

Appendix J

Section 401 Water Quality Certification Application Form

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

SECTION 401 WATER QUALITY CERTIFICATION
APPLICATION FORM

A minimum of \$500.00 processing fee is required however additional fees in accordance with Title 23 CCR § 2200 (a)(2) may also be required. Please use the fee calculator at <http://www.waterboards.ca.gov/cwa401/docs/dredgefillfeecalculator.xls> to determine the total fee.

Please include a check payable to the **State Water Resources Control Board**.

Attach additional sheets as necessary.

Submit the complete form to the appropriate Regional Board office.

1. APPLICANT INFORMATION

2. AGENT INFORMATION*

Applicant: U.S. Army Corps of Engineers	Agent*: Ayres Associates
Contact Name: Mike Dietl	Contact Name: Tom Smith
Address: 1325 J Street	Address: 2151 River Plaza Drive, Suite 170
Sacramento, CA 95814	Sacramento, CA 95814
Phone No: (916) 557-6742	Phone No: (916) 563-7700
Fax No: (916) 557-7256	Fax No: (916) 563-6972

*Complete only if applicable

3. PROJECT DESCRIPTION

a) Project Title: Sacramento River Protection Project, 13 Bank Protection Sites, 2008								
b) Project Location:								
Location		Street Location	County	Section	Township	Range	Latitude	Longitude
Water body	River Mile							
Steamboat Slough	16.6R	Ryer Road East	Solano	NA	NA	NA	38.194	121.633
Cache Slough	21.8R	Standard patrol road	Solano	NA	NA	NA	38.269	121.704
Sacramento River	49.7L	Standard patrol road	Sacramento	NA	NA	NA	38.481	121.546
Sacramento River	52.3L	Standard patrol road	Sacramento	NA	NA	NA	38.514	121.545
Lower American River	0.3L	Standard patrol road	Sacramento	NA	NA	NA	38.601	121.501

Lower American River	2.8L	Standard patrol road	Sacramento	NA	NA	NA	38.589	121.468
Sacramento River	53.5R	South River Road	Yolo	NA	NA	NA	38.520	121.525
Sacramento River	177.8R	Highway 45	Glenn	NA	NA	NA	39.555	122.003
Sacramento River	16.8L	Highway 160	Sacramento	NA	NA	NA	38.163	121.618
Sacramento River	42.7R	South River Road	Yolo	27	7N	4E	38.424	121.531
Sacramento River	55.2L	Standard patrol road	Sacramento	NA	NA	NA	38.533	121.521
Sacramento River	77.2L	Garden Highway	Sutter	NA	NA	NA	38.760	121.592
Feather River	28.5R	Standard patrol road	Sutter	NA	NA	NA	39.137	121.606

*Attach site map with "waters" clearly indicated (e.g. USGS 7 1/2 quadrangle map)

c) Project Description:

Recent bathymetric surveys conducted by Ayres Associates indicate the development of scour holes in the river bed near the toes of the levees in many locations. The U.S. Army Corps of Engineers and the Central Valley Flood Protection propose to implement bank protection measures to prevent ongoing stream bank erosion at thirteen erosion sites along the Sacramento River, Feather River, American River, Cache Slough and Steamboat Slough. Measures would include coverage of the levee slope to the high water mark with a mixture of soil and rock revetment, building toe berms to minimize erosion and enhance slope stability, and installing mitigation plantings. The repairs have been designed with an expected lifespan of 50 years. Work would be completed under the authority of the Sacramento River Bank Protection Project (SRBBP), Phase II.

d) Proposed Schedule: *(start-up, duration, and completion dates):*

The sites in Contracts 1 and 2 (SB 16.6R, CS 21.8R, Sac 49.7L, Sac 52.3L, LAR 0.3L, LAR 2.8L, Sac 53.5R, and Sac 177.8R) would be constructed in the summer and fall of 2008, while the sites in Contract 3 (Sac 16.8L, Sac 42.7R, Sac 55.2L, Sac 77.2L, and F 28.5R) would be constructed at a later date due to the presence of pumps and encroachment issues that cannot be resolved quickly. In-water construction would be restricted to the period of August 1st to November 30.

e) Total Project size: *(clearing, grading, other construction activities)*

18.47 acres 8,040 linear feet *(if appropriate)*

4. IMPACTED WATER BODIES

a) Name(s) of Receiving Water Body(ies):

Steamboat Slough, Cache Slough, Lower American River, Sacramento River, and Feather River

b) Anticipated potential stream flow during project activity:

Steamboat 16.6 - 3,000 cfs (based on UNET Comp Study flow split at Steamboat Slough and Freeport gage data)

Cache Slough 21.8 - tidal backwater, no flow estimate available

Sac River 16.8 - 7,200 cfs (based on UNET Comp Study flow split at Georgiana and flows in the 2006 Sac Bank report by Brett Whitin)
 Sac River 42.7 - 13,600 cfs (based on Freeport gage data)
 Sac River 49.7 - 13,600 cfs (ditto)
 Sac River 52.3 - 13,600 cfs (ditto)
 Sac River 53.5 - 13,600 cfs (ditto)
 Sac River 55.2 - 13,600 cfs (ditto)
 Sac River 55.5 - 13,600 cfs (ditto)
 Sac River 57.2 - 13,600 cfs (ditto)
 LAR 0.3 - 2,000 cfs (based on Fair Oaks gage data)
 LAR 2.8 - 2,000 cfs (ditto)
 Feather R 28.5 - 2,300 cfs (based on Gridley gage data)
 Sac River 77.2 - 11,600 cfs (based on Verona gage data)
 Sac River 83.9 - 7,100 cfs (based on Knights Landing gage data)
 Sac River 177.8 - 6,800 cfs (based on Butte City/Ord Ferry gage data)

c) Describe potential impacts to water quality:

The placement of riprap during construction activities within the channel would temporarily generate increased turbidity in the immediate vicinity of the project area. The placement of rip-rap on the toe to the water surface could result in a plume of sediments generated from the channel bottom and the channel side, becoming suspended in the water and could generate turbidity levels above those identified as acceptable by the Basin Plan. For landside construction, water quality impacts would be constrained to the temporary turbidity increases for riprap placement. Waterside construction would also include the potential for additional turbidity impacts from wave action generated during boat and barge operations. Other potential impacts include releases of small volumes of petroleum products (fuel, engine oil, and hydraulic line oil) due to their use in close proximity to the local receiving waters downstream of the projects sites.

d) Indicate in ACRES and LINEAR FEET (*where appropriate*) the proposed **waters of the United States** to be impacted by any discharge other than dredging, and identify the impacts(*s*) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent Impacts		Temporary Impacts	
	(acres)	(linear feet)	(acres)	(linear feet)
Jurisdictional Wetland				
Riparian			3.8	
Streambed unvegetated	4.47		7.85	
Lake/Reservoir				

c) Indicate the volume of the dredged material (cubic yards) to be discharged to waters of the United States:

None

d) Indicate type(s) of material proposed to be discharged to waters of the United States:

This project would include the placement of approximately 176,626 cubic yards of quarry stone and 13,870 cubic yards of soil fill (a mixture of sand and silt suitable for plant establishment and growth). All materials would be placed on the waterside of the levee and are therefore subject to potential

discharge into waters of the United States.

The levee slope to the mean summer water surface elevation would be covered in a soil and rock mixture, while the repair below the water elevation would consist of strictly quarry stone. These structural aspects would be covered in a layer of soil fill, which may be covered with a biodegradable coir fabric to prevent soil loss during the first high water (before vegetation has established). Sand will be placed on top of wetland benches at five of the erosion sites, including SB 16.6R, CS 21.8R, Sac 52.3L, Sac 16.8L, and F 28.5R.

5. COMPENSATORY MITIGATION

a) Indicate in ACRES and LINEAR FEET (*where appropriate*) the total quantity of **waters of the United States** proposed to be Created, Restored and/or Enhanced for purposes of providing Compensatory Mitigation:

Water Body Type	Created		Restored		Enhanced	
	(acres)	(linear ft)	(acres)	(linear ft)	(acres)	(linear ft)
Jurisdictional Wetland	1.24					
Riparian			3.8		6.83	
Streambed						
Lake/Reservoir						

b) If contributing to a Mitigation or Conservation Bank, indicate the agency, dollar amount, acreage, and water body type (*if applicable*):

Conservation Agency _____

\$ _____ for _____ acres of _____ (*water body type*)

How many acres of this mitigation area qualify as waters of the United States? _____

c) Other Mitigation:

Not applicable

d) Location of Compensatory Mitigation Site(s) (*attach map of suitable quality and detail*):

Created riparian habitat (e.g. riparian benches) is proposed at all thirteen erosion sites. Created wetland habitat is proposed at five of the thirteen priority erosion sites, including SB 16.6R, CS 21.8R, Sac 52.3L, Sac 16.8L, and F 28.5R.

OTHER ACTIONS/BEST MANAGEMENT PRACTICES (BMPs)

Briefly describe other actions/BMPs to be implemented to Avoid and/or Minimize impacts to waters of the United States, including preservations of habitats, erosion control measures, project scheduling, flow diversions, etc.

The Corps would implement a Storm Water Pollution Prevention Plan (SWPPP) before and during construction to minimize turbidity generating activities. The Corps will monitor turbidity and settleable solids to avoid violation of basin standards. The contractor would be required to develop and implement a hazardous materials management plan prior to initiation of construction. The plan would include best management practices to (1) reduce the likelihood of spills of toxic chemicals and other hazardous materials during construction, (2) describe a specific protocol for the proper handling and disposal of materials and contingency procedures to follow in the event of an accidental spill, and (3) describe a specific protocol for the proper handling and disposal of materials should materials be encountered during construction. The specific BMPs that will be incorporated into the SWPPP will be determined during the final stages of project design. However, the SWPPP is likely to include one or more of the following standard practices, which are commonly used during the construction and post construction phases of levee improvement projects:

- Stage construction equipment and materials on the landside of the subject levee reaches. To the extent possible, stage equipment and materials in areas that have already been disturbed.
- Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations.
- Stockpile soil and grading spoils on the landside of the subject levee reaches, and install sediment barriers (e.g., silt fences, fiber rolls, straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion.
- Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from leaving the project site and entering nearby surface waters.
- Use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas located away from surface waters. Implement a spill prevention and control plan that specifies measures that will be used to prevent, control, and clean up hazardous material spills.
- Install plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Plant materials may include an erosion control seed mixture or shrub and tree container stock. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, may be installed as needed to stabilize disturbed areas until vegetation becomes established.
- Implementation of the BMPs specified in the erosion control plan and SWPPP would substantially reduce the potential for accelerated erosion and sedimentation to occur as a result of construction-related ground and vegetation disturbance.

7. OTHER PERMITS/AGREEMENTS/ETC

a) U.S. Army Corps of Engineers Permit

Indicate the type of ACOE permit (*check one*)

Nationwide Permit No(s) _____ Individual Permit No(s): _____ Regional Permit No(s): _____

Have you notified ACOE of project? ACOE project

Have you reviewed the General Conditions for your ACOE permit? _____

Have you attached a copy of the application/notification to ACOE? _____

b) California Department of Fish and Game Lake or Streambed Alteration Agreement

This is a Federal project, therefore no Lake or Streambed Alteration Agreement is required.

Date of Application: _____

Have you attached a copy of the application?

Has the Agreement been issued? _____ if so, list Agreement number: _____

8. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

a) Indicate the type of CEQA Document required for project and Lead Agency:

Categorical Exemption ____ Negative Declaration X Environmental Impact Report _____

Has the document been certified/approved, or has a Notice of Exemption been filed? No

If yes date of approval/filing _____ If no, expected approval/filing date: June 20, 2008

Lead Agency Central Valley Flood Protection Board

Submit final or draft copy if available*

b) Threatened or Endangered Species impacted by this project (*list potential*):

Twenty-seven special status species occur or have the potential to occur within the thirteen erosion sites. These species include: green sturgeon (*Acipenser medirostris*), Delta smelt (*Hypomesus transpacificus*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), winter-run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento splittail (*Pogonichthys macrolepidotus*), valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*), northwestern pond turtle (*Actinemys marmorata marmorata*), Cooper's hawk (*Accipiter cooperii*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), snowy egret (*Egretta thula*), white-tailed kite (*Elanus leucurus*), black-crowned night heron (*Nycticorax nycticorax*), osprey (*Pandion haliaetus*), double-crested cormorant (*Phalacrocorax auritus*), bank swallow (*Riparia riparia*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*), California black walnut (*Juglans californica* var. *hindsii*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), Mason's lilaeopsis (*Lilaeopsis masonii*), Delta mudwort (*Limosella subulata*), Sanford's arrowhead (*Sagittaria sanfordii*), marsh skullcap (*Scutellaria galericulata*), and Suisun marsh aster (*Symphotrichum lentum*).

PAST/FUTURE PROPOSALS BY THE APPLICANT

Briefly list/describe any projects carried out in the last 5 years or planned for implementation in the next 5 years that are in any way related to the proposed activity or may impact the same receiving body of water. Include the estimated adverse impacts from the past or future projects.

The proposed levee work would be conducted under the Sacramento River Bank Protection Project (SRBPP), the planning area for which extends from the lower Sacramento River near Collinsville (at river mile 0) to Chico Landing (at river mile 194) and includes the lower reaches of the American River (river miles 0-23), Feather River (river miles 0-61), Yuba River (river miles 0-11), and Bear River (river miles 0-17), as well as portions of Three Mile, Steamboat, Sutter, Miner, Georgiana, Elk, and Cache sloughs.

The SRBPP is a partnership between federal (USACE) and state (CVFPB) entities. Authorization for environmental features associated with the proposed work was provided through the Water Resources Development Act of 1990. The project is on-going, with similar bank protection measures completed in the past and anticipated in the future. Onsite mitigation on these sites has been determined to effectively eliminate adverse impacts.

CERTIFICATION

“I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Print Name: _____

Title: _____

Signature: _____

Date: _____