tank Use: M.V. FUEL

Stg: LEADED Content: Number Of Tanks:

Status: Comp Number: 40710 Number: 6

Board Of Equalization: 44-031857 Ref Date: 07-01-85 Act Date: Not reported Created Date: 02-29-88 Tank Status:

Owner Tank Id:

34-000-040710-000002 Swrcb Tank Id:

Actv Date : 07-01-85 Capacity: 575 Tank Use: M.V. FUEL Stg: **DIESEL** Content: Number Of Tanks: Not reported

Status: Α Comp Number: 40710

Direction EDR ID Number
Distance

AMERICAN RIVER DISTRICT (Continued)

Database(s)

S101627812

EPA ID Number

Number:

 Board Of Equalization:
 44-031857

 Ref Date:
 07-01-85

 Act Date:
 Not reported

 Created Date:
 02-29-88

Tank Status: A
Owner Tank Id: 3

Swrcb Tank Id: 34-000-040710-000003

Actv Date : 07-01-85
Capacity : 550
Tank Use : M.V. FUEL
Stg : P
Content : LEADED
Number Of Tanks : Not reported

Hambor of Tariko.

28 PINEBROOK VILLAGE 7900 FOLSOM AUBURN RD FOLSOM, CA 95630

Placer MS:

Facility ID: PR0001013
District Code: 15
Program Elements: 2302
Facility Status: 2

Facility ID: PR0003051
District Code: 15
Program Elements: 2106
Facility Status: 2

Facility ID: PR0006302
District Code: 15
Program Elements: 2115
Facility Status: 2

Facility ID: PR0008012
District Code: 15
Program Elements: 2268
Facility Status: 2

Sacramento ML:

Facility Id: Not reported

Number of Tanks: 0
WG Bill Code: 50
Food Bill Code : 50
Billing Codes BP: Disclaimer
Billing Codes UST: No Tanks
Tier Permitting: Not reported
Risk Mgmt Protection Program : Not reported

FD:

Target Property Bill Code: 50

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported Not reported **UST Tank Test Date:** Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported CA PLACER CO. MS U001612928 HIST UST N/A Sacramento Co. ML Map ID Direction Distance (ft.)Site

Distance Database(s) **EPA ID Number**

PINEBROOK VILLAGE (Continued)

EDR ID Number

UST HIST:

Facility ID: 21816

Total Tanks:

Owner Address: 911-22ND STREET

SACRAMENTO, CA 95816

Tank Used for: **PRODUCT**

Tank Num:

00001000 Tank Capacity:

Type of Fuel: **UNLEADED** Leak Detection: Stock Inventor

DALE R. MORRIS Contact Name: Facility Type: Other

Facility ID: 21816 Total Tanks:

Owner Address: 911-22ND STREET

SACRAMENTO, CA 95816

Tank Used for: **PRODUCT**

Tank Num: Tank Capacity: 00002000 Type of Fuel: **REGULAR**

Leak Detection: Stock Inventor

Contact Name: DALE R. MORRIS Facility Type: Other

U001612928

Container Num:

Owner Name:

Region:

1978 Year Installed:

Tank Construction: Not Reported

Telephone: (916) 444-8830 Other Type: MOBILEHOME PARK

PINEBROOK VILLAGE Owner Name:

STATE

PINEBROOK VILLAGE

Region: STATE

Container Num: Year Installed: 1979

Tank Construction: Not Reported

Telephone: (916) 444-8830

Other Type: MOBILEHOME PARK

M A NANGLE. DC 28 **7940 FOLSOM AUBURN** FOLSO, CA 95630

Sacramento ML:

Facility Id: Not reported

Number of Tanks: WG Bill Code: 51 Food Bill Code: 51

Billing Codes BP: Out of Business Billing Codes UST: No Tanks Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported FD:

Target Property Bill Code: 51 **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported Not reported **HAZMAT Inspection Date:** UST Inspection Date: Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: 8041

S105269179 Sacramento Co. ML N/A

Map ID Direction Distance Distance (ft.)Site

28

EDR ID Number

BUREAU OF REC - DRILL YARD Sacramento Co. ML S100947617

FOLSOM, CA 95630 Sacramento ML:

7794 FOLSOM DAM RD

Not reported Facility Id: Number of Tanks: Not reported WG Bill Code: 5306 Food Bill Code: Not reported Billing Codes BP: 5205 Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

28 **FOLSOM DAM** 7794 FOLSOM DAM RD

S101590549 LUST Cortese **CA FID UST** Sacramento Co. CS **SWEEPS UST**

Database(s)

EPA ID Number

N/A

N/A

State LUST:

FOLSOM, CA 95630

Not reported Cross Street: Not reported Qty Leaked: Case Number Not reported Reg Board: Not reported Chemical: Gasoline Lead Agency: Local Agency Local Agency: 34000L Case Type: Soil only Status: **Case Closed**

Abate Method: Excavate and Treat - remove contaminated soil and treat (includes

spreading or land farming)

Review Date: Confirm Leak: Not reported Not reported Workplan: Not reported Prelim Assess: Not reported Pollution Char: Not reported Remed Plan: Not reported

Not reported Monitoring: 1999-01-07 00:00:00 Close Date: Release Date: Not reported Cleanup Fund Id: Not reported Discover Date : Not reported

Not reported

Enforcement Dt: 1965-01-01 00:00:00

Enf Type: None Taken Enter Date: Not reported Federal Funds Funding:

DWB Staff Initials: How Discovered: Not reported How Stopped: Not reported

Interim: Yes

Remed Action:

Not reported Leak Cause: Leak Source: Not reported

EDR ID Number

Database(s) **EPA ID Number**

S101590549

FOLSOM DAM (Continued)

MTBE Date: Not reported Max MTBE GW: Not reported

Site NOT Tested for MTBE.Includes Unknown and Not Analyzed. MTBE Tested:

Low priority. Priority ranking can change over time. Priority:

Local Case #: 314 Beneficial: Not reported

Staff: **KDA** GW Qualifier :

Not reported Max MTBE Soil: Not reported Soil Qualifier: Not reported Hydr Basin #: **UNNAMED BASIN**

Operator: US BUREAU OF RECLAMATION

Oversight Prgm: LUST

Review Date: 1994-11-30 00:00:00 Stop Date: Not reported

Work Suspended :No

Responsible PartyUS BUREAU OF RECLAMATION

7794 FOLSOM DAM RD, FOLSOM, CA 95630 RP Address:

Global Id: T0606700538 Org Name: Not reported Contact Person: Not reported

MTBE Conc: 0 Mtbe Fuel:

Water System Name: Not reported Well Name: Not reported Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

GASOLINE Substance: Case Type: Soil only Program: LUST Staff Initials: KDA

Case Closed Status:

MTBE Code: N/A Lead Agency: Local

CORTESE:

Region: **CORTESE**

Fac Address 2: 7794 FOLSOM DAM RD

FID:

Facility ID: 34001800 Regulate ID: 00059363

Reg By: Inactive Underground Storage Tank Location

SIC Code: Not reported Cortese Code: Not reported (916) 988-1707 Status: Inactive Facility Tel:

Case Number:

340633

Mail To: Not reported

7794 FOLSOM DAM RD FOLSOM, CA 95630

Not reported

Contact: Contact Tel: Not reported DUNs No: Not reported NPDES No: Not reported Creation: 10/22/93 Modified: 00/00/00

EPA ID: Not reported Comments: Not reported

SACRAMENTO CS:

Facility Id: RO0000507

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM DAM (Continued)

S101590549

EDR ID Number

Region: SACRAMENTO

State Site Number: 0314
Lead Staff: BOOTH, D.
Lead Agency: HM
Remedial Action Taken: NO
Post Remedial Action Monitoring:

Substance: Automotive(motor gasoline and additives)

 Date Reported:
 06/13/1990

 Date Closed:
 07/28/1992

 Case Type:
 Soil only

 Facility Id:
 RO0000508

 Region:
 SACRAMENTO

State Site Number: A370 Lead Staff: MARCUS, B.

Lead Agency: HM
Remedial Action Taken: NO
Post Remedial Action Monitoring:

Substance: Automotive(motor gasoline and additives)

Date Reported: 11/04/1994

Date Closed: 02/02/1999

Case Type: Soil only

SWEEPS:

Status: Not reported Comp Number: 59363 Not reported Number: Board Of Equalization: Not reported Not reported Ref Date: Act Date : Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank ld: 34-000-059363-000001

 Actv Date :
 Not reported

 Capacity :
 4000

 Tank Use :
 M.V. FUEL

 Stg :
 PRODUCT

 Content :
 REG UNLEADED

Number Of Tanks: 2

Not reported Status: Comp Number: 59363 Number: Not reported Board Of Equalization: Not reported Not reported Ref Date: Act Date : Not reported Not reported Created Date: Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-059363-000002

Actv Date: Not reported
Capacity: 2000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

virection EDR ID Number

28 U.S. BUREAU OF RECLAMATION FOL 7794 FOLSOM DAM RD Database(s)

HIST UST

EPA ID Number

U001612935

N/A

FOLSOM, CA 95630

UST HIST:

Facility ID:

Facility ID:

Total Tanks:

59363

63 Owner Name:

STATE

1979

(916) 988-1707

FEDERAL AREA

Tank Construction: Not Reported

U.S. BUREAU OF RECLAMATION FOL

Region: S

Container Num:

Year Installed:

Telephone:

Other Type:

Container Num:

Owner Address: 7794 FOLSOM DAM ROAD

FOLSOM, CA 95630

Tank Used for: PRODUCT

Tank Num:

Tank Capacity: 00004000
Type of Fuel: UNLEADED

Type of Fuel: UNLEADED

Leak Detection: None

Contact Name: Not reported Facility Type: Other

59363 Owner Name:

Owner Name: U.S. BUREAU OF RECLAMATION FOL

Total Tanks: 2 Region: STATE

Owner Address: 7794 FOLSOM DAM ROAD

FOLSOM, CA 95630

Tank Used for: PRODUCT

Tank Num: 2

Tank Capacity: 00002000 Year Installed: Not reported Type of Fuel: REGULAR Tank Construction: Not Reported

Leak Detection: None
Contact Name: Not reported
Facility Type: Other

Telephone: (916) 988-1707 Other Type: FEDERAL AREA

2

28 U S BUREAU OF RECLAMATION 7794 FOLSOM DAM RD FOLSOM, CA 95630

HAZNET:

Gepaid: CAL000089562
TSD EPA ID: CAD059494310
Gen County: Sacramento
Tsd County: Santa Clara
Tons: .9100
Facility Address 2: Not reported

Waste Category: Asbestos-containing waste

Disposal Method: Transfer Station

Contact: U S DEPT OF THE INTERIOR

Telephone: (916) 978-5020 Mailing Name: Not reported

Mailing Address: 2800 COTTAGE WAY RM E-2604

SACRAMENTO, CA 95825 - 1898

County Sacramento

Gepaid: CAL000089562
TSD EPA ID: CAD044003556
Gen County: Sacramento
Tsd County: Yolo
Tons: 3.1275

Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station

Contact: U S DEPT OF THE INTERIOR

Telephone: (916) 978-5020 Mailing Name: Not reported

Mailing Address: 2800 COTTAGE WAY RM E-2604

HAZNET \$104573990

N/A

Distance (ft.)Site Database(s) **EPA ID Number**

U S BUREAU OF RECLAMATION (Continued)

S104573990

EDR ID Number

SACRAMENTO, CA 95825 - 1898

County Sacramento CAD140090176 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Los Angeles Tons: 0.20

Facility Address 2: Not reported

Waste Category: Unspecified solvent mixture Waste

Disposal Method: Recycler

DAN ASLIN SUPPLY CLERK Contact:

Telephone: (916) 989-7240 Not reported Mailing Name:

Mailing Address: 7794 FOLSOM DAM RD

FOLSOM, CA 95630

County Not reported CAD140090176 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Los Angeles Tons: 0.53

Facility Address 2: Not reported

Waste Category: Off-specification, aged, or surplus organics

Disposal Method: Recycler Contact: DAN ASLIN SUPPLY CLERK

Telephone: (916) 989-7240 Mailing Name: Not reported

Mailing Address: 7794 FOLSOM DAM RD

FOLSOM, CA 95630

County Not reported Gepaid: CAD140090176 TSD EPA ID: Not reported Sacramento Gen County: Tsd County: Santa Clara Tons: 2.40 Facility Address 2: Not reported

Waste Category: Other organic solids Disposal Method: **Transfer Station**

Contact: DAN ASLIN SUPPLY CLERK

Telephone: (916) 989-7240 Mailing Name: Not reported

Mailing Address: 7794 FOLSOM DAM RD

FOLSOM, CA 95630

County Not reported

> Click this hyperlink while viewing on your computer to access 104 additional CA HAZNET record(s) in the EDR Site Report.

Map ID Direction Distance Distance (ft.)Site

rection EDR ID Number

Database(s)

HAZNET

28 ANDY BOHART 7794 FOLSOM DAM RD FOLSOM, CA 95630

HAZNET:

Gepaid: CAC001042944
TSD EPA ID: CAT000646117
Gen County: Sacramento
Tsd County: Kings
Tons: .8000
Facility Address 2: Not reported

Waste Category: Contaminated soil from site clean-ups

Disposal Method: Disposal, Land Fill
Contact: ANDY BOHART
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 114 PARKSHORE DR

FOLSOM, CA 95630

County Sacramento

28 CENTRAL CALIF AREA OFFICE 7794 FOLSOM DAM RD FOLSOM, CA 95630

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: 5306 Food Bill Code: Not reported Billing Codes BP: 5206 Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported

HAZMAT Inspection Date:

UST Inspection Date:

UST Tank Test Date:

Waste General Insp Date:

Hazmat Date BP Received:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

28 BUREAU OF RECLAMATION-FOLSOM DAM POWER 7794 FOLSOM DAM RD FOLSOM, CA 95630

FTTS:

Case Number: Not reported 5-TSCA-94-003 Docket Number: 10/07/1993 Complaint Issued: Complaint Closed: 0.0000 Abatement Amount: 76300.0000 Proposed Penalty: Final Assessment: 51105.0000 Final Order Date: 10/11/1994 Close Date: Violation: Section 5

N/A

EPA ID Number

S103950198

Sacramento Co. ML S103707334 N/A

> FINDS 1004441955 FTTS 110006526526

Direction EDR ID Number Distance

BUREAU OF RECLAMATION-FOLSOM DAM POWER (Continued)

1004441955

EPA ID Number

Database(s)

FTTS Insp:

Region: 09

Inspected Date: 11/13/1990 Insp Number: 19901113R006 1

Violation occurred: No

Inspector: RKEMMERRER

Investigation Type: Section 6 PCB Federal Conducted

Facility Function: User
Investig Reason: Not reported
Legislation Code: TSCA

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL COMPLIANCE DATABASE SYSTEM

28 FOLSOM SUBSTATION FOLSOM DAM FOLSOM, CA 95630 CA FID UST S101627816
AST N/A
Sacramento Co. ML
SWEEPS UST

FID:

Facility ID: 34007195 Regulate ID: 00049879

Reg By: Active Underground Storage Tank Location

Cortese Code: Not reported SIC Code: Not reported Status: Active Facility Tel: (916) 440-2990

Mail To: Not reported

2800 COTTAGE WAY FOLSOM, CA 95630

Contact: Not reported Contact Tel: Not reported DUNs No: Not reported NPDES No: Not reported Creation: 10/22/93 Modified: 00/00/00

Not reported

EPA ID: Not reported Comments: Not reported

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: Not reported Food Bill Code: Not reported Billing Codes BP: 5204 Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported FD: Not reported Target Property Bill Code: Not reported CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported

SWEEPS:

SIC Code:

Status: A
Comp Number: 49879
Number: 6

Board Of Equalization: Not reported Ref Date: 07-01-85

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM SUBSTATION (Continued)

S101627816

EDR ID Number

Act Date : Not reported Created Date : 02-29-88 Tank Status : A

Owner Tank Id: 1

Swrcb Tank Id: 34-000-049879-000001

Actv Date : 07-01-85
Capacity : 350
Tank Use : OIL
Stg : W

Content: WASTE OIL

Number Of Tanks: 1

AST:

Owner: DEPARTMENT OF ENERGY

Total Gallons: 28000

28 DOUGLAS REKERS DDS 8008 FOLSOM AUBURN RD FOLSOM, CA 95630

HAZNET S103707331 Sacramento Co. ML N/A

HAZNET:

Gepaid: CAL000259896
TSD EPA ID: CAL000175030
Gen County: Sacramento
Tsd County: Sacramento
Tons: 0.01
Facility Address 2: Not reported

Waste Category: Unspecified organic liquid mixture

Disposal Method: Treatment, Tank
Contact: JANN MAFI-LEE
Telephone: (916) 988-7790
Mailing Name: Not reported

Mailing Address: 8008 FOLSOM AUBURN RD

FOLSOM, CA 95630

County Sacramento

Sacramento ML:

SIC Code:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: 5320 Food Bill Code: Not reported Billing Codes BP: 5214 Billing Codes UST: Not reported Tier Permitting: Not reported Not reported Risk Mgmt Protection Program: Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received : Not reported

Not reported

rection EDR ID Number

Database(s)

EPA ID Number

S101627818

N/A

CA FID UST

SWEEPS UST

28 EARNEST J HOOK DPM Sacramento Co. ML S106387751 8018 FOLSOM AUBURN RD N/A

FOLSOM, CA 95630 Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: 5320 Food Bill Code: Not reported Billing Codes BP: 5214 Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

29 GREEN VALLEY MARKET 381 GREEN VALLEY RD

FID:

FOLSOM, CA 95630

Facility ID: 34006938 Regulate ID: 00018431

Reg By: Active Underground Storage Tank Location

Cortese Code: Not reported SIC Code: Not reported Status: Active Facility Tel: (916) 933-1601

Mail To: Not reported

381 GREEN VALLEY RD FOLSOM, CA 95630

Contact: Not reported Contact Tel: Not reported DUNs No: Not reported NPDES No: Not reported Creation: 10/22/93 Modified: 00/00/00

EPA ID: Not reported Comments: Not reported

SWEEPS:

Status: A
Comp Number: 18431
Number: 9

Board Of Equalization: Not reported Ref Date: 07-01-85
Act Date: Not reported Created Date: 02-29-88

Tank Status: A
Owner Tank Id: 1

Swrcb Tank ld: 34-000-018431-000001

Actv Date : 07-01-85
Capacity : 5000
Tank Use : M.V. FUEL

Stg: P

Content: REG UNLEADED

Number Of Tanks: 5

Status: A

TC01637093.1r Page 78 of 128

Distance (ft.)Site Database(s) **EPA ID Number**

GREEN VALLEY MARKET (Continued)

Comp Number: 18431 Number: 9

Board Of Equalization: Not reported Ref Date: 07-01-85 Act Date: Not reported Created Date: 02-29-88

Tank Status: Α Owner Tank Id: 2

Swrcb Tank Id: 34-000-018431-000002

Actv Date : 07-01-85 Capacity: Not reported Tank Use: M.V. FUEL

Stg:

Content: **REG UNLEADED** Number Of Tanks: Not reported

Α Status: Comp Number: 18431 Number: 9

Board Of Equalization: Not reported Ref Date: 07-01-85 Act Date : Not reported Created Date: 02-29-88 Tank Status: Α

Owner Tank Id: 3 REG. GAS

34-000-018431-000003 Swrcb Tank Id: 07-01-85

Actv Date : Capacity: Not reported Tank Use: M.V. FUEL Stg: LEADED Content:

Number Of Tanks: Not reported

Status: 18431 Comp Number: Number: 9

Board Of Equalization: Not reported Ref Date: 07-01-85 Not reported Act Date: Created Date: 02-29-88

Tank Status: Α

Owner Tank Id: 4 REG. GAS

Swrcb Tank Id: 34-000-018431-000004

Actv Date: 07-01-85 Capacity: Not reported Tank Use: M.V. FUEL Stg:

LEADED Content: Number Of Tanks: Not reported

Status: Α Comp Number: 18431 Number:

Board Of Equalization: Not reported 07-01-85 Ref Date: Act Date : Not reported Created Date: 02-29-88

S101627818

EDR ID Number

Map ID
Direction
Distance

Distance (ft.)Site Database(s) EPA ID Number

GREEN VALLEY MARKET (Continued)

EDR ID Number

S101627818

S105023770

N/A

Cortese

Tank Status:

Owner Tank Id: 5 PREM

Swrcb Tank Id: 34-000-018431-000005

Actv Date: 07-01-85
Capacity: Not reported
Tank Use: M.V. FUEL

Stg:

Content: REG UNLEADED Number Of Tanks: Not reported

30 SIERRA LIFE CHURCH

64 MARY

FOLSOM, CA 95630

CORTESE:

Region: CORTESE Fac Address 2: Not reported

31 CHMIRS S105882234 103 HOLLYANN DR. N/A

Not reported

FOLSOM, CA

Report Date:

CHMIRS:

OES Control Number: 02-0336

Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Time Completed: Not reported Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 02-0336 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated : Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Not reported Not reported Others Number Of Fatalities: Vehicle Make/year: Not reported Not reported Vehicle License Number: Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported

irection EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

(Continued) S105882234

Comments: Not reported Facility Telephone Number: Not reported

Waterway Involved : Yes

Waterway: unknown creek Spill Site: Not reported Cleanup By: Unknown Containment: Not reported What Happened: Not reported Not reported Type: Other: Not reported Substance: Cement

Quantity Released:

E Date : Not reported

Contained: No
Site Type: Residence
Evacuations: 0

Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time: Not reported Year: 2002

Agency: Sacramento Co Haz Mat

BBLS: 0 Cups: 0 CUFT: 0 Gallons: 0 Grams: 0 Pounds: 0 Liters: 0 Ounces: 0 0 Pints: 0 Quarts: Sheen: 0 Tons: Unknown:

Description: Per caller, a contractor may have cleaned tools of cement.

Incident date : 1/17/200212:00:00 AM

Admin Agency: Sacramento County Environmental Mgmt.

OES date : Not reported OES time : Not reported

OES notification: 1/17/200206:01:59 PM

Amount: Not reported

31 ZACH ENTERPRISES
410 DANIELLE

HAZNET:

FOLSOM, CA 95630

Gepaid: CAC001386280
TSD EPA ID: CAD981382732
Gen County: Sacramento

Tsd County: 1
Tons: 5.0568
Facility Address 2: Not reported

Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Contact: ZACH ROCKWELL
Telephone: (916) 989-4684

Mailing Name: Not reported

Mailing Address: 9477 GREENBACK LANE STE 203

HAZNET \$104566981 N/A

Map ID Direction Distance Distance (ft.)Site

virection EDR ID Number

ZACH ENTERPRISES (Continued)

S104566981

HAZNET \$105084350

N/A

EPA ID Number

Database(s)

FOLSOM, CA 95630

County Sacramento

32 IRVIN BINGHEM 321 GREEN VALLEY RD EL DORADO, CA 95162

HAZNET:

Gepaid: CAC002195473 TSD EPA ID: CAD044003556

 Gen County:
 9

 Tsd County:
 Yolo

 Tons:
 .5004

 Facility Address 2:
 Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station
Contact: IRVIN BINGHEM
Telephone: (916) 933-0527
Mailing Name: Not reported

Mailing Address: 321 GREEN VALLEY RD

EL DORADO, CA 95162

County 9

Gepaid: CAC002195473 TSD EPA ID: CAT080013352

Gen County: 9
Tsd County: Los Angeles

Tons: 7.1724
Facility Address 2: Not reported

Waste Category: Off-specification, aged, or surplus organics

Disposal Method: Recycler
Contact: IRVIN BINGHEM
Telephone: (916) 933-0527
Mailing Name: Not reported

Mailing Address: 321 GREEN VALLEY RD

EL DORADO, CA 95162

County

32 GREEN VALLEY GAS & FOOD 369 GREEN VALLEY RD EL DORADO HILLS, CA 95762

HAZNET:

Gepaid: CAC002195465 TSD EPA ID: CAD044003556

 Gen County:
 9

 Tsd County:
 Yolo

 Tons:
 1.4595

 Facility Address 2:
 Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station
Contact: DIANNE ANDERS
Telephone: (916) 933-2616
Mailing Name: Not reported

Mailing Address: 369 GREEN VALLEY RD

EL DORADO, CA 95162

County 9

CORTESE:

S102444874

N/A

HAZNET

Cortese

EDR ID Number

Distance (ft.)Site Database(s) **EPA ID Number**

GREEN VALLEY GAS & FOOD (Continued)

CORTESE

369 GREEN VALLEY RD Fac Address 2:

32 **GREEN VALLEY MARKET** 381 GREEN VALLEY RD FOLSOM, CA 95630

UST HIST:

Region:

Facility ID: 18431 Owner Name: ANDERS, DIANNA J. OR KENNETH K

S102444874

U001612919

N/A

HIST UST

Total Tanks: Region: STATE

Owner Address: 369 GREEN VALLEY RD

FOLSOM, CA 95630 **PRODUCT** Tank Used for:

Tank Num: Container Num:

Tank Capacity: 00005000 Year Installed: Not reported Type of Fuel: UNLEADED Tank Construction: Not Reported

Leak Detection: None

Contact Name: MARVIN HINSHAW Telephone: (916) 933-1601 Facility Type: Gas Station Other Type: Not reported

Facility ID: 18431 Owner Name: ANDERS, DIANNA J. OR KENNETH K

Total Tanks: Region: STATE

Owner Address: 369 GREEN VALLEY RD

FOLSOM, CA 95630

Tank Used for: **PRODUCT**

Tank Num: Container Num: 2

00000000 Tank Capacity: Year Installed: Not reported Type of Fuel: **UNLEADED** Tank Construction: Not Reported

Leak Detection: None

PRODUCT

MARVIN HINSHAW (916) 933-1601 Contact Name: Telephone: Facility Type: Gas Station Other Type: Not reported

ANDERS, DIANNA J. OR KENNETH K Facility ID: 18431 Owner Name:

Total Tanks: 5 Region: STATE

369 GREEN VALLEY RD Owner Address:

FOLSOM. CA 95630

Tank Used for: **PRODUCT** Tank Num: Container Num: 3 REG. GAS

Tank Capacity: 00000000 Year Installed: Not reported Type of Fuel: **REGULAR** Tank Construction: Not Reported Leak Detection: None

Contact Name: MARVIN HINSHAW Telephone: (916) 933-1601 Facility Type: Gas Station Other Type: Not reported

Facility ID: 18431 Owner Name: ANDERS, DIANNA J. OR KENNETH K

Total Tanks: STATE

Region:

Owner Address: 369 GREEN VALLEY RD **FOLSOM, CA 95630**

Tank Used for: Tank Num: Container Num: 4 REG GAS 00000000 Year Installed: Not reported

Tank Capacity: Type of Fuel: **REGULAR** Tank Construction: Not Reported

Leak Detection: None MARVIN HINSHAW Contact Name: Telephone: (916) 933-1601

Other Type: Facility Type: Gas Station Not reported

ANDERS, DIANNA J. OR KENNETH K Facility ID: 18431 Owner Name:

Total Tanks: Region: STATE Owner Address: 369 GREEN VALLEY RD

Map ID Direction Distance Distance (ft.)Site

irection EDR ID Number

GREEN VALLEY MARKET (Continued)

U001612919

EPA ID Number

FOLSOM, CA 95630

Tank Used for: PRODUCT

Tank Num:5Container Num:5 PREMTank Capacity:00000000Year Installed:Not reportedType of Fuel:PREMIUMTank Construction:Not Reported

Leak Detection: None

Contact Name: MARVIN HINSHAW Telephone: (916) 933-1601 Facility Type: Gas Station Other Type: Not reported

32 GREEN VALLEY GAS & FOOD 381 GREEN VALLEY RD EL DORADO HILLS, CA 95762 LUST S104548945 SWEEPS UST N/A

Database(s)

State LUST:

Cross Street: Not reported
Qty Leaked: Not reported
Case Number Not reported
Reg Board: Not reported
Chemical: Gasoline
Lead Agency: Regional Board

Local Agency: 09000 Case Type: O, S

Status: Pollution Characterization

 Review Date:
 2000-05-26 00:00:00
 Confirm Leak:
 2000-05-26 00:00:00

 Workplan:
 2004-03-17 00:00:00
 Prelim Assess:
 2004-03-17 00:00:00

 Pollution Char:
 Not reported
 Remed Plan:
 Not reported

Remed Action: Not reported Monitoring: Not reported Close Date: Not reported Release Date: Not reported Cleanup Fund Id: Not reported Discover Date: Not reported

Enforcement Dt: 1965-01-01 00:00:00

Enf Type: None Taken
Enter Date: Not reported
Funding: Not reported
Staff Initials: Not reported

How Discovered: OM

How Stopped: Not reported Interim: Not reported Leak Cause: UNK Leak Source: UNK MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected

Priority: Not reported Local Case #: Not reported Beneficial: **GWR** PGM Staff: GW Qualifier: Not reported Max MTBE Soil: Not reported Soil Qualifier: Not reported Hydr Basin #: UNNAMED BASIN Operator: **DIANNA ANDERS**

Oversight Prgm: LUST
Review Date: Not reported
Stop Date: Not reported

Work Suspended :No

Responsible PartyGREEN VALLEY GAS & FOOD

Distance (ft.)Site Database(s) EPA ID Number

GREEN VALLEY GAS & FOOD (Continued)

S104548945

EDR ID Number

RP Address: 369 GREEN VALLEY RD, EL DORADO, CA 95672

Global Id: T0601793598
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 0 Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported

Distance To Lust: 0

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

Substance: GASOLINE
Case Type: O, S
Program: LUST

Staff Initials: PGM Case Number: 090109

Status: Pollution Characterization

MTBE Code: N/A Lead Agency: Regional

SWEEPS:

Status: A
Comp Number: 53
Number: 2

Board Of Equalization: 44-002870
Ref Date: 05-29-92
Act Date: 05-29-92
Created Date: 07-12-89
Tank Status: A
Owner Tank Id: G01

Swrcb Tank Id: 09-000-000053-000001

Actv Date : 05-29-92
Capacity : 6000
Tank Use : M.V. FUEL

Stg: P

Content: REG UNLEADED

Number Of Tanks: 5

Status: A
Comp Number: 53
Number: 2

Board Of Equalization: 44-002870
Ref Date: 05-29-92
Act Date: 05-29-92
Created Date: 07-12-89
Tank Status: A
Owner Tank Id: G02

Swrcb Tank Id: 09-000-000053-000002

Actv Date : 05-29-92
Capacity : 6000
Tank Use : M.V. FUEL
Stg : P

Content: UNLEADED PLU
Number Of Tanks: Not reported

Status: A

Map ID Direction Distance

Distance (ft.)Site Database(s) **EPA ID Number**

GREEN VALLEY GAS & FOOD (Continued)

Comp Number: 53 Number: 2

Board Of Equalization: 44-002870 Ref Date: 05-29-92 Act Date: 05-29-92 Created Date: 07-12-89 Tank Status: Α Owner Tank Id: G04

Swrcb Tank Id: 09-000-000053-000003

Actv Date : 05-29-92 Capacity: 4000 Tank Use: M.V. FUEL

Stg:

Content: **UNLEADED PLU** Number Of Tanks: Not reported

Α Status: Comp Number: 53 Number:

Board Of Equalization: 44-002870 Ref Date: 05-29-92 Act Date : 05-29-92 Created Date: 07-12-89 Tank Status: Α G03

Owner Tank Id:

Swrcb Tank Id: 09-000-000053-000004

05-29-92 Actv Date : Capacity: 4000 Tank Use: M.V. FUEL

Stg:

REG UNLEADED Content: Number Of Tanks: Not reported

Status: Comp Number: 53 Number: 2

Board Of Equalization: 44-002870 Ref Date: 05-29-92 05-29-92 Act Date: 07-12-89 Created Date: Tank Status: Α Owner Tank Id: G05

Swrcb Tank Id: 09-000-000053-000005

05-29-92 Actv Date: Capacity: 4000 Tank Use: M.V. FUEL

Stg:

PRM UNLEADED Content: Number Of Tanks: Not reported

S104548945

EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

32 GREEN VALLEY TIRE AND BRAKE 390 GREEN VALLEY RD EL DORADO HILLS, CA 95630

HAZNET:

Gepaid: CAL000067650 TSD EPA ID: CAD982446874

 Gen County:
 9

 Tsd County:
 Yolo

 Tons:
 .7923

 Facility Address 2:
 Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Transfer Station
Contact: RENKE CLAY
Telephone: (916) 939-4084
Mailing Name: Not reported

Mailing Address: 390 GREEN VALLEY RD

EL DORADO HILLS, CA 95762 - 3937

County 9

Gepaid: CAL000067650 TSD EPA ID: CAD982446874

 Gen County:
 9

 Tsd County:
 Yolo

 Tons:
 1.0841

 Facility Address 2:
 Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Transfer Station
Contact: RENKE CLAY
Telephone: (916) 939-4084
Mailing Name: Not reported

Mailing Address: 390 GREEN VALLEY RD

EL DORADO HILLS, CA 95762 - 3937

County 9

Gepaid: CAL000067650 TSD EPA ID: CAD093459485

Gen County: 9
Tsd County: Fresno
Tons: .0166
Facility Address 2: Not reported

Waste Category: Unspecified solvent mixture Waste

Disposal Method: Transfer Station
Contact: RENKE CLAY
Telephone: (916) 939-4084
Mailing Name: Not reported
Mailing Address: 390 GREEN VALLEY RD

EL DORADO HILLS, CA 95762 - 3937

County 9

Gepaid: CAL000067650 TSD EPA ID: CAD982446874

 Gen County:
 9

 Tsd County:
 Yolo

 Tons:
 .4587

 Facility Address 2:
 Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Transfer Station
Contact: RENKE CLAY
Telephone: (916) 939-4084
Mailing Name: Not reported

EDR ID Number

S102814588

N/A

HAZNET

Distance (ft.)Site Database(s) **EPA ID Number**

GREEN VALLEY TIRE AND BRAKE (Continued)

S102814588

EDR ID Number

Mailing Address: 390 GREEN VALLEY RD

EL DORADO HILLS, CA 95762 - 3937

County

Gepaid: CAL000190436 TSD EPA ID: CAD044003556

Gen County: Tsd County: Yolo Tons: .4170 Facility Address 2: Not reported

Waste Category: Aqueous solution with 10% or more total organic residues

Disposal Method: **Transfer Station**

Contact: **GRADY & BELVA GETTINGS**

Telephone: (000) 000-0000 Mailing Name: Not reported Mailing Address: 390 GREEN VALLEY RD

EL DORADO HILLS, CA 95762

County 9

> Click this hyperlink while viewing on your computer to access 3 additional CA HAZNET record(s) in the EDR Site Report.

33 **FOLSOM SUBSTATION FOLSOM DAM** FOLSOM, CA 95630

HIST UST U001612914

N/A

UST HIST:

Facility ID: 49879 Total Tanks:

Owner Name: WESTERN AREA POWER ADMINISTRAT

Region: STATE

2800 COTTAGE WAY Owner Address:

SACRAMENTO, CA 95825

Tank Used for: WASTE

Tank Num: Container Num: 01 Tank Capacity: 00000350 Year Installed: 1983 Type of Fuel: WASTE OIL Tank Construction: 1 inches

Leak Detection: Stock Inventor

DOUG GROSS (916) 440-2990 Contact Name: Telephone: Facility Type: Other Other Type: GOVERNMENT

WAPA-FOLSOM SUBSTATION 33 **FOLSOM DAM RD** FOLSOM, CA 95630

S102441061 Sacramento Co. CS Sacramento Co. ML N/A

Sacramento ML:

Facility Id: Not reported

Number of Tanks: 0 WG Bill Code: 50 50 Food Bill Code: Billing Codes BP: Disclaimer Billing Codes UST: No Tanks Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported

FD:

Target Property Bill Code: 50

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported

L

Map ID
Direction
Distance

33

Distance (ft.)Site Database(s) EPA ID Number

WAPA-FOLSOM SUBSTATION (Continued)

ERNS

8856375

N/A

ERNS 879560

ERNS

N/A

87464046

N/A

Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

SACRAMENTO CS:

Facility Id: RO0000506 Region: SACRAMENTO

State Site Number: R069

Lead Staff: BENEDICT, A.

Lead Agency: HM
Remedial Action Taken: NO
Post Remedial Action Monitoring:
Substance: Waste Oil

Date Reported:

Not reported

Not reported

Not reported

Not reported

Not reported

33 FOLSOM LAKE NEAR TOWN OF FOLSOM FOLSOM LAKE NEAR TOWN OF FOLSOM SACREMENTO (County), CA

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

FOLSOM DAM ROAD FOLSOM SUBSTATION FOLSOM, CA

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

33 FOLSOM DAM RD, FOLSOM SUBSTATION FOLSOM DAM RD, FOLSOM SUBSTATION NR. FOLSOM, CA

<u>Click this hyperlink</u> while viewing on your computer to access additional ERNS detail in the EDR Site Report.

S102441061

EDR ID Number

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Map ID Direction Distance Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

33 FOLSOM SOUTH CANAL BETW HWY 50 & SUNRISE BLVD FOLSOM SOUTH CANAL BETW HWY 50 & SUNRISE BLVD FOLSOM, CA 95630

ERNS 93346172 N/A

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

33 FOLSOM PRISON FOLSOM PRISON FOLSOM, CA 95630 ERNS 93342400 N/A

<u>Click this hyperlink</u> while viewing on your computer to access additional ERNS detail in the EDR Site Report.

33 FOLSOM STATE PRISON, BETWEEN BLDG & GARAGE FOLSOM STATE PRISON, BETWEEN BLDG & GARAGE FOLSOM, CA 95630

ERNS 93327960

N/A

<u>Click this hyperlink</u> while viewing on your computer to access additional ERNS detail in the EDR Site Report.

34 BROTHERS BOATS 7450 FOLSOM AUBURN RD FOLSOM, CA 95630 HAZNET \$100931170 Sacramento Co. ML N/A

HAZNET:

Gepaid: CAL000058246 TSD EPA ID: CAD980887418

Gen County: Placer
Tsd County: 1
Tons: .1876
Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Not reported
Contact: Not reported
Telephone: (000) 000-0000
Mailing Name: Not reported

Mailing Address: 7450 FOLSOM/AUBURN ROAD

FOLSOM, CA 95630

County Placer

rection EDR ID Number

BROTHERS BOATS (Continued)

S100931170

EPA ID Number

Database(s)

Gepaid: CAL000043386
TSD EPA ID: CAT080011059
Gen County: Sacramento
Tsd County: Los Angeles
Tons: .2293
Facility Address 2: Not reported

Waste Category: Aqueous solution with 10% or more total organic residues

Disposal Method: Recycler
Contact: FOLAMAR INC
Telephone: (000) 000-0000
Mailing Name: Not reported

Mailing Address: 7450 FOLSOM AUBURN RD

FOLSOM, CA 95630 Sacramento

Sacramento ML:

County

Facility Id:

Not reported

Number of Tanks:

WG Bill Code:

Food Bill Code:

Billing Codes BP:

Not reported

Not reported

S203

Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported FD: Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported UST Tank Test Date: Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

34 COUNTRY BOY GENERAL STORE 7530 FOLSOM AUBURN RD FOLSOM, CA

Sacramento Co. CS S102314785 N/A

SACRAMENTO CS:

Facility Id: RO0000505
Region: SACRAMENTO

State Site Number: C525
Lead Staff: MARCUS, B.
Lead Agency: HM

Lead Agency: HM
Remedial Action Taken: YES
Post Remedial Action Monitoring:

Substance: Automotive(motor gasoline and additives)

Date Reported: 01/08/1990 **Date Closed: 02/18/1998**

Case Type: Other ground water affected

ction EDR ID Number

Database(s) EPA ID Number

34 COUNTRY BOY GENERAL STORE 7530 FOLSOM AUBURN FOLSO, CA 95630

Sacramento Co. ML

S102314786 N/A

Sacramento ML: Facility Id:

Not reported Number of Tanks: Not reported WG Bill Code: 5306 Food Bill Code: Not reported Billing Codes BP: 5203 Billing Codes UST: Not reported Tier Permitting: Not reported Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported Not reported **HAZMAT Inspection Date: UST Inspection Date:** Not reported UST Tank Test Date: Not reported

Facility Id: Not reported

Not reported

Not reported

Not reported

Number of Tanks: 0 WG Bill Code: 51 Food Bill Code: 51

Waste General Insp Date:

SIC Code:

Hazmat Date BP Received:

Billing Codes BP: Out of Business
Billing Codes UST: No Tanks
Tier Permitting: Not reported
Risk Mgmt Protection Program: Not reported

FD: L
Target Property Bill Code: 51

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported Not reported **HAZMAT Inspection Date: UST Inspection Date:** Not reported UST Tank Test Date: Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: 5311

COUNTRY BOY MARKET 7530 FOLSOM AUBURN RD

FOLSOM, CA 95630

34

CA FID UST S101590714 SWEEPS UST N/A

Distance (ft.)Site Database(s) EPA ID Number

COUNTRY BOY MARKET (Continued)

S101590714

EDR ID Number

FID:

Facility ID: 34006616 Regulate ID: Not reported

Reg By: Inactive Underground Storage Tank Location

Cortese Code: Not reported SIC Code: Not reported Status: Facility Tel: (916) 988-6707

Mail To: Not reported

P O BOX

FOLSOM, CA 95630

Contact:Not reportedContact Tel:Not reportedDUNs No:Not reportedNPDES No:Not reportedCreation:10/22/93Modified:00/00/00

EPA ID: Not reported Comments: Not reported

SWEEPS:

Status: Not reported

Comp Number: 206

Number: Not reported
Board Of Equalization: Not reported
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-000206-000001

Actv Date: Not reported
Capacity: 2000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED

Number Of Tanks: 4

Status: Not reported

Comp Number: 206

Number: Not reported
Board Of Equalization: Not reported
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-000206-000002

Actv Date: Not reported
Capacity: 2000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported

Comp Number: 206

Number: Not reported
Board Of Equalization: Not reported
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported

Distance (ft.)Site Database(s) **EPA ID Number**

Confirm Leak:

Prelim Assess:

Remed Plan:

COUNTRY BOY MARKET (Continued)

Owner Tank Id:

Not reported

34-000-000206-000003 Swrcb Tank Id:

Actv Date : Not reported 2000 Capacity: Tank Use: M.V. FUEL **PRODUCT** Stg: **REG UNLEADED** Content: Number Of Tanks: Not reported

Status: Not reported

Comp Number : 206

Number: Not reported Board Of Equalization: Not reported Ref Date: Not reported Act Date : Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-000206-000004

Actv Date : Not reported 2000 Capacity: Tank Use: M.V. FUEL **PRODUCT** Stg: Content: **REG UNLEADED** Number Of Tanks: Not reported

34 **COUNTRY BOY GENERAL STORE** 7530 FOLSOM-AUBURN BLVD FOLSOM, CA 95630

State LUST:

Cross Street: OAK AVE PARKWAY

Qty Leaked: Not reported Not reported Case Number Reg Board: Not reported Chemical: Gasoline Local Agency Lead Agency: Local Agency: 34000L

Case Type: Drinking Water Aquifer affected

Case Closed Status: 1989-11-25 00:00:00 Review Date: Workplan: 1990-01-08 00:00:00 Pollution Char: 1990-10-19 00:00:00

Remed Action: Not reported Not reported Monitoring: 1998-02-18 00:00:00 Close Date: Release Date: Not reported Cleanup Fund Id: Not reported

Enforcement Dt: 1990-07-23 00:00:00 Enf Type: None Taken Enter Date: Not reported Federal Funds Funding:

Discover Date: Not reported

BIM Staff Initials:

How Discovered: Not reported How Stopped: Not reported Interim: Not reported Not reported Leak Cause: Leak Source: Not reported

EDR ID Number

S101590714

LUST S105023769 Cortese N/A

1989-11-25 00:00:00

1990-01-08 00:00:00

1990-10-19 00:00:00

TC01637093.1r Page 94 of 128

ection EDR ID Number

Case Number:

340486

Database(s) EPA ID Number

COUNTRY BOY GENERAL STORE (Continued)

MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

Priority: Low priority. Priority ranking can change over time.

Local Case # : Not reported Beneficial: Not reported Staff : KDA

GW Qualifier: Not reported

Max MTBE Soil: Not reported

Soil Qualifier: Not reported

Hydr Basin #: UNNAMED BASIN

Operator: RALPH DREWITZ

Oversight Prgm: LUST

Review Date: 1996-06-24 00:00:00

Stop Date: Not reported

Work Suspended :No

Responsible PartyCOUNTRY BOY GENERAL STORE RP Address: BOX 2366, ROSEVILLE, CA 95746

Global Id: T0606700405
Org Name: Not reported
Contact Person: Not reported

MTBE Conc: 0 Mtbe Fuel: 1

Water System Name: Not reported Well Name: Not reported

Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

Summary: Not reported

LUST Region 5:

Substance: GASOLINE

Case Type: Drinking Water Aquifer affected

Program: LUST Staff Initials: KDA

Status: Case Closed

MTBE Code: N/A

MTBE Code: N/A Lead Agency: Local

CORTESE:

Region: CORTESE

Fac Address 2: 7530 FOLSOM-AUBURN BLVD

35 SUNDAHL (CARL H.) ELEMENTARY 9932 INWOOD ROAD

FOLSOM, CA 95630

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL CENTER FOR EDUCATION STATISTICS

S105023769

FINDS 1008312733

110022059671

Map ID Direction Distance Distance (ft.)Site

Direction EDR ID Number

Database(s) EPA ID Number

S103971941

S101481890

N/A

N/A

HAZNET

DEED

VCP

36 JENNIFER BRINITZER 9824 OAK PLACE WEST FOLSOM, CA 95630

HAZNET:

Gepaid: CAC000931800
TSD EPA ID: CAD982042475
Gen County: Sacramento
Tsd County: Solano
Tons: 2.5284
Facility Address 2: Not reported

Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Contact: JENNIFER BRINITZER
Telephone: (916) 987-1520
Mailing Name: Not reported

Mailing Address: 9824 OAK PLACE WEST

FOLSOM, CA 95630

County Sacramento

37 FOLSOM PRISON
N OF FOLSOM CITY; ADJ TO AMERICAN RIVER
REPRESA, CA 95671

VCP:

Facility ID 34920001

Dtsc Region Code: 1

Region Code Definition: SACRAMENTO

County Code: 34

Site Name Under : Not reported Current Status Date : 07011993 Current Status Code : VCP

Current Status: VOLUNTARY CLEANUP PROGRAM

Lead Agency Code: DTSC

Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL

Site Type Code : VCP

Site Type: VOLUNTARY CLEANUP PROGRAM

National Priorities List: N

Tier: Not reported Source Of Funding Code: C

Staff Member : RFEARS
Supervisor : Not reported

Sic Code: 92

Sic Code Definition: JUSTICE, PUBLIC ORDER & SAFETY

Site Mitigatn & Brnflds Reuse Prog (SMBR) Code: CC

SMBR Branch: CENTRAL CALIFORNIA

Regional Water Quality Control Board : Not reported RWQCB Definition : Not reported Site Access Controlled : Not reported Listed In Haz Wst & Substncs Sites List (CORTESE) Not reported Date Hazard Ranked : Not reported

GW Contamination Suspected : C # Of Sources Contributing To Contamination : 4

Lat/Long: 0° 0′ 0″ / 0° 0′ 0″ / 0° 0′ 0″ Direction Lat: Not reported Direction Long: Not reported Lat/long Method: Not reported Entity Lat/long Coordinates Refer To: Not reported

State Assembly Distt Code : 05
State Senate Distt Code : 01

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

S101481890

EDR ID Number

Identifying Code: PCODE ID Value: P12084

Other ID Desc: BEP DATABASE PCODE

Identifying Code: SITES
ID Value: 34-50-0001

Other ID Desc: CALSITES ID NUMBER

Identifying Code: SITES
ID Value: 34-28-0107

Other ID Desc: CALSITES ID NUMBER

Identifying Code: CSTAR ID Value: 101408

Other ID Desc: CALSTARS CODE
Alternate Name(s): FOLSOM PRISON
Alternate Name(s): FOLSOM STATE PRISON
Address(es): 301 NORTH M STREET

FOLSOM, CA 95630

Address(es): N OF FOLSOM CITY; ADJ TO AMERICAN RIVER

REPRESA, CA 95671

Background Info: Folsom Prison operates a license plate manufacturing

plant onsite. Caustic stripping bath liquids and paint sludges were stored in a drum storage area or discharged into an evaporation pond. Other areas of contamination associated with the Prison site are a second evaporation pond used for cannery wastewater and a scrap metal disposal

area, light industrial areas, and firing ranges.

High levels (above 1,000 milligrams per kilogram) of chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), and zinc (Zn) have been detected in the soil. Several specific areas have been identified and evaluated in a preliminary

endangerment assessment.

Folsom Prison is located north of the main part of the City of Folsom and directly south (0.5 mile) of Folsom Dam. The site is on a bluff adjacent (0.25 mile) to the American

River. The site is located on fractured bedrock. Aquatic and human health may be affected if

contamination reaches the American River. No drinking water

wells exist in the vicinity.

Facility Id: 34920001
AWP Activities Code: 1
DTSC Site Activity Code: SS

Activity Code Def:

AWP Activity Id:

Dt Activity Due For Completion:

Revised Due Date:

Date Activity Completed:

Date Activity Completed:

Est # Of Person-years To Complete:

SITE SCREENING

Not reported

Not reported

02061987

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 2

AWP Activities Code : 2
DTSC Site Activity Code : RA

Activity Code Def: REMOVAL ACTION

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

S101481890

EDR ID Number

AWP Activity Id: SLDGE
Dt Activity Due For Completion: Not reported
Revised Due Date: Not reported
Date Activity Completed: 09301988

Est # Of Person-years To Complete: 0

Est. Size Of An Activity Code : Not reported Site Status When Activity Commitment Made : VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 3

DTSC Site Activity Code: ORDER

Activity Code Def: I/SE, IORSE, FFA, FFSRA, VCA, EA

AWP Activity Id:
Dt Activity Due For Completion:
Not reported
Revised Due Date:
Not reported
Date Activity Completed:
12301988
Est # Of Person-years To Complete:
0

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition : VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 4

DTSC Site Activity Code: ERA

Activity Code Def: EXPEDITED RESPONSE ACTION

AWP Activity Id: SLDGE
Dt Activity Due For Completion: Not reported
Revised Due Date: Not reported
Date Activity Completed: 12041990

Est # Of Person-years To Complete: 0

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made : VCP

Status Code Definition : VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 5

DTSC Site Activity Code: RIFS

Activity Code Def: REMEDIAL INVESTIGATION / FEASIBILITY STUDY

AWP Activity Id:

Dt Activity Due For Completion:

Revised Due Date:

Date Activity Completed:

Est # Of Person-years To Complete:

Not reported
05311991

0

Est. Size Of An Activity Code: Not reported Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0

Map ID

Direction

EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

Distance

S101481890

Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 6

DTSC Site Activity Code: RAP

Activity Code Def: REMEDIAL ACTION PLAN / RECORD OF DECISION

AWP Activity Id:

Dt Activity Due For Completion:

Revised Due Date:

Date Activity Completed:

Date Activity Completed:

Est # Of Person-years To Complete:

Not reported

06301992

Est # Of Person-years To Complete : 0

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made : VCP

Status Code Definition : VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 7

DTSC Site Activity Code : PEA

Activity Code Def: PRELIMINARY ENDANGERMENT ASSESSMENT

AWP Activity Id:

Dt Activity Due For Completion:

Revised Due Date:

Not reported

Not reported

O4201994

Est # Of Person-years To Complete:

O

Est. Size Of An Activity Code:

Not reported

Not reported

Site Status When Activity Commitment Made : VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 8

DTSC Site Activity Code: DES

Activity Code Def: DESIGN

AWP Activity Id: 1

Dt Activity Due For Completion : Not reported
Revised Due Date : Not reported
Date Activity Completed : 12011994

Est # Of Person-years To Complete :

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 9

DTSC Site Activity Code: RMDL

Activity Code Def: REMEDIAL ACTION (RAP REQUIRED)

AWP Activity Id:

Dt Activity Due For Completion : Not reported

Map ID Direction **EDR ID Number**

Distance (ft.)Site Database(s) **EPA ID Number**

FOLSOM PRISON (Continued)

Distance

S101481890

Revised Due Date: Not reported 06281996 Date Activity Completed: Est # Of Person-years To Complete: O Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: VCP

VOLUNTARY CLEANUP PROGRAM Status Code Definition:

Cubic Yards Of Solids Removed At Completion: 7600 Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion:

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code: 10 DTSC Site Activity Code: **RIFS**

Activity Code Def: REMEDIAL INVESTIGATION / FEASIBILITY STUDY

AWP Activity Id: SOIL Dt Activity Due For Completion: Not reported Not reported Revised Due Date: Date Activity Completed: 03261997

Est # Of Person-years To Complete:

Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: **VCP**

Status Code Definition: **VOLUNTARY CLEANUP PROGRAM**

Cubic Yards Of Solids Removed At Completion: 0 Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code: 11 RAP DTSC Site Activity Code:

REMEDIAL ACTION PLAN / RECORD OF DECISION Activity Code Def:

AWP Activity Id: SOIL Dt Activity Due For Completion: Not reported Revised Due Date: Not reported Date Activity Completed: 03181998

Est # Of Person-years To Complete:

Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: **VCP**

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code: 12

DTSC Site Activity Code: DES Activity Code Def: **DESIGN** AWP Activity Id: SOIL

Dt Activity Due For Completion: Not reported Revised Due Date: Not reported 05092000 Date Activity Completed: Est # Of Person-years To Complete:

Est. Size Of An Activity Code: Not reported Site Status When Activity Commitment Made:

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0 Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion:

Distance (ft.)Site Database(s) **EPA ID Number**

FOLSOM PRISON (Continued)

S101481890

EDR ID Number

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code: 13 DTSC Site Activity Code: RIFS

Activity Code Def: REMEDIAL INVESTIGATION / FEASIBILITY STUDY

AWP Activity Id: GW Dt Activity Due For Completion: Not reported Revised Due Date: Not reported Date Activity Completed: 06302000

Est # Of Person-years To Complete:

Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: VCP

VOLUNTARY CLEANUP PROGRAM Status Code Definition:

Cubic Yards Of Solids Removed At Completion: Gallons Of Liquid Removed Upon Completion: Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code: 16 DTSC Site Activity Code: **RMDL**

Activity Code Def: REMEDIAL ACTION (RAP REQUIRED)

AWP Activity Id: SOIL

Dt Activity Due For Completion: Not reported Revised Due Date: Not reported 04182002 Date Activity Completed: Est # Of Person-years To Complete: Λ

Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: VCP

VOLUNTARY CLEANUP PROGRAM Status Code Definition:

Cubic Yards Of Solids Removed At Completion: 5500 Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported Facility Id: 34920001 AWP Activities Code : 18 DTSC Site Activity Code: **CERT**

Activity Code Def: CERTIFICATION AWP Activity Id: Not reported Dt Activity Due For Completion: 12302004 Revised Due Date: 06302005 Date Activity Completed: Not reported

Est # Of Person-years To Complete:

Est. Size Of An Activity Code: Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0 Gallons Of Liquid Removed Upon Completion: 0 Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported 34920001 Facility Id: AWP Activities Code: 19 DTSC Site Activity Code: **ORDER**

Activity Code Def: I/SE, IORSE, FFA, FFSRA, VCA, EA

AWP Activity Id: IA2

Not reported Dt Activity Due For Completion: Not reported Revised Due Date: Date Activity Completed: 06261997

Map ID

Direction

EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued) S101481890

Est # Of Person-years To Complete : 0

Distance

Est. Size Of An Activity Code : Not reported Site Status When Activity Commitment Made : VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001
AWP Activities Code: 20
DTSC Site Activity Code: CEQA

Activity Code Def: CEQA INCLUDING NEGATIVE DECS

AWP Activity Id:

Dt Activity Due For Completion:

Revised Due Date:

Not reported

Not reported

Not reported

O3181998

Est # Of Person-years To Complete:

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 21

DTSC Site Activity Code: CHP65

Activity Code Def: AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION

AWP Activity Id:

ORDER

Dt Activity Due For Completion:

Revised Due Date:

Not reported

Not reported

12071998

Est # Of Person-years To Complete: 0

Est. Size Of An Activity Code : Not reported Site Status When Activity Commitment Made : VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Activity Deleted Via Commitmnt/Completins Screen: Not reported Facility Id: 34920001

AWP Activities Code: 22

DTSC Site Activity Code: RAW

Activity Code Def: REMOVAL ACTION WORKPLAN

AWP Activity Id: GW

Dt Activity Due For Completion:

Revised Due Date:

Not reported

Not reported

Not reported

O3012001

Est # Of Person-years To Complete:

0

Est. Size Of An Activity Code : Not reported

Site Status When Activity Commitment Made: VCP

Status Code Definition: VOLUNTARY CLEANUP PROGRAM

Cubic Yards Of Solids Removed At Completion: 0
Gallons Of Liquid Removed Upon Completion: 0
Cubic Yards Of Solids Treated Upon Completion: 0

Actvty Deleted Via Commitmnt/Completns Screen: Not reported

Map ID
Direction
Distance
Distance (ft)Site

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

S101481890

EDR ID Number

Special Program Code: Not reported Special Program: Not reported Comments Date: 04201994

Comments: (Preliminary Endangerment Assessment) for the Folsom Prison

project. 15 suspected areas were evaluated to determine if suspected releases or threatened releases pose a potential threat to public health and the environment. 9 of the 15 areas have been found to require additional investigative work and will proceed to the Remedial Investigation phase. The remaining 6 areas will require no further action.

Approx. cost = \$69,000 (Reimbursement Funds)

DES/SOIL - The Department approved a remedial design workplan to address four units located at the folsom prison site. The workplan outlines steps for excavation and off-site disposal of impacted soil consistent with the selected remedial action strategy approved in a March 1998 RAP. Approximatedly 6000 cubic yards of soil are to be removed.

Remedial Investigation/Feasibility Study (RI/FS) completed for 4 areas of the site: PIA drum storage area, paint sludge evaporation pond and associated soil piles, scrap metal disposal area, and waste water pond #1.

THE 2001 REMOVAL ACTION WORK PLAN (RAW) FOR THE INDUSTRIAL MANUFACTURING AND PROCESSING AREA (IMPA) CONCLUDED THAT ONLY GROUNDWATER IS AFFECTED, WHERE CONTAMINATED GROUNDWATER OCCURS IN AN UNDERLYING BEDROCK WATER-BEARING ZONE THAT IS 20 TO 50 FEET BELOW GROUND SURFACE AND IS ALMOST COMPLETELY ISOLATED FROM THE MAIN AQUIFER. CONTAMINANTS IN THE AFFECTED GROUNDWATER INCLUDE BENZENE, ETHYLBENZENE, TOLUENE, AND TOTAL XYLENES (BTEX) AT LEVELS GREATER THAN CALIFORNIA DRINKING WATER STANDARDS. PURSUANT TO THE FEBRUARY 2001 RAW PREPARED BY DTSC, THE APPROVED REMEDY INCLUDED CONTINUED MONITORING OF GROUNDWATER TO CONFIRM REDUCTION OF BTEX CONCENTRATIONS TO RWQCB DRINKING WATER STANDARDS. AN OPERATION AND MAINTENANCE (O&M) AGREEMENT (DOCKET NUMBER HSA-A 04/05-198) WAS FULLY EXCUTED ON JUNE 23, 2005 BETWEEN THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL AND THE CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION (CDCR) FOR CONTINUED GROUNDWATER MONITORING AT THE IMPA.

RMDL/1 -- DTSC approved completion of the remedial action design implementation activities for Site 1, Site 2, Site 2A, and Site 8. By letter of 12/20/95, Folsom Prison referred Site 3 back to DTSC for additional characterization and re-evaluation of alternatives to complete remediation as necessary. Completed activities are reported in the "Summary of Site Closure" (Porter Geotechnical, 2/22/96) and the "Clarification of Closure Report Addendum" (Folsom Prison, 6/27/96).

Commercial/industrial use only.

Remedial Action Plan (RAP) completed to select alternatives for remediation of soil contamination at the 4 areas investigated in the RI.

RI/FS - an RI/EECA DTS has been prepared to address groundwater contamination at the Industrial Manufacturing and Processing Area (IMPA) at the Folsom Prison Site. The RI/EECA has been prepared to summarize and document investigation findings and to evaluate

Map ID
Direction
Distance
Distance (ft.)Site

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

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and propose a remedy for groundwater contamination encountered at the site. Groundwater contaminants include BTEX which have been detected above RWQCB MCL's.

Removal Action: Excavation of paint sludge.

Expedited Removal Action: Excavation of 450 cubic yards of soil contaminated with paint sludge and stockpiling of soil on site.

DESIGN -- Approval of design workplan for excavation and off-site disposal of soil from 5 separate areas of the site.

CHP65/STLMT -- DEPT. OF CORRECTIONS SIGNED THE AMENDMENT TO THEIR EXISTING ENFORCEABLE AGREEMENT TO INCLUDE CITATIONS UNDER CHAPTER 6.5 IN THE AUTHORITY SECTION OF THE AGREEMENT. Enforceable Agreement: Dept of Corrections entered into an enforceable agreement and secured an interagency agreement with the DTSC to have DTSC regional contractors perform work Site Screening Done: Mitre Model required.

RAW/GW -

DTSC has prepared and approved a final Removal Action Workplan to address groundwater contamination at the Industrial Manufacturing and Processing Area (IMPA) at the Folsom State Prison Site. The RAW has been prepared to summarize and document investigation findings and to approve a remedy for groundwater contamination encountered at the site. Groundwater contaminants include BTEX which have been detected above Regional Water Quality Control Board Maximum Contaminant Level (MCLs). The approved remedy consists of on-going monitoring of existing wells to confirm contaminant reduction continues to within RWQCB drinking water standards.

CEQA -- A NEGATIVE DECLARATION (ND) WAS PROPOSED FOR APPROVAL OF ACTIONS PROPOSED UNDER A REMEDIAL ACTION PLAN PREPARED FOR THE SUBJECT SITE. THE ND WAS MADE AVAILABLE FOR PUBLIC REVIEW FOR 30 DAYS FROM 12/15/97-1/13/98. A NOTICE WAS DISPLAYED IN THE SACRAMENTO BEE NEWSPAPER AND A FACT SHEET WAS MAILED TO THE SITE MAILING LIST TO PROVIDE INFORMATION AND ANNOUNCE THE COMMENT PERIOD AND A PUBLIC MEETING. ON 1/18/98, DTSC HELD A PUBLIC MEETING AT FOLSOM PRISON'S LARKIN HALL. AN INFORMATION REPOSITORY WAS ESTABLISHED AT THE DTSC-SACRAMENTO OFFICE FILE ROOM TO MAKE AVAILABLE FOR REVIEW THE DRAFT RAP, ND, AND SUPPORTING DOCUMENTS. NO COMMENTS WERE RECEIVED AND THE ND WAS APPROVED.

RAP/SOIL -- DTSC HAS APPROVED THE FINAL RAP. THE SUBJECT RAP WAS MADE AVAILABLE FOR PUBLIC REVIEW FOR 30 DAYS FROM 12/15/97 TO 1/13/98. A NOTICE WAS DISPLAYED IN THE SACRAMENTO BEE NEWSPAPER AND A FACT SHEET WAS MAILED TO THE SITE MAILING LIST TO PROVIDE INFORMATION AND ANNOUNCE THE COMMENT PERIOD AND A PUBLIC MEETING. ON 1/8/98, DTSC HELD A PUBLIC MEETING AT FOLSOM PRISON'S LARKIN HALL. AN INFORMATION REPOSITORY WAS ESTABLISHED AT THE DTSC-SACRAMENTO OFFICE FILE ROOM TO MAKE AVAILABLE FOR REVIEW THE DRAFT RAP, NEGATIVE DECLARATION, AND SUPPORTING DOCUMENTS. THE FINAL RAP OUTLINES THE CONCEPTUAL PROCESS FOR REMEDIATION OF SOIL CONTAMINATION. THE SELECTED REMEDY INVOLVES EXCAVATION OF APPROXIMATELY 6,000 CUBIC YARDS OF SOIL IMPACTED WITH METALS, PRIMARILY LEAD FROM THREE LOCATIONS (AREA 3-LARKIN HALL FIRING RANGE, SITE 3-SCRAP METAL DISPOSAL AREA, AND SITE 14-FORMER FIRING RANGE) AND AERATION OF UP TO 12 CUBIC YARDS OF TETRACHLOROETHENE-IMPACTED SOIL IN THE VICINITY

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM PRISON (Continued)

S101481890

EDR ID Number

THE FORMER DRY CLEANING BUILDING.

RI/FS SOIL--DTSC has approved the Folsom Prison RI/FS phase of the project to address soil contamination for soils at over the entire site. The Feasibility Study primarily addresses evaluation of alternatives for cleanup of lead contaminated

soils from firing ranges and a scrap disposal site. Ground-water investigation is ongoing.

SOIL - RMDL -- Soil removal completed in accordance with the Final Remedial Action Plan dated March 1998 and the Remedial

Action Design Workplan dated March 2000.

PEA -- On April 20, 1994, the Department completed the PEA

CA DEEDS:

Deed Date(s): 07/27/05

38 CITY OF FOLSOM/SOLID WASTE DIVISION 560 E NATOMA ST FOLSOM, CA 95630

HAZNET \$102313640

Sacramento Co. CS N/A Sacramento Co. ML

HAZNET:

Gepaid: CAH111000384
TSD EPA ID: Not reported
Gen County: Sacramento
Tsd County: Los Angeles
Tons: 1.07

Facility Address 2: Not reported Waste Category: Household waste

Disposal Method: Recycler

Contact: DARIN AJAX/HAZ MAT COORDINATOR

Telephone: (916) 985-4798
Mailing Name: Not reported
Mailing Address: 50 NATOMA ST
FOLSOM, CA 95630

Not were entered

County Not reported

Gepaid: CAH111000384
TSD EPA ID: Not reported
Gen County: Sacramento
Tsd County: Los Angeles
Tons: 0.12
Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Transfer Station

Contact: DARIN AJAX/HAZ MAT COORDINATOR

Telephone: (916) 985-4798
Mailing Name: Not reported
Mailing Address: 50 NATOMA ST
FOLSOM, CA 95630

County Not reported

Gepaid: CAH111000384

TSD EPA ID: Not reported

Gen County: Sacramento

Tsd County: Los Angeles

Facility Address 2: Not reported

Tons:

Waste Category: Other empty containers 30 gallons or more

Disposal Method: Transfer Station

0.35

Contact: DARIN AJAX/HAZ MAT COORDINATOR

Telephone: (916) 985-4798

rection EDR ID Number

CITY OF FOLSOM/SOLID WASTE DIVISION (Continued)

S102313640

EPA ID Number

Database(s)

Mailing Name: Not reported Mailing Address: 50 NATOMA ST

FOLSOM, CA 95630

County Not reported

Gepaid: CAH111000384
TSD EPA ID: Not reported
Gen County: Sacramento
Tsd County: Los Angeles
Tons: 0.23

Facility Address 2: Not reported
Waste Category: Household waste
Disposal Method: Transfer Station

Contact: DARIN AJAX/HAZ MAT COORDINATOR

Telephone: (916) 985-4798
Mailing Name: Not reported
Mailing Address: 50 NATOMA ST

FOLSOM, CA 95630

County Not reported

Gepaid: CAH111000384

TSD EPA ID: Not reported

Gen County: Sacramento

Tsd County: Yolo

Tons: 0.20

Facility Address 2: Not reported

Waste Category: Aqueous solution with less than 10% total organic residues

Disposal Method: Transfer Station

Contact: DARIN AJAX/HAZ MAT COORDINATOR

Telephone: (916) 985-4798
Mailing Name: Not reported
Mailing Address: 50 NATOMA ST
FOLSOM, CA 95630

FOLSOW, CA 950

County Not reported

<u>Click this hyperlink</u> while viewing on your computer to access 75 additional CA HAZNET record(s) in the EDR Site Report.

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: Not reported Food Bill Code: Not reported Billing Codes BP: 5203

Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported FD: Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported HAZMAT Permit Date: Not reported **HAZMAT Inspection Date:** Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

EDR ID Number

Database(s) EPA ID Number

CITY OF FOLSOM/SOLID WASTE DIVISION (Continued)

S102313640

Not reported Facility Id: Number of Tanks: Not reported WG Bill Code: 5307* Food Bill Code: Not reported 5206* Billing Codes BP: Billing Codes UST: Not reported Not reported Tier Permitting: Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported Not reported **UST Tank Test Date:** Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

SACRAMENTO CS:

Facility Id: RO0000936
Region: SACRAMENTO
State Site Number: 0502/71502
Lead Staff: RWB, R.
Lead Agency: DT
Remedial Action Taken: NO
Post Remedial Action Monitoring:
Substance: Solvents

Date Reported: 03/13/1989

Date Closed: Not reported

Case Type: Soil only

38 CALIFORNIA STATE PRISON GARAGE 560 E NATOMA ST FOLSOM, CA

Sacramento Co. CS S105799094 N/A

SACRAMENTO CS:

Facility Id: RO0001482 Region: SACRAMENTO

State Site Number: G002
Lead Staff: LEIBOLD, R.
Lead Agency: HM

Permedial Action Token: NO

Lead Agency: HM
Remedial Action Taken: NO
Post Remedial Action Monitoring:
Substance: Not reported

Date Reported: Not reported

Date Closed: Not reported

Case Type: Other ground water affected

ection EDR ID Number

Database(s) EPA ID Number

38 FOLSOM CORRECTIONAL RESOURCE 560 E NATOMA ST FOLSOM, CA 95630

Sacramento Co. ML S104971060 N/A

Sacramento ML:

Not reported Facility Id: Number of Tanks: Not reported WG Bill Code: 5307* Food Bill Code: Not reported 5205* Billing Codes BP: Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

38 FOLSOM STATE PRISON 560 E NATOMA REPRESA, CA 95671

SACRAMENTO CS:

Facility Id: RO0000937
Region: SACRAMENTO
State Site Number: 0501/71501
Lead Staff: LEIBOLD, R.
Lead Agency: HM
Remodial Action Taken: NO

Remedial Action Taken: NO
Post Remedial Action Monitoring:

Substance: Diesel

Date Reported: 03/13/1989

Date Closed: Not reported

Case Type: Soil only

Facility Id: RO0000939

Region: SACRAMENTO

State Site Number: 0500/71500

Lead Staff: LEIBOLD, R.

Lead Agency: HM
Remedial Action Taken: YES
Post Remedial Action Monitoring:

Substance: Automotive(motor gasoline and additives)

Date Reported: 03/13/1989

Date Closed: Not reported

Case Type: Soil only

SWEEPS:

Status: Not reported
Comp Number: 30064
Number: Not reported
Board Of Equalization: 44-019184
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported

Sacramento Co. CS S105067558 SWEEPS UST N/A

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM STATE PRISON (Continued)

Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000001

Actv Date: Not reported
Capacity: 1000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported

Number Of Tanks: 15

Status: Not reported 30064 Comp Number : Number: Not reported 44-019184 Board Of Equalization: Ref Date: Not reported Act Date : Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank ld: 34-000-030064-000002

Actv Date: Not reported
Capacity: 550
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Not reported Status: Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Not reported Ref Date: Act Date : Not reported Created Date: Not reported Tank Status: Not reported Not reported Owner Tank Id:

Swrcb Tank Id: 34-000-030064-000003

Actv Date: Not reported
Capacity: 3000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date: Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000004

Actv Date : Not reported

Capacity: 1
Tank Use: OIL
Stg: WASTE

S105067558

EDR ID Number

Distance (ft.)Site Database(s) **EPA ID Number**

FOLSOM STATE PRISON (Continued)

Content:

WASTE OIL Not reported Number Of Tanks:

Not reported Status: Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date : Not reported Created Date: Not reported Tank Status: Not reported Not reported Owner Tank Id:

34-000-030064-000005 Swrcb Tank Id:

Actv Date : Not reported

Capacity:

Tank Use: M.V. FUEL **PRODUCT** Stg: Content: **DIESEL** Number Of Tanks: Not reported

Not reported Status: Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date : Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

34-000-030064-000006 Swrcb Tank Id:

Actv Date : Not reported Capacity: 1500 Tank Use: UNKNOWN Stg: WASTE Not reported Content: Number Of Tanks: Not reported

Status: Not reported 30064 Comp Number: Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date : Not reported Not reported Created Date: Not reported Tank Status: Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000007

Actv Date : Not reported Capacity: 5000 Tank Use: **UNKNOWN PRODUCT** Stg: Content: Not reported Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported S105067558

EDR ID Number

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM STATE PRISON (Continued)

S105067558

EDR ID Number

Board Of Equalization: 44-019184
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000008

Actv Date: Not reported
Capacity: 5000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date: Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000009

Actv Date: Not reported
Capacity: 1000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Not reported Ref Date: Act Date : Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000010

Actv Date : Not reported Capacity : 500

Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Status: Not reported 30064 Comp Number: Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date: Not reported Created Date: Not reported Not reported Tank Status: Owner Tank Id: Not reported

Distance (ft.)Site Database(s) EPA ID Number

FOLSOM STATE PRISON (Continued)

Swrcb Tank Id: 34-000-030064-000011

Actv Date: Not reported
Capacity: 1000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Not reported Status: Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Not reported Ref Date: Act Date : Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank ld: 34-000-030064-000012

Actv Date: Not reported
Capacity: 8000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date : Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000013

Actv Date: Not reported
Capacity: 4000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 30064 Number: Not reported Board Of Equalization: 44-019184 Ref Date: Not reported Act Date: Not reported Created Date: Not reported Tank Status: Not reported Not reported Owner Tank Id:

Swrcb Tank Id: 34-000-030064-000014

Actv Date: Not reported
Capacity: 4000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED

S105067558

EDR ID Number

EDR ID Number

S105067558

Database(s) EPA ID Number

FOLSOM STATE PRISON (Continued)

Number Of Tanks: Not reported

Not reported Status: 30064 Comp Number: Number: Not reported Board Of Equalization: 44-019184 Not reported Ref Date: Act Date : Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-030064-000015

Actv Date: Not reported
Capacity: 2000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Not reported

560 EAST NATUMA STREET FOLSOM, CA 95671

CHMIRS:

OES Control Number: 98-5100
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported Time Completed :

Agency Id Number: Not reported Agency Incident Number: Not reported OES Incident Number: 98-5100 Time Notified: Not reported Not reported Surrounding Area: Estimated Temperature: Not reported Property Management: Not reported More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated: Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Not reported Company Name: Reporting Officer Name/ID: Not reported Report Date: Not reported Comments: Not reported Facility Telephone Number: Not reported

Waterway Involved : No

irection EDR ID Number

(Continued) S105653560

Waterway: Not reported Spill Site: Not reported Cleanup By: Reporting Party Containment: Not reported What Happened: Not reported Not reported Type: Not reported Other: Substance: hydraulic oil

Quantity Released:

E Date: Not reported
Contained: Yes
Site Type: Other
Evacuations: 0
Num Of Injuries: 0
Num Of Fatalities: 0

Date/Time : Not reported

Year: 1998

Agency: DOC - Calif State Prison Sacramento

BBLS: 0 Cups: CUFT: 0 Gallons: 10-15 Grams: 0 Pounds: 0 Liters: 0 Ounces: 0 Pints: 0 Quarts: 0 Sheen: 0 0 Tons: Unknown:

Description: When checking a drain plug it was removed too far and the

hydraulic oil was released onto the asphalt - contained by dirt.

Incident date: 11/13/199812:00:00 AM

Admin Agency: Sacramento County Environmental Mgmt.

OES date : Not reported OES time : Not reported

OES notification: 11/13/199802:51:43 PM

Amount: Not reported

38 CALIF STATE PRISON-SACRAMENTO 560 E NATOMA ST Sacramento Co. ML S105067556 N/A

Database(s)

EPA ID Number

REPRESA, CA 95671 Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported 5308 WG Bill Code: Not reported Food Bill Code: Billing Codes BP: 5205 Billing Codes UST: 5403* Tier Permitting: Not reported Risk Mgmt Protection Program : Not reported Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported

Map ID Direction Distance Distance (ft.)Site

Direction EDR ID Number

CALIF STATE PRISON-SACRAMENTO (Continued)

S105067556

EPA ID Number

UST Tank Test Date: Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

38 FOLSOM PRISON-GREEN VALLEY 560 E NATOMA ST Sacramento Co. CS S105067557

Database(s)

N/A

REPRESA, CA

SACRAMENTO CS:

Facility Id: RO0001190
Region: SACRAMENTO

State Site Number: D514 Lead Staff: LEIBOLD, R.

Lead Agency: HM
Remedial Action Taken: NO
Post Remedial Action Monitoring:

Substance: Automotive(motor gasoline and additives)

Date Reported: 04/17/1998

Date Closed: Not reported

Case Type: Soil only

38 PRISON IND AUTH CHEMICAL DIV 560 E NATOMA ST FOLSOM, CA 95630 SSTS 1005435275 N/A

SSTS:

Product: SANI PINE CLEAN

Status: Active
Registration #: 010970CA 001

 Report Year:
 1990

 Permit:
 Registered

 Product #:
 04737100105

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported Product: MEDI CLEAN Status: Active

 Registration #:
 010970CA 001

 Report Year:
 1990

 Permit:
 Registered

 Product #:
 04737100009

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported

Map ID
Direction
Distance

Distance (ft.)Site Database(s) EPA ID Number

PRISON IND AUTH CHEMICAL DIV (Continued)

1005435275

EDR ID Number

Product: MEDI CLEAN & GERM CLEAN GERMICIDAL DETERGENT

 Status:
 Active

 Registration #:
 010970CA 001

 Report Year:
 1992

 Permit:
 Registered

 Product #:
 04737100009

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: SANI PINE CLEAN CLEANER DISINFECTANT DEODORANT

 Status:
 Active

 Registration #:
 010970CA 001

 Report Year:
 1992

 Permit:
 Registered

 Product #:
 04737100105

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: 1801-GERM, GERMICIDAL DETERGENT

Status: Active
Registration #: 010970CA 001
Report Year: 1996
Permit: Registered

Product #: 04737100009010970

Product Type: End-use blend, formulation, or concentrate

Product Class: 20 Product Use: 9

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: 1752 MEDI-CLEAN GERMICIDAL DETERGENT

 Status:
 Active

 Registration #:
 010970CA 001

 Report Year:
 1996

 Permit:
 Registered

Product #: 04737100009010970

Product Type: End-use blend, formulation, or concentrate

Product Class: 20 Product Use: 9

Marketed in the United States

Country: Not reported Region: Not reported

Map ID Direction Distance

Distance (ft.)Site Database(s) EPA ID Number

PRISON IND AUTH CHEMICAL DIV (Continued)

1005435275

EDR ID Number

Product: 1757-SANI PINE, DISINFECTANT DEODORANT

Status: Active
Registration #: 010970CA 001
Report Year: 1996
Permit: Registered

Product #: 04737100105010970

Product Type: End-use blend, formulation, or concentrate

Product Class: 20 Product Use: 9

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: 1752 MEDI CLEAN GERMICIDAL DETERGENT

Status: Inactive
Registration #: 010970CA 001
Report Year: Not reported
Permit: Registered

Product #: 04737100009010970

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: 1757 SANI PINE DISINFECTANT DEODORANT

Status: Inactive
Registration #: 010970CA 001
Report Year: Not reported
Permit: Registered

Product #: 04737100105010970

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Market: Marketed in the United States

Country: Not reported Region: Not reported

Product: MEDI CLEAN GERMICIDAL DETERGENT

 Status:
 Active

 Registration #:
 010970CA 001

 Report Year:
 1991

 Permit:
 Registered

 Product #:
 04737100009

Product Type: End-use blend, formulation, or concentrate

Product Class: Disinfectant, germicide, sanitizer

Product Use: All other products

Marketed in the United States

Country: Not reported Region: Not reported

Map ID Direction Distance Distance (ft.)Site

Database(s) **EPA ID Number**

PRISON IND AUTH CHEMICAL DIV (Continued)

1005435275

EDR ID Number

Click this hyperlink while viewing on your computer to access 3 additional SSTS record(s) in the EDR Site Report.

PRISON INDUSTRY AUTHORITY 38 **560 E NATOMA ST**

FINDS 1004439553 110011395686

FOLSOM, CA 95630

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL COMPLIANCE DATABASE SYSTEM

FOLSOM COMMUNITY CORRECTIONAL FACILITY 39 **570 E NATOMA ST**

HAZNET S106093984 N/A

HAZNET:

County

FOLSOM, CA 95630

Gepaid: CAL000261351 TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Yolo Tons: 0.58

Not reported Facility Address 2:

Waste Category: Waste oil and mixed oil Disposal Method: **Transfer Station** Contact: **BILL WINCHESTER** Telephone: (916) 985-5420 Mailing Name: Not reported Mailing Address: 570 E NATOMA ST

FOLSOM, CA 95630 Not reported

CAL000261351 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Los Angeles Tons: 0.16

Facility Address 2: Not reported Waste Category: Unspecified organic liquid mixture

Disposal Method: Recycler

BILL WINCHESTER Contact: Telephone: (916) 985-5420 Not reported Mailing Name: Mailing Address: 570 E NATOMA ST FOLSOM, CA 95630

County Not reported

Map ID Direction Distance Distance (ft.)Site

Database(s)

39 **CDFA FOLSOM FACILITY** SLIC S106486615 600 E. NATOMA N/A

FOLSOM, CA 95630 CA STATE SLIC:

SLT5S3513727 Global Id: Region: STATE Assigned Name: SLICSITE CORI CONDON Lead Agency Contact:

Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)

Lead Agency Case Number: SLT5S351 Responsible Party: PAT MINARD Recent Dtw: Not reported Facility Status: Case Open FER, PHC Substance Released:

CALIFORNIA DEPT FOOD & AGRIC 39 **600 E NATOMA**

FOLSOM, CA 95630

RCRAInfo:

CALIFORNIA STATE OF Owner:

(415) 555-1212

EPA ID: CAD981966401

Contact: **ENVIRONMENTAL MANAGER**

(916) 985-3090

Small Quantity Generator Classification:

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

HAZNET:

CAD981966401 Gepaid: TSD EPA ID: MND980791321 Gen County: Sacramento

Tsd County: 99 Tons: .1000 Facility Address 2: Not reported

Waste Category:

Disposal Method: Not reported Contact: Not reported (000) 000-0000 Telephone: Mailing Name: Not reported

Mailing Address: 1220 N STREET RM A-357

SACRAMENTO, CA 95814 - 5607

County Sacramento CAD981966401 Gepaid: TSD EPA ID: MND980791321 Gen County: Sacramento

Tsd County: 99 .1000 Tons: Facility Address 2: Not reported

Waste Category:

Treatment, Incineration Disposal Method:

Contact: Not reported Telephone: (000) 000-0000

TC01637093.1r Page 119 of 128

EDR ID Number

EPA ID Number

1000252377

CAD981966401

RCRA-SQG

FINDS

HAZNET

ection EDR ID Number

Database(s) EPA ID Number

1000252377

CALIFORNIA DEPT FOOD & AGRIC (Continued)

Mailing Name: Not reported

Mailing Address: 1220 N STREET RM A-357

SACRAMENTO, CA 95814 - 5607

County Sacramento

40 RALPH'S #988 Sacramento Co. ML \$104654631 25000 BLUE RAVINE RD N/A

FOLSOM, CA 95630

Sacramento ML:
Facility Id:
Number of Tanks:
Not reported
WG Bill Code:
Food Bill Code:
Not reported
Not reported
Not reported
Billing Codes BP:
5207

Billing Codes UST: Not reported Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported Target Property Bill Code: Not reported CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported

SIC Code : Not reported

40 SUMMIT DENTAL Sacramento Co. ML S102955984
25004 BLUE RAVINE RD, #111 N/A
FOLSOM, CA 95630

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: 5320 Food Bill Code: Not reported Billing Codes BP: Not reported Billing Codes UST: Not reported Not reported Tier Permitting: Risk Mgmt Protection Program: Not reported Not reported FD: Not reported Target Property Bill Code: CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

41

Distance (ft.)Site Database(s) **EPA ID Number**

FOLSOM MATERIALS RECOVERY & COMPOSTING N OF NEW FOLSOM PRISON CMPLX OFF NATOMA REPRESA (IN FOLSOM), CA

SWF/LF S102361843 N/A

EDR ID Number

LF:

Prison Industry Authority, St. Of Calif. Facility ID: 34-AC-0002 Operator:

Operator Addr: 560 East Natoma Street

Folsom, CA 95630

Date: Not reported Address: Not reported Not reported Prep By: DOHS Number: Not reported CUP Number: Not reported CIWMB: Not reported

Activity: Composting Facility (Green Waste)

Operator's Status: Active

Owner: Calif Dept Of Corrections

Facility Phone 2: Not reported Owner Address: Not reported

P.O. Box 942883 - Room 139 South

Sacramento, CA 94283

Operator Phone: (916) 323-5483 Owner Telephone: (916) 323-5483 STATE

Regulation Status:Permitted Region:

Location: Not reported Parcel Num: Not reported Parcel Num 2: Not reported Land Use: Not reported Sig. Change Since Last Visit: Not reported Site Size: Not reported Other Observations: Not reported Issue And Observations: Not reported Recommendations / Follow Up: Not reported

Program Type: Not reported Public Notice: Not reported PERMTIER: Not reported

Lat/Long: 38.68972 / -121.15611 Permit Date: 9/16/1999

Accepted Waste: Restrictions:

Status: Not reported Swisnumber: Not reported Site Type: Not reported Aka: Not reported Type Of Waste: Not reported Disposal Area: Not reported SWFP Date: Not reported WDR Number: Not reported Dates Operation: Not reported Closure Approve: Not reported Dt Of Field Units: Not reported Surface Condition: Not reported Reassess Site: Not reported Lea Date: Not reported Leachate: Not reported Emrgncy ResponseNot reported

Landfill Gas: Not reported

Priority For Site Assessment: Not reported Other Recommendation: Not reported Explanation: Not Reported Not Reported No Further Action: Permitted Throughput with Units: 78 Actual Throughput with Units: Tons/day Actual Capacity with Units: 78 Permitted Capacity with Units: 78 Remaining Capacity with Units: Tons/day Permitted Total Acreage:

Remaining Capacity: Not reported

Distance
Distance (ft.)Site Database(s) EPA ID Number

FOLSOM MATERIALS RECOVERY & COMPOSTING (Continued)

S102361843

EDR ID Number

Fill Area: Not reported Inspec Frequency : Monthly
Landuse Name: Not reported GIS Source: Map
Permit Status: Permitted Category: Composting
Unit Number: 02 Closure Date: / /

Closure Type: Not reported Disposal Acreage: Not reported Year Opened: Not reported Year Closed: Not reported

Last Waste Tire Inspection Count : Not reported
Last Waste Tire Inspection Date: Not reported
Original Waste Tire Count: Not reported
Original Waste Tire Count Date: Not reported

Type Of Refuse: Not reported

Avg Depth Of Fill:
Addtl Expansion Area:
Not reported
Not reported
Not Reported

42 EMPIRE RANCH GOLF CLUB 1620 E NATOMAS ST FOLSOM, CA 95630 Sacramento Co. ML S105629218 N/A

Sacramento ML:

Not reported Facility Id: Number of Tanks: Not reported WG Bill Code: 5306 Food Bill Code: Not reported Billing Codes BP: 5204 Billing Codes UST: Not reported Not reported Tier Permitting: Risk Mgmt Protection Program: Not reported FD: Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported Not reported **HAZMAT Permit Date: HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported UST Tank Test Date: Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported

43 FOLSOM HILLS ELEMENTARY FINDS 1008312739

Not reported

106 MANSEAU DR. FOLSOM, CA 95630

SIC Code:

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL CENTER FOR EDUCATION STATISTICS 110022059733

Distance
Distance (ft.)Site
Database(s) EPA ID Number

Not reported

Not reported

Drinking Water

44 FOLSOM WATER TREATMENT PLANT 194 RANDALL DRIVE FOLSOM, CA 95630 AST A100210989

N/A

S107449033

N/A

EDR ID Number

AST:

Owner: CITY OF FOLSOM

Total Gallons: 4000

44 CHMIRS

194 RANDALL DR. FOLSOM, CA

CHMIRS:

OES Control Number: 04-1487
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported

Date Completed: Not reported

Time Completed:

Agency Id Number: Not reported Agency Incident Number: Not reported **OES Incident Number:** 04-1487 Time Notified: Not reported Surrounding Area: Not reported Estimated Temperature: Not reported Not reported Property Management: More Than Two Substances Involved?: Not reported Special Studies 1: Not reported Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported Resp Agncy Personel # Of Decontaminated : Not reported Others Number Of Decontaminated : Not reported Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Vehicle Make/year: Not reported Vehicle License Number : Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Not reported Reporting Officer Name/ID: Report Date: Not reported Comments: Not reported Facility Telephone Number: Not reported Waterway Involved: Not reported Waterway: Willow Creek Spill Site: Not reported Cleanup By: Reporting Party Containment: Not reported What Happened: Not reported Type: Not reported

Quantity Released:

Other:

Substance:

E Date : Not reported

EDR ID Number

(Continued) S107449033

Database(s)

HAZNET

Sacramento Co. ML

S104796038

N/A

EPA ID Number

Contained: Yes

Treatment/Sewage Facility Site Type:

Evacuations: Num Of Injuries: Num Of Fatalities: 0

Date/Time: Not reported Year: 2004 Agency: Not reported

BBLS: Cups: 0 CUFT: 0 Gallons: 1000 Grams: 0 Pounds: 0 Liters: 0 Ounces: 0 Pints: 0 Quarts: 0 Sheen: 0 0 Tons: Unknown:

Description: A contractor hit pipe and caused spill.

Incident date: 3/16/200412:00:00 AM

Admin Agency: Sacramento County Environmental Mgmt.

OES date: Not reported OES time: Not reported OES notification: Not reported Amount: Not reported

44 CITY OF FOLSOM WATER TREATMENT PLANT

194 RANDALL DR FOLSOM, CA 95630

HAZNET:

CAL000255200 Gepaid: TSD EPA ID: Not reported Gen County: Sacramento Tsd County: Los Angeles Tons: 0.20 Facility Address 2: Not reported

Other inorganic solid waste Waste Category:

Disposal Method: Disposal, Land Fill

Contact: JAMES BRIDGES/PLT SUP

Telephone: (916) 355-8339 Mailing Name: Not reported Mailing Address: 194 RANDALL DR FOLSOM, CA 95630

Not reported

County CAL000255200 Gepaid: TSD EPA ID: CAT080033681 Gen County: Sacramento Tsd County: Sacramento Tons: 0.15

Facility Address 2: Not reported Waste Category: Other organic solids Disposal Method: Disposal, Land Fill JAMES BRIDGES/PLT SUP Contact:

Telephone: (916) 355-8339

Distance (ft.)Site Database(s) EPA ID Number

CITY OF FOLSOM WATER TREATMENT PLANT (Continued)

S104796038

EDR ID Number

Mailing Name: FOLSOM WATER TREATMENT PLANT

Mailing Address: 194 RANDALL DR

FOLSOM, CA 95630

County Sacramento

Gepaid: CAC002205945
TSD EPA ID: CAD044003556
Gen County: Sacramento
Tsd County: Yolo
Tons: .4170

Facility Address 2: Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station
Contact: CITY OF FOLSOM
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 194 RANDALL DR

FOLSOM, CA 95630

County Sacramento

Gepaid: CAC001324496
TSD EPA ID: CAD044003556
Gen County: Sacramento
Tsd County: Yolo
Tons: .2085
Facility Address 2: Not reported

Waste Category: Unspecified oil-containing waste

Disposal Method: Transfer Station

Contact: CW ROWEN CONSTRUCTION

Telephone: (925) 837-5501 Mailing Name: Not reported Mailing Address: PO BOX 4

DANVILLE, CA 94526

County Sacramento

Sacramento ML:

Facility Id: Not reported

Number of Tanks: 0
WG Bill Code: 51
Food Bill Code: 51

Billing Codes BP: Out of Business
Billing Codes UST: No Tanks
Tier Permitting: Not reported
Risk Mgmt Protection Program: Not reported

FD: L Target Property Bill Code: 51

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

CITY OF FOLSOM WATER TREATMENT PLANT (Continued)

S104796038

Database(s)

EDR ID Number

EPA ID Number

Not reported Facility Id: Number of Tanks: Not reported WG Bill Code: 5306 Food Bill Code: Not reported Billing Codes BP: 5204 Billing Codes UST: Not reported Not reported Tier Permitting: Risk Mgmt Protection Program: 5902* Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported Not reported **UST Tank Test Date:** Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

TOM HOWARD MOVING SERVICE 45 236 SPENCER ST FOLSO, CA 95630

S105808269 Sacramento Co. ML

N/A

Sacramento ML:

Facility Id: Not reported

Number of Tanks: 0 WG Bill Code: 50 Food Bill Code: 50

Billing Codes BP: Disclaimer Billing Codes UST: No Tanks Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported

L

FD:

Target Property Bill Code: 50

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

CINGULAR WIRELESS 46 771 OAK AV PKWY FOLSOM, CA 95630

S102956466 Sacramento Co. ML N/A

Distance (ft.)Site Database(s) EPA ID Number

Not reported

CINGULAR WIRELESS (Continued)

S102956466

EDR ID Number

Sacramento ML:

Facility Id: Not reported Number of Tanks: Not reported WG Bill Code: Not reported Food Bill Code: Not reported Billing Codes BP: 5203 Billing Codes UST: Not reported Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported FD: Not reported Target Property Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Not reported Waste General Insp Date: Hazmat Date BP Received: Not reported

47 BLANCHE SPRENTZ ELEMENTARY SCHOOL 249 FLOWER DR FOLSOM, CA 95630 HAZNET \$106087454 N/A

HAZNET:

SIC Code:

Gepaid: CAC002552473
TSD EPA ID: Not reported
Gen County: Sacramento
Tsd County: San Joaquin
Tons: 3.36

Facility Address 2: Not reported

Waste Category:
Disposal Method:
Contact:
Telephone:
Mailing Address:
Disposal, Land Fill
GRANT SMITH
(916) 812-8693
Not reported
Mailing Address:
125 E BIDWELL ST

FOLSOM, CA 95630

County Not reported

Gepaid: CAC002552473

TSD EPA ID: Not reported

Gen County: Sacramento

Tsd County: 99

Tons: 99
Tons: 0.53
Facility Address 2: Not r

Facility Address 2: Not reported

Waste Category: Other inorganic solid waste

Disposal Method:
Contact:
Telephone:
Mailing Name:
Mailing Address:

Not reported
(916) 812-8693
Not reported
125 E BIDWELL ST

FOLSOM, CA 95630

County Not reported

EDR ID Number

Database(s) **EPA ID Number**

1000384008

CAD981668692

RCRA-SQG

FINDS

47 **FOLSOM CORDOVA USD BLANCHE SPRENTZ** 249 FLOWER CIRCLE FOLSOM, CA 95630

RCRAInfo:

NOT REQUIRED Owner:

> (415) 555-1212 CAD981668692

EPA ID: Contact: Not reported

Classification: **Small Quantity Generator**

TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

BLANCHE SPRENTZ ELEM. SCHOOL 47 249 FLOWER CR FOLSO, CA 95630

Sacramento ML:

Facility Id: Not reported

Number of Tanks: WG Bill Code: 50 Food Bill Code: 50 Billing Codes BP: Disclaimer Billing Codes UST: No Tanks Tier Permitting: Not reported Risk Mgmt Protection Program: Not reported

FD:

Target Property Bill Code: 50

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported HAZMAT Inspection Date: Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Waste General Insp Date: Not reported Hazmat Date BP Received: Not reported SIC Code: Not reported

SPRENTZ (BLANCHE) ELEMENTARY 47 249 FLOWER DR. FOLSOM, CA 95630

FINDS:

Other Pertinent Environmental Activity Identified at Site: NATIONAL CENTER FOR EDUCATION STATISTICS Sacramento Co. ML S105269177 N/A

> **FINDS** 1008312276 110022059458

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COUNTY	U001612913	FOLSOM DAM	SAME AS ABOVE	95630	HIST UST
EL DORADO	A100184481	PILOT HILL FFS	PEDRO HILL RD	95664	AST
EL DORADO HILLS	S105954489	PROMONTORY ELEMENTARY SCHOOL	3371 BRITTANY WAY	95762	SCH
EL DORADO HILLS	A100115649	BROWN'S RAVINE, FOLSOM LAKE	BROWN'S RAVINE-FOLSOM LAKE	95762	AST
EL DORADO HILLS	S104567748	CALIFORNIA EMERGENCY FOOD LINK	SW CORNER OF EL DORADO BLVD / PARK ST	95762	HAZNET
EL DORADO HILLS	S106932756	T-2 LIFT STATION	CROWN DR	95762	SWEEPS UST
EL DORADO HILLS	U001612933	T-2 LIFT STATION	CROWN DRIVE	95762	HIST UST
EL DORADO HILLS	S103678651	EL DORADO IRRIGATION DISTRICT	EL DORADO HILL BLVD AT THE END	95762	HAZNET
EL DORADO HILLS	1007490845	EL DORADO HILLS NATURALLY OCCURRING ASBESTOS	EL DORADO HILLS BOULEVARD	95762	CERCLIS
EL DORADO HILLS	U001612932	T-1 LIFT STATION	FRANCISCO DRIVE	95762	HIST UST
EL DORADO HILLS	S103979450	NORMAN L. CHRISTENSEN	6610 GREEN VALLEY	95762	HAZNET
EL DORADO HILLS	S105799364	HIGHLANDS VILLAGE LIFT	LAKERIDGE DRIVE	95762	HIST UST
EL DORADO HILLS	S106927286	HIGHLANDS VILLAGE LIFT STATION	LAKERIDGE DR	95762	SWEEPS UST
EL DORADO HILLS	U003895494	HIGHLANDS VILLAGE LIFT	LAKERIDGE DR	95762	UST
EL DORADO HILLS	S106929874	NEW YORK CREEK LIFT STATION	MALCOM DIXON RD	95762	SWEEPS UST
EL DORADO HILLS	U001612924	NEW YORK CREEK LIFT STA.	MALCOM DIXON ROAD	95762	HIST UST
EL DORADO HILLS	U001612923	MARINA VILLAGE LIFT STA.	MARINA LIFT ACCESS	95762	HIST UST, SWEEPS UST
EL DORADO HILLS	S103962540	EL DORADO IRRIGATION DISTRICT	1/4 MILE OFF CROWN DRIVE	95762	HAZNET
EL DORADO HILLS	S103962547	EL DORADO IRRIGATION DISTRICT	OFF MALCOLM DIXON RD	95762	HAZNET
EL DORADO HILLS	S107138334	WEIS RECYCLE CENTERS INC/RALEYS 424	3935 PARK DR STE A	95762	SWRCY
EL DORADO HILLS	U001612929	RIDGE VIEW LIFT STATION	POWERS DRIVE	95762	HIST UST
EL DORADO HILLS	S102808744	EL DORADO IRRIGATION DIST	RIDGE VIEW DRIVE	95762	HAZNET
EL DORADO HILLS	S104582412	MAIL WELL ENVELOPES	5220 ROBERT J MATTHEWS	95762	HAZNET
FOLSO	S102313061	FM 105 RADIO STATION	CARPENTER HILL	95630	Sacramento Co. ML
FOLSO	S105270869	FOLSOM STATION	OAKDALE / BIDWELL	95630	Sacramento Co. ML
FOLSOM	S106825831	AMERICAN RIVER ASPHALT	AMERICAN RIVER AGGREGATE DRIVE	95630	EMI
FOLSOM	S101332645	AMERICAN RIVER AGGREGATES	AMERICAN AGGREGRATE RD	95630	LUST, Cortese, Sacramento Co. CS, Sacramento Co. ML
FOLSOM	S106104291	FOLSOM AUTO MALL DEALERS ASSOC	AUTO MALL DRIVE		CA WDS
FOLSOM	92256680	BACK OF "B" FACILITY ON "NEW" FOLSOM IN BACK OF GUN RANGE, W	BACK OF "B" FACILITY ON "NEW" FOLSOM IN BACK OF GUN RANGE, W	95630	ERNS
FOLSOM	1006837391	FOLSOM EAST BIDWELL	EAST BIDWELL AND RILEY ROAD		FINDS
FOLSOM	S107139519	PG&E	E BIDWELL ST 2 MI N OF HWY 50	95630	HAZNET
FOLSOM	S107447344	FOLSOM HOT TUBS & BILLIARDS	411 BLUE RAVINE RD 100	95630	Sacramento Co. ML
FOLSOM	S103706855	N G CLEANERS	24988 BLUE RAVINE RD 112	95630	Sacramento Co. ML
FOLSOM	S106167335	N. G. CLEANERS	24988 BLUE RAVIN #112	95630	CLEANERS
FOLSOM	1006805760	COSTCO WHOLESALE #765	1800 CAVITT DR	95630	RCRA-SQG, FINDS
FOLSOM	1006873635	COSTCO WHOLESALE	1800 CAVITT CT	95630	Sacramento Co. ML
FOLSOM	S107538188		CORNER OF STAFFORD / NATOMA STREETS	95630	CDL
FOLSOM	1000252403	CALIFORNIA DEPT OF FORESTRY	#1 DAM ROAD	95630	RCRA-SQG, FINDS
FOLSOM	S106087401	TRI	7160 DOUGLAS BLVD	95630	HAZNET
FOLSOM	S106926291	FOLSOM LAKE MARINA/BROWN'S RAVINE	FOLSOM LAKE	95762	SWEEPS UST

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address		Database(s)
FOLSOM	1000250706	PACIFIC BELL C/O ALLEN UC048	2700 FOLSOM BLVD	95630	RCRA-SQG, FINDS
FOLSOM	S101590836	PRISON INDUSTRY AUTHORITY	1 FOLSOM DAM RD	95630	CA FID UST, Sacramento Co. ML, SWEEPS UST
FOLSOM	S106541814	P J CARPENTER DC	6693 FOLSOM AUBURN RD 6	95630	Sacramento Co. ML
FOLSOM	U001612918	GREEN VALLEY CONSERVATION CAMP	#1 FOLSOM DAM RD	95630	HAZNET, HIST UST
FOLSOM	S106873010	GOLD RUSH AUTO SPA	7620 FOLSOM-AUBURN RD	95630	Sacramento Co. ML
FOLSOM	S107447432	VERIZON WIRELESS BIDWELL	HALVERSON	95630	Sacramento Co. ML
FOLSOM	S101590673	CITY OF FOLSOM CORPORATION YD	1300 LEIDESDORFF ST	95630	CA FID UST, SWEEPS UST
FOLSOM	U001612908		1300 LEIDESDORFF STREET	95630	CHMIRS, HIST UST
FOLSOM	S106782287	FORMER FOLSOM LAKE FORD	9479B MADISON AVE		Sacramento Co. CS
FOLSOM	S107530806		211 MORMON ST	95630	CDL
FOLSOM	1007999742	LOCATED 200 FT. SSW OF FOLSOM CITY HALL	50 NATOMA STREET, FOLSOM		FINDS
FOLSOM	S106104277	CORRECTIONAL RESOURCE	560 E NATOMA ST # B	95630	CA WDS
FOLSOM	S105083541	PACIFIC GAS & ELECTRIC	2MI S OF FOLSOM ON OLD PLACERVILLE RD	95630	HAZNET
FOLSOM	S107540161		ORANGEVALE AVE / WINDING CANYON	95630	CDL
FOLSOM	S106967416	FOLSOM LAKE COLLISION CENTER	300 PLAZA DR	95630	Sacramento Co. ML
FOLSOM	1007218606	FOLSOM COLLISION CENTER	300 PLAZA DR	95630	FINDS
FOLSOM	1007117594	FOLSOM COLLISION CENTER	300 PLAZA DR	95630	RCRA-SQG
FOLSOM	S103672931	1X FOLSOM AUTO TECH	806 D REEDING STREET	95630	HAZNET
FOLSOM	S105982673	CALIF. DEPARTMENT OF CORRECTIONS, FOLSOM PRISON	REPRESA		SLIC
FOLSOM	1008312288	FOLSOM LAKE HIGH (CONT.)	715A RILEY ST.	95630	FINDS
FOLSOM	S106780526	FOLSOM LAKE COLLEGE	100 SCHOLAR WAY	95630	Sacramento Co. ML
FOLSOM	S106388144	BODYCRAFT COLLISION CNTR OF FOLSOM	1128 SIBLEY ST H	95630	Sacramento Co. ML
FOLSOM	S106152464	FOLSOM AUTO TECH	1126 SIBLEY ST A	95630	Sacramento Co. ML
FOLSOM	S101627823	WILSON RANCH	WHITE ROCK RD	95630	CA FID UST, SWEEPS UST
FOLSOM	S106388237	AMERICAN TOWER CORP SITE 8105, 8106	15125 WHITE ROCK RD	95630	Sacramento Co. ML
FOLSOM	U001612939	WILSON RANCH	WHITE ROCK ROAD	95630	HIST UST
FOLSOM	S101480011	WILLOW DUMP	WILLOW CREEK / BLUE RAVINE ROAD	95630	REF
GRANITE	S106534244	ELITE CLEANERS	4060 DOUGLAS BLVD 111	95746	CA PLACER CO. MS
GRANITE BAY	S106167408	ELITE CLEANERS	4060 DOUGLAS BLVD STE 111	95746	CLEANERS
GRANITE BAY	S104180982	P G & E (HORSESHOE SUBSTAT)	OAK KNOLL DR	95746	CA PLACER CO. MS
GRANITE BAY	S107540846		TALLPINE LANE, NORTH OF REBA DRIVE	95746	CDL
LO	S106715800	KODIAK ROOFING & WATERPROOFING CO.	3930A SIERRA COLLEGE BLVD	95650	CA PLACER CO. MS
LO	S106715801	KODIAK ROOFING & WATERPROOFING CO.	3930A SIERRA COLLEGE BLVD	95650	CA PLACER CO. MS
LOOMIS	S107504385	NEXTEL SITE:CA1398/LAIRD	5398 LAIRD RD	95650	CA PLACER CO. MS
LOOMIS	S104915660	SMITH, LEONARD E.	6200 OAK RIDGE ROAD	95650	CA PLACER CO. MS
LOOMIS	S104915638	SEARS CONSTRUCTION	ROCKCREST PHASE III	95650	CA PLACER CO. MS
LOOMIS	S107140161	KODIAK ROOFING INC	3930 SIERRA COLLEGE BLVD STE A	95650	HAZNET
LOOMIS	S107540682		SIERRA COLLEGE RD AT BANKHEAD RD	95650	CDL
ORANG	S105268002	MARCO MUFFLER	9282 AUBURN BL	95662	Sacramento Co. ML
PILOT HILL	S106932729	SWEETS PILOT HILL MARKET	4400 HIGHWAY 49	95664	SWEEPS UST
PILOT HILL	U001613455	SMITH'S PILOT HILL MARKET	HIGHWAY 49	95664	HIST UST
PILOT HILL	S106930590	PENINSULA CAMPGROUND	NEGRO HILL RD	95664	SWEEPS UST
PILOT HILL	U001613165	PENINSULA CAMPGROUND	NEGRO HILL ROAD	95664	HIST UST
PILOT HILL	S106930700	PILOT HILL F.F.S.	PEDRO HILL RD	95664	SWEEPS UST
PILOT HILL	U001613454	PILOT HILL F.F.S.	PEDRO HILL RD.	95664	HIST UST

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
RANCHO CORDOVA	S103679832	AEROJET GENERAL CORPORATION	SCOTT RD / WHITE RD	95630	HAZNET
ROCKLIN	S105675659		MIDAS AVE. AT NATHAN CT.	95650	CHMIRS, CA PLACER CO. MS
SACRAMENTO	S105954553	SACRAMENTO COUNTRY DAY SCHOOL	WHITE ROCK ROAD	95630	SCH
SACRAMENTO COUNTY	S106389177		VOID		HAZNET, CHMIRS
SACRAMENTO COUNTY	S105641112		TWITCHELL ISLAND ROAD .5 MI WEST OF RIO VISTA		CHMIRS, SLIC

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 11/29/2005 Source: EPA
Date Data Arrived at EDR: 01/31/2006 Telephone: N/A

Date Made Active in Reports: 02/27/2006 Last EDR Contact: 03/01/2006

Number of Days to Update: 27 Next Scheduled EDR Contact: 05/01/2006
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 8

Telephone 215-814-5418 Telephone: 303-312-6774

EPA Region 4

Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 11/29/2005 Source: EPA
Date Data Arrived at EDR: 01/31/2006 Telephone: N/A

Number of Days to Update: 27 Next Scheduled EDR Contact: 05/01/2006
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 11/29/2005 Source: EPA
Date Data Arrived at EDR: 01/31/2006 Telephone: N/A

Number of Days to Update: 27 Next Scheduled EDR Contact: 05/01/2006
Data Release Frequency: Quarterly

NPL RECOVERY: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA Telephone: 202-564-4267 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/24/2005 Date Data Arrived at EDR: 12/21/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 40

Source: EPA

Telephone: 703-413-0223 Last EDR Contact: 03/21/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 10/24/2005 Date Data Arrived at EDR: 12/21/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 40

Source: EPA

Telephone: 703-413-0223 Last EDR Contact: 03/21/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/29/2005 Date Data Arrived at EDR: 01/11/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 41

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/15/2005 Date Data Arrived at EDR: 12/28/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 33

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 03/01/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 01/12/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 40

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342 Last EDR Contact: 01/12/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 01/16/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 36

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/02/2005 Date Data Arrived at EDR: 08/12/2005

Date Made Active in Reports: 10/06/2005 Number of Days to Update: 55 Source: Environmental Protection Agency

Telephone: 703-603-8867 Last EDR Contact: 03/03/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/10/2005 Date Data Arrived at EDR: 02/11/2005 Date Made Active in Reports: 04/06/2005

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 703-603-8867 Last EDR Contact: 03/03/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004 Date Data Arrived at EDR: 02/08/2005 Date Made Active in Reports: 08/04/2005

Number of Days to Update: 177

Source: USGS

Telephone: 703-692-8801 Last EDR Contact: 02/06/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 01/19/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 33

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 01/19/2006

Next Scheduled EDR Contact: 04/03/2006

Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 11/29/2005 Date Data Arrived at EDR: 12/05/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 56

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 04/25/2005

Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/07/2005 Date Data Arrived at EDR: 01/06/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 46

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 01/04/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005 Date Data Arrived at EDR: 11/28/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 63

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 03/20/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2003 Date Data Arrived at EDR: 07/13/2005 Date Made Active in Reports: 08/17/2005

Number of Days to Update: 35

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 03/21/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002 Date Data Arrived at EDR: 04/27/2004 Date Made Active in Reports: 05/21/2004

Number of Days to Update: 24

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 01/17/2006 Date Data Arrived at EDR: 01/24/2006 Date Made Active in Reports: 02/27/2006

Number of Days to Update: 34

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 03/20/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 01/17/2006 Date Data Arrived at EDR: 01/24/2006 Date Made Active in Reports: 02/27/2006

Number of Days to Update: 34

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 03/20/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2003 Date Data Arrived at EDR: 01/03/2005 Date Made Active in Reports: 01/25/2005

Number of Days to Update: 22

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Annually

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/27/2005 Date Data Arrived at EDR: 02/08/2006 Date Made Active in Reports: 02/27/2006

Number of Days to Update: 19

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 02/08/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/18/2005 Date Data Arrived at EDR: 10/31/2005 Date Made Active in Reports: 12/20/2005

Number of Days to Update: 50

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 02/08/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/08/2005 Date Data Arrived at EDR: 12/27/2005 Date Made Active in Reports: 01/30/2006

Number of Days to Update: 34

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: Semi-Annually

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/09/2006 Date Data Arrived at EDR: 01/16/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 36

Source: EPA Telephone: N/A

Last EDR Contact: 01/03/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003 Date Data Arrived at EDR: 06/17/2005 Date Made Active in Reports: 08/04/2005

Number of Days to Update: 48

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 03/17/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

AWP: Annual Workplan Sites

Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous

substance sites targeted for cleanup.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 09/21/2005

Number of Days to Update: 23

Source: California Environmental Protection Agency

Telephone: 916-323-3400 Last EDR Contact: 03/16/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Annually

CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 09/21/2005

Number of Days to Update: 23

Telephone: 916-323-3400

Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

Source: Department of Toxic Substance Control

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of

Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services

Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

NFA: No Further Action Determination

This category contains properties at which DTSC has made a clear determination that the property does not pose a problem to the environment or to public health.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 10/06/2005

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

NFE: Properties Needing Further Evaluation

This category contains properties that are suspected of being contaminated. These are unconfirmed contaminated properties that need to be assessed using the PEA process. PEA in Progress indicates properties where DTSC is currently conducting a PEA. PEA Required indicates properties where DTSC has determined a PEA is required, but not currently underway.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 09/21/2005

Number of Days to Update: 23

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

REF: Unconfirmed Properties Referred to Another Agency

This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 10/06/2005

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 10/06/2005

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/30/2006

Next Scheduled EDR Contact: 05/01/2006 Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/08/2005 Date Data Arrived at EDR: 12/13/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 37

Source: Integrated Waste Management Board

Telephone: 916-341-6320 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Quarterly

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 12/19/2005 Date Data Arrived at EDR: 12/21/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 29

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 03/21/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 05/29/2001 Date Made Active in Reports: 07/26/2001

Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-9100 Last EDR Contact: 02/06/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 01/05/2006 Date Data Arrived at EDR: 01/09/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 22

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/09/2006 Date Data Arrived at EDR: 01/09/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 22

Source: State Water Resources Control Board

Telephone: 916-341-5752 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006

Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 916-542-5424 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-4130 Last EDR Contact: 02/06/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-346-7491 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-346-7491 Last EDR Contact: 01/04/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 01/15/2006 Date Data Arrived at EDR: 01/16/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 36

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 02/13/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Telephone: 707-576-2220 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills

and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 01/09/2006 Date Data Arrived at EDR: 01/09/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 22

Source: State Water Resources Control Board

Telephone: 916-341-5752 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006

Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 02/17/2006 Date Data Arrived at EDR: 02/17/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 24

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 02/13/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6600

Last EDR Contact: 01/23/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 01/06/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 01/17/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 35

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 01/17/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 12/14/2005 Date Data Arrived at EDR: 12/14/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 36

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Annually

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/09/2006 Date Data Arrived at EDR: 01/09/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 22

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Semi-Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

AST: Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 01/30/2006 Date Data Arrived at EDR: 01/30/2006 Date Made Active in Reports: 02/17/2006

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5712 Last EDR Contact: 01/30/2006

Next Scheduled EDR Contact: 05/01/2006 Data Release Frequency: Quarterly

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004 Date Data Arrived at EDR: 11/30/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 50

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006

Data Release Frequency: Varies

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993 Date Data Arrived at EDR: 11/01/1993 Date Made Active in Reports: 11/19/1993

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 01/03/2006 Date Data Arrived at EDR: 01/04/2006 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 15

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/03/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/29/2005 Date Made Active in Reports: 09/21/2005

Number of Days to Update: 23

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005 Date Data Arrived at EDR: 04/18/2005 Date Made Active in Reports: 05/06/2005

Number of Days to Update: 18

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 01/04/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 01/23/2006 Date Data Arrived at EDR: 01/24/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 28

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 01/23/2006

Next Scheduled EDR Contact: 04/24/2006

Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/10/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 31

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 02/08/2006

Next Scheduled EDR Contact: 04/24/2006

Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2003 Date Data Arrived at EDR: 10/11/2005 Date Made Active in Reports: 10/31/2005

Number of Days to Update: 20

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 02/24/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2003 Date Data Arrived at EDR: 07/19/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 23

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006

Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004 Date Data Arrived at EDR: 02/08/2005 Date Made Active in Reports: 08/04/2005

Number of Days to Update: 177

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 02/06/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Semi-Annually

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/07/2005 Date Data Arrived at EDR: 09/08/2005 Date Made Active in Reports: 10/31/2005

Number of Days to Update: 53

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 01/10/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Varies

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/01/2005 Date Data Arrived at EDR: 01/03/2006 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 16

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Varies

INDIAN UST: Underground Storage Tanks on Indian Land

Date of Government Version: 11/08/2005 Date Data Arrived at EDR: 11/09/2005 Date Made Active in Reports: 12/12/2005

Number of Days to Update: 33

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 02/16/2006 Date Data Arrived at EDR: 02/17/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 24

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 01/23/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Semi-Annually

Underground Tanks

Date of Government Version: 11/08/2005 Date Data Arrived at EDR: 11/10/2005 Date Made Active in Reports: 12/08/2005

Number of Days to Update: 28

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 02/27/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/09/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 41

Telephone: 925-646-2286 Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 05/29/2006 Data Release Frequency: Semi-Annually

Source: Contra Costa Health Services Department

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/18/2006 Date Data Arrived at EDR: 01/18/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 34

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 01/18/2006

Next Scheduled EDR Contact: 05/08/2006 Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/09/2005 Date Made Active in Reports: 01/11/2006

Number of Days to Update: 33

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 03/20/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 07/07/1999 Date Made Active in Reports: N/A Number of Days to Update: 0

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact: 07/06/1999 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

City of El Segundo Underground Storage Tank

Date of Government Version: 11/14/2005 Date Data Arrived at EDR: 11/14/2005 Date Made Active in Reports: 12/08/2005

Number of Days to Update: 24

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 02/27/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/2003 Date Data Arrived at EDR: 10/23/2003 Date Made Active in Reports: 11/26/2003

Number of Days to Update: 34

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 02/24/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Date of Government Version: 11/29/2005 Date Data Arrived at EDR: 12/01/2005 Date Made Active in Reports: 12/16/2005

Number of Days to Update: 15

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 02/27/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: Semi-Annually

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2005 Date Data Arrived at EDR: 01/30/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 22

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 02/13/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Date of Government Version: 02/14/2006 Date Data Arrived at EDR: 02/28/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 13

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 02/15/2006

Next Scheduled EDR Contact: 05/15/2006

Data Release Frequency: Varies

City of Los Angeles Landfills

Date of Government Version: 03/01/2005 Date Data Arrived at EDR: 03/18/2005 Date Made Active in Reports: 04/08/2005

Number of Days to Update: 21

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 06/12/2006

Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/05/2006 Date Data Arrived at EDR: 02/16/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 25

Source: Community Health Services Telephone: 323-890-7806

Last EDR Contact: 02/03/2006

Next Scheduled EDR Contact: 05/15/2006 Data Release Frequency: Annually

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/26/2005 Date Made Active in Reports: 09/28/2005

Number of Days to Update: 33

Source: Public Works Department Waste Management

Telephone: 415-499-6647 Last EDR Contact: 01/30/2006

Next Scheduled EDR Contact: 05/01/2006 Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

Date of Government Version: 12/27/2005 Date Data Arrived at EDR: 12/28/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 22

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Date of Government Version: 12/27/2005 Date Data Arrived at EDR: 12/28/2005 Date Made Active in Reports: 01/11/2006

Number of Days to Update: 14

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 12/01/2005 Date Data Arrived at EDR: 12/20/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 30

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 03/08/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 12/01/2005 Date Data Arrived at EDR: 12/20/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 30

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 03/08/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 12/01/2005 Date Data Arrived at EDR: 12/16/2005 Date Made Active in Reports: 01/11/2006

Number of Days to Update: 26

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 03/08/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/18/2006 Date Data Arrived at EDR: 01/18/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 34

Source: Placer County Health and Human Services Telephone: 530-889-7312

Last EDR Contact: 03/20/2006

Next Scheduled EDR Contact: 06/19/2006 Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Underground Storage Tank Tank List

Date of Government Version: 02/09/2006 Date Data Arrived at EDR: 02/10/2006 Date Made Active in Reports: 03/09/2006

Number of Days to Update: 27

Source: Health Services Agency Telephone: 951-358-5055 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Quarterly

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 02/09/2006 Date Data Arrived at EDR: 02/10/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 31

Source: Department of Public Health Telephone: 951-358-5055 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS - Contaminated Sites

Date of Government Version: 02/02/2006 Date Data Arrived at EDR: 02/13/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 28

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 01/30/2006

Next Scheduled EDR Contact: 05/01/2006 Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/2006 Date Data Arrived at EDR: 02/10/2006 Date Made Active in Reports: 03/13/2006

Number of Days to Update: 31

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 01/30/2006

Next Scheduled EDR Contact: 05/01/2006 Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/21/2005 Date Data Arrived at EDR: 12/21/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 29

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005 Date Data Arrived at EDR: 05/18/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 29

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 01/20/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2005 Date Data Arrived at EDR: 12/29/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 21

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

Date of Government Version: 12/07/2005 Date Data Arrived at EDR: 12/07/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 43

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

Underground Storage Tank Information

Date of Government Version: 12/07/2005 Date Data Arrived at EDR: 12/07/2005 Date Made Active in Reports: 01/11/2006

Number of Days to Update: 35

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Quarterly

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/09/2006 Date Data Arrived at EDR: 01/10/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 21

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Annually

Fuel Leak List

Date of Government Version: 01/11/2006 Date Data Arrived at EDR: 01/12/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 19

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 01/09/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: No Update Planned

LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 10/24/2005 Date Data Arrived at EDR: 11/28/2005 Date Made Active in Reports: 12/12/2005

Number of Days to Update: 14

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 12/27/2005

Next Scheduled EDR Contact: 03/27/2006 Data Release Frequency: Varies

Hazardous Material Facilities

Date of Government Version: 12/12/2005 Date Data Arrived at EDR: 12/12/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 38

Source: City of San Jose Fire Department

Telephone: 408-277-4659 Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 06/05/2006 Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

Date of Government Version: 12/13/2005 Date Data Arrived at EDR: 12/14/2005 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 36

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Quarterly

Underground Storage Tanks

Date of Government Version: 10/13/2005 Date Data Arrived at EDR: 10/31/2005 Date Made Active in Reports: 12/08/2005

Number of Days to Update: 38

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 03/13/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

Date of Government Version: 01/23/2006 Date Data Arrived at EDR: 01/23/2006 Date Made Active in Reports: 02/21/2006

Number of Days to Update: 29

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 01/23/2006

Next Scheduled EDR Contact: 04/24/2006 Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Date of Government Version: 12/31/0005 Date Data Arrived at EDR: 01/05/2006 Date Made Active in Reports: 01/31/2006

Number of Days to Update: 26

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 01/03/2006

Next Scheduled EDR Contact: 04/03/2006 Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/30/2005 Date Data Arrived at EDR: 01/04/2006 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 15

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2005 Date Data Arrived at EDR: 09/20/2005 Date Made Active in Reports: 10/06/2005

Number of Days to Update: 16

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 02/20/2006

Next Scheduled EDR Contact: 05/22/2006 Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/30/2005 Date Data Arrived at EDR: 01/03/2006 Date Made Active in Reports: 01/19/2006

Number of Days to Update: 16

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 03/15/2006

Next Scheduled EDR Contact: 06/12/2006 Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 12/29/2005 Date Data Arrived at EDR: 01/20/2006 Date Made Active in Reports: 02/15/2006

Number of Days to Update: 26

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 01/11/2006

Next Scheduled EDR Contact: 04/10/2006 Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 01/18/2006 Date Data Arrived at EDR: 02/09/2006 Date Made Active in Reports: 03/09/2006

Number of Days to Update: 28

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 01/16/2006

Next Scheduled EDR Contact: 04/17/2006 Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

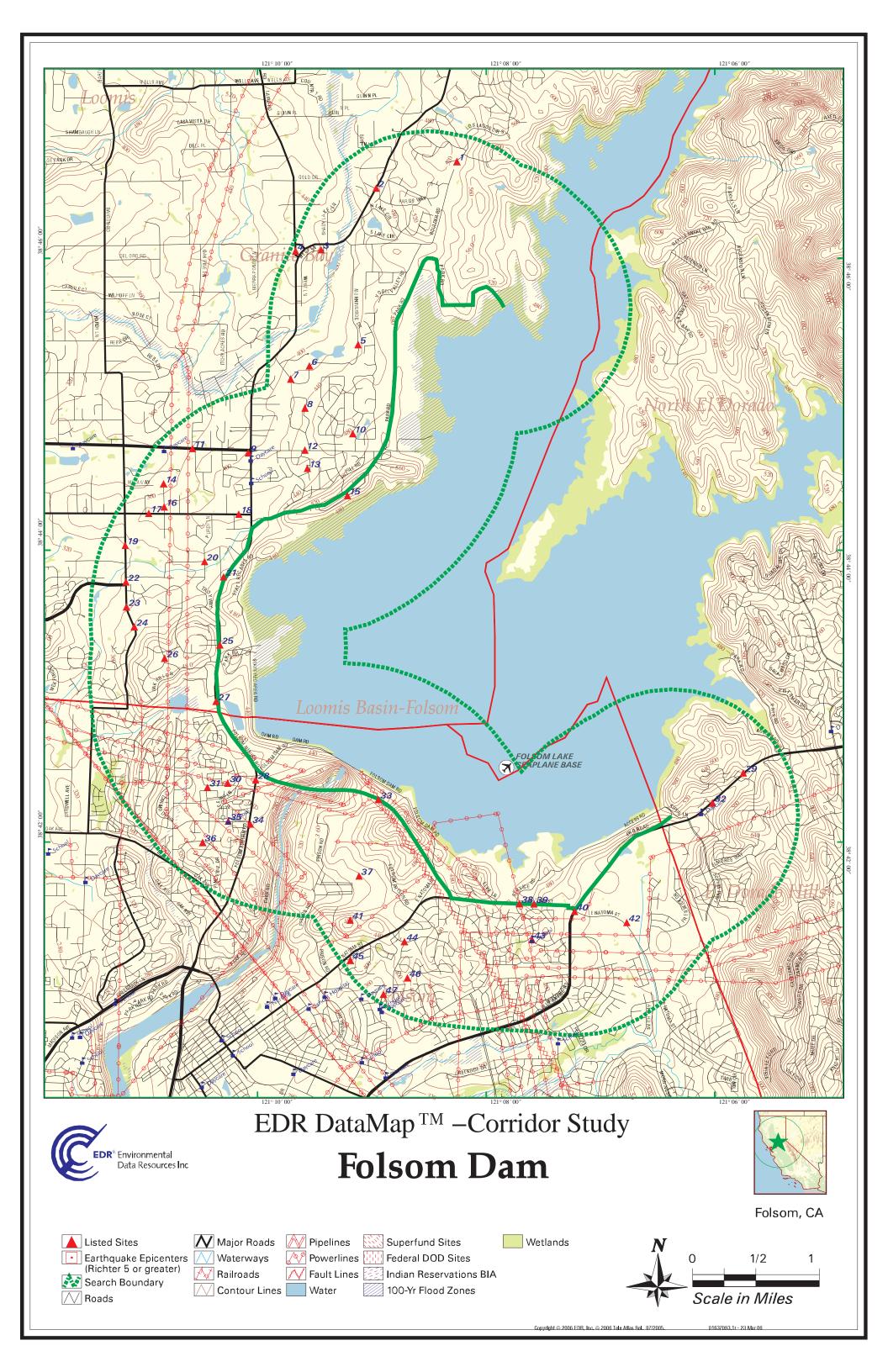
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Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

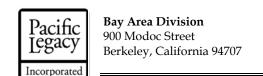
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Appendix I Cultural Resources Study



Phone: 510.524.3991 Fax: 510.524.4419 www.pacificlegacy.com

MEMO

To: John Wondolleck, CDM

From: Kevin M. Bartoy

1/12/06 Date:

Re: Fatal Flaw Analysis of Folsom Dam Project

John,

As per your request, we have assembled all pertinent cultural resources information related to the areas currently under consideration by the USBR for the Folsom Dam Project. Our data includes: information from surveys performed by Pacific Legacy; information from surveys performed by URS; and, information from previous surveys and records provided to Pacific Legacy by the USBR.

A total of 86 cultural resources have been identified within the areas currently under consideration. To our knowledge, none of these resources have been evaluated for National Register of Historic Places eligibility. We have provided a list of each area of the project as discussed at our meeting on 1/10/06. Identified resources have been listed in tables for each area under consideration.

Please feel free to contact me if you have any questions.

Dike 1 Contractor Area

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dikes 1, 2, and 3

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Beal / Granite Bay Borrow

The portion of this area located to the north of Mooney Ridge was previously surveyed by Far Western Anthropological Research Group in 1992 and was not resurveyed by URS upon consultation with Patrick Welch (USBR Archaeologist). The portion of this area located along and to the south of Mooney Ridge was surveyed by URS in 2005.

The Far Western survey resulted in the discovery of 24 cultural resources. These resources are listed in Table 1. The URS survey resulted in the discovery three new sites, two new isolates, and the re-recording or re-visiting of four previously known sites. These resources are listed in Table 2. An additional four sites were also noted by Pacific Legacy during our analysis of the records search. These sites were not noted during survey by URS and were not field checked.

Phone: 510.524.3991 Fax: 510.524.4419 www.pacificlegacy.com

These resources are listed in Table 3 and are located in the area south of Mooney Ridge.

Table 1. Sites previously recorded by Far Western (1992)

	Table 1. Sites previously recorded by Far Western (1992)					
Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation (Far Western 1992)		
CA-PLA-158/255	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1975	435-460	Auger and test excavations		
CA-PLA-248	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1977	420	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-254	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1977	380	Auger and test excavations		
CA-PLA-746	PREHISTORIC: Lithics	1992	410	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-747	PREHISTORIC: Groundstone and Lithics	1992	410	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-748	PREHISTORIC: Lithics	1992	400	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-749/H	PREHISTORIC AND HISTORIC: Lithics and Historic Debris	1992	420	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-750H	HISTORIC: Historic Debris	1992	410	Data potential exhausted by recordation		
CA-PLA-751	PREHISTORIC: Lithics	1992	425	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-752	PREHISTORIC: Lithics	1992	420	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-753	PREHISTORIC: Lithics	1992	415	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-754	PREHISTORIC: Groundstone and Lithics	1992	405	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-755	PREHISTORIC: Lithics	1992	418	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-756	PREHISTORIC: Lithics	1992	420	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-759	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1992	440	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-760	PREHISTORIC: Lithics (Potential Subsurface)	1992	405	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-761	PREHISTORIC: Groundstone and Lithics	1992	395	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-762	PREHISTORIC: Groundstone and Lithics	1992	425	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-763	PREHISTORIC: Groundstone and Lithics	1992	440	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)		
CA-PLA-764	PREHISTORIC: Groundstone and Lithics	1992	430	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-765	PREHISTORIC: Groundstone and Lithics	1992	425	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-768	PREHISTORIC: Groundstone and Lithics	1992	405	Surface collect, record, analyze, and auger to test midden potential		
CA-PLA-769/H	HISTORIC: Historic Debris	1992	480	Auger and test excavations		
FD-23/90-1	PREHISTORIC: Groundstone and Lithics	1991	440	Surface collect, record, analyze, and auger to test midden potential		

Table 2. Sites recorded and re-visited by URS (2005)

Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
CA-PLA-243	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1977	424	Not relocated during survey
CA-PLA-244	PREHISTORIC: Groundstone and Lithics	1977	426	None provided
CA-PLA-247H	HISTORIC: Historic Structure and Historic Debris	Unknown	390	Not relocated during survey
CA-PLA-520H	HISTORIC: Large Earthen Ditch	1992	460	Not relocated during survey
Site M-1	PREHISTORIC: Bedrock Mortars and Lithics	2005	420	None provided
Site M-2	PREHISTORIC: Groundstone and Lithics	2005	420	None provided
Site M-3	PREHISTORIC: Groundstone and Lithics	2005	420	None provided
Isolate I-18	PREHISTORIC: Groundstone Fragment	2005	435	None provided
Isolate I-19	PREHISTORIC: Portable Anvil Stone	2005	460	None provided

Table 3. Sites previously recorded and not field checked by URS (2005)

Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
CA-PLA-246	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1977	390	None provided
CA-PLA-249	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1977	415	None provided
CA-PLA-250H	HISTORIC: Concrete Structure near Flume	Unknown	400	None provided
CA-PLA-251H	HISTORIC: Historic Dump	Unknown	400	None provided

Dike 4 Contractor

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 4

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 5 Contractor 1

Two cultural resources were located during survey of area by Pacific Legacy. These resources are listed in Table 4.

Table 4. Sites recorded by Pacific Legacy (2006)

				, ,
Trinomial /	Description	Date	Elevation	Management Recommendation
Temporary No.		Recorded	(ft)	
PL-FDEIS-2	HISTORIC: Concrete-lined rectangular pit with no associated artifacts or features	2006	400	Flag and avoid. Document and evaluate through historical research and test excavation.

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egacy	Berkeley	, California 94707
Trinomi		Description

Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
PL-FDEIS-3	HISTORIC: Water conveyance system consisting of earthen ditch, concrete intake, and six concrete supports for an approximately 24-inch pipe, which no longer is extant	2006	400	Flag and avoid. Document and evaluate through historical research.

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 5 Contractor 2

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Beal / Dam Borrow

The portion of this area located to the south and east of Beals Point was previously surveyed by Far Western Anthropological Research Group in 1993 and was not resurveyed by URS upon consultation with Patrick Welch (USBR Archaeologist). The portion of this area located along Beals Point and to the north and west was surveyed by URS in 2005.

The Far Western survey resulted in the discovery of 10 cultural resources within the current project area and the re-recording of two previously known cultural resources. These resources are listed in Table 5. The URS survey resulted in the discovery of two new isolates. These resources are listed in Table 6. An additional seven previously recorded sites were also noted by Pacific Legacy during our analysis of the records search. These sites were not noted during survey by either Far Western or URS and were not field checked. The documents provided to Pacific Legacy by USBR did not include site records for six of these resources. These resources are listed in Table 7.

Table 5. Sites previously recorded by Far Western (1993)

Trinomial /	Description	Date Recorded	Elevation	Management Recommendation (Far Western 1992)
CA-PLA-253H	HISTORIC: Historic Structure	1993	(ft) 380	Historical research, surface collection, and subsurface testing
CA-PLA-520H	HISTORIC: Large Earthen Ditch	1992	460	None provided
FD-3(I)	PREHISTORIC: Shale Stemmed Projectile Point Basal Fragment	1993	410	None provided
FD-47	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1993	422	Auger and test excavations
FD-48	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1993	429	Auger and test excavations
FD-50/H	PREHISTORIC AND HISTORIC: Groundstone and Lithics (Potential Subsurface) and Historic Debris	1993	405	Auger and test excavations

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Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation (Far Western 1992)
FD-52	PREHISTORIC: Lithics (Potential Subsurface)	1993	410	Auger to test for subsurface deposit and, if none, apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)
FD-55	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1993	370	Auger and test excavations
FD-56/H	PREHISTORIC AND HISTORIC: Lithics (Potential Subsurface) and Historic Debris	1993	390	Auger to test for subsurface deposit and, if none, apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)
FD-57	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1993	410	Auger and test excavations
FD-58	PREHISTORIC: Lithics (Potential Subsurface)	1993	412	Apply Sparse Lithic Scatter Data Acquisition Program (Jackson et al. 1988)
FD-59	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1993	410	Auger and test excavations

Table 6. Sites recorded by URS (2005)

1 4515 11 51155 1555 1555 1555				
Trinomial /	Description	Date	Elevation	Management Recommendation
Temporary No.		Recorded	(ft)	
Isolate I-17	HISTORIC: Fourteen-inch-	2005	425	None provided
	diameter Ferrous Pipe			
Isolate I-20	PREHISTORIC: Basalt	1977	425	None provided
	Biface			

Table 7. Sites previously recorded and not field checked

Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
CA-PLA-435	PREHISTORIC: Groundstone and Lithics (Potential Subsurface)	1987	400-410	None provided
CA-PLA-947	Uknown	Uknown	400	None provided
CA-PLA-948	Uknown	Uknown	420	None provided
CA-PLA-949	Uknown	Uknown	420	None provided
CA-PLA-950	Uknown	Uknown	400	None provided
CA-PLA-955	Uknown	Uknown	400	None provided
CA-PLA-959	Uknown	Uknown	420	None provided

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 6 Contractor

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Right Wing Dam Haul

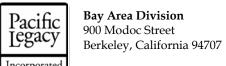
This area is covered under the discussion of Beal / Dam Borrow.

Right Wing Dam

No cultural resources located during survey of area by Pacific Legacy. Two previously recorded

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Legacy's survey. The resources are listed in Table 8.

Incorporated cultural resources were noted in the records search and were not relocated during Pacific

Table 8. Sites previously recorded and field checked by Pacific Legacy (2006)

Trinomial /	Description	Date	Elevation	Management Recommendation
Temporary No.		Recorded	(ft)	
CA-SAC-412	HISTORIC: Right-of-way of the Sacramento, Placer, and Nevada Railroad	1986	330	Resource recorded approximately one mile to southwest of project area and does not exist in projected location within project area
P-31-60	HISTORIC: One dressed stone noted in fill of American River Bike Path	1987	430	Data potential exhausted by recordation

Right Wing Dam Contractor

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Below Left Wing Dam

No cultural resources located during survey of area by Army Corps of Engineers. With consultation from Patrick Welch (USBR Archaeologist), Pacific Legacy did not survey area since it had previously been completely surveyed and noted that the area was greatly disturbed from dam construction. No previously recorded cultural resources.

Left Wing Dam Haul

This area is covered under the discussion of Dike 8 / MIAD Borrow.

Dike 7

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 7 Contractor

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 8

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Dike 8 / MIAD Borrow

This area was surveyed by URS in 2005. The URS survey resulted in the discovery of seven new isolates. These resources are listed in Table 9.

Table 9. Sites recorded by URS (2005)

1 4510 01 01100 10001404 57 0110 (2000)				
Trinomial /	Description	Date	Elevation	Management Recommendation
Temporary No.		Recorded	(ft)	
Isolate I-6	HISTORIC: Concrete Barrier Post	2005	450	None provided
Isolate I-7	HISTORIC: Iron Ferry Platform at end of Dike 8	2005	470	None provided

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Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
Isolate I-8	HISTORIC: Concrete Blocks at north end of Dike 8	2005	470	None provided
Isolate I-9	PREHISTORIC: Basalt Core	2005	450	None provided
Isolate I-21	PREHISTORIC: Basalt Flake and Quartzite Hammerstone	2005	450	None provided
Isolate I-22	PREHISTORIC: Obsidian Biface	2005	440	None provided
Isolate I-23	PREHISTORIC: Quartzite Flake	2005	440	None provided

MIAD Borrow 2 (AKA D2)

One cultural resource was located during survey of area by Pacific Legacy. This resource is listed in Table 10.

Table 10. Site recorded by Pacific Legacy (2006)

Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
PL-FDEIS-1	HISTORIC: Small Prospect Pit (3 m by 3 m) with no associated artifacts or features	2006	500	Flag and avoid. Document and evaluate through historical research and test excavation.

MIAD Borrow 1 (AKA D1)

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

MIAD

No cultural resources located during survey of area by Pacific Legacy. No previously recorded cultural resources.

Brown's Ravine Borrow

This area was surveyed by URS in 2005. The URS survey resulted in the discovery of ten new isolates and the re-recording of one previously known site. These resources are listed in Table 11. An additional five previously recorded sites were also noted by Pacific Legacy during our analysis of the records search. These sites were not noted during survey by URS and were not field checked. The documents provided to Pacific Legacy by USBR did not include site records for six of these resources. These resources are listed in Table 12.

Table 11. Sites recorded by URS (2005)

14515 111 51155 1555 1454 57 5115 (2555)				
Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation
Site FDSOD-3	PREHISTORIC: Bedrock Mortars, Groundstone, and Lithic Scatter	2004	443	None provided
Isolate I-1	HISTORIC: Red Brick Fragment	2005	400	None provided
Isolate I-2	HISTORIC: Two-inch- diameter Iron Pipe Fragment and White Ceramic	2005	400	None provided

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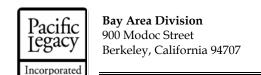
Trinomial / Temporary No.	Description	Date Recorded	Elevation (ft)	Management Recommendation	
Isolate I-3	HISTORIC: Wooden Platform, Iron Braces, and Willows	2005	400	None provided	
Isolate I-4	HISTORIC: Two-inch- diameter Iron Pipe	2005	430	None provided	
Isolate I-11	HISTORIC: Beer Can	2005	450	None provided	
Isolate I-12	HISTORIC: Ovate Schist Rock Pile and Red Brick Fragments	2005	450	None provided	
Isolate I-13	HISTORIC: Red Brick Fragment	2005	450	None provided	
Isolate I-14	HISTORIC: Corrugated Metal Pipe	2005	430	None provided	
Isolate I-16	HISTORIC: One-half-inch- diameter Iron Pipe	2005	450	None provided	
Isolate I-17	HISTORIC: Fourteen-inch- diameter Ferrous Pipe	2005	450	None provided	

Table 12. Sites previously recorded and not field checked					
Trinomial /	Description	Date	Elevation	Management Recommendation	
Temporary No.		Recorded	(ft)		
CA-ELD-261	PREHISTORIC:	1977	430-435	None provided	
	Groundstone and Lithics				
	(Potential Subsurface)				
Site FDSOD-1	HISTORIC: Historic	2004	405	None provided	
	Foundation, Trash Pit, and				
	Historic Debris				
Site FDSOD-2	HISTORIC: Historic	2004	410	None provided	
	Foundation, Footings,			·	
	Orchard, and Historic				
	Debris				
Site FDSOD-4	PREHISTORIC:	2004	422	None provided	
	Groundstone and Lithics				
Site FDSOD-5	PREHISTORIC:	2004	422	None provided	
	Groundstone and Lithics				

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Fax: 510.524.4419



MEMO

To: John Wondolleck, CDM

From: Kevin M. Bartoy

3/27/06 Date:

Fatal Flaw Analysis of Mississippi Bar and East Lake Natoma Borrow Sites Re:

John,

As per your request, we have assembled all pertinent cultural resources information related to the two borrow areas known as Mississippi Bar and East Lake Natoma. Our data includes information from previous surveys and records provided to Pacific Legacy by the USBR as well as information from previous surveys and records provided to Pacific Legacy from California State Parks, who currently administer the locations of Mississippi Bar and East Lake Natoma.

It appears that previous surveys have led to complete coverage of the areas under consideration. A total of six cultural resources have been identified within the areas currently under consideration. To our knowledge, only one of these resources has been evaluated for National Register of Historic Places (NRHP) eligibility. This resource, CA-SAC-308H, was determined eligible for listing on the NRHP. For each area, we have provided a brief summary of the studies and identified resources.

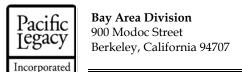
Please feel free to contact me if you have any questions.

Mississippi Bar

This potential borrow area has been the subject of previous survey by two previous studies. These studies include EDAW 2003, and Motz and Johnson 1980. It appears that these studies have resulted in a complete coverage of the current APE.

These studies have resulted in the discovery of two cultural resources: CA-SAC-308H; and, LN12.

CA-SAC-308H is located in the southeastern portion of the current APE. CA-SAC-308H is also known as the Natoma Ground Sluice Diggings or the Natoma Diggings. The site is a compilation of three cultural resources recorded during separate projects. The North Central Information Center concluded that due to their proximity and historical relationship, the three resources should be designated as a single historic property comprised of three loci (A-1, B-1, and C-1). Locus A-1 consists of leveled dredge tailings, Locus B-1 consists of approximately 68 mining related features, and Locus C-1 consists primarily of tailings piles. CA-SAC-308H has been determined eligible to the National Register of Historic Places (NRHP). Since CA-SAC-308H has been previously determined eligible for the NRHP, the current project would pose an adverse effect to this resource.



LN12 was identified by EDAW (2003). The site consists of early sluice and dredge tailings that may date as early as the 1840s. The dredging activities continued in this location until the early 1960s. Additional rock crushing activities were also carried out in this location most likely in the 1950s. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project.

East Lake Natoma

This potential borrow area has been the subject of previous survey by seven previous studies. These studies include: EDAW 2003; JRP and Far Western 1999; Motz and Johnson 1980; PAR 1999; and, Peak and Associates 1978, 1990, 1998. It appears that these studies have resulted in a complete coverage of the current APE.

The studies resulted in the discovery of five cultural resources. These resources include: CA-SAC-308H; LN1; LN3; IA2; and, IF1.

CA-SAC-308H is also known as the Natoma Ground Sluice Diggings or the Natoma Diggings. The site is a compilation of three cultural resources recorded during separate projects. The North Central Information Center concluded that due to their proximity and historical relationship, the three resources should be designated as a single historic property comprised of three loci (A-1, B-1, and C-1). Locus A-1 consists of leveled dredge tailings, Locus B-1 consists of approximately 68 mining related features, and Locus C-1 consists primarily of tailings piles. CA-SAC-308H has been determined eligible to the National Register of Historic Places (NRHP).

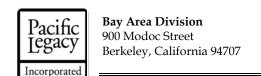
With the exception of a small portion of the APE to the southeast, CA-SAC-308H extends throughout the East Lake Natoma Borrow Area. Since CA-SAC-308H has been previously determined eligible for the NRHP, the current project would pose an adverse effect to this resource.

LN1 was identified by EDAW (2003). The site consists of an olive and fig orchard with an associated ditch and stand of eucalyptus trees. The trees were planted by the Natoma Company in the early twentieth century in an effort to prove that dredge property could be reclaimed. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project.

LN3 was identified by EDAW (2003). The site consists of a large cleared area with dredge tailings, historic artifact scatters, and concrete foundations. The site is most likely associated with rock crushing activities from the early 1950s. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project.

IA2 was identified by EDAW (2003). This isolated artifact is aprehistoric pestle/mano fragment.

IF1 was identified by EDAW (2003). This isolated feature consists of a concrete and rock foundation.



MEMO

To: John Wondolleck, CDM; Shawn Oliver, Bureau of Reclamation

From: Kevin M. Bartoy

4/3/06 Date:

Re: Fatal Flaw Analysis of Mississippi Bar and East Lake Natoma Borrow Sites

John,

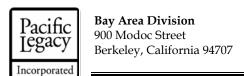
As per your request, we have assembled all pertinent cultural resources information related to the two borrow areas known as Mississippi Bar and East Lake Natoma. Our data includes information from previous surveys and records provided to Pacific Legacy by the USBR as well as information from previous surveys and records provided to Pacific Legacy from California State Parks, who currently administer the locations of Mississippi Bar and East Lake Natoma.

It appears that previous surveys have led to complete coverage of the areas under consideration. A total of six cultural resources have been identified within the areas currently under consideration. To our knowledge, only one of these resources has been evaluated for National Register of Historic Places (NRHP) eligibility. This resource, CA-SAC-308H, was determined eligible for listing on the NRHP. However, it is quite likely that the resource known as LN12 would also be determined eligible. For each area, we have provided a brief summary of the studies and identified resources.

For Mississippi Bar and East Lake Natoma to continue to be considered as borrow areas, the following cultural resources would have to be fully recorded and evaluated for eligibility to the NRHP: LN1 (historic orchard), LN3 (rock crushing site), and LN12 (sluice and dredge tailings). Additionally, the relationship of IF1 (possible rock crushing site) to CA-SAC-308H would have to be determined. It is possible that IF1 could be a contributing element to CA-SAC-308H. We anticipate that this research, fieldwork, and reporting would take two to three months to complete.

In addition to CA-SAC-308H being previously determined eligible to the NRHP, it is our opinion that LN12 would most likely be determined eligible as well. Given their status as historical resources, the current project would have an adverse effect on these resources and would require mitigation to reduce the impacts to a less than significant level. A mitigation plan would have to be developed and agreed upon in consultation with the Office of Historic Preservation and the State Historic Preservation Officer (SHPO). Project activities could not commence at Mississippi Bar and East Lake Natoma until an agreement on the mitigation plan was reached and the mitigation was completed. We anticipate that this process would take upwards of one year.

We estimate that the work required to meet Section 106 compliance for the borrow areas of



Mississippi Bar and East Lake Natoma would be approximately 14 to 15 months. We have not included a cost estimate in this memo, but we could prepare one at your request. Please feel free to contact me if you have any questions.

Mississippi Bar

This potential borrow area has been the subject of previous survey by two previous studies. These studies include EDAW 2003, and Motz and Johnson 1980. It appears that these studies have resulted in a complete coverage of the current APE.

These studies have resulted in the discovery of two cultural resources: CA-SAC-308H; and, LN12. These two resources encompass the entire potential borrow area at Mississippi Bar.

CA-SAC-308H is located in the southeastern portion of the current APE. CA-SAC-308H is also known as the Natoma Ground Sluice Diggings or the Natoma Diggings. The site is a compilation of three cultural resources recorded during separate projects. The North Central Information Center concluded that due to their proximity and historical relationship, the three resources should be designated as a single historic property comprised of three loci (A-1, B-1, and C-1). Locus A-1 consists of leveled dredge tailings, Locus B-1 consists of approximately 68 mining related features, and Locus C-1 consists primarily of tailings piles. CA-SAC-308H has been determined eligible to the National Register of Historic Places (NRHP). Since CA-SAC-308H has been previously determined eligible for the NRHP, the current project would pose an adverse effect to this resource.

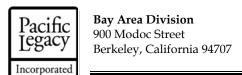
LN12 was identified by EDAW (2003). The site consists of early sluice and dredge tailings that may date as early as the 1840s. The dredging activities continued in this location until the early 1960s. Additional rock crushing activities were also carried out in this location most likely in the 1950s. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project. Based on its similarity to CA-SAC-308H, LN12 would most likely also be determined eligible for the NRHP.

East Lake Natoma

This potential borrow area has been the subject of previous survey by seven previous studies. These studies include: EDAW 2003; JRP and Far Western 1999; Motz and Johnson 1980; PAR 1999; and, Peak and Associates 1978, 1990, 1998. It appears that these studies have resulted in a complete coverage of the current APE.

The studies resulted in the discovery of five cultural resources. These resources include: CA-SAC-308H; LN1; LN3; IA2; and, IF1. These resources encompass the entire potential borrow area at East Lake Natoma.

CA-SAC-308H is also known as the Natoma Ground Sluice Diggings or the Natoma Diggings. The site is a compilation of three cultural resources recorded during separate projects. The North Central Information Center concluded that due to their proximity and historical relationship, the three resources should be designated as a single historic property comprised of three loci (A-1, B-1, and C-1). Locus A-1 consists of leveled dredge tailings, Locus B-1 consists of approximately 68 mining related features, and Locus C-1 consists primarily of tailings piles.



CA-SAC-308H has been determined eligible to the National Register of Historic Places (NRHP).

With the exception of a small portion of the APE to the southeast, CA-SAC-308H extends throughout the East Lake Natoma Borrow Area. Since CA-SAC-308H has been previously determined eligible for the NRHP, the current project would pose an adverse effect to this resource.

LN1 was identified by EDAW (2003). The site consists of an olive and fig orchard with an associated ditch and stand of eucalyptus trees. The trees were planted by the Natoma Company in the early twentieth century in an effort to prove that dredge property could be reclaimed. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project.

LN3 was identified by EDAW (2003). The site consists of a large cleared area with dredge tailings, historic artifact scatters, and concrete foundations. The site is most likely associated with rock crushing activities from the early 1950s. The site has not been subject to evaluation. The site would need to be evaluated for CRHR and NRHP eligibility as part of the current project.

IA2 was identified by EDAW (2003). This isolated artifact is a prehistoric pestle/mano fragment.

IF1 was identified by EDAW (2003). This isolated feature consists of a concrete and rock foundation.

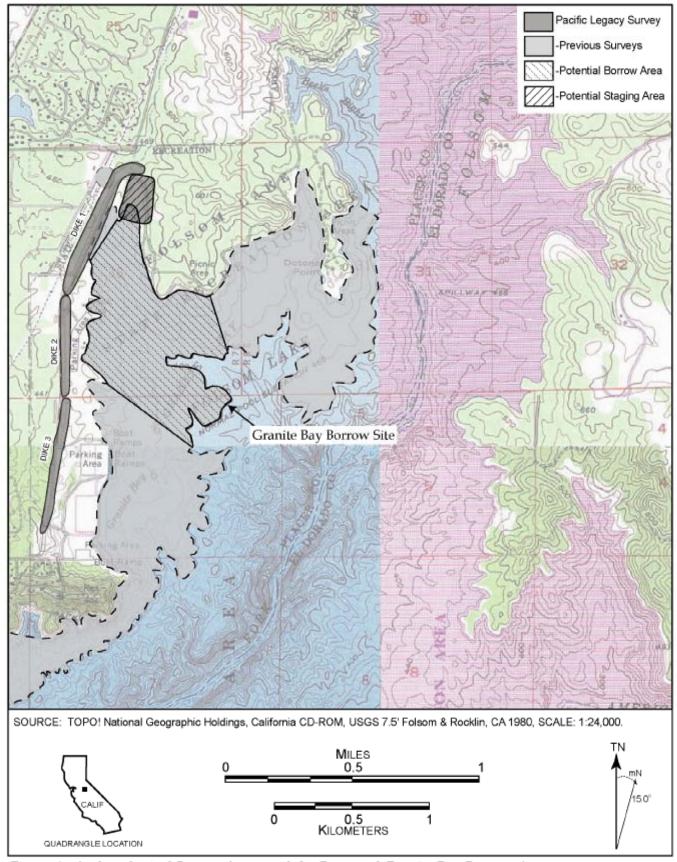


Figure 1. Archaeological Survey Areas and the Proposed Granite Bay Borrow Areas.



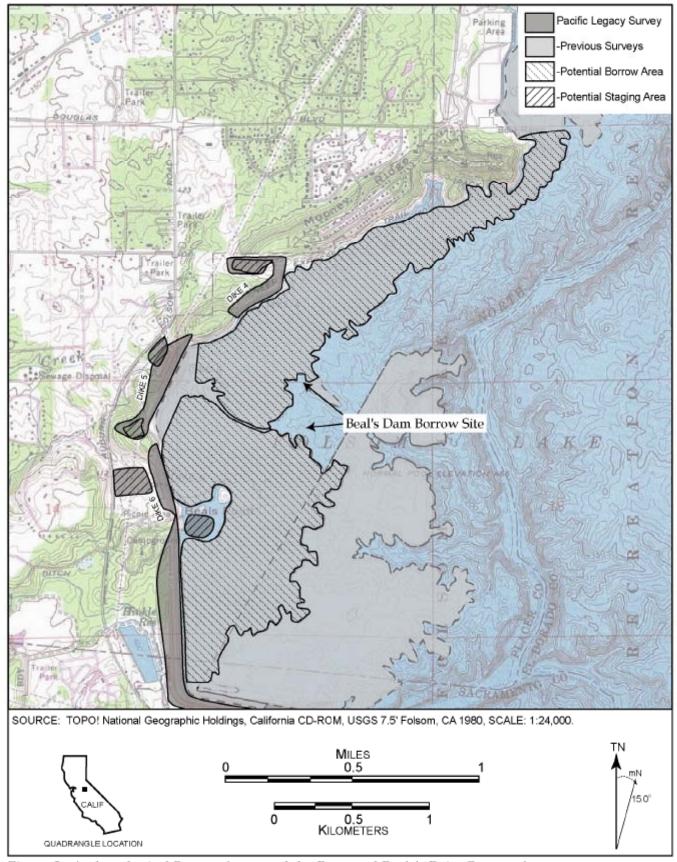


Figure 2. Archaeological Survey Areas and the Proposed Beals's Point Borrow Areas.



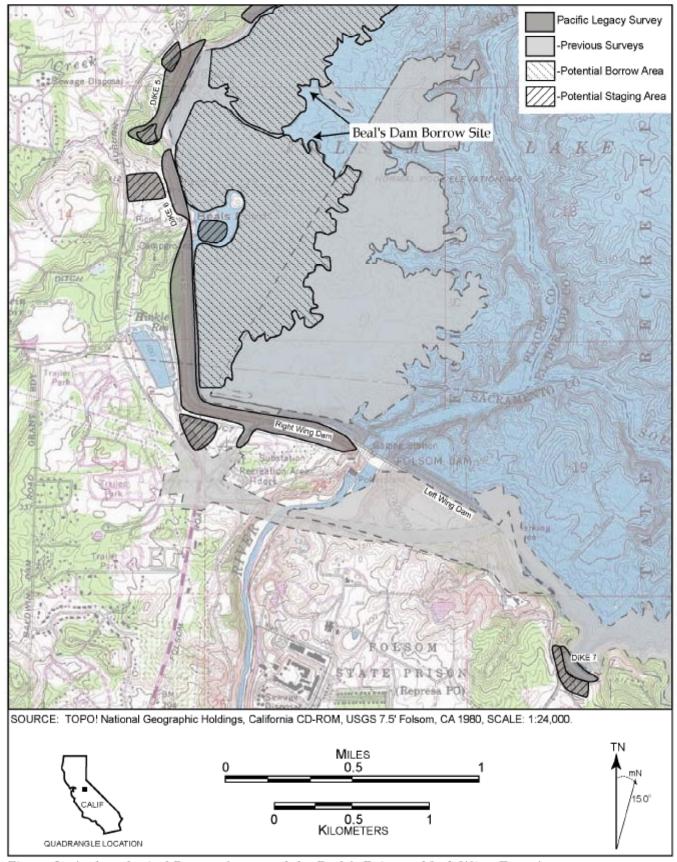


Figure 3. Archaeological Survey Areas and the Beals's Point and Left Wing Dam Areas.



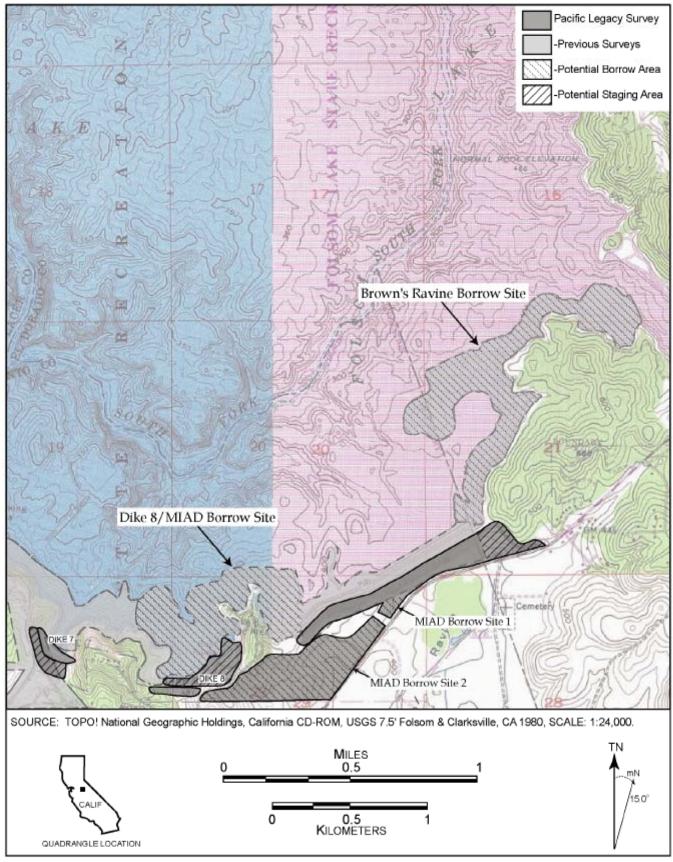


Figure 4. Archaeological Survey Areas and the Proposed MIAD and Brown's Ravine Borrow Areas.



Appendix J Trace Mercury and Total Metals

Joint Federal Project Auxiliary Spillway Folsom Lake Sediment Characterization Trace Mercury and Total Metals

RECLAMATION

Managing Water in the West



U.S. Bureau of Reclamation, Mid-Pacific Region Environmental Monitoring Branch, MP-157

Date: August 14, 2006

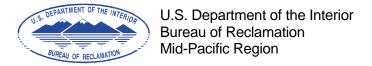


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Background

Folsom Reservoir is located approximately five miles east of Folsom, California on the American River. The Reservoir was completed in 1956 by the U.S. Army Corps of Engineers and transferred to the U.S. Bureau of Reclamation for coordinated operation as an integral part of the Central Valley Project. Folsom Dam provides flood control, power generation and water supply. Pursuant to Section 102(2) (C) of the National Environmental Policy Act of 1969 (NEPA), the Bureau of Reclamation (Reclamation) intends to prepare an EIS for the implementation of the safety modifications for Folsom Dam and Appurtenant Structures (Folsom Safety of Dams Project including the proposed auxiliary spillway). Reclamation seeks to improve public safety by modifying Folsom Facilities and its appurtenant structures to mitigate issues identified in previous and ongoing safety evaluations. Studies are being conducted by Reclamation to identify alternatives (modifications) to address these conditions. Engineering, Economic, and Environmental studies are being conducted to help determine reasonable design alternatives. Information gathered from the EIS process will be used in conjunction with engineering and economic principles to determine preferred alternatives.

The proposed auxiliary spillway is designed as a flood control alternative. Construction of an alternate spillway may lead to mobilization of sediment that would likely move downstream. These sediments may contain elemental mercury from historic mining operations, and metals from historic activities or geology in the American River drainage. The toxicity of mercury in the sediment to aquatic life and human health has been called into question. The purpose of this investigation is to determine whether these sediments are a hazard to aquatic life if allowed to flow downstream.

The area to be sampled for this project is within the confines of Folsom Lake and within the area of the lake that could be affected by various design concepts for the auxiliary spillway. The design in Figure 1 has an extent into the reservoir of approximately 600 feet. The sample plan extended this length to 2200 feet to encompass any additional plans such as Reclamations Fuse Plug design.

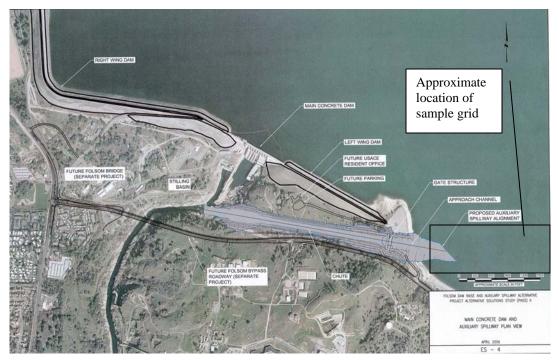


Figure 1: Site Location

Preliminary Site Assessment

A preliminary assessment was initiated to make visual observations on site conditions, record Global Position System (GPS) coordinates of the project area, and photograph the sampling area. The information collected from the initial assessment was used to design the sampling plan and detail the overall scope of work.

The purpose of this project is to determine the magnitude and spatial distribution of sedimentary metals contamination in the project work area. Based on this, the project area coordinates collected during the preliminary assessment were incorporated into a Geographic Information System (GIS) program that was able to generate 25 random sampling points within the project area. Preliminary sampling locations are shown in the Joint Federal Project Auxiliary Spillway Folsom Lake Quality Assurance Project Plan (QAPP) (Appendix A). Randomly assigning sampling points within the project area will provide a more representative sampling design that will more accurately display the distribution of sediment contamination. These points are spatially spread out over the project site from shallow to deep locations.

Site Characterization

Sampling Design and Methods

During sample collection, the individual site locations were identified using the sample grid within which 25 sites were randomly selected using available geospatial tools. Out of three randomizations proposed, one was selected as effective for this project. These sample sites were loaded into the GPS units to facilitate the location of sites in the field. Field collection of sites was further randomized due to wind, drift and wave activity.

GPS sample locations were downloaded and post processed to increase accuracy of site locations and plotted in appendix 4. The sample locations shown on this figure are a best attempt at showing the actual sample point. The GPS unit started collecting data when the sample device was first lowered and stopped when the sampler was retrieved. The sample locations shown are actually the midpoints of the line stored in the GPS.

The preferential sampling method was to utilize a gravity corer (Figure 2); this device was lowered into the bottom sediments where it trapped a vertical sediment profile in a thin-walled core barrel (clear polycarbonate). A positive check valve maintained a vacuum on the sample as it was recovered through the water column. Upon retrieval, the bottom of the core tube was capped (with core extruding plug or poly end cap) before breaking the air-water interface to prevent loss of sample.

When the sample was retrieved, a photo was taken of the intact core (Figure 3). Notes were recorded on the time of collection, depth of sample, field ID and length of core. The sample was then transferred to a certified clean plastic cubitaner for later processing.

Sample Collection

Originally, twenty five sampling sites were identified; however, samples were only collected at eighteen of those sampling sites. At least three attempts were made to collect a sample. If the first attempt was not successful then another was attempted nearby. After the third attempt the site was abandoned or an attempt was made to collect the sample using a clam shell "Ponar".



Figure 2: Gravity Core

The Ponar was utilized only once at site 14 where a small bite of coarse grain decomposed granite was recovered. Due to the absence of sediment in this sample, the sample was discarded and the site abandoned (Figure 4).



Figure 3: Average sample collected in gravity corer tube



 $\label{eq:Figure 4: Coarse grain decomposed gravel - discarded sample (shown in cubitainer)} \\$

Sample Processing

Once the samples were collected they were transported on ice to Reclamation's lab facility for processing. Since the entire core and associated water column in the sampler were placed in the cubitainer, it was first necessary to decant the excess water prior to homogenization of the sample. This decanted water was saved for future use as wash water as described below. Samples were then homogenized in the sample cubitaner by mixing the material with a clean, plastic spatula.

Two sets of material were taken from each sample. The first set removed was for total metals. This material needed no further processing and was placed in a certified clean plastic sample bottle (500 ml wide mouth HDPE, pc class).

The second set removed was for the trace mercury sample. Due to the fine grain consistency of all the samples collected, it was not necessary to first sieve any large grain particles, as stated in the QAPP. After some trial and error using the sieve frame method stated in the QAPP, the method was modified.

Using the modified method, the 63 micron mesh was placed directly onto the sample container. Small amounts of sample material were placed onto the mesh and worked into the sample container using the rounded end of the spatula. The material was also rinsed with the decanted sample water in order to facilitate the movement of the material through the mesh. To ensure that the minimum weight of material was sieved for analysis, a clean sample bottle was filled with deionized water and the weight tarred for comparison to the filled sample bottle.

Site Characterization Results

The initial concern for this sampling effort was to determine if mercury levels in the sediment in the project area could become re-suspended during construction or operation. It was also determined to be beneficial to obtain additional metals results at the same time.

Of the 38 metals that were analyzed, only ten had criteria for sediment. These were: Antimony, Arsenic, Cadmium, Copper, Lead, Mercury, Nickel, Selenium, Silver, and Zinc. Other than the mercury standard discussed below, the results were first compared to goals in the Dredged Material Evaluation Framework¹. If a goal for a particular metal was not found in this document, or if a more stringent one was available, the number came from California Regional Water Quality

¹ Dredged Material Evaluation Framework. Lower Columbia River Management Area, November 1998.

Control Boards – San Francisco Bay Region – Class 1 Disposal Option Sediment Screening Criteria. This reference was found in Compilation of Sediment and Soil Standards². Criteria were also compared to the San Francisco Bay Regions Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines³ using the criteria for wetland foundation material concentrations. If no sediment standard was available, the soil standard from the California Department of Toxics Substance – Soil Criteria for TTLC was included.

The *Dredged Material Evaluation Framework (DMF)* was developed in November 1998 by the U.S. Army Corp of Engineers, U.S. Environmental Protection Agency, Washington Departments of Ecology and Natural Resources, and the Oregon Department of Environmental Quality. This manual was developed as a guidance document for dredging and aquatic disposal of that dredged material. Construction and operation of the Auxiliary Spillway could mimic dredging activities.

In Tier I of this tiered evaluation approach, the DMF first examines the history of the site by looking at upstream land use practices. If the information shows that none of the chemicals of concern were present in the watershed and none have been detected in the sediment, it supports a decision for unconfined aquatic disposal, and no additional tests are necessary.

Tier II is designed to provide a reliable screen to predict potential contaminate effects from discharge of the sediment, and it is comprised of two sub-tiers. Sub-tier IIA requires a physical examination of the sediment and Sub-tier IIB requires the sediment be tested for chemicals of concern.

The DMF screening levels used in appendix 2 come from the Tier IIB testing which are designed to assess the presence of chemicals of concern. These chemicals of concern generally have the following characteristics.

- A demonstrated or suspected adverse biological or human health effect.
- A relatively widespread distribution and high concentration when compared to natural or background conditions.

² Compilation of Sediment and Soil Standards. Criteria and Guidelines, State of California, Department of Water Resources, February 1995.

³ Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines, Draft Staff Report, San Francisco Bay Regional Water Quality Control Board, May 2000 (For Planning Purposes Only)

- A potential for remaining in a toxic form for long periods in the environment (persistent).
- A potential for entering the food web (bioavailability).

The screening level for mercury was obtained from the California Central Valley Regional Water Quality Control Board. This standard of 0.2 mg/kg is intended to define the fractional portion of the mercury that can easily be re-suspended and stay in suspension. It is for this reason that only the portion of the sample that passed through a 63 micron mesh was analyzed.

Of the 18 samples that were collected, only two reached the threshold of 0.2 mg/kg hg (site 2 and site 19). The mean of all sites was 0.16 mg/kg Hg (figure 5).

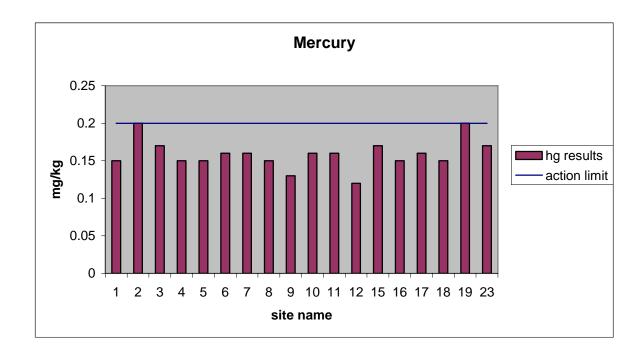


Figure 5: Mercury results

Of all the samples analyzed for metals, no results met or exceeded any of the sediment standards, and as a result would be suitable for unconfined aquatic disposal.

Quality Assurance

All field samples were collected by monitoring personnel in accordance with procedures listed in the QAPP (Appendix I sections VII-VIII). A specific summary of quality assurance for this project is incorporated in the report in Appendix 3.

To assess laboratory performance, Reclamation monitoring and/or QA personnel incorporated reference, duplicate and blank samples as blind samples. These samples were labeled similarly to the environmental samples and their true values were not revealed to the laboratory. QA samples were incorporated at the rates described in the QAPP (Appendix I section XI).

The laboratories incorporated internal QC check samples to ensure data reliability. For specific rates of QC check sample incorporation, refer to the laboratory QA manuals. Laboratory QC check sample results were reported as QC summary reports.

Data reports were received by Reclamation, the data was validated and the results were entered into a secure database as explained in the QAPP (Appendix I section XVII).

Precision

Reference duplicate samples provided precision information for the entire measurement system including sample acquisition, homogeneity, handling, shipping, storage, preparation, and analysis. Duplicate samples were analyzed by the laboratory for the same parameters as the primary samples.

Accuracy

Reference samples provided accuracy information for sample analysis. Reference samples were analyzed for the same parameters as the field samples.

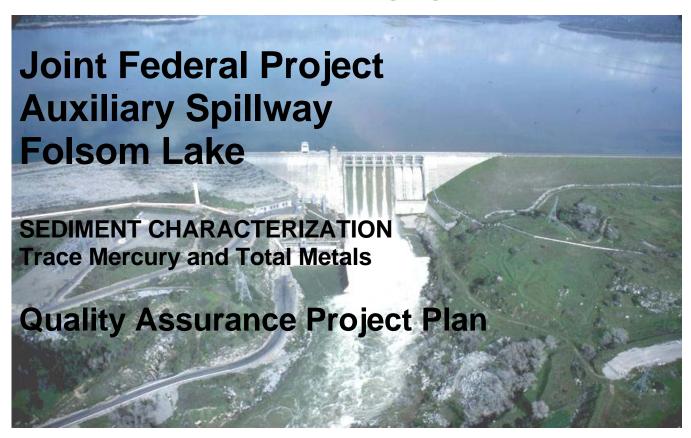
Contamination

Blank samples provided contamination information for sample preparation and analysis. Blank samples were analyzed for the same parameters as the field samples.

Appendix 1 Quality Assurance Project Plan

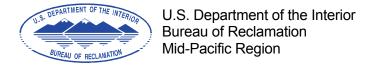
RECLAMATION

Managing Water in the West



U.S. Bureau of Reclamation, Mid-Pacific Region Environmental Monitoring Branch, MP-157

Date: June 7, 2006



Integrated Federal Action Auxiliary Spillway Folsom Lake

SEDIMENT CHARACTERIZATION Trace Mercury and Total Metals

Rev 1

Quality Assurance Project Plan

U.S. Bureau of Reclamation, Mid-Pacific Region Environmental Monitoring Branch, MP-157

Environmental Monitoring Team Project Manager	Date
Quality Assurance Team Project Manager	Date
Data Management Team Project Manager	 Date

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Project Management

I. Project/Task Organization

Personnel from the Environmental Monitoring Branch (MP157) will maintain and review this QAPP. Additionally, personnel from MP157 will collect the samples, incorporate external quality assurance samples, validate the analytical data, write a quality assurance summary report, enter data into the Environmental Monitoring Branch database, and write a data assessment. Individuals from MP157 responsible for these tasks are:

Stuart Angerer, 916-978-5046 Melanie Lowe, 916-978-5238 John Fields, 916-978-5280 Satpal Kalsi, 916-978-5278 Monitoring Coordinator Quality Assurance Specialist Site Manager Database Manager

Laboratory analysis will be performed by DataChem Laboratories, Inc. (sediment samples)

Kevin Griffiths, 801-904-4302

Project Manager - DataChem

II. Problem Definition/Background

Folsom Reservoir is located approximately five miles east of Folsom, California on the American River. The Reservoir was completed in 1956 by the U.S. Army Corps of Engineers and transferred to the U.S. Bureau of Reclamation for coordinated operation as an integral part of the Central Valley Project. Folsom Dam provides flood control, power generation and water supply. Sediment in the project area that may be mobilized would likely move downstream with the construction of an alternate spillway. The toxicity of mercury in the sediment to aquatic life and human health has been called into question. The purpose of this investigation is to determine whether these sediments are a hazard to aquatic life if allowed to flow downstream.

Pursuant to Section 102(2) (C) of the National Environmental Policy Act of 1969 (NEPA), the Bureau of Reclamation (Reclamation) intends to prepare an EIS for the implementation of the safety modifications for Folsom Dam and Appurtenant Structures (Folsom Safety of Dams Project including the proposed auxiliary spillway). Reclamation seeks to improve public safety by modifying Folsom Facilities and its appurtenant structures (Folsom Facilities) to mitigate issues identified in previous and ongoing safety evaluations. Studies are being conducted by Reclamation to identify alternatives (modifications) to address these conditions. Engineering, Economic, and Environmental studies are being conducted to help determine reasonable design alternatives. Information gathered from the EIS process will be used in conjunction with engineering and economic principles to determine preferred alternatives.

III. Project/Task Description

Sediment associated with the project area in Folsom Reservoir may contain elemental mercury from historic mining operations and metals from historic activities or geology in the American River drainage. Bottom sediment will be collected from the reservoir in the area defined as the footprint of the proposed spillway site and the approach leading up to this footprint (figure 1). This sampling will be conducted during full pool operations necessitating collecting these samples through the water column.

Three different sampling methods may be employed to collect the samples. The preferential method will be to utilize a gravity corer. Secondarily a "Ponar" clam shell type sampler or a US BMH-60 bed-material sampler will be used. It is anticipated that the sediments in the higher elevation of the reservoir will be thinner and coarser than those found at depth. These thin, coarse samples may be difficult to retrieve with the gravity corer.

Full core lengths will be composited to create one sample from each location. Subsets of this composite will make up two samples, one for total metals and one for trace mercury. The total metals sample will be sent to the lab "as is" for drying and analysis. The trace mercury sample will be sieved through a 63 micron mesh and sent wet to the lab for drying and analysis.

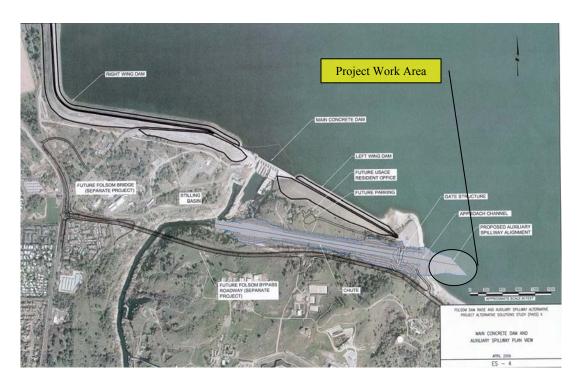


Figure 1: Site Location (approximate – several working plans)

IV. Quality Objectives and Criteria

Parameter	Reporting Limit	Action Limit	Accuracy	Precision	Contamination	Completeness
Mercury: EPA 7471	.0067 mg/kg	0.2 mg/kg dry weight	65 – 135%	< 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Metals: EPA 6020						
Aluminum	3 µg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Antimony	0.6 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Arsenic	0.4 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Barium	0.4 µg/g	n/a	65 – 135%		< 2RL	100%
Beryllium	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Boron	2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Cadmium	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Cerium	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Cesium	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Chromium	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Cobalt	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Copper	0.4 µg/g	n/a	65 – 135%		< 2RL	100%
Gallium	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Gold	0.9 µg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Iron	9 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Lead	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Lithium	0.4 µg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Magnesium	3 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Manganese	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Molybdenum	0.2 μg/g	n/a	65 – 135%	<u><</u> 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Nickel	0.4 μg/g	n/a	65 – 135%		< 2RL	100%
Palladium	0.3 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Platinum	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Potassium	4 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Selenium	0.9 μg/g	n/a	65 – 135%		< 2RL	100%
Silver	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Sodium	6 μg/g	n/a	65 – 135%		< 2RL	100%
Strontium	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Tellurium	0.3 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Thallium	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Tin	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Titanium	1 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Total Thorium	0.2 μg/g	n/a	65 – 135%	≤ 35% RPD or ±2RL (<5xRL)	< 2RL	100%
Total Uranium	0.2 μg/g	n/a	65 – 135%		< 2RL	100%
Tungsten	0.3 µg/g	n/a	65 – 135%		< 2RL	100%
Vanadium	0.4 μg/g	n/a	65 – 135%		< 2RL	100%
Zinc	0.8 μg/g	n/a	65 – 135%	<u><</u> 35% RPD or ±2RL (<5xRL)	< 2RL	100%

Representativness

To ensure samples are representative, they will be collected from 20-25 randomly generated points throughout the sampling footprint. Four samples will have collocated twins. Samples will be thoroughly homogenized before processing.

Comparability

To ensure data comparability, all samples are collected and homogenized following the same methods. It is possible that some samples may not be collected with the same sediment collecting device due to the unknown composition of the reservoir floor. Alternative sample collection equipment has been pre-selected and designated for collection. Additionally, the laboratory processes and analyzes all samples identically.

Method Sensitivity

The chosen analytical methods need to have detection limits at least three to five times below the action limit. This helps ensure the accuracy of results close to the action limit.

V. Special Training/Certifications

No special training is required,

VI. Documentation and Records

Sample Numbering System

All samples will be assigned unique identification numbers in the format of FSS###. (Folsom Sediment Sample 001)

Sample Labels

All samples will be labeled with at least the following information:

- Identification number
- Date
- Analysis required

Field Logbook

A bound field notebook will be used to record at least the following information:

- Project name
- Site location
- Date
- Start Time
- End Time
- QA Type
- Method of Sampling
- Parameters Collected

- Project manager
- Sample identification number
- Name of visitors and other persons on site
- Sampler's Signature
- Conditions that may affect sample
- Any significant observations or events

The field notebook will be maintained by the Project Leader, who will sign and date the notebook prior to initiation of field work. Corrections to erroneous data will be made by crossing a line through the entry and entering the correct information. The correction will be initialed and dated by the person making the entry. Unused portions of logbook pages will be crossed out, signed, and dated at the end of each work day. Logbook entries must be dated, legible, in ink, and contain accurate documentation. Language used will be objective, factual, and free of personal opinions.

Field Log Sheets and Chain of Custody

The following information will be recorded on field log sheets and the chain of custody (COC):

- Project name
- Sample identification number
- Sampling location
- Type of sample media
- Laboratory analysis
- Date and/or time of sample preparation and collection
- Personnel who conducted sampling

Spike Book

The QA specialist is responsible for documenting the necessary information pertaining to the QA samples in the spike book. A spike book is a bound notebook that contains spike worksheets. Documentation on the spike worksheet includes the following information:

- Project name
- Number of samples
- Collection date
- Batch identification number
- Range of sample ID numbers assigned to the batch of samples
- Range of laboratory ID numbers assigned to the batch of samples
- Site name for the selected QA site
- Types of QA samples incorporated
- Field IDs that correspond to the QA samples
- Source ID for reference material used
- Historical background levels for parameters
- Reporting limits for parameters

Dated initials of QA personnel incorporating the external QA samples

Analytical Report

The laboratory produces the analytical report which contains laboratory data results. The analytical report documents the analytical results for each parameter analyzed on each sample submitted. The analytical report generally includes the following information:

- Case narrative
- Analytical results
- Reporting limits (RL) for parameters
- Methods used to analyze the sample(s)
- Date sample(s) was/were collected, prepared, and analyzed
- Laboratory's quality control results

Data Generation and Acquisition

VII. Sampling Process Design

This sampling event is designed to determine the magnitude and spatial distribution of sedimentary metals contamination in the project work area.

Twenty five randomly generated sample points have been generated to assess the project site. These points are spatially spread out over the project site from shallow to deep locations and include four points with collocated twins for representativness.

Variability in sample results is anticipated in a dynamic system. Near shore sample points are thought to have thinner sediment accumulations than deeper sites. Uniform metals contamination is not likely. An attempt will be made, based on the results, to map spatial variation in contaminate types and levels.

If a sample cannot be collected from a site then attempts will be made to collect that sample at a nearby location. A random compass heading will be selected and a new sample attempt will be made at a point approximately 30 meters in that direction. This new site will be given a unique identification number and its position captured by GPS.

Sampling is scheduled for June 22 & 23, 2006. Samples processing will be attempted in the field. If field processing becomes cumbersome, samples will be taken back to MP-157's lab facility for homogenization and sieving. Samples will be sent to the contract analytical laboratory during the following week.

Mercury results are to be considered the critical component of this sampling effort. Fully qualified results are needed by the middle of August 2006 to assess the data and report on it by September 2006.

VIII. Sampling Methods

The sample area identified in figure 1 (pg 5) will be incorporated into a Geographic Information System (GIS) to obtain the area coordinates. Once the coordinates are known, GIS can generate random sampling points within the project area. (See Appendix A pg 15) The coordinates generated can then be loaded into a field ready Global Positioning System utilizing "beacon on the belt" technology to locate the sampling points in the field within one meter.

The preferential sampling method is to utilize a gravity corer; this device is lowered into the bottom sediments and traps a vertical sediment profile in a thin-walled core barrel (clear polycarbonate). A positive check valve maintains a vacuum on the sample as it is recovered through the water column. A slide hammer can also be utilized to drive the core barrel further into the sediments if necessary. Upon retrieval, the bottom of the core tube is capped before breaking the air-water interface (with core extruding plug or poly end cap) to prevent loss of sample.

When the sample is retrieved a photo will be taken of the intact core. Notes will be recorded on the time of collection, depth of sample, field ID, length of core, and physical characteristics of the core (i.e. layering of fine or coarse grain sediments or pockets) The sample will be extruded into a plastic mixing bowl using the core extruding tool. The sample will then be homogenized and a representative sample of predetermined size will be placed into the sample bottle.

The secondary sampling method is to utilize a Ponar sampler. A Ponar dredge is a heavyweight sediment sampling device with weighted jaws that is lever activated. It is used to collect consolidated fine to coarse textured sediment.

If the gravity corer is unable to collect suitable samples the Ponar will be employed to attempt collection. The device is lowered to the bottom where it is tripped to close when its hanging weight is removed. The sample is brought to the surface where any free liquid is decanted through the top screens. The sample is then emptied into a stainless steel mixing bowl for homogenization.



Figure 2 : Ponar (L) and Gravity Corer (R)

If neither of the two previous methods are able to retrieve a sample then a US BMH-60 bed-material sampler will used in an attempt to obtain a surface sediment sample.



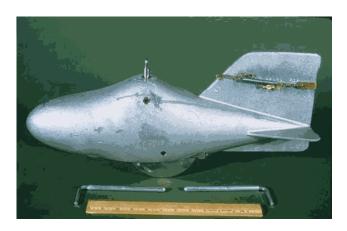


Figure 3: BMH-60 bed material sampler

The preferred method for sample collection in this study will be to utilize the gravity corer. Contamination will be kept to a minimum due to the plastic

construction of this device. Only if the sediments in the project area prove to be to difficult to sample with the gravity corer will the Ponar or BMH-60 be used.

To recover quality cores the gravity corer will be lowered slowly to the bottom. The weight of the unit will penetrate the sediment. Adjustments to the weight can be made in the field by adding or reducing the number of weights. If greater penetration is needed a slide hammer attachment can be utilized to pound the core barrels deeper.

When the corer is brought to the surface the end is capped before it breaks the surface. The barrel is then removed from the core head and the sample removed using the core extruder. The cores are pushed out into a clean opened cubitainer where the sample is homogenized.

Samples will be homogenized using a plastic impeller (mixing bar) attached to a 12 volt cordless drill. When the sample is well mixed a raw sample will be collected for total metals. A separate sample will be removed for processing for 63 micron sieving for trace mercury.

The trace mercury sample will first be sieved through a large pore opening plastic colander for removal of large debris and gravel (> 2 mm). The sample will then be placed on a two layer bedded sieve. The top sieve (held in an eight inch acrylic frame) will be a tightly stretched 830 micron nylon monofilament material. The sample will fall into the lower layer that is the final 63 micron mesh. The material will be washed through the sieve using environmental water. The sieve frames will be located on top of an eight inch plastic funnel which directs the sample into a sample bottle (500 ml wide mouth HDPE, pc class).

The material is washed through the sieves using a clean plastic Nalgene® wash bottle. When the sample bottle fills with water and further sieving is needed to collect enough sample material (16 grams), the water in the sample bottle will be decanted back to the wash bottle for further washing.

IX. Sample Handling and Custody

Samples will be collected in containers approved by the EPA. Samples will be placed in ice chests with blue ice and chilled to four degrees Celsius. Samples will be transported as soon as possible after sample collection to the laboratory for analysis. Samples are packaged in accordance with procedures outlined in the FSOP and QASOP. A hardbound logbook is used to record the following information in the field at the time of sediment collection: site location, time and date of collection, description of sampling procedures, conditions under which the samples are collected, personnel collecting the samples, sample identification number, weather conditions, and any additional comments that may be appropriate. The logbook is kept at Reclamation's Sacramento office.

Field sheets are used to record the site location, field identification number, collection date, type of QA sample, sample type, analyses requested, personnel collecting the sample, and any additional comments that may be appropriate. Field sheets are for internal use by both field and QA personnel and are not submitted to the laboratory. They are filed at Reclamation's Sacramento office.

Chain of custody sheets are used to document the custody of samples and record field identifications of samples, date and time collected, sample type, number of sample containers, types of analyses requested, dates and signatures documenting the custody of samples, and any additional remarks that may be appropriate. All samples will be accompanied by a COC. The COC must be filled out with ink. When the samples are transferred from one party to another, the individuals will sign, date, and note the time on the form. A separate form will accompany each delivery of samples to the laboratory. The COC will be included in the cooler used for preservation and transport of the samples. MP-157 will retain a copy of the COC prior to shipping samples to the laboratory.

X. Analytical Methods

The sediment samples will be analyzed for total trace mercury and DataChem's suite for total metals. The laboratory will follow the protocols for preparation, analysis, and corrective actions stated in the analytical methods and the laboratory Standard Operating Procedures (SOP).

Mercury

Prior to analysis the laboratory will centrifuge the samples, decant the water, and dry them for up to four hours @ 70°C. Then the mercury samples will be prepped and analyzed by EPA 7471.

Metals

The metals samples will be digested by EPA 3050 and analyzed by EPA 6020.

XI. Quality Control

As part of the quality assurance for this project, the Quality Assurance Specialist will incorporate quality assurance (QA) samples and validate those results. Additionally, the analytical report will be reviewed. All validation and review will be performed in accordance with the guidelines from the Environmental Monitoring Branch's *Standard Operating Procedures for Quality Assurance*, January 2005.

Accuracy checks:

Soil reference materials will be incorporated with the samples submitted to the laboratory at a rate of at least 10% of the number of production samples (or at least one reference sample is incorporated if less than 10 production samples are submitted).

Precision checks:

Duplicate samples for analysis of the metals will be prepared in the field. Duplicate reference samples for analysis of mercury will be incorporated prior to shipment to the laboratory. Duplicate samples will be analyzed with production samples and are incorporated at a rate of at least 10% of the number of production samples (or at least one reference sample is incorporated if less than 10 production samples are submitted).

Contamination checks:

Blank soil reference samples will be incorporated at a rate of at least 5% of the number of production samples (or at least one blank sample is incorporated if less than 20 production samples are submitted).

Laboratory QC:

It is the policy of the QA Section of MP157 to review the laboratory=s internal QC for any analytical report. The laboratory's QC check samples must meet certain levels of acceptability when analyzed with the production samples. These levels of acceptability are established with control charts or set at certain limits found in the methods.

Holding Times:

The date of the sample extraction/analysis will be compared to the date the sample was collected to ensure the sample was extracted and analyzed within the holding time. If the holding times are exceeded, the program manager will determine if re-sampling is required. If re-sampling is not required, the QA specialist will qualify the data as necessary.

Completeness:

If the completeness criterion is not met, then appropriate re-sampling will occur. Completeness is determined by calculating the following:

$$\%$$
completeness = $\left(\frac{V}{n}\right)(100)$

V = Number of Valid Resultsn = Total Number of Results

XII. Instrument/Equipment Testing, Calibration, Inspection, and Maintenance

There is no specific testing or calibration required on field equipment. Inspection and maintenance of field equipment will be maintained for safety and to prevent sample contamination.

The laboratory performs instrument calibrations following the procedures and protocols stated in the analytical methods for each parameter.

XIII. Inspection/Acceptance for Supplies and Consumables

500 ml wide mouth HDPE, pc class bottles will be used for both mercury and metals samples. Only bottles ordered specifically for this project will be used ensuring that specific lot numbers for those bottles can be tracked for potential contamination.

References used for external QA incorporation have certified values from the vendor.

XIV. Data Management

In conjunction with the project name, the alpha-numeric field sample identifications assigned for this project will be FSS followed by the sequential number (i.e. FSS20).

Data management also includes field sheets, COC, laboratory data reports, field log books and project binders.

Field sheets and COC's are generated, inspected and signed by the field sampler. These documents are turned in to the QA specialist. The QA specialist will contact any field sampler whose paper work contains significant errors or omissions. The QA specialist turns these documents to the DMT to be entered into the Environmental Monitoring Database and filed in the project binder.

Laboratory data reports are received by the QA specialist to review and document QA metadata. After the laboratory data reports are reviewed by the QA specialist, the data reports are signed and sent to the DMT for review. The DMT enters the analytical results ($\mu g/kg$) and the QA metadata in the Environmental Monitoring Database.

All data entered into the database follows the DMT SOP. As a QC check, all data entered will be secondarily reviewed by an additional DMT member and initialed. After all data has been entered into the database, the data is signed and filed in project binders.

Field logbooks and project binders are locked in a file cabinet and must be signed out by individuals.

Assessment and Oversight

XV. Assessments and Response Actions

Audits

The QAT audits each laboratory analyzing samples, each field sampler collecting samples, and documentation produced in the field.

Laboratory

The three-tier audit consists of reviewing the laboratory's Quality Assurance Manual, reviewing the laboratory's performance evaluation sample results, and conducting an intensive, on-site, system audit of the laboratory. The laboratory's expertise in conducting analyses, their capability for producing valid data, their ability to effectively support the data, and the integrity of the Quality Assurance/Quality Control practices are assessed during the on-site audit. Laboratory audits are conducted every three years. The audit reports are issued to the laboratory. The laboratory then issues a response with corrective actions to MP157. At that time, the QAT determines whether or not to approve the laboratory for use and contacts the laboratory with their decision.

Field

The field audit consists of reviewing the Standard Operating Procedures, submitting performance evaluation samples and reviewing the results, and accompanying the field sampler while they demonstrate the sample collection process. The QAT assesses the field sampler's expertise in collecting representative samples. Field audits are conducted every two years. The field audit reports are sent to the field sampler and MP157's EMT Leader. The EMT Leader is responsible for issuing corrective actions.

Documentation

Twice a year, field logbooks, instrument calibration sheets, and field sheets are audited by the QAT to ensure that all the necessary information is correctly documented. The documentation audit reports are sent to the field sampler and the EMT Leader. The EMT Leader is responsible for issuing corrective actions.

XVI. Reports to Management

The QAT will write audit reports to the individuals identified in section XV at the frequency documented in section XV.

Also, the QAT will write a QA summary report for each sampling event per section VI. Quality assurance reports will be issued to the EMT and will summarize all QA/QC findings in regard to this investigation and the data generated.

Data Validation and Usability

XVII. Data Review, Verification, and Validation

If all external QA samples and laboratory QC samples meet the acceptance criteria and all samples are analyzed within the holding time, all data will be accepted as valid.

If a result is confirmed after reanalysis, the result will be accepted as valid.

Data will be qualified if results demonstrate unacceptable QA after being reanalyzed, if the laboratory QC sample results are unacceptable, or if the holding times were exceeded.

The data assessor will determine the usability of the data.

XVIII. Verification and Validation Methods

The QA specialist will validate the data by following the guidelines in the Environmental Monitoring Branch's *Standard Operating Procedures for Quality Assurance*, January 2005.

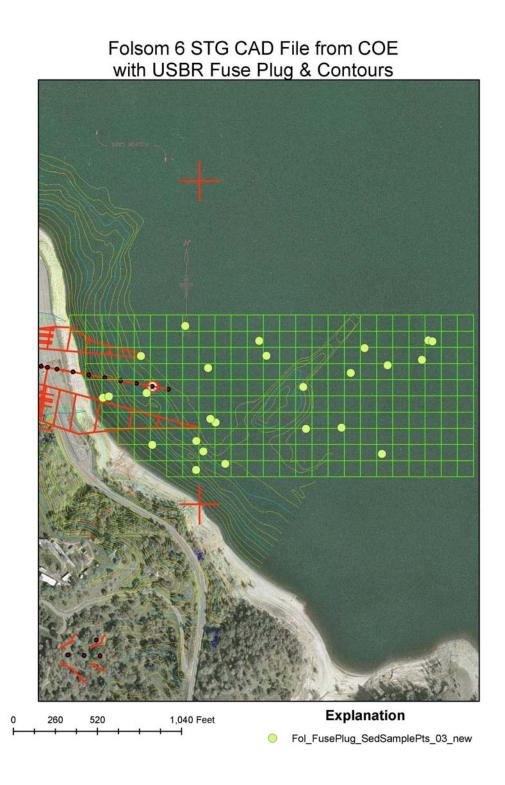
If any of the external QA sample results do not meet the acceptance criteria stated in section IV, the samples are submitted for reanalysis. If the laboratory confirms the original result, the original data is accepted based on the laboratory demonstrating that sample preparation and instrumentation was run properly on the initial analysis. If the original result cannot be confirmed, the laboratory must then analyze a bracket of samples or the entire batch of samples an additional time for the parameter. The bracket of samples or the entire batch of samples that has been analyzed an additional time is then evaluated for the parameter to see if the results meet the acceptance criteria in section IV. Professional judgment is used to decide which set of data to accept and whether or not the data should be qualified if both sets of data demonstrate unacceptable external QA sample results.

XIX. Reconciliation with User Requirements

Any qualified results will be identified to the data entry staff (DMT) by completing the Data Requiring Qualifiers and/or Data With Outliers form or the Parameter Not Analyzed Within Holding Time form per MP157 protocol. Additionally, if results are qualified, the result will be marked with a footnote on the data table submitted to the data assessor (EMT); the footnote will detail the qualification.

Appendix A

Preliminary Sample Locations



Appendix B

Sampling Equipment List

Boat with winch and davit

Gravity corer + accessories

Ponar

BMH-69 bed material sampler

500 ml HDPE sample bottles

Funnel

860 µg sieve cloth

63 µg sieve cloth

Sieve frames

Rubber bands

Spatula

Policeman

Plastic Colander

Plastic mixing bowls

Cubitainers

Stirrers

12 volt electric drill

DI water

Wash bottles

Latex gloves

Ice Chest

Blue Ice

GPS

Camera

Log book

Pens and labels

Triple beam scale

Locking carabineers

Cell phone

Swedge tool and sleeves

Tape measure

Appendix C

Sediment guidelines

		State of Florida	State of Florida	NOAA	NOAA	Lower Columbia	Lower Columbia	Candian Sediment
						Dredged Material	Dredged Material	
Metals by	SFRWQCB	TEL	PEL	ERL	ERM	screening level	maximum level	
EPA 6020		mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg	mg/kg	mg/kg
Aluminum								
Antimony						150	200	
Arsenic	33	7.24	41.6	8.2	70	57	700	5.9
Barium								
Beryllium								
Boron								
Cadmium	5	0.676	4.21	1.2	9.6	5.1	14	0.6
Cerium								
Cesium								
Chromium	220	52.3	160.4	81	370			37.3
Cobalt								
Copper	90	18.7	108.2	34	270	390	1300	35.7
Gallium								
Gold								
Iron								
Lead	50	30.24	112.18	46.7	218	450	1200	35
Lithium								
Magnesium								
Manganese								
Molybdenum								
Nickel	140	15.9	42.8	20.9	51.6	140	370	
Palladium								
Platinum								
Potassium								
Selenium	0.7							
Silver	1	0.733	1.77	1	3.7	6.1	8.4	
Sodium								
Strontium								
Tellurium								
Thallium								
Tin								
Titanium								
Total Thorium								
Total Uranium								
Tungsten								
Vanadium								
Zinc	160	124	271	150	410	410	3800	123

SFRWQCB = San Francisco Bay Regional Water Qualtiy Control Board – Disposal Option Sediment Screening Criteria for Levee Restoration

TEL = Threshold Effects Levels

PEL = Probable Effects Levels

ER-L = Effects Range-Low

ER-M =Effects Range-Medium

Appendix 2 Data Table

Aluminum 2800 2800 2800 2800 2800 2800 2800 280													_	_									
Antimory st.6 st.6 st.3 st.6 st.7 st.6 st.7 st.8 st.2 st.5 st.8 st.1 st.5 st.8 st.5 st.			site 1	site 2	site 3	site 4	site 5	site 6	site 7	site 8	site 9	site 10	site 11	site 12	site 15	site 16	site 17	site 18	site 19	site 23	units	sediment	source
Antmony		Aluminum	28000	32000	25000	28000	32000	25000	23000	23000	15000	18000	19000	21000	27000	28000	24000	21000	23000	28000	ma/ka	n/a	-
Arsenic 8.9 12 7.8 9.4 12 9.2 7.8 7.1 4.1 5.2 6.5 5 9.2 9.2 7.4 5.7 5.8 7.1 mg/kg 57 OMF																							DMF
Bartum 220 280 230 240 200 210 200 210 200 190 180 200 190 220 240 210 180 210 230 mg/mg 1900 CDTS		Arsenic																					DMF
Beryllium 0.67 0.76 0.6 0.63 0.76 0.6 0.63 0.67 0.62 0.42 0.54 0.63 0.43 0.68 0.71 0.6 0.53 0.58 0.61 mg/mg 75 CDTS				260	230	230	240	200		200			200			240	210	180				10000	CDTSC
Boron 6.8 6.53 6.43 6.52 6.66 6.5.5 6.57 6.58 6.51 6.61 6.61 6.42 6.69 6.51 6.49 6.46 6.40 6.42 mg/kg 5.1 0.66		Bervllium																					CDTSC
Cadmium c0.53 c0.53 c0.43 c0.52 c0.56 c0.55 c0.57 c0.58 c0.51 c0.51 c0.61 c0.42 c0.54 c0.40 c0																							-
Cenium 36 45 37 36 44 35 36 34 22 28 34 25 37 41 36 31 25 37 mg/sq n/a		Cadmium	<0.53	< 0.53	< 0.43		<0.56			<0.58	< 0.41		<0.61	<0.42			<0.49	<0.46	<0.40	<0.42		5.1	DMF
Chromium		Cerium	36	45	37	36	44	35	36	34	22	28	34	25	37	41	36	31	25	37		n/a	-
Cobail 23 28 21 24 25 21 21 21 17 19 20 18 21 22 20 18 21 21 mg/kg 270 RWDC		Cesium	1.3	1.7	1.2	1.4	1.5	1.2	1	1.2	0.77	0.87	0.91	1.3	1.5	1.5	1.2	1.1	1.5	1.5	mg/kg	n/a	-
Copper 66		Chromium	81	86	64	80	87	72	64	67	44	55	51	51	69	69	64	54	61	72	mg/kg	370	RWCQB*
Copper 66		Cobalt	23	26	21	24	25	21	21	21	17	19	20	18	21	22	20	18	21	21	mg/kg	270	RWCQB*
Gold		Copper	66	71	64	69	72	60	59	57	41	49	50	44	59	57	53	45	53	58		390	DMF
Iron		Gallium	8.1	9.4	7.3	8.3	9.2	7.3	7.3	7.3	5	5.9	6.3	6.7	8.1	8.7	7.1	6.2	7.2	8.3	mg/kg	n/a	-
Lead		Gold	<2.4	<2.4	<1.9	<2.4	<2.5	<2.5	<2.6	<2.6	<1.8	<2.3	<2.7	<1.9	<2.4	<2.3	<2.2	<2.1	<1.8	<1.9	mg/kg	n/a	-
Lead 17 28 21 19 23 20 23 18 12 15 24 19 24 26 21 16 15 22 mg/kg 450 DMF		Iron	43000	48000	36000	42000	47000	38000	39000	39000	26000	32000	34000	32000	40000	41000	36000	29000	34000	39000	mg/kg	n/a	
Magnesium 12000 14000 9600 13000 13000 11000 11000 880 9600 9600 11000 12000 11000 9300 13000 13000 13000 mg/kg n/a Manganese 940 1200 840 1200 1100 930 850 560 810 850 520 790 900 730 580 730 740 mg/kg n/a - Mercury 0.15 0.2 0.17 0.15 0.16 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 <td< td=""><td></td><td>Lead</td><td>17</td><td>26</td><td>21</td><td>19</td><td>23</td><td>20</td><td>23</td><td>18</td><td>12</td><td>15</td><td>24</td><td>19</td><td>24</td><td>26</td><td>21</td><td>16</td><td>15</td><td>22</td><td></td><td>450</td><td>DMF</td></td<>		Lead	17	26	21	19	23	20	23	18	12	15	24	19	24	26	21	16	15	22		450	DMF
Manganese 940 1200 840 1200 1100 930 930 850 560 810 850 520 790 900 730 580 730 740 mg/kg n/a		Lithium	17	20	15	17	19	15	14	15	10	12	13	14	17	18	15	14	16	18	mg/kg	n/a	-
Mercury 0.15 0.2 0.17 0.15 0.16 0.16 0.15 0.13 0.16 0.16 0.12 0.17 0.15 0.16 0.15 0.12 0.17 0.15 0.16 0.17 mark 0.15 0.2 0.17 mg/kg 0.2 mg/kg n/a - Nickel 100 100 72 91 100 88 78 8 50 69 66 58 81 78 75 63 71 76 mg/kg 140 DMR Palladium -0.80 <0.80		Magnesium	12000	14000	9600	13000	13000	11000	11000	11000	8800	9600	9600	11000	12000	12000	11000	9300	13000	13000	mg/kg	n/a	-
Molybdenum		Manganese	940	1200	840	1200	1100	930	930	850	560	810	850	520	790	900	730	580	730	740	mg/kg	n/a	-
Molybdenum		Mercury	0.15	0.2	0.17	0.15	0.15	0.16	0.16	0.15	0.13	0.16	0.16	0.12	0.17	0.15	0.16	0.15	0.2	0.17	mg/kg	0.2	RWCQB
Palladium <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.66 <0.74 <0.69 0.65 <0.64 <0.74 <0.69 0.65 <0.64 mg/kg n/a Platinum <0.53 <0.53 <0.43 <0.52 <0.56 <0.55 <0.57 <0.58 <0.41 <0.51 <0.61 <0.61 <0.42 <0.54 <0.51 <0.49 <0.46 <0.49 <0.46 <0.40 <0.42 mg/kg n/a Potassium 3300 3700 3000 3300 3500 2800 3100 3100 2900 2400 2800 4400 3700 4100 2800 2600 4000 4400 mg/kg n/a Selenium <2.4 <2.4 <1.9 <2.4 <2.5 <2.5 <2.5 <2.6 <2.6 <1.8 <2.3 <2.7 <1.9 <2.4 <2.3 <2.2 <2.1 <1.8 <1.9 mg/kg <0.46 <0.46 <0.49 <0.46 <0.49 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.42 <0.46 <0.40 <0.46 <0.40 <0.40 <0.42 <0.46 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <	N	Molybdenum	<0.53	0.54	0.44	<0.52	<0.56	< 0.55	<0.57	<0.58	<0.41	<0.51	<0.61	<0.42	<0.54	<0.51	<0.49	<0.46	<0.40	<0.42		n/a	-
Palladium		Nickel	100	100	72	91	100	88	78	80	50	69	66	58	81	78	75	63	71	76	mg/kg	140	DMF
Platinum		Palladium	<0.80	<0.80	<0.64	<0.79	<0.85	<0.82	<0.86	<0.88	<0.61	<0.77	<0.91	< 0.63	<0.80	<0.76	<0.74	<0.69	0.65	<0.64	mg/kg	n/a	-
Potassium 3300 3700 3000 3300 3300 3500 2800 3100 3100 2900 2400 2800 4400 3700 4100 2800 2600 4400 4400 mg/kg n/a - Selenium <2.4 <2.4 <2.5 <2.5 <2.6 <2.6 <2.6 <1.8 <2.3 <2.7 <1.9 <2.4 <2.3 <2.2 <2.1 <1.8 <1.9 mg/kg x/a <- Silver 1.5 1.1 <0.43 <0.52 1.4 <0.55 <0.57 <0.58 <0.41 <0.51 1.4 <0.42 1.7 <0.51 <0.49 <0.46 1.1 0.88 mg/kg n/a <- Silver 3.4 3.8		Platinum	<0.53	< 0.53	< 0.43	<0.52	< 0.56	< 0.55	<0.57	<0.58	<0.41	<0.51	<0.61	<0.42	<0.54	<0.51	< 0.49	<0.46	<0.40	<0.42		n/a	-
Silver 1.5 1.1 < 0.43 < 0.52 1.4 < 0.55 < 0.57 < 0.58 < 0.41 < 0.51 1.4 < 0.42 1.7 < 0.51 < 0.49 < 0.46 1.1 0.88 mg/kg 6.1 DMF Sodium 260 320 270 240 290 220 220 240 150 190 190 170 250 240 210 210 200 230 mg/kg n/a - Strontium 34 43 38 38 38 39 32 33 34 25 27 30 33 35 39 30 28 33 40 mg/kg n/a - Tellurium < 0.80		Potassium	3300	3700	3000	3300	3500	2800	3100	3100	2900	2400	2800	4400	3700	4100	2800	2600	4000	4400		n/a	-
Sodium 260 320 270 240 290 220 240 150 190 190 170 250 240 210 210 200 230 mg/kg n/a - Strontium 34 43 38 38 39 32 33 34 25 27 30 33 35 39 30 28 33 40 mg/kg n/a - Tellurium <0.80		Selenium	<2.4	<2.4	<1.9	<2.4	<2.5	<2.5	<2.6	<2.6	<1.8	<2.3	<2.7	<1.9	<2.4	<2.3	<2.2	<2.1	<1.8	<1.9	mg/kg	>200	CRWQCB
Strontium 34 43 38 38 39 32 33 34 25 27 30 33 35 39 30 28 33 40 mg/kg n/a - Tellurium <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.65 <0.74 <0.69 <0.60 <0.64 <0.40 <0.64 mg/kg n/a - Thallium 0.58 <0.53 <0.43 <0.52 <0.56 <0.55 <0.57 <0.58 <0.41 <0.51 <0.61 <0.64 <0.86 <0.81 <0.42 <0.65 <0.51 <0.49 <0.66 <0.40 <0.42 mg/kg n/a - Thorium 4.4 5.5 4.3 4.5 5.2 4.5 1.2 0.98 0.46 0.64 0.86 3.1 4.6 4.9 4.4 3.5 3.2 4.3 mg/kg n/a - Tin 0.87 0.83 0.67 0.72 0.81 0.64 <0.57 <0.58 <0.41 <0.51 <0.61 <0.61 <0.61 <0.61 <0.42 0.65 <0.51 <0.9 <0.66 <0.51 <0.9 <0.66 <0.55 <0.50 <0.50 <0.60 \text{mg/kg} n/a - Titanium 970 1200 880 1100 1100 880 760 830 550 540 650 1100 1200 1200 860 770 1200 1200 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.64 <0.69 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.80 <0.64 <0.79 <0.85 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.80 <0.64 <0.79 <0.85 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Tungsten <0.80 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.80 <0.64 <0.80 <0.80 <0.64 <0.80 <0.80 <0.80 <0.80 <0.64 <0.80 <0.80 <0.80 <0.64 <0.80 <0.80 <0.80 <0.80 <0.64 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.8		Silver	1.5	1.1	< 0.43	<0.52	1.4	< 0.55	<0.57	<0.58	<0.41	<0.51	1.4	<0.42	1.7	<0.51	< 0.49	<0.46	1.1	0.88	mg/kg	6.1	DMF
Tellurium		Sodium	260	320	270	240	290	220	220	240	150	190	190	170	250	240	210	210	200	230	mg/kg	n/a	-
Thallium 0.58 <0.53 <0.43 <0.52 <0.56 <0.55 <0.57 <0.58 <0.41 <0.51 <0.61 <0.42 0.65 <0.51 <0.49 <0.46 <0.49 <0.46 <0.40 <0.42 mg/kg n/a - Thorium 4.4 5.5 4.3 4.5 5.2 4.5 1.2 0.98 0.46 0.64 0.86 3.1 4.6 4.9 4.4 3.5 3.2 4.3 mg/kg n/a - Tin 0.87 0.83 0.67 0.72 0.81 0.64 <0.57 <0.58 <0.41 <0.51 <0.61 1.6 0.97 0.9 0.65 0.53 0.71 0.71 mg/kg n/a - Titanium 970 1200 880 1100 1100 880 760 830 550 540 650 1100 1200 1200 860 770 1200 1200 mg/kg n/a - Tungsten <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.80 <0.8		Strontium	34	43	38	38	39	32	33	34	25	27	30	33	35	39	30	28	33	40	mg/kg	n/a	-
Thorium 4.4 5.5 4.3 4.5 5.2 4.5 1.2 0.98 0.46 0.64 0.86 3.1 4.6 4.9 4.4 3.5 3.2 4.3 mg/kg n/a - Tin 0.87 0.83 0.67 0.72 0.81 0.64 <0.57 <0.58 <0.41 <0.51 <0.61 1.6 0.97 0.9 0.65 0.53 0.71 0.71 mg/kg n/a - Titanium 970 1200 880 1100 1100 880 760 830 550 540 650 1100 1200 1200 860 770 1200 1200 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.66 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Tellurium	<0.80	<0.80	< 0.64	<0.79	< 0.85	<0.82	<0.86	<0.88	<0.61	<0.77	< 0.91	< 0.63	<0.80	<0.76	<0.74	< 0.69	< 0.60	< 0.64	mg/kg	n/a	-
Thorium 4.4 5.5 4.3 4.5 5.2 4.5 1.2 0.98 0.46 0.64 0.86 3.1 4.6 4.9 4.4 3.5 3.2 4.3 mg/kg n/a - Tin 0.87 0.83 0.67 0.72 0.81 0.64 <0.57 <0.58 <0.41 <0.51 <0.61 1.6 0.97 0.9 0.65 0.53 0.71 0.71 mg/kg n/a - Titanium 970 1200 880 1100 1100 880 760 830 550 540 650 1100 1200 1200 860 770 1200 1200 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.64 <0.76 <0.74 <0.69 <0.60 <0.64 mg/kg n/a - Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Thallium	0.58	< 0.53	< 0.43	<0.52	<0.56	< 0.55	<0.57	<0.58	<0.41	<0.51	<0.61	<0.42	0.65	<0.51	<0.49	<0.46	<0.40	< 0.42	mg/kg	n/a	-
Titanium 970 1200 880 1100 1100 880 760 830 550 540 650 1100 1200 1200 860 770 1200 1200 mg/kg n/a - Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.66 <0.76 <0.74 <0.69 <0.60 <0.60 <0.64 mg/kg n/a - Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Thorium	4.4	5.5	4.3	4.5	5.2	4.5	1.2	0.98	0.46	0.64	0.86	3.1	4.6	4.9	4.4	3.5	3.2	4.3		n/a	-
Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.66 <0.74 <0.69 <0.69 <0.60 <0.64 mg/kg n/a - Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Tin	0.87	0.83	0.67	0.72	0.81	0.64	<0.57	<0.58	<0.41	<0.51	<0.61	1.6	0.97	0.9	0.65	0.53	0.71	0.71	mg/kg	n/a	-
Tungsten <0.80 <0.80 <0.64 <0.79 <0.85 <0.82 <0.86 <0.88 <0.61 <0.77 <0.91 <0.63 <0.80 <0.66 <0.76 <0.74 <0.69 <0.60 <0.60 <0.64 mg/kg n/a - Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Titanium	970	1200	880	1100	1100	880	760	830	550	540	650	1100	1200	1200	860	770	1200	1200	mg/kg	n/a	-
Uranium 2.6 2.9 2.3 2.6 3 2.4 2.6 2.6 1.6 2.1 2.4 1.7 2.5 2.6 2.2 1.9 1.8 2.3 mg/kg n/a -		Tungsten	<0.80	<0.80	<0.64	<0.79	<0.85	<0.82	<0.86	<0.88	<0.61	<0.77	< 0.91	< 0.63	<0.80	<0.76	<0.74	< 0.69	<0.60	< 0.64		n/a	-
		Uranium	2.6	2.9	2.3	2.6	3	2.4	2.6	2.6	1.6	2.1	2.4	1.7	2.5	2.6	2.2	1.9	1.8	2.3		n/a	
		Vanadium	90	99	78	91	98	80	84	86	62	74	74	66	82	86	76	64	72	86		2400	CDTSC
Zinc 82 94 75 83 93 77 83 84 60 68 77 79 87 99 76 69 81 84 mg/kg 410 DMF			82	94	75	83	93	77	83	84	60	68	77	79	87	99	76	69	81	84		410	DMF

DMF = Dredged Material Evaluation Framework - Lower Columbia River Management Area - November 1998 RWCQB = Mercury in Sediment Standard fractional portion less than 0.65 micron

RWCQB * = Recommended Sediment Chemistry Guideline Beneficial Reuse of Dredged Material - Wetland Foundation CRWCQB = San Francisco Bay Region - Class I Disposal Option Sediment Screening Criteria

CDTSC = California Departmet of Toxics Substance - Soil Criteria TTLC

Appendix 3 Quality Assurance Summary Report



U. S. Bureau of Reclamation
Mid-Pacific Region
Environmental Monitoring Branch, MP-157

Joint Federal Project: Auxiliary Spillway Folsom Sediment Characterization Quality Assurance Summary Report

On June 29, 2006, the Environmental Monitoring Team (EMT) collected samples in support of the Joint Federal Project: Auxiliary Spillway Folsom Sediment Characterization. The Quality Assurance Team (QAT) incorporated External Quality Assurance (QA) samples with the production samples to assess the ability of the DataChem Laboratories to produce reliable data. Personnel from the QAT reviewed the production sample and laboratory Quality Control sample results, and validated the external QA samples. The QA sample results are discussed below.

Precision

Most parameters had Relative Percent Differences (RPDs) within the QA acceptance limits.

Thorium:

The initial RPD for QA regular/duplicate samples FSS00A/FSS010A was 68%. Sample reanalysis did not confirm so DataChem Labs performed re-prep and reanalysis for the bracket of samples between FSS00A - FSS010A. The bracket reanalysis RPD for QA regular/duplicate samples FSS00A/FSS010A was 93%. Because the regular/duplicate RPD for the initial results was closer to the QA acceptance criteria of \leq 35% RPD, the initial results were accepted with the qualification that production results within the bracket are suspect and may show excessive variability from their true values.

Accuracy

Most parameters had Percent Recoveries (PRs) within the QA acceptance limits.

Beryllium:

Reference analysis of sample FSS014 resulted in a PR of 38%. Reanalysis of this sample confirmed the original result with 6% RPD so original data accepted.

Cadmium:

Reference analysis of sample FSS014 resulted in a PR of 21%. Reanalysis of this sample confirmed the original result with 7% RPD so original data accepted.

Chromium:

Reference analysis of sample FSS014 resulted in a PR of 61%. Reanalysis of this sample confirmed the original result with 7% RPD so original data accepted.

Vanadium:

Reference analysis of sample FSS014 resulted in a PR of 58%. Reanalysis of this sample confirmed the original result with 14% RPD so original data accepted.

Contamination

The QA blank sample was acceptable with respect to contamination for the parameters where contamination could be assessed.

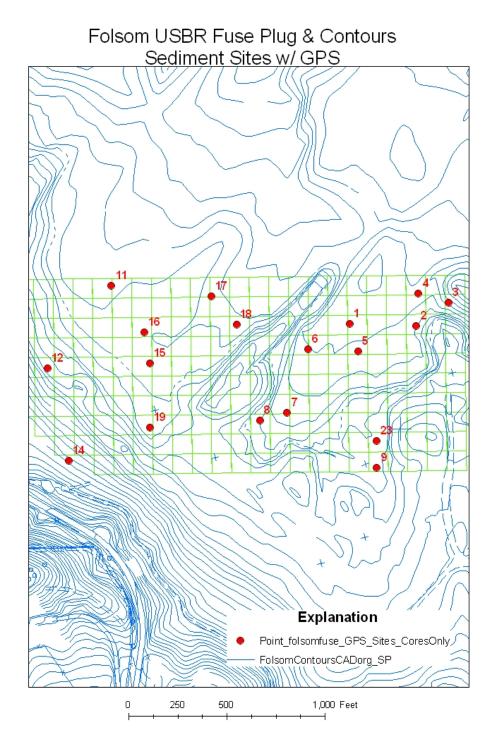
Completeness

All parameters for this study met the 100% acceptance limit.

Holding Times

All samples were analyzed within the recommended holding times of the parameters.

Appendix 4 Site Locations



Appendix 5 Field Sample Information

Site Name (Location)	Depth	Core Size (inches)
1	120	7
2	119	8
3	107	5
4	119	7.5
5	119	8
6	120	4
7	112	8.5
8	108	14
9	95	7
10	118	4
11	106	6
12	100	4
15	104	10.5
16	104	4
17	107	6.5
18	108	4
19	100	4.5
23	95	5.5