Chapter 2

Figures

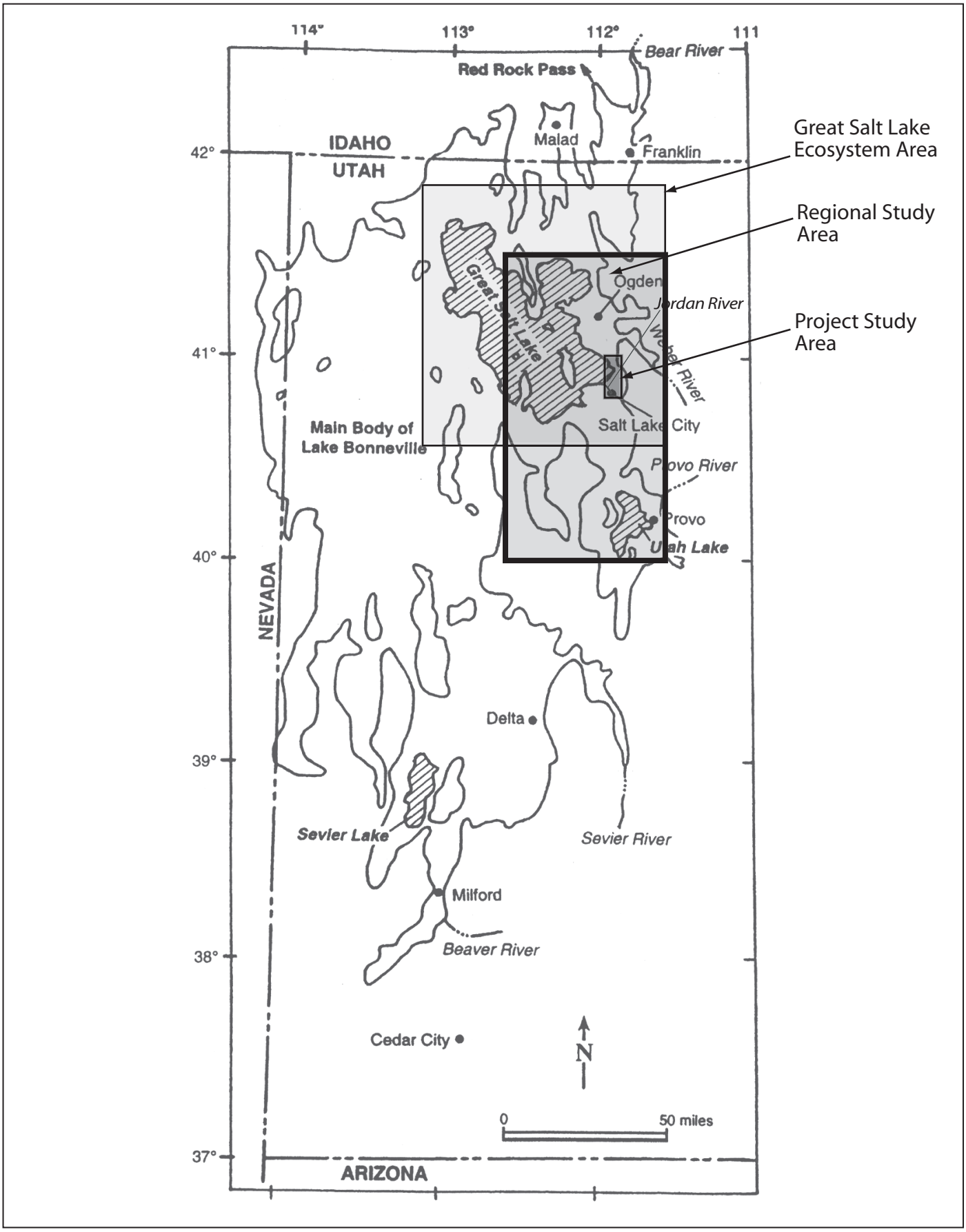

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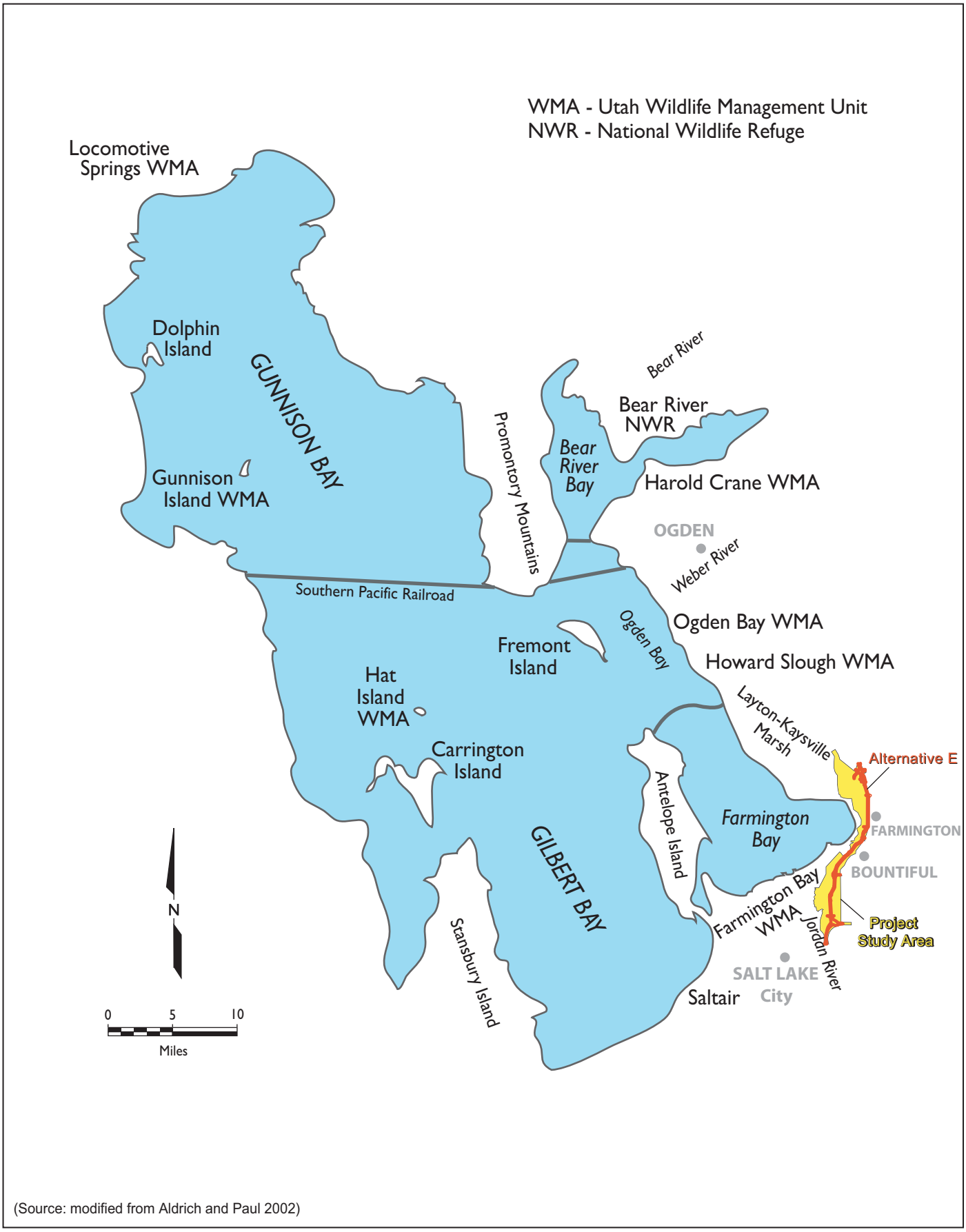
Figure 2-1
Location of Great Salt Lake in Lake Bonneville Basin



(Source: modified from Aldrich and Paul 2002)

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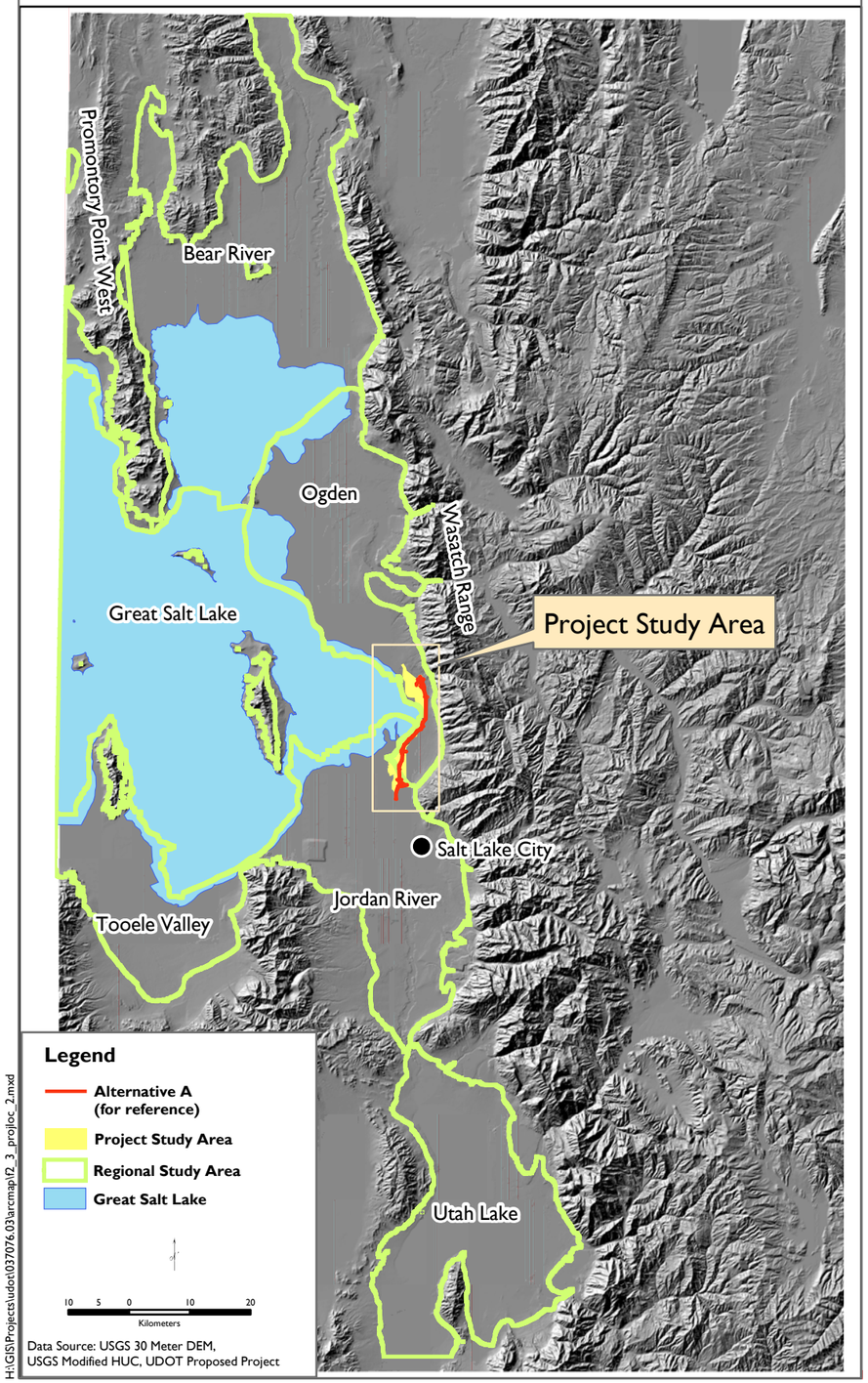
Jones & Stokes

Figure 2-2
Great Salt Lake Ecosystem Area

Regional Study Area



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Jones & Stokes

Project Study Area

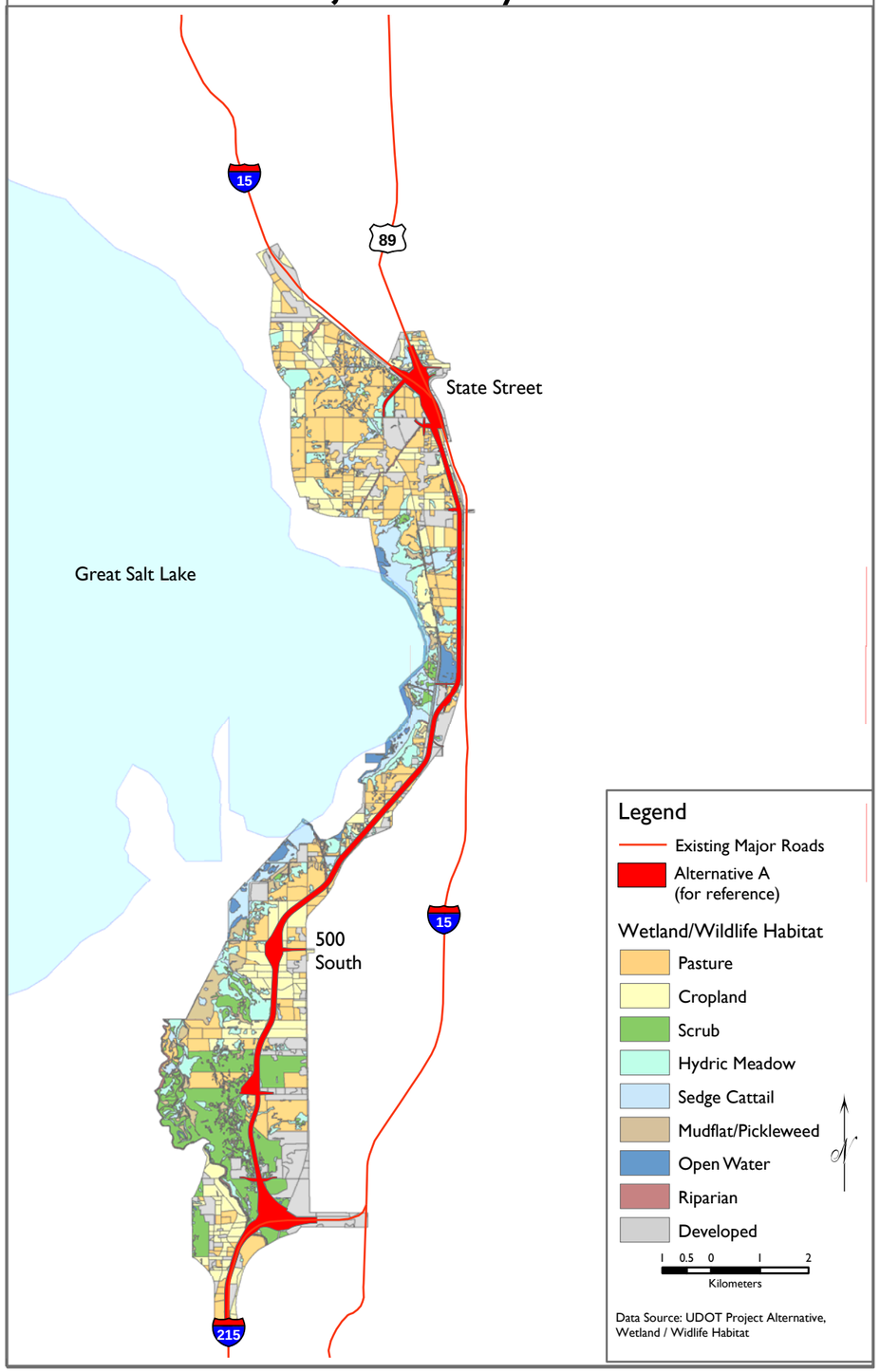
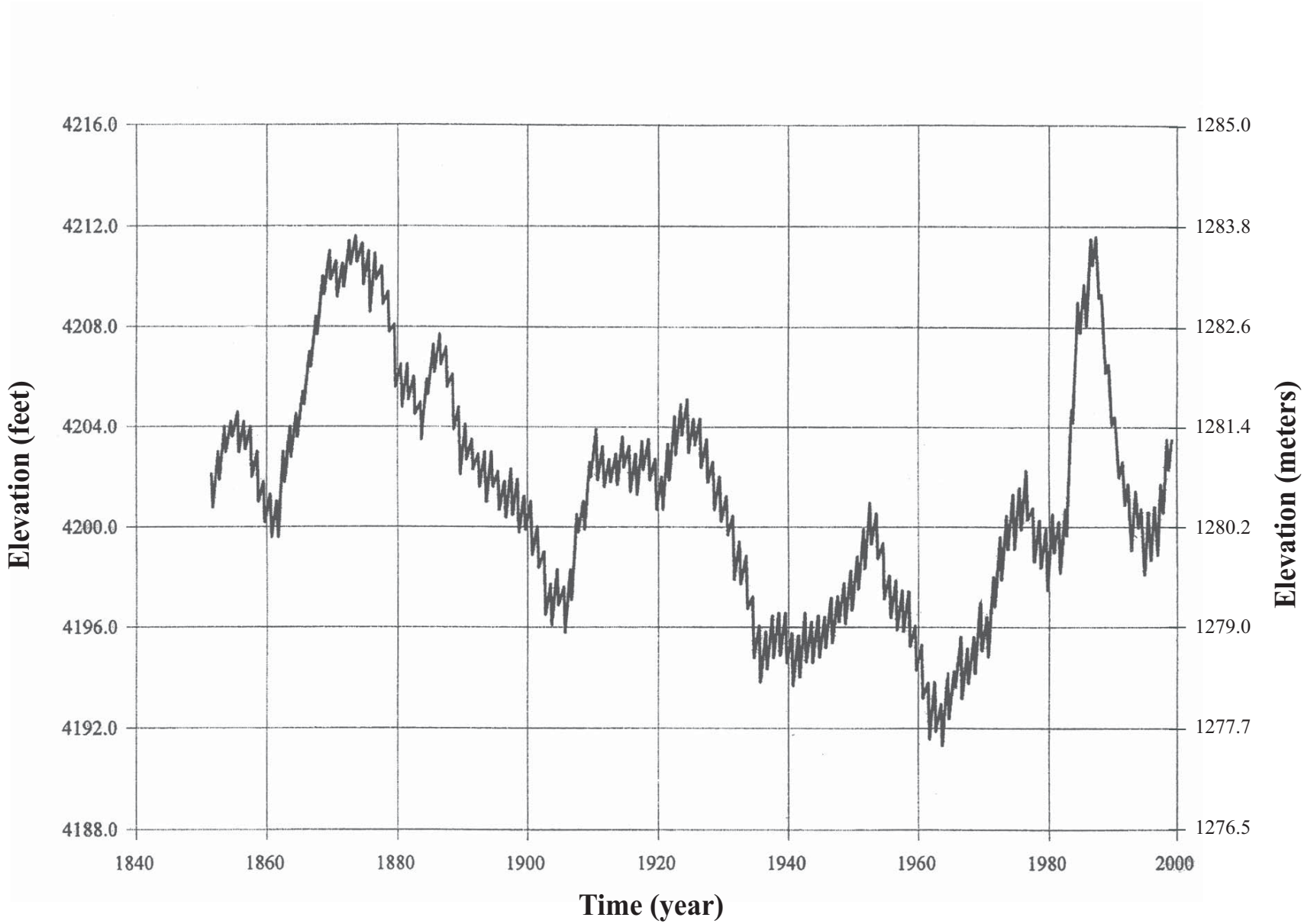


Figure 2-3
Legacy Parkway Regional and Project Study Areas



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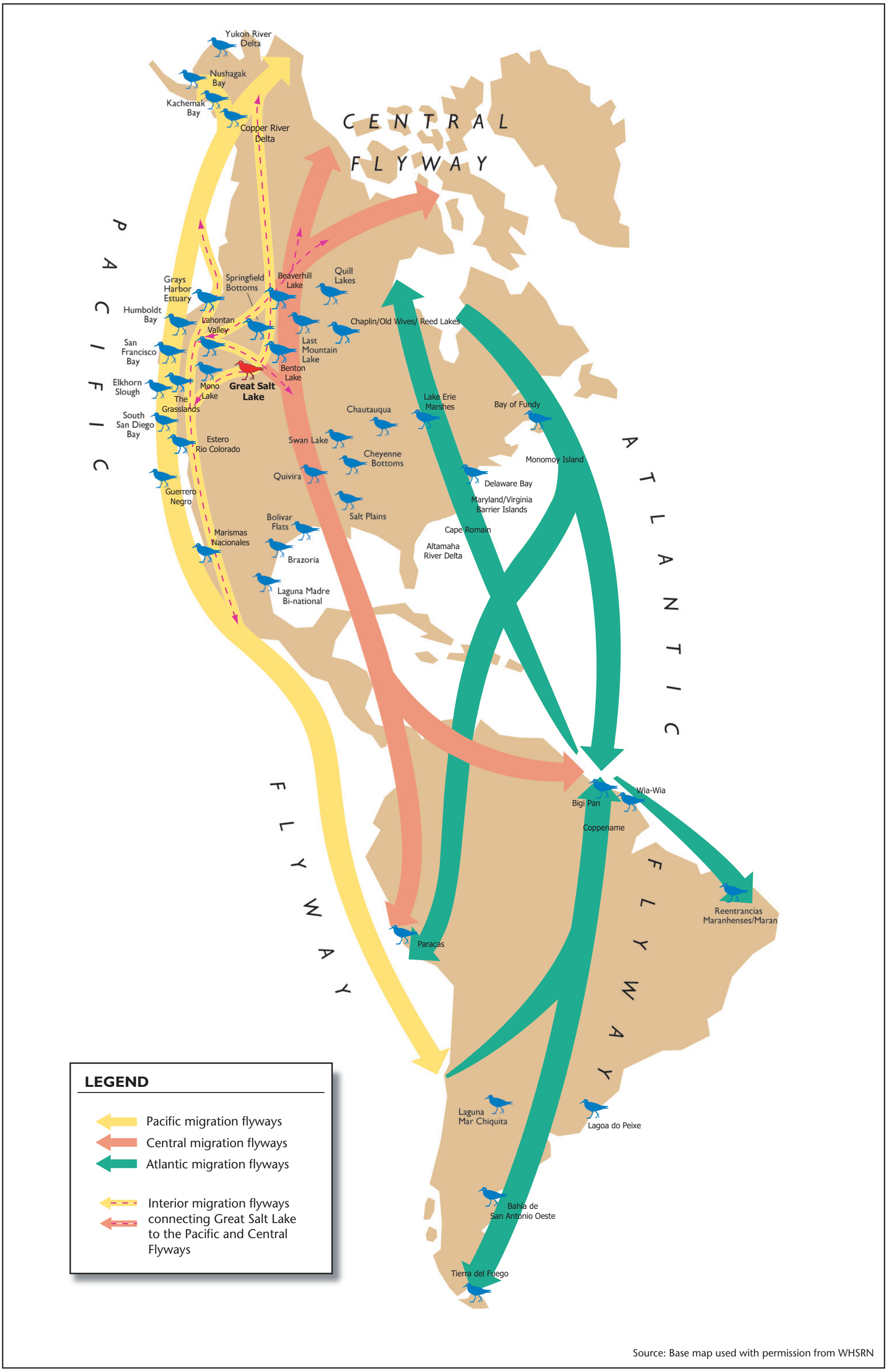
Jones & Stokes

Figure 2-4
Historical Great Salt Lake Hydrograph



Source: Base map used with permission from WHSRN

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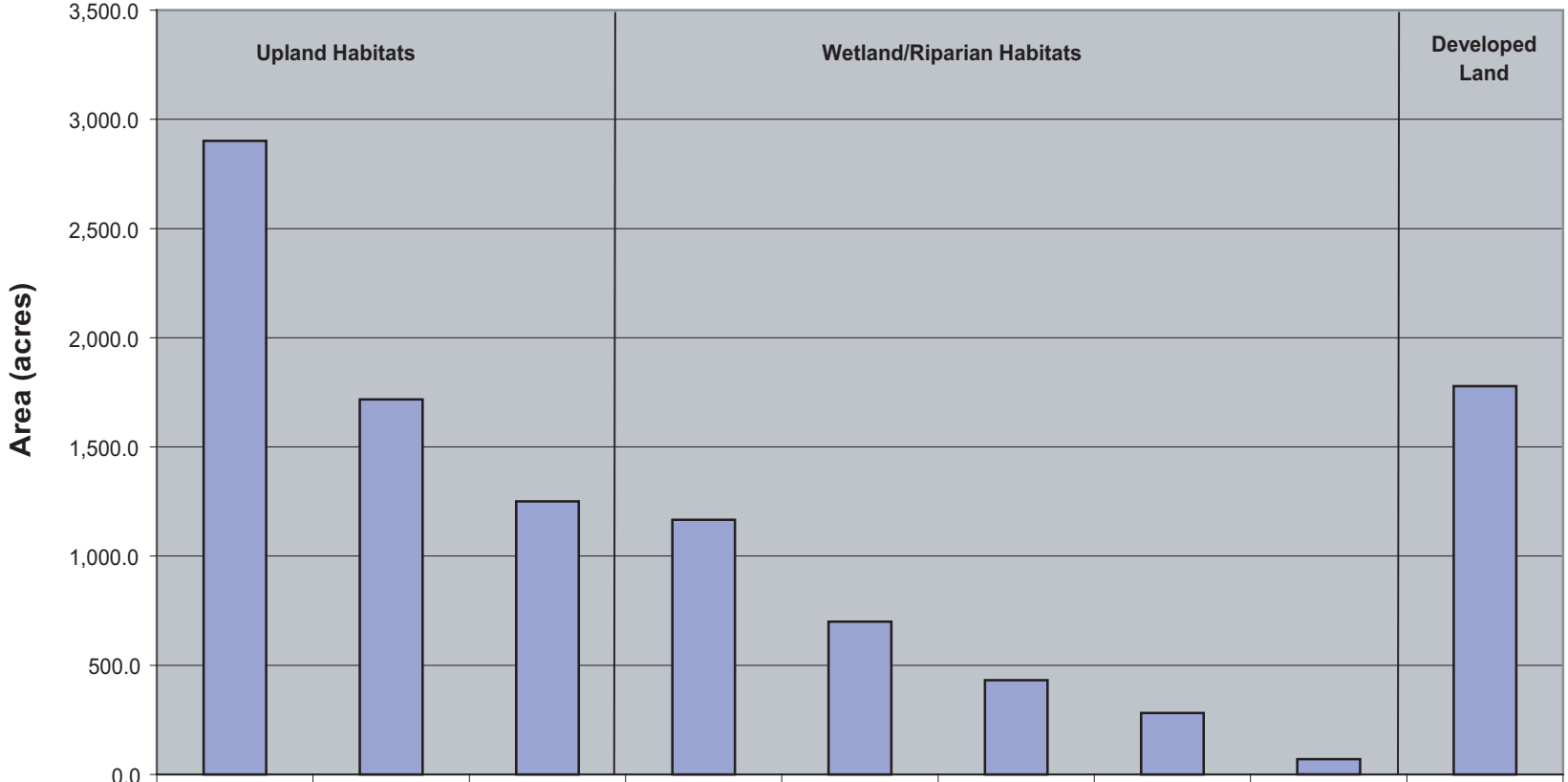
Figure 2-5
Western Hemisphere Shorebird Reserve Network (WHSRN) Sites



	Pasture	Cropland	Desert Scrub	Hydric Meadow	Sedge Cattail	Mudflat/ Pickleweed	Open Water	Riparian	Developed
Habitat Area (acres)	2,908.7	1,725.1	1,260.7	1,161.4	709.5	439.8	284.8	70.9	1,783.3

03076.03 002 Wildlife Tech Memo (revised 7-05)

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Figure 2-6
Total Existing Wildlife Habitat in Project Study Area

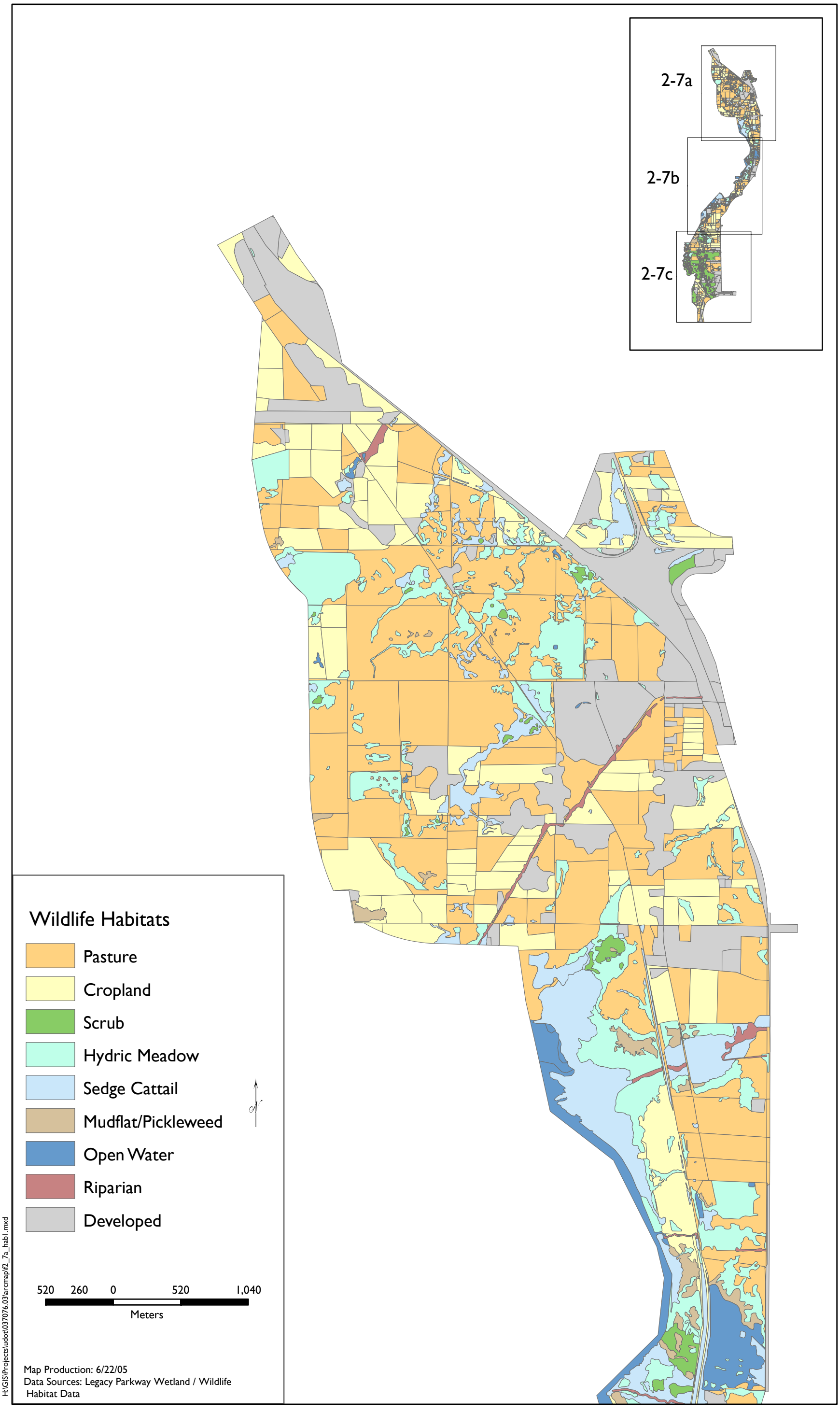

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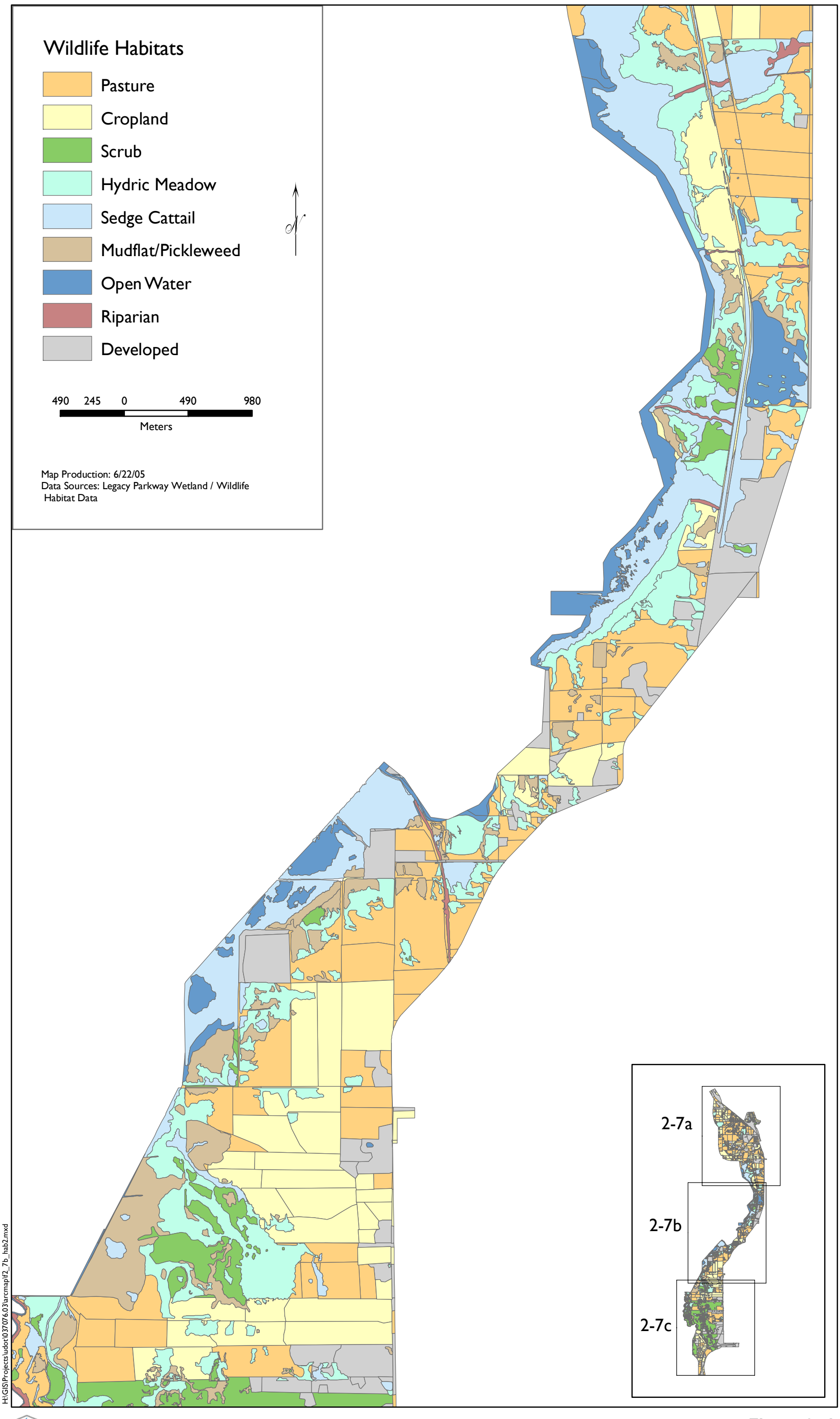
Figure 2-7a
Wildlife Habitats in the Project Study Area



Jones & Stokes

Figure 2-7b
Wildlife Habitats in the Project Study Area

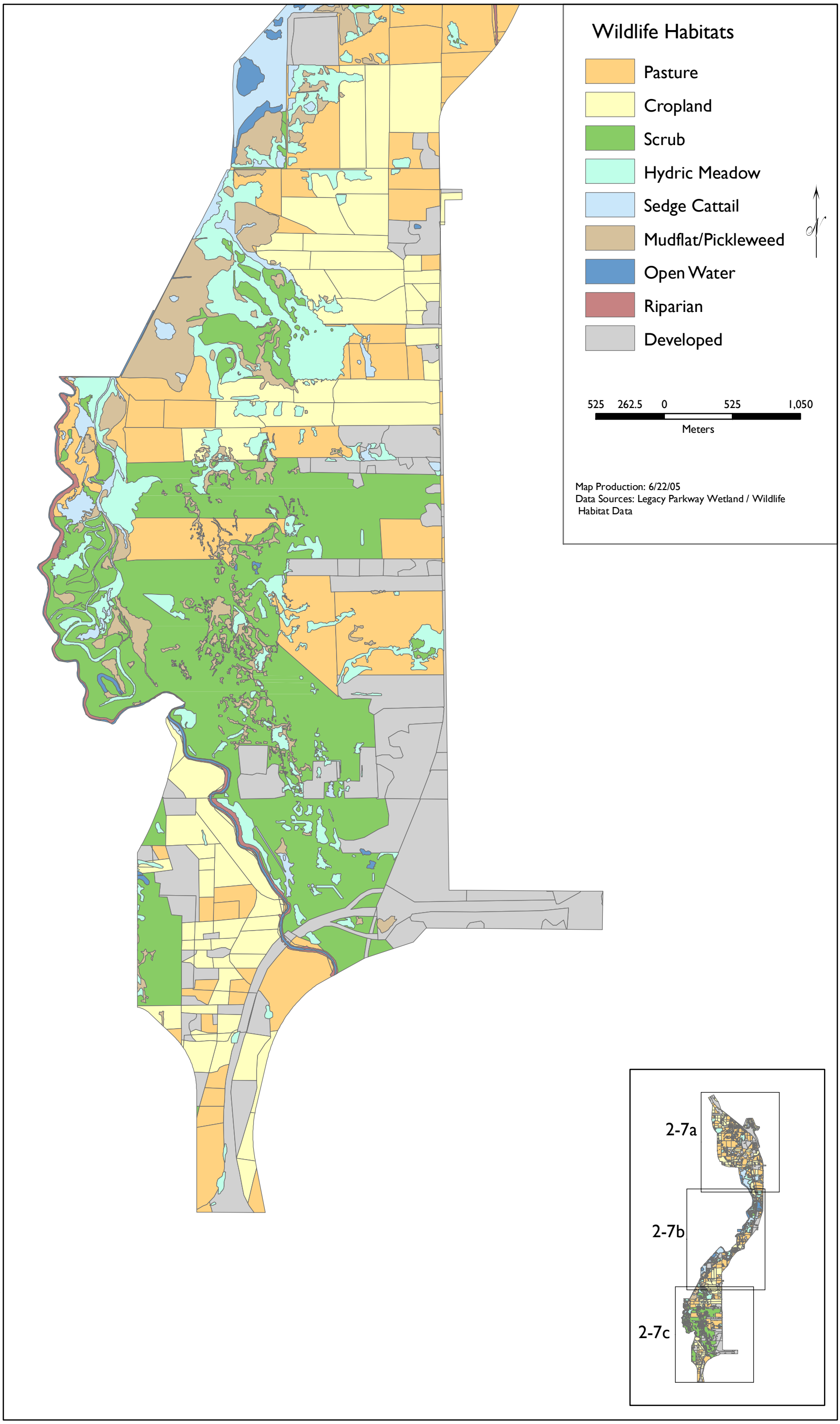


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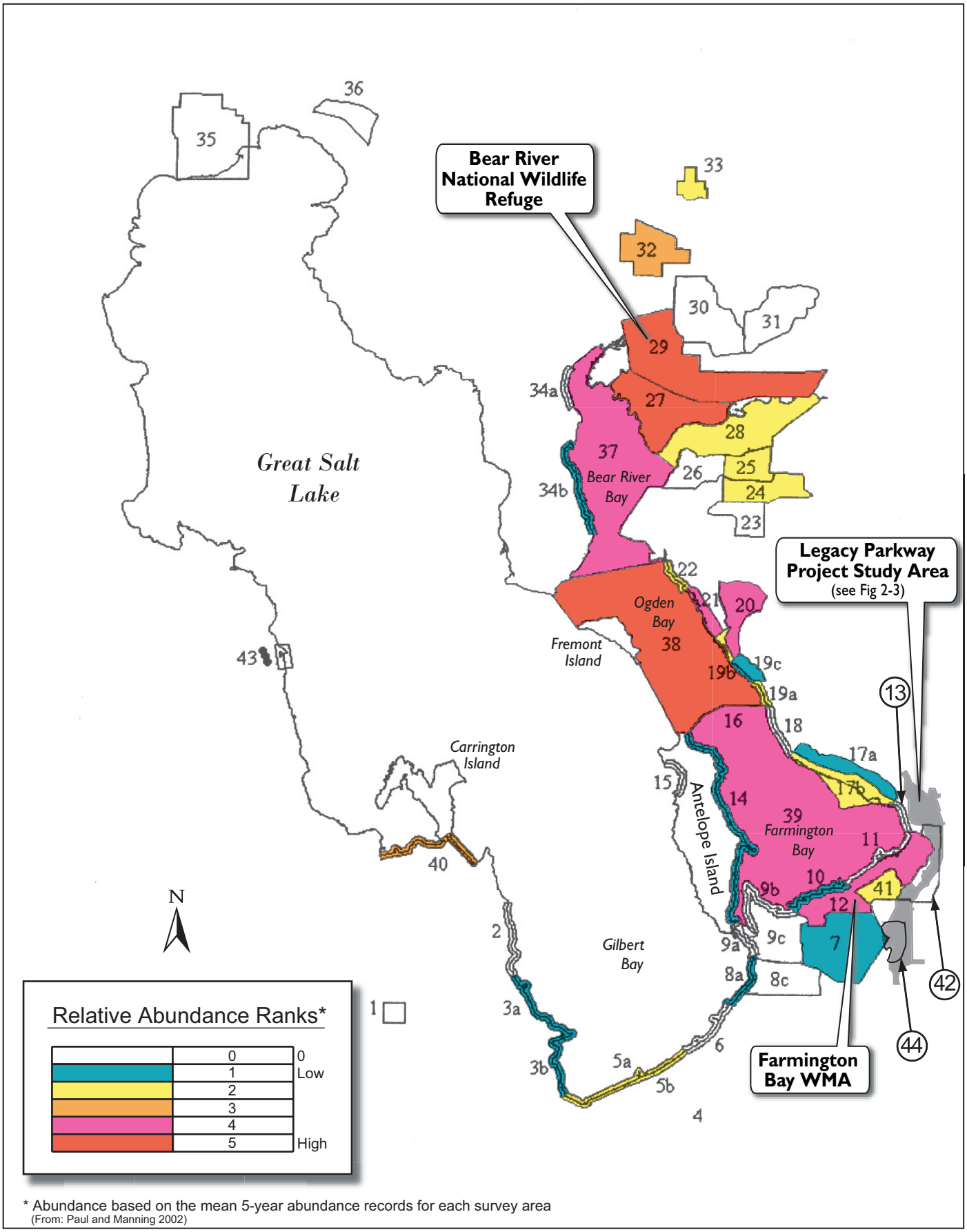
Figure 2-7c
Wildlife Habitats in the Project Study Area



Jones & Stokes

Figure 2-8
Great Salt Lake Waterbird Survey Areas

Figure 2-9. Distribution and Abundance of Great Salt Lake Migratory Waterbirds [1]

Relative Abundance Ranking Charts	Species	GSL Ecosystem Status[2]	Legacy Parkway Project Area Status[2]	Bear River Refuge[3] 29 [4]	Ogden Bay 38	South Bear River 27	Farmington Bay WMA 12	Farmington Bay 39	Ogden Bay WMA 20	Bear River Bay 37	Ogden Bay Lakeside 21	Magcorp 40	Public Shooting Grounds WMA 32	Willard Spur 28	New State Duck Club 41	Interstate 80 North (a) 5a	Harold Crane WMA 25	West Kaysville (b) 17b	Ogden Bay North 22	South Harold Crane 24	Howard Slough (b) 19b	Interstate 80 North (b) 5b	Howard Slough (a) 19a	Salt Creek WMA 33	Stansbury Is. South (a) 3a	Kennecott (a) 8a	West Kaysville (a) 17a	East Promontory (b) 34b	Crystal Lakeside 10	Howard Slough (c) 19c
	Eared Grebe	CS/RW	CT/RS	3.7	85,164.2	31.8	194.5	10,168.5	9.6	1,342.0	4.4	376.6	0.6	64.1	0.9	2,105.8	7.1	83.2	0.0	0.6	296.5	0.7	119.3	0.7	170.5	55.8	76.4	165.1	30.3	11.3
	Western Grebe	CS		101.2	10.1	206.0	21.4	4.8	26.2	804.7	0.1	1.3	42.4	167.2	6.4	0.2	10.6	0.1	0.0	0.5	0.2	11.3	0.0	6.0	0.0	35.5	0.0	4.3	0.1	3.4
	American White Pelican	CS	RS	2,119.2	13.4	6,524.9	554.7	22.0	125.7	11,465.8	6.8	0.0	194.0	2,877.8	100.7	0.0	250.0	2.7	3.2	22.5	46.4	95.5	2.3	92.2	0.0	0.1	5.0	31.9	136.1	47.6
	White-faced Ibis	CS	CS	8,396.1	21.7	4,799.1	862.4	80.7	1,636.6	787.1	224.2	1.0	543.3	1,762.3	198.8	0.8	1,520.2	923.4	0.0	392.2	55.7	20.5	47.5	664.0	0.0	11.2	471.4	66.5	61.6	226.6
	Canada Goose	CP	CP	788.5	636.8	198.5	507.1	48.4	478.6	2,355.8	13.1	0.1	312.0	174.0	100.0	1.5	548.4	18.8	0.4	142.6	89.4	55.2	60.2	301.3	0.0	22.5	49.3	1,897.4	75.1	99.1
	Gadwall	CS/CT/UW	US/UT/RT	9,960.1	0.3	13,547.7	4,084.4	22.0	8,025.7	413.0	20.4	0.7	1,144.7	522.3	5,454.7	0.0	691.2	5.6	1.0	231.6	5.0	29.3	11.3	437.1	0.0	51.4	9.6	17.3	1.7	403.5
	American Wigeon	RT	RT	2,148.6	0.0	489.6	1,410.0	13.5	1,840.3	125.7	52.5	0.0	2,111.1	54.4	107.2	0.0	369.1	0.0	0.0	100.5	0.3	5.9	0.0	222.0	0.0	0.0	2.8	232.0	0.6	111.2
	Mallard	CP	UP	12,256.8	0.2	12,683.3	3,033.8	179.7	5,086.5	373.4	27.9	0.8	2,128.7	469.5	2,489.1	0.1	2,507.4	98.0	0.0	683.1	40.8	112.1	0.3	950.1	0.0	4.7	332.0	16.7	21.2	308.1
	Cinammon Teal	CS	RS	3,609.1	0.5	976.7	2,581.4	0.8	4,218.3	59.6	32.2	0.5	759.9	81.3	2,151.7	0.0	671.3	29.0	0.0	234.1	18.2	2.0	27.3	445.2	0.0	1.5	22.9	56.7	0.1	550.2
	Northern Shoveler	CT/UW	UT	12,630.1	681.6	9,266.1	9,359.5	17,278.7	5,188.7	2,937.8	1,023.8	0.0	951.5	1,349.5	2,944.8	0.3	1,092.8	422.2	2.3	297.5	460.0	8.1	568.4	463.7	0.0	110.7	1,272.8	232.8	1,102.6	1,139.2
0	Northern Pintail	CT/RS	UT	14,614.8	121.5	10,417.7	12,162.3	513.6	11,559.5	6,211.9	132.8	0.0	18,732.7	2,733.2	910.7	0.0	2,472.0	20.0	16.4	544.9	41.9	140.2	61.3	4,977.9	0.0	37.2	63.6	80.7	11.2	876.8
Low Abundance	Redhead	CS		643.9	13.5	97.1	1,054.7	171.7	438.4	3,032.9	9.5	0.0	66.8	458.1	299.7	0.0	342.6	13.3	0.8	56.6	4.2	38.3	0.3	40.2	0.0	2.1	21.9	266.3	9.7	71.3
	Common Goldeneye	CW	RW	3.8	2.1	6.8	0.0	1.8	1.1	365.3	0.1	0.0	0.0	3.3	0.2	0.3	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	1.1
	Ruddy Duck	CS	RT	1,116.0	14.7	481.0	7,004.0	2.7	961.2	653.2	2.7	0.8	84.3	773.7	873.8	0.0	161.2	5.5	0.0	2.3	3.8	0.5	4.7	29.1	0.0	0.2	24.0	84.4	0.4	159.6
	American Coot	RP		7,560.4	0.8	6,192.9	6,841.1	12.9	3,935.7	2,325.8	5.4	0.0	1,731.4	1,773.4	1,490.7	0.1	925.0	64.5	0.0	254.2	1.8	37.4	3.4	245.3	0.0	3.2	56.8	243.5	43.1	371.7
High Abundance	Black-bellied Plover	CT	RT	17.7	0.3	15.5	5.8	0.0	61.3	9.3	82.2	0.1	0.0	0.0	0.1	0.0	9.9	96.3	9.2	0.6	26.7	0.0	122.5	0.0	2.7	96.1	4.2	0.0	209.4	12.1
	American Avocet	CS	UP	13,626.0	475.6	11,289.8	9,354.3	12,441.4	1,872.0	2,628.8	4,858.5	2,323.5	271.4	2,032.8	380.6	624.8	1,670.9	7,313.6	830.0	9,029.9	1,867.5	127.6	1,661.3	502.1	4,062.9	3,952.0	1,264.7	998.6	2,340.5	718.7
	Black-necked Stilt	CS	UP	8,351.8	32.1	4,266.1	1,854.1	1,033.1	1,276.0	890.2	758.2	0.7	407.4	528.6	84.7	9.4	803.5	3,194.6	114.3	349.7	185.8	55.9	183.4	284.7	0.0	66.8	1,218.9	6.7	713.2	167.0
	Marbled Godwit	CT	RT	8,866.7	0.9	4,547.9	0.7	4.3	93.5	16.6	4.9	0.0	0.0	1,269.9	0.0	0.0	217.1	3.1	1.3	49.9	0.7	0.4	0.5	0.9	1.3	5.4	1.2	0.0	1.5	2.2
	Sanderling	UT		0.0	0.0	0.0	0.0	0.0	9.3	1.3	451.0	12.9	0.0	0.2	0.0	2.1	0.0	0.7	7.4	0.0	0.7	1.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
	Western Sandpiper	RT		11,597.8	0.0	4,952.5	884.8	0.0	62.7	0.0	985.9	311.5	0.4	2.0	17.5	0.0	0.0	309.5	2.1	0.0	0.0	1.2	8.1	3.6	1,182.2	476.9	14.5	0.0	524.9	1.4
	Baird's Sandpiper	CT	RT	5.2	0.0	1.6	0.0	0.0	7.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.0	53.2	7.3	0.0	0.0	0.0	0.0
	Long-billed Dowitcher	CT	RT	1,087.8	0.0	5,086.4	1,666.1	0.0	232.1	2,248.5	37.2	0.0	1.0	1,994.5	157.9	0.0	1,156.7	86.4	0.0	105.6	0.3	0.1	0.2	7.8	28.4	0.8	239.4	0.0	4.5	61.7
	Wilson's Phalarope	CT/US	UT/RS	5,590.0	17,084.8	1,237.0	1,633.1	1,231.0	3,838.7	6,945.6	32,876.9	36,082.1	33.3	1,151.4	8.3	5.3	314.4	432.6	9,353.3	32.4	808.7	17.4	296.3	61.3	385.4	8.4	2,981.5	0.0	854.7	280.1
	Red-necked Phalarope	UT	RT	0.7	309.7	0.1	1,213.3	268.4	321.1	8.3	1,010.6	1,258.9	0.0	0.0	302.0	0.0	0.0	34.8	0.0	0.0	17.6	0.0	0.0	7.3	0.0	2.8	141.3	0.0	0.0	0.1
	Franklin's Gull	CS	CT	2,806.7	3,714.3	2,327.4	789.0	9,679.7	2,344.8	1,412.7	4,834.9	92.9	121.0	300.5	27.2	2,302.4	328.8	1,295.5	2,097.3	60.9	4,227.3	1,744.0	6,621.2	26.2	884.5	578.7	358.9	980.1	622.0	440.0
	Ring-billed Gull	CW	UW	22.3	551.4	18.4	110.4	1,248.4	915.5	803.2	507.3	0.0	84.2	164.2	4.2	316.8	27.4	12.4	110.1	19.7	1,675.5	6.2	957.9	24.6	2.8	0.1	49.0	176.0	393.8	285.9
	California Gull	CP	UP	1,330.3	14,645.4	1,059.4	3,328.2	5,927.2	2,752.0	8,340.1	3,057.9	2,437.4	99.9	316.5	132.1	12,312.2	315.4	517.1	1,131.9	127.9	1,641.3	9,039.6	441.7	146.4	2,868.7	3,677.5	115.6	2,072.1	125.1	400.6
	Black Tern	US	RS	122.6	0.4	127.2	94.0	3.9	1.4	1.3	2.1	0.0	0.2	3.5	0.0	0.0	0.2	9.7	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	51.1	0.2
	Pied-billed Grebe	CS/UW	US/RW	12.0	0.0	0.6	33.2	0.0	27.7	0.0	0.0	0.0	18.4	0.0	10.9	0.0	1.0	0.0	0.0	0.2	96.0	0.7	0.0	3.6	0.0	0.0	0.0	0.0	0.5	15.7
	Double-crested Cormorant	CS	RS	215.6	0.8	97.6	73.3	6.4	47.4	130.6	4.8	0.0	10.0	51.5	17.5	0.0	27.3	1.1	1.6	3.6	5.4	3.2	0.6	9.4	0.0	1.9	0.4	0.3	7.4	9.0
	Great Blue Heron	RS		40.7	2.0	37.7	51.6	1.5	52.6	13.2	2.8	0.2	18.4	18.9	16.5	0.8	32.1	2.2	0.6	6.7	1.6	1.8	1.0	9.0	0.0	1.2	1.9	1.0	3.4	11.6
	Snowy Egret	CS	US	155.1	1.3	98.9	138.3	1.4	79.8	54.3	20.3	0.0	69.2	187.5	72.6	0.0	64.0	10.0	0.0	16.7	0.7	12.8	0.4	32.0	0.0	0.4	13.8	4.1	3.1	12.9
	Black-crowned Night Heron	CS/RW	CS	11.8	0.0	12.7	30.4	0.0	26.1	4.4	2.1	0.1	8.7	5.3	7.7	0.0	35.7	2.6	0.0	3.3	0.5	0.2	0.3	5.1	0.0	0.2	4.6	0.0	12.5	6.2
0	Blue-winged Teal	US	RS	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.4	0.0	1.5	0.0	1.0	0.0	0.0	0.6	0.0	0.0	4.5	0.0	1.9	173.4	0.0	3.6	0.6	0.0	3.3	2.5
Low Abundance	Canvasback	UT		26.9	0.0	130.9	36.0	0.0	278.6	8.3	0.0	0.0	12.3	87.3	12.7	0.0	8.5	0.3	0.0	0.3	0.6	1.5	0.3	3.0	0.0	0.1	0.4	0.3	0.0	0.3
	Bufflehead	CW	RW	18.4	0.3	49.5	39.7	0.0	17.5	6.9	0.0	0.0	17.5	9.3	1.6	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.2	4.1	0.0	0.0	1.4	0.3	0.0	2.2
	Sandhill Crane	UT/RS	UT	0.5	0.0	0.6	1.1	0.0	11.1	0.1	0.5	0.0	4.8	0.2	1.2	0.0	5.1	0.6	0.0	9.3	0.5	0.0	0.4	24.2	0.0	0.0	0.2	0.2	0.0	5.6
High Abundance	Killdeer	CP	CP	5.0	0.0	2.7	5.8	0.0	11.5	0.0	0.6	0.4	2.3	0.0	4.4	42.3	5.7	0.4	0.1	2.1	0.9	2.8	2.0	4.9	0.1	1.7	0.0	2.3	0.0	3.8
	Snowy Plover	RT		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.5	0.8	4.9	0.7	0.3	0.5	0.0	0.0	72.8	45.1	0.0	0.0	0.1	0.1
	Greater Yellowlegs	CT	UT	15.7	0.0	5.6	0.8	0.0	40.9	0.0	0.5	0.2	7.3	0.2	7.5	0.0	2.2	0.0	0.0	0.2	0.0	0.8	0.3	8.3	0.0	0.4	0.0	0.0	9.6	2.8
	Lesser Yellowlegs	CT	UT	5.5	0.0	0.0	15.6	0.0	56.1	0.0	0.9	0.0	7.5	0.0	0.1	0.0	16.9	0.1	0.0	4.1	0.2	0.1	0.1	9.2	0.3	0.2	0.3	0.1	0.4	2.4
	Willet	CS	RS	16.0	0.2	10.7	6.7	0.0	126.5	1.9	254.1	0.1	7.9	9.0	10.8	16.3	7.9	49.1	23.0	4.3	45.1	5.4	45.3	6.3	0.0	39.9	15.6	7.5	35.3	11.4
	Long-billed Curlew	CT	RT	0.1	0.0	0.0	0.0	0.0	2.4	0.0	10.8	1.8	0.1	0.0	0.0	0.0	1.0	0.1	0.1	2.5	1.0	0.0	0.7	1.1	1.2	0.8	0.1	11.5	0.6	3.9
	Least Sandpiper	CT	RT	0.7	0.0	0.0	18.5	0.0	12.0	0.0	8.2	285.4	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.1	0.0	0.0	0.0	0.0	229.6	0.3	0.0	0.0	0.0	0.6
	Caspian Tern	US	RS	9.3	0.1	9.9	1.1	1.8	0.2	29.8	0.7	0.0	0.2	8.5	0.2	0.1	5.6	0.8	0.1	0.3	0.5	0.5	0.0	0.0	0.0	0.1	0.2	4.4	0.9	0.4
	Forster's Tern	RW		70.3	1.1	79.4	72.1	11.2	74.9	62.4	18.2	0.0	57.0	168.4	12.1	0.2	77.3	20.3	18.7	17.9	2.4	21.3	0.3	6.0	0.0	0.3	10.8	2.6	29.8	8.2
	Total No. Species	47	38	40	29	40	38	27	42	35	40	22	36	35	38	19	36	39	22	35	39	35	35	38	14	37	34	29	35	41
	Total Mean Abundance			129,901	123,501	101,296	71,038	60,369	58,096	56,780	51,312	42,903	30,008	21,397	18,409	17,742	16,620	15,062	13,712	12,791	11,673	11,580	11,252	10,232	9,716	9,321	8,837	7,649	7,410	6,837
	Abundance Rank			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Figure 2-9. Distribution and Abundance of Great Salt Lake Migratory Waterbirds [1]

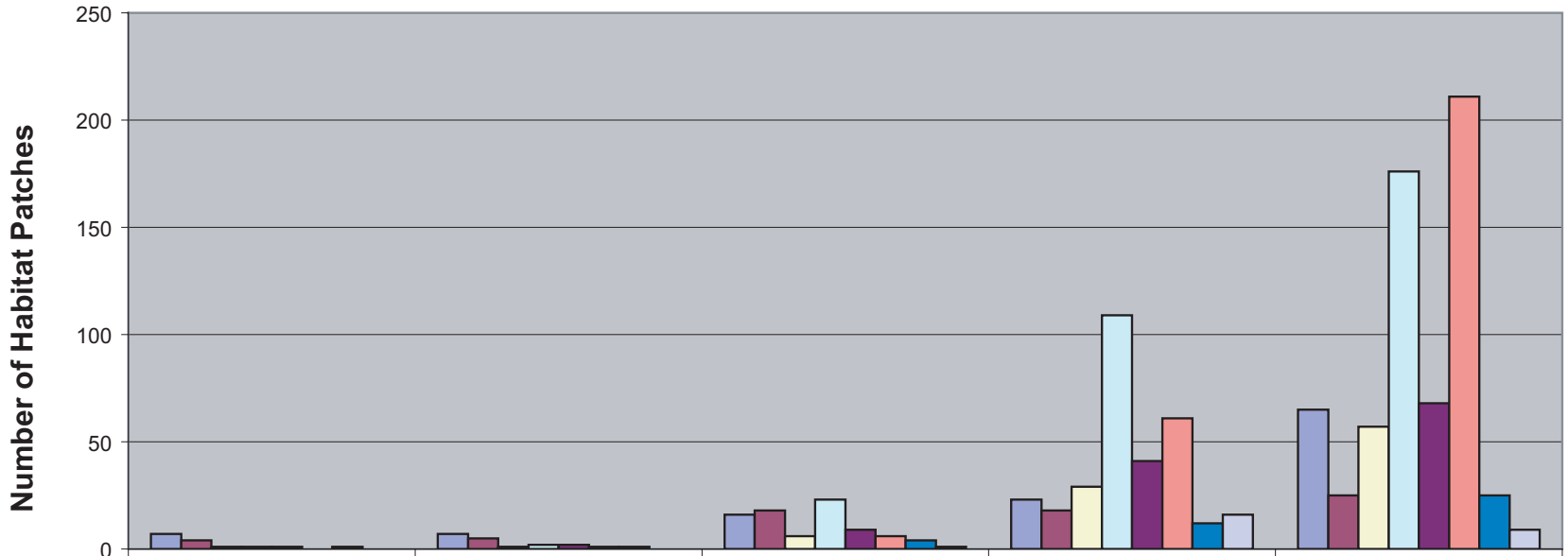
Relative Abundance Ranking Charts	Species	GSL Ecosystem	Legacy Parkway Project Area	Antelope Is. East	Associated Duck Club	Stansbury Is. South (b)	Farmington Bay Lakeside	West Layton	Saltair	Deardens Knoll	Audubon (b)	West Farmington	East Promontory (a)	Rainbow	Antelope Island Causeway	Kennecott (c)	Bear River Club	Stansbury Is. North	Antelope Is. West	Audubon (a)	Locomotive Springs WMA	Timpie Springs WMA	Salt Wells Flat WMA	East Farmington Bay	Jordan River
	Status[2]			14	7	3b	11	18	6	43	9b	13	34a	23	16	8c	30	2	15	9a	35	1	36	42	44
	Eared Grebe	CS/RW	CT/RS	1,238.1	0.3	0.0	65.3	101.4	206.7	916.7	92.8	56.2	0.2	0.0	344.5	1.3	3.1	85.2	794.4	0.0	0.6	0.2	0.3	0.2	3.8
	Western Grebe	CS		0.5	2.6	0.0	4.7	0.0	0.2	0.0	0.0	1.4	13.6	0.6	0.1	0.1	1.5	0.0	0.7	0.0	0.5	0.1	0.0	1.1	0.3
	American White Pelican	CS	RS	0.0	263.1	0.1	21.8	0.0	0.8	0.4	0.0	12.1	330.5	13.0	2.8	1.4	74.5	0.0	0.0	0.0	5.4	5.3	0.2	30.2	0.6
	White-faced Ibis	CS	CS	0.0	487.1	0.0	19.2	27.9	5.1	0.0	0.1	34.9	53.5	478.8	1.1	205.2	457.1	0.0	1.2	0.5	54.8	13.7	17.4	33.6	7.1
	Canada Goose	CP	CP	43.9	206.1	0.0	6.9	43.6	2.9	0.0	1.7	31.1	254.5	117.4	0.6	188.4	270.9	0.0	1.4	7.2	10.7	17.6	5.4	64.9	25.5
	Gadwall	CS/CT/UW	US/UT/RT	37.6	460.0	0.0	0.2	115.0	0.2	0.0	4.1	68.3	195.6	116.5	0.0	33.4	26.7	0.0	0.9	3.4	24.6	18.3	10.5	0.0	2.3
	American Wigeon	RT	RT	0.0	966.0	0.0	0.0	0.6	0.0	0.0	0.5	0.0	611.5	57.4	0.0	1.5	12.4	0.0	0.0	0.0	15.4	6.0	0.5	0.0	3.1
	Mallard	CP	UP	60.1	821.5	0.0	0.1	55.3	24.2	0.0	0.1	5.0	45.0	400.1	0.1	53.6	14.7	0.0	0.4	0.1	194.5	40.2	4.2	8.6	5.3
	Cinammon Teal	CS	RS	0.0	70.6	0.0	0.0	14.4	0.4	0.0	0.0	4.7	8.8	74.9	0.0	35.6	18.0	0.0	0.0	0.4	27.5	1.5	5.6	3.0	1.0
	Northern Shoveler	CT/UW	UT	120.0	60.9	0.0	376.7	1,065.4	0.9	0.0	170.5	426.6	654.5	254.2	59.1	119.0	79.6	0.0	0.2	20.0	27.1	6.9	1.6	0.0	2.5
0	Northern Pintail	CT/RS	UT	5.2	1,045.3	0.0	0.4	6.0	0.6	0.1	1.5	41.7	237.4	455.7	0.0	43.6	90.3	0.0	0.0	0.0	217.3	103.1	6.9	1.6	0.1
Low Abundance	Redhead	CS		0.0	9.4	0.0	0.2	0.5	10.7	0.0	3.7	1.3	1.5	19.9	0.1	2.9	1.2	0.0	0.1	0.0	156.1	10.8	1.5	0.0	0.9
	Common Goldeneye	CW	RW	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.1	0.0
	Ruddy Duck	CS	RT	0.0	65.3	0.0	0.8	0.0	10.1	0.0	0.0	5.0	16.0	7.0	0.0	0.5	7.2	0.0	0.8	0.0	8.2	1.8	0.6	0.5	0.0
	American Coot	RP		0.1	615.0	0.0	23.2	0.5	31.1	0.0	0.0	8.1	233.0	128.1	0.3	2.5	92.9	0.0	0.0	0.1	9.2	211.9	0.0	0.1	30.8
High Abundance	Black-bellied Plover	CT	RT	8.3	28.2	0.0	0.0	35.2	10.9	0.0	107.0	9.4	0.0	0.0	0.2	36.0	0.0	0.0	0.1	61.4	7.0	0.0	0.2	0.9	0.0
	American Avocet	CS	UP	3,078.9	657.9	1,166.9	170.1	1,217.9	1,733.8	835.7	2,253.3	641.4	181.4	239.7	51.5	1,251.6	490.3	669.7	111.6	547.6	20.2	87.2	16.1	10.0	1.0
	Black-necked Stilt	CS	UP	127.6	162.4	1.1	160.1	88.5	91.5	0.8	131.3	183.8	6.4	87.4	123.0	126.0	152.0	0.0	20.2	6.0	13.1	25.7	8.0	4.4	0.0
	Marbled Godwit	CT	RT	0.2	3.4	0.0	2.0	0.6	0.3	0.0	0.4	0.4	0.0	1.7	0.0	0.3	24.8	0.0	0.0	0.0	3.5	0.4	0.0	0.0	0.0
	Sanderling	UT		15.1	0.0	0.0	0.0	0.1	8.0	0.0	262.3	0.0	0.0	0.0	59.4	0.4	0.0	0.1	0.0	17.4	0.2	12.0	0.0	0.0	0.0
	Western Sandpiper	RT		0.6	0.3	176.0	1.1	9.3	26.4	45.0	233.1	1.0	0.2	0.0	0.0	60.8	0.1	0.0	0.0	3.1	62.1	0.2	24.3	0.3	0.0
	Baird's Sandpiper	CT	RT	0.0	0.0	0.7	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	1.8	0.3	1.2	0.0	0.0
	Long-billed Dowitcher	CT	RT	0.0	22.5	0.0	0.0	0.2	0.6	0.1	0.0	0.0	0.0	38.2	0.1	3.2	89.8	0.0	0.0	0.1	5.8	0.3	1.7	3.5	0.0
	Wilson's Phalarope	CT/US	UT/RS	54.9	3.4	56.3	3,348.0	358.4	3.1	1,796.9	37.1	2.5	0.1	12.3	182.0	9.5	5.4	0.0	83.5	14.8	117.4	5.5	21.8	0.0	0.0
	Red-necked Phalarope	UT	RT	0.0	17.3	0.0	0.0	0.8	0.2	0.0	4.6	229.8	0.5	0.0	71.1	89.6	2.6	0.0	1.8	0.0	14.3	10.6	0.0	0.0	0.0
	Franklin's Gull	CS	CT	676.7	43.2	2,067.8	76.4	772.2	34.4	4.7	78.1	1,037.0	97.4	38.0	140.4	15.6	81.6	1.3	20.3	30.7	0.3	0.0	0.4	0.6	0.4
	Ring-billed Gull	CW	UW	0.0	10.8	0.0	38.1	150.9	4.1	0.0	146.0	156.0	203.1	1.9	1,022.1	0.0	54.4	3.9	0.0	16.6	4.5	0.5	0.0	0.0	0.0
	California Gull	CP	UP	855.6	51.8	992.6	154.9	182.2	1,884.5	453.4	304.8	662.5	170.3	229.5	719.7	57.9	38.1	1,261.3	407.4	608.7	33.3	112.5	164.8	129.4	1.0
	Black Tern	US	RS	0.0	9.4	0.0	1.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
	Pied-billed Grebe	CS/UW	US/RW	0.0	4.2	0.0	0.1	0.0	0.9	0.0	0.0	0.0	0.1	0.1	0.0	0.2	4.9	0.0	0.0	0.0	2.0	0.5	0.0	0.2	0.0
	Double-crested Cormorant	CS	RS	0.0	10.8	0.0	1.4	0.1	3.4	0.0	0.1	23.0	1.4	0.6	0.0	0.4	5.5	0.0	0.0	1.4	6.0	0.3	0.0	1.4	0.0
	Great Blue Heron	RS		0.4	26.4	0.0	1.6	0.2	0.7	0.0	0.3	2.0	2.7	8.6	0.0	2.3	7.9	0.0	0.1	0.3	8.9	3.7	1.2	4.9	0.0
	Snowy Egret	CS	US	0.0	69.5	0.0	8.2	0.2	11.6	0.0	0.0	3.2	8.1	24.1	0.2	3.9	59.3	0.0	0.0	0.1	1.6	1.6	0.2	5.8	0.8
	Black-crowned Night Heron	CS/RW	CS	0.0	8.9	0.0	0.5	0.0	0.2	0.0	0.0	0.5	0.3	2.6	0.0	0.2	4.9	0.0	0.0	0.2	4.4	3.1	0.1	0.1	0.0
0	Blue-winged Teal	US	RS	0.2	5.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.2	0.0	0.0	0.0	2.7	1.7	1.4	0.0	0.0
Low Abundance	Canvasback	UT		0.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0	0.0	1.7	0.0	0.2	0.0	23.6	0.1	0.6	7.8	0.0
	Bufflehead	CW	RW	3.3	2.1	0.0	0.0	0.2	0.0	0.0	0.0	1.7	0.1	0.0	0.0	0.8	3.1	0.0	0.0	0.0	7.8	0.6	0.5	0.0	0.0
	Sandhill Crane	UT/RS	UT	0.0	1.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	1.8	2.7	0.0	0.0	17.9	0.0	0.0	0.0	0.7	0.2	0.3	0.9	0.0
High Abundance	Killdeer	CP	CP	2.8	17.3	0.5	0.5	1.9	12.3	0.2	0.2	7.0	3.1	3.3	2.4	26.0	5.9	0.0	2.9	0.9	15.2	1.9	9.5	8.0	0.0
	Snowy Plover	RT		0.0	0.7	38.3	0.6	12.9	5.3	0.0	34.3	0.2	0.2	0.3	0.1	8.8	0.3	0.0	0.1	0.1	59.5	1.1	72.2	1.0	0.0
	Greater Yellowlegs	CT	UT	0.1	1.1	0.0	0.0	0.2	1.2	0.0	0.0	1.9	0.7	0.0	4.5	1.6	5.5	0.0	0.0	0.0	3.9	2.3	1.7	0.6	0.0
	Lesser Yellowlegs	CT	UT	0.0	4.6	0.0	0.0	0.0	0.5	0.0	0.1	0.3	0.0	2.0	0.0	0.4	7.9	0.0	0.0	0.0	4.9	0.9	0.9	0.7	0.0
	Willet	CS	RS	11.7	4.9	3.1	4.8	39.6	7.9	1.0	9.4	10.6	18.5	3.3	12.8	22.9	3.5	0.8	30.7	6.1	76.3	9.0	34.5	0.9	0.1
	Long-billed Curlew	CT	RT	1.2	16.2	0.8	0.0	0.7	0.0	0.2	1.1	0.0	17.0	3.9	0.0	8.1	0.5	0.0	5.6	3.0	15.8	0.1	10.7	0.1	0.0
	Least Sandpiper	CT	RT	0.0	1.0	0.0	0.0	2.4	1.2	0.0	1.3	3.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.1	0.4	0.8	0.0
	Caspian Tern	US	RS	0.0	3.6	0.0	0.9	0.0	0.9	0.0	0.2	1.2	8.9	0.4	0.2	0.2	1.4	0.0	0.0	0.1	2.2	1.2	0.0	0.1	0.0
	Forster's Tern	RW		0.0	23.3	0.0	5.0	0.4	6.0	0.0	1.2	4.4	9.3	8.2	0.0	0.5	12.4	0.0	0.0	0.0	10.8	4.5	0.0	2.6	0.0
	Total No. Species	47	38	**24**	**41**	**11**	**29**	**32**	**36**	**12**	**28**	**35**	**34**	**32**	**25**	**39**	**40**	**7**	**21**	**24**	**42**	**40**	**34**	**30**	**18**
	Total Mean Abundance			**6,342**	**6,243**	**4,503**	**4,490**	**4,303**	**4,136**	**4,055**	**3,886**	**3,671**	**3,352**	**2,820**	**2,798**	**2,413**	**2,218**	**2,022**	**1,479**	**1,347**	**1,253**	**720**	**417**	**325**	**87**
	Abundance Rank			**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**

1. Abundance data are the mean 5-year abundance records for each species at each survey area described in Appendix 1 in Paul and Manning (2002). Color coding shows relative mean abundance for each species across all survey sites. Color coding varies with rank scale for each species (see left) as shown in Appendix 2 of Paul and Manning. Species are sorted in descending order of seasonal abundance for GSL Ecosystem. Species names in yellow colored cells are USFWS Birds of Conservation Concern for the Great Basin (U.S. Fish and Wildlife Service 2002. http://migratorybirds.fws.gov/reports/BCC02/BCC2002.pdf).

2. Abundance Codes: C - common (Found consistently in fair numbers in appropriate habitat and season); **U** - uncommon - (Found consistently in small numbers in appropriate habitat and season); **R** - Rare (Found infrequently but regularly in very small numbers in proper habitat and season); **Season Codes: P** - permanent (Found year round); **S** - summer (Present during the nesting season); **W** - winter (Present during January and/or February); **T** - transient (Migrates through in the spring and/or fall).

3. Survey Site Name. Survey site columns are sequentially presented in order of descending total mean abundance.

4. Survey Site Number (see Figure 2-7).



	100+ Acres	50-99 Acres	10-49 Acres	1-9 Acres	0-1 Acre
Pasture	7	5	19	24	68
Cropland	4	5	18	18	26
Desert Scrub	1	1	7	32	59
Wet Meadow	1	2	24	108	178
Wemergent Marsh	1	3	8	41	72
Mudflat/Pickleweed	0	1	6	61	211
Open Water	1	1	3	14	29
Riparian	0	0	1	16	9

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Figure 2-10
Number of Existing Habitat Patches within the Project Study Area

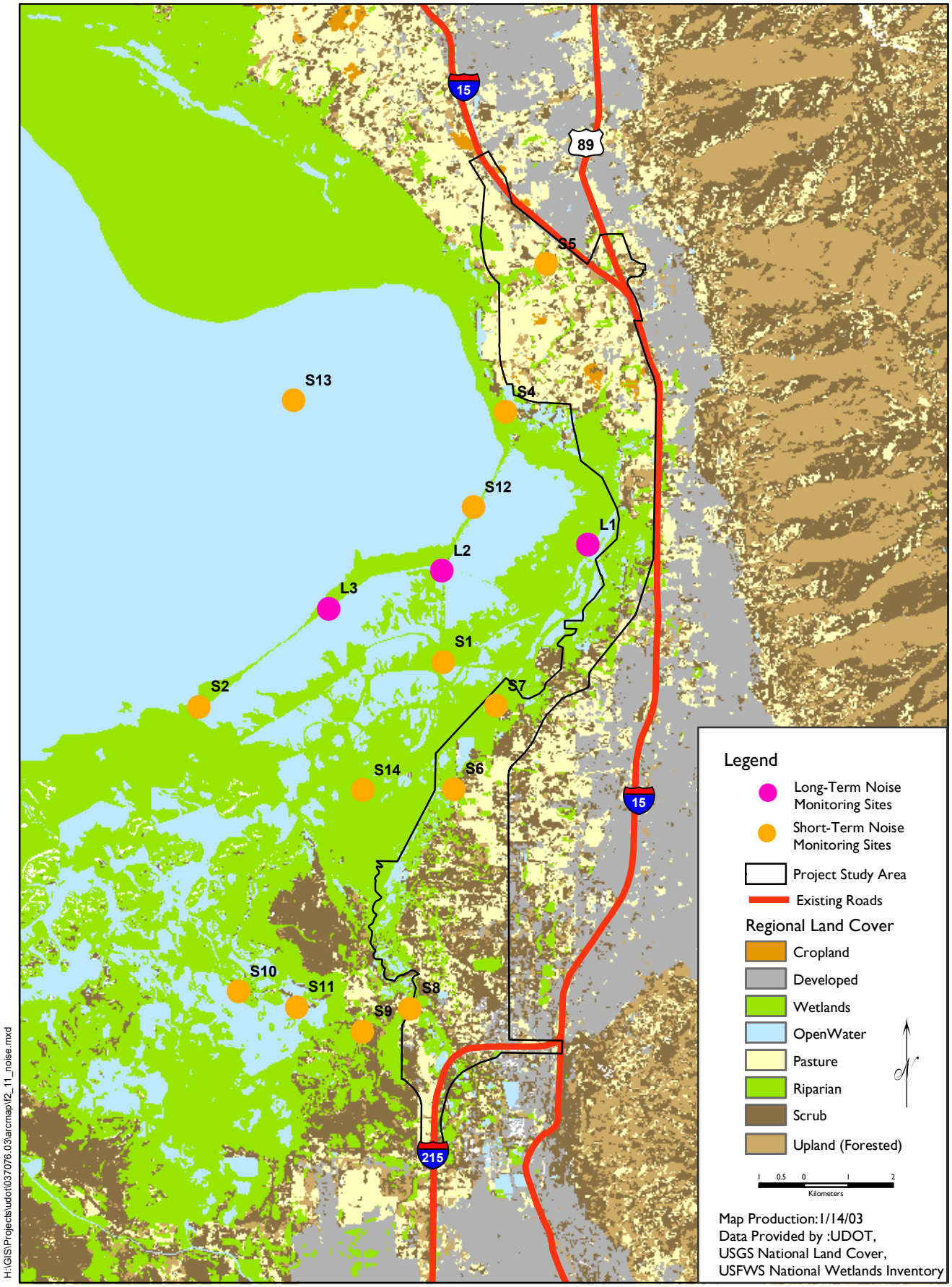

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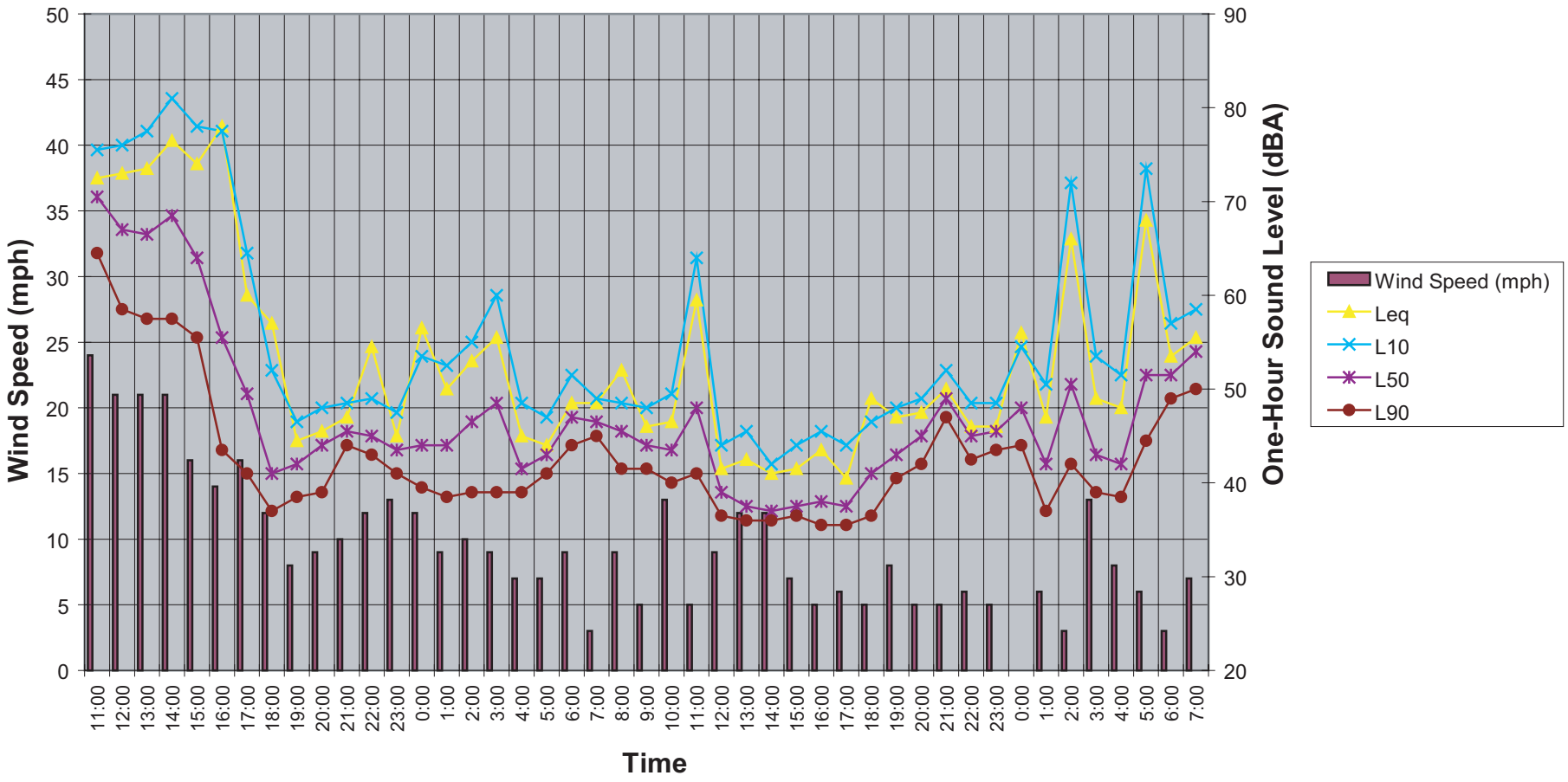
Figure 2-11
Noise Monitoring Sites in the Legacy Parkway Project Study Area



Leq – Equivalent Sound Level. The equivalent steady-state sound level that, in a stated period in time, would contain the same acoustical energy.

Lxx – Percentile-Exeeded Sound Level. The sound level exceeded "x" percent of a specific time period. L10 is the sound level exceeded 10% of the time.

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Figure 2-12
Background Sound and Wind Levels at Long-Term Position 1