

APPENDIX H

Wildlife Species and Associated Plant Communities and
Aquatic Ecosystems at the Upper Truckee Marsh

Appendix H: Wildlife species and associated plant communities and aquatic ecosystems at the Upper Truckee Marsh. Species in bold have been observed at the site during recent surveys. Other species may potentially occur. List compiled from TRPA surveys from 1999-2002 (TRPA 2001, TRPA 2002), CTC surveys from 2002 (CTC 2002), and S. Fox suveys from 1994-1996 (Global 1997).

Scientific Name	Common Name	Community Associations ¹	Breeder? ²
AMPHIBIANS			
<i>Ambystoma macrodactylum</i>	Long-toed Salamander	WS, MM, ST, LG	M
<i>Bufo boreas</i>	Western Toad	WS, MM, ST, LG	
<i>Hyla regilla</i>	Pacific Treefrog	WS, MM, ST, LG	B
<i>Rana catesbeiana</i>	Bullfrog	WS, MM, ST, LG	M
<i>Rana muscosa</i>	Mountain Yellow-legged Frog	WS, MM, ST, LG	
REPTILES			
<i>Chanina bottae</i>	Rubber Boa	JP, LP, MM	
<i>Elgaria coerulea</i>	Northern Alligator Lizard	JP, LP, MM	
<i>Sceloporus occidentalis</i>	Western Fence Lizard	JP, LP, MM	
<i>Thamnophis couchii</i>	Western Aquatic Garter Snake	WS, MM, ST, LG	
<i>Thamnophis elegans</i>	Western Terrestrial Garter	WS, MM, ST, LG	
<i>Thamnophis sirtalis</i>	Common Garter Snake	WS, MM, ST, LG	
BIRDS			
<i>Accipiter cooperii</i>	Cooper's Hawk	JP, LP, WS	
<i>Accipiter gentilis</i>	Northern Goshawk	JP	
<i>Accipiter striatus</i>	Sharp-shinned Hawk	JP, LP, WS	
<i>Actitis macularia</i>	Spotted Sandpiper	MM, BD, ST	B
<i>Aechmophorus occidentalis</i>	Western/Clark's Grebe	LG, LK	M
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	WS, MM	B
<i>Anas acuta</i>	Northern Pintail	MM, ST, LG	M
<i>Anas americana</i>	American Wigeon	MM, ST, LG	M
<i>Anas clypeata</i>	Northern Shoveler	MM, ST, LG	M
<i>Anas crecca</i>	Green-winged Teal	ST, LG	M
<i>Anas cyanoptera</i>	Cinnamon Teal	MM, ST, LG	M
<i>Anas platyrhynchos</i>	Mallard	MM, ST, LG	B
<i>Anas strepera</i>	Gadwall	MM, ST, LG	B
<i>Anser albifrons</i>	Greater White-fronted Goose	MM, LG	
<i>Anthus rubescens</i>	American Pipit	WS, MM	
<i>Aphelocoma coerulescens</i>	Western Scrub-jay	JP, LP, WS, DA	
<i>Ardea herodias</i>	Great-blue Heron	WS, MM, ST, LG	
<i>Aythya affinis</i>	Lesser Scaup	ST, LG, LK	
<i>Aythya americana</i>	Redhead	ST, LG, LK	
<i>Aythya collaris</i>	Ring-necked Duck	MM, ST, LG, LK	M
<i>Aythya marila</i>	Greater Scaup	ST, LG, LK	
<i>Aythya valisineria</i>	Canvasback	ST, LG, LK	
<i>Bombycilla cedrorum</i>	Cedar Waxwing	WS, DA	
<i>Botaurus lentiginosus</i>	American Bittern	WS, MM, ST, LG	
<i>Branta canadensis</i>	Canada Goose	MM, BD, LG, LK, DA	B
<i>Bubo virginianus</i>	Great-horned Owl	JP	
<i>Bucephala albeola</i>	Bufflehead	ST, LG, LK	
<i>Bucephala clangula</i>	Common Goldeneye	ST, LG, LK	

Scientific Name	Common Name	Community Associations ¹	Breeder? ²
<i>Bucephala islandica</i>	Barrow's Goldeneye	ST, LG, LK	
<i>Buteo jamaicensis</i>	Red-tailed Hawk	JP, LP, MM	
<i>Buteo lagopus</i>	Rough-legged Hawk	JP, LP, MM	
<i>Butorides virescens</i>	Green Heron	WS, MM, ST, LG	
<i>Calidris mauri</i>	Western Sandpiper	BD, ST	
<i>Calidris minutilla</i>	Least Sandpiper	BD, ST	
<i>Carduelis pinus</i>	Pine Siskin	JP, LP, WS, MM	M
<i>Carduelis psaltria</i>	Lesser Goldfinch	LP, WS, MM	
<i>Carduelis tristis</i>	American Goldfinch	LP, WS, MM	M
<i>Carpodacus cassinii</i>	Cassin's Finch	JP, LP, WS	B
<i>Carpodacus mexicanus</i>	House Finch	JP, LP, WS, DA	M
<i>Carpodacus purpureus</i>	Purple Finch	JP, LP, WS	
<i>Carthartes aura</i>	Turkey Vulture	LP, MM	
<i>Casmerodius albus</i>	Great Egret	WS, MM, ST, LG	
<i>Catharus guttatus</i>	Hermit Thrush	JP, LP, WS	
<i>Catharus ustulatus</i>	Swainson's Thrush	JP, LP, WS	
<i>Catoptrophorus semipalmatus</i>	Willet	MM, BD, ST	
<i>Certhia americana</i>	Brown Creeper	JP, LP	M
<i>Ceryle alcyon</i>	Belted Kingfisher	WS, ST	M
<i>Charadrius alexandrinus</i>	Snowy Plover	BD	
<i>Charadrius semipalmatus</i>	Semipalmated Plover	BD	
<i>Charadrius vociferus</i>	Killdeer	MM, BD, ST	B
<i>Chen caerulescens</i>	Snow Goose	MM, LG	
<i>Chlidonias niger</i>	Black Tern	BD, LG, LK	M
<i>Chondestes grammacus</i>	Lark Sparrow	MM	M
<i>Chordeiles minor</i>	Common Nighthawk	JP, LP, MM	
<i>Cinclus mexicanus</i>	American Dipper	ST	
<i>Circus cyaneus</i>	Northern Harrier	LP, MM	M
<i>Cistothorus palustris</i>	Marsh Wren	WS, ST, LG	
<i>Coccothraustes vespertinus</i>	Evening Grosbeak	JP, LP	M
<i>Colaptes auratus</i>	Northern Flicker	JP, LP	B
<i>Columbia fasciata</i>	Band-tailed Pigeon	JP, LP	
<i>Columbia livia</i>	Rock Dove	DA	
<i>Contopus sordidulus</i>	Western Wood-pewee	JP, LP, WS, MM	B
<i>Corvus corax</i>	Common Raven	JP, LP, DA	M
<i>Cyanocitta stelleri</i>	Steller's Jay	JP, LP, WS, DA	B
<i>Cygnus columbianus</i>	Tundra Swan	MM, LG	
<i>Dendroica coronata</i>	Yellow-rumped Warbler	JP, LP, WS	B
<i>Dendroica nigrescens</i>	Black-throated Gray Warbler	JP, LP, WS	M
<i>Dendroica occidentalis</i>	Hermit Warbler	JP, LP, WS	M
<i>Dendroica petechia</i>	Yellow Warbler	WS	B
<i>Dendroica townsendi</i>	Townsend's Warbler	JP, LP, WS	
<i>Egretta thula</i>	Snowy Egret	WS, MM, ST, LG	
<i>Empidonax traillii</i>	Willow Flycatcher	WS, MM	M
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird	LP, WS, MM, DA	B
<i>Falco columbarius</i>	Merlin	JP, LP	
<i>Falco sparverius</i>	American Kestrel	LP, MM	M
<i>Fulica americana</i>	American Coot	ST, LG	M
<i>Gallinago gallinago</i>	Wilson's Snipe	MM, BD, ST	M
<i>Gavia immer</i>	Common Loon	LK	
<i>Geothlypis trichas</i>	Common Yellowthroat	WS, LG	M

Scientific Name	Common Name	Community Associations ¹	Breeder? ²
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay	JP, LP	
<i>Haliaeetus leucocephalus</i>	Bald Eagle	JP, LK	
<i>Himantopus mexicanus</i>	Black-necked Stilt	MM, BD	M
<i>Hirundo pyrrhonota</i>	Cliff Swallow	LP, WS, MM, ST, LG, DA	B
<i>Hirundo rustica</i>	Barn Swallow	LP, WS, MM, ST, LG, DA	B
<i>Ixobrychus exilis</i>	Least Bittern	WS, MM, ST, LG	
<i>Junco hyemalis</i>	Oregon Junco	JP, LP, WS, MM	B
<i>Lanius ludovicianus</i>	Loggerhead Shrike	LP, MM	
<i>Larus argentatus</i>	Herring Gull	BD, LG, LK	
<i>Larus californicus</i>	California Gull	BD, LG, LK	
<i>Larus delawarensis</i>	Ring-billed Gull	BD, LG, LK	
<i>Larus philadelphia</i>	Bonaparte's Gull	BD, LG, LK	
<i>Larus thayeri</i>	Thayer's Gull	BD, LG, LK	
<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher	MM, BD, ST	
<i>Limosa fedoa</i>	Marbled Godwit	MM, BD, ST	
<i>Lophodytes cucullatus</i>	Hooded Merganser	ST, LG, LK	
<i>Loxia curvirostra</i>	Red Crossbill	JP	
<i>Melospiza lincolni</i>	Lincoln's Sparrow	LP, WS, MM	M
<i>Melospiza melodia</i>	Song Sparrow	LP, WS, MM	B
<i>Mergus merganser</i>	Common Merganser	MM, ST, LG, LK	B
<i>Molothrus ater</i>	Brown-headed Cowbird	JP, LP, WS, MM, DA	B
<i>Nucifraga columbiana</i>	Clark's Nutcracker	JP, LP	
<i>Numenius americanus</i>	Long-billed Curlew	MM, BD, ST	
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	WS, MM, ST, LG	M
<i>Oporornis tolmiei</i>	MacGillivray's Warbler	WS	B
<i>Otus kennicottii</i>	Western Screech-owl	JP	
<i>Oxyura jamaicensis</i>	Ruddy Duck	MM, ST, LG, LK	M
<i>Palacrocorax auritus</i>	Double-crested Cormorant	LG, LK	
<i>Pandion haliaetus</i>	Osprey	JP, LP, MM, LG, LK	
<i>Passer domesticus</i>	House Sparrow	DA	
<i>Passerculus sandwichensis</i>	Savannah Sparrow	LP, WS, MM	B
<i>Passerella iliaca</i>	Fox Sparrow	JP, WS	
<i>Phalaropus tricolor</i>	Wilson's Phalarope	MM, BD, ST	M
<i>Pheucticus malanocephalus</i>	Black-headed Grosbeak	WS	M
<i>Pica hudsonia</i>	Black-billed Magpie	JP, LP, WS, DA	B
<i>Picoides albolarvatus</i>	White-headed Woodpecker	JP, LP	M
<i>Picoides arcticus</i>	Black-backed Woodpecker	JP, LP	M
<i>Picoides villosus</i>	Hairy Woodpecker	JP, LP	M
<i>Pipilo chlorurus</i>	Green-tailed Towhee	LP	
<i>Pipilo maculatus</i>	Spotted Towhee	WS	M
<i>Piranga ludoviciana</i>	Western Tanager	JP, LP	M
<i>Pluvialis squatarola</i>	Black-bellied Plover	BD	
<i>Podiceps auritus</i>	Horned Grebe	LG, LK	
<i>Podiceps grisegena</i>	Red-necked Grebe	LG, LK	
<i>Podiceps nigricollis</i>	Eared Grebe	LG, LK	
<i>Podilymbus podiceps</i>	Pied-billed Grebe	LG, LK	M
<i>Poecile gambeli</i>	Mountain Chickadee	JP, LP, WS	B
<i>Poocetes gramineus</i>	Vesper Sparrow	LP, MM	
<i>Porzana carolina</i>	Sora	WS, MM, ST, LG	B
<i>Rallus limicola</i>	Virginia Rail	WS, MM, ST, LG	
<i>Recurvirostra americana</i>	American Avocet	MM, BD	M

Scientific Name	Common Name	Community Associations ¹	Breeder? ²
<i>Regulus calendula</i>	Ruby-crowned Kinglet	JP, LP, WS	M
<i>Regulus satrapa</i>	Golden-crowned Kinglet	JP, LP, WS	B
<i>Sayornis nigricans</i>	Black Phoebe	WS, MM	M
<i>Sayornis saya</i>	Say's Phoebe	LP, WS, MM	
<i>Sialia currucoides</i>	Mountain Bluebird	LP, WS, MM	
<i>Sialia mexicana</i>	Western Bluebird	LP, WS, MM	
<i>Sitta canadensis</i>	Red-breasted Nuthatch	JP, LP	B
<i>Sitta carolinensis</i>	White-breasted Nuthatch	JP, LP, WS	B
<i>Sitta pygmaea</i>	Pygmy Nuthatch	JP, LP	B
<i>Sphyrapicus ruber</i>	Red-breasted Sapsucker	JP, LP	M
<i>Spizella breweri</i>	Brewer's Sparrow	JP, LP, MM	
<i>Spizella passerina</i>	Chipping Sparrow	JP, LP, MM	M
<i>Stellula calliope</i>	Calliope Hummingbird	LP, MM	
<i>Sterna caspia</i>	Caspian Tern	BD, LG, LK	
<i>Sterna forsteri</i>	Forster's Tern	BD, LG, LK	M
<i>Sterna hirundo</i>	Common Tern	BD, LG, LK	
<i>Sturnella neglecta</i>	Western Meadowlark	MM	B
<i>Sturnus vulgaris</i>	European Starling	LP, WS, DA	B
<i>Tachycineta bicolor</i>	Tree Swallow	LP, WS, MM, ST, LG, DA	M
<i>Tachycineta thalassina</i>	Violet-green Swallow	LP, WS, MM, ST, LG, DA	M
<i>Tringa flavipes</i>	Lesser Yellowlegs	MM, BD, ST	
<i>Tringa melanoleuca</i>	Greater Yellowlegs	MM, BD, ST	
<i>Turdus migratorius</i>	American Robin	JP, LP, WS, MM	B
<i>Tyrannus verticalis</i>	Western Kingbird	LP, WS, MM	M
<i>Vermivora celata</i>	Orange-crowned Warbler	JP, LP, WS	M
<i>Vermivora ruficapilla</i>	Nashville Warbler	JP, LP, WS	M
<i>Vireo cassinii</i>	Cassin's Vireo	JP, LP, WS	M
<i>Vireo gilvus</i>	Warbling Vireo	JP, LP, WS	M
<i>Wilsonia pusilla</i>	Wilson's Warbler	WS	B
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	WS, MM, LG	B
<i>Zenaidura macroura</i>	Mourning Dove	JP, LP, WS, MM, DA	M
<i>Zonotrichia atricapilla</i>	Golden-crowned Sparrow	JP, LP, WS, MM	
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	JP, LP, WS, MM	B
MAMMALS			
<i>Canis latrans</i>	Coyote	JP, LP, WS, MM	
<i>Castor canadensis</i>	Beaver	ST, LG	M
<i>Erithizon dorsatum</i>	Porcupine	JP, LP	
<i>Eutamias spp.</i>	Chipmunk species	JP, LP	M
<i>Glaucomys sabrinus</i>	Northern Flying Squirrel	JP, LP	
<i>Lutra canadensis</i>	River Otter	ST, LG	
<i>Microtus longicaudus</i>	Long-tailed Vole	JP, LP, WS	M
<i>Microtus montanus</i>	Mountain Vole	WS, MM	M
<i>Mustela erminea</i>	Ermine	JP, LP, WS, MM	
<i>Mustela frenata</i>	Long-tailed Weasel	JP, LP, WS, MM	
<i>Mustela vison</i>	Mink	ST, LG	
<i>Odocoileus hemionus</i>	Mule deer	JP, LP, WS, MM	
<i>Ondatra zibethicus</i>	Muskrat	ST, LG	M
<i>Peromyscus maniculatus</i>	Deer Mouse	JP, LP, WS, MM	M
<i>Procyon lotor</i>	Raccoon	JP, LP, WS, DA	

<i>Scientific Name</i>	<i>Common Name</i>	<i>Community Associations</i> ¹	<i>Breeder?</i> ²
<i>Reithrodontomys megalotis</i>	Western Harvest Mouse	JP, LP, WS, MM	M
<i>Scapanus latimanus</i>	Broad-footed Mole	MM	M
<i>Sciurus griseus</i>	Western Gray Squirrel	JP, LP	M
<i>Sorex obscurus</i>	Dusky Shrew	JP, LP, MM	M
<i>Sorex vagrans</i>	Vagrant Shrew	JP, LP, MM	M
<i>Tamiasciurus douglasii</i>	Douglas Squirrel	JP, LP	M
<i>Thomomys monticola</i>	Sierran pocket gopher	JP, LP, WS, MM	M
<i>Ursus americana</i>	Black bear	JP	
Various	Bat species	JP, LP, MM, ST, LG	
<i>Zapus princeps</i>	Western Jumping Mouse	WS, MM	M

¹ JP=Jeffrey pine; LP=Lodgepole pine, WS=Willow scrub/wet meadow, MM=Montane meadow, BD=Beach and dune, ST=Stream, LG=Lagoon, LK=Lake; DA=Disturbed area

² B=Confirmed breeder on site, M=May breed on site. If blank, species does not breed on site or the status is unknown.

APPENDIX I

Stream Channel Bank Erosion Data

	TMDL Results:				
	Channel Restoration	MIXED Treatment	Bank Protection		
river station (ft)	Existing Load of fines (CUBIC YARDS)	Maximum Treatment Bank Erosion of Fines (CUBIC YARDS)	Maximum Treatment Bank Erosion of Fines (CUBIC YARDS)	Maximum Treatment Bank Erosion of Fines (CUBIC YARDS)	No Action/ No Project
	No treatments	All reaches treated	All reaches treated	All reaches treated	Subtotals
79,364					
75,492	3.83	1.77	3.83	0.60	887.14
73,950	2.18	1.01	2.18	0.34	
71,424	2.56	1.18	2.56	0.40	
70,210	0.75	0.35	0.75	0.12	
68,077	2.23	1.03	2.23	0.35	
65,420	145.26	67.11	57.02	22.81	
63,189	178.99	82.69	70.25	28.10	
60,925	181.62	83.91	71.29	28.51	
59,022	10.73	4.96	10.73	1.68	
58,333	30.76	14.21	4.83	4.83	
55,446	12.42	5.74	12.42	1.95	
53,806	6.31	2.92	6.31	0.99	
51,772	6.10	2.82	6.10	0.96	
50,121	57.02	26.34	8.95	8.95	
48,458	246.38	113.83	90.91	38.68	
46,260	23.22	10.73	23.22	3.65	2,894.47
44,357	413.30	190.94	64.89	64.89	
43,143	173.71	80.25	64.10	27.27	
39,600	24.77	11.44	24.77	3.89	
36,778	197.22	91.12	72.78	30.96	
35,564	149.16	68.91	70.55	23.42	
32,940	19.01	8.78	19.01	2.99	
27,756	982.33	453.84	362.48	154.23	
23,425	718.37	331.89	265.08	112.78	
19,160	24.95	11.52	24.95	3.92	
16,601	149.39	69.02	58.64	23.45	
13,451	19.05	8.80	19.05	2.99	
9,646	333.43	154.05	52.35	52.35	538.13
6,414	197.72	91.35	72.96	31.04	
5,344	3.88	1.79	3.88	0.61	
-	3.11	1.43	3.11	0.49	
Totals	4319.74	1995.72	1552.15	678.20	4319.74
79,364	4,319.74	1,995.72	1,552.15	678.20	4,319.74

	Upper Truckee Marsh Project (other reaches remain as Existing)					Cumulative Upper Truckee River Projects				Marsh Only	Other Projects ONLY	ALL
river station (ft)	UTMarsh ONLY Alt 1	UTMarsh ONLY Alt 2	UTMarsh ONLY Alt 3	UTMarsh ONLY Alt 4	UTMarsh ONLY	Cumulative Projects + UTMarsh NO Action		Cumulative Projects + UTMarsh ALTS		Reduction	Reduction	Reduction
					Subtotals	Complete treat all proposed projects	Subtotals	Complete Treat other projects AND UTMarsh	Subtotals			
79,364												
75,492	3.83	3.83	3.83	3.83	887.14	3.83	887.14	4	887.14	-	-	-
73,950	2.18	2.18	2.18	2.18		2.18		2				
71,424	2.56	2.56	2.56	2.56		2.56		3				
70,210	0.75	0.75	0.75	0.75		0.75		1				
68,077	2.23	2.23	2.23	2.23		2.23		2				
65,420	145.26	145.26	145.26	145.26		145.26		145				
63,189	178.99	178.99	178.99	178.99		178.99		179				
60,925	181.62	181.62	181.62	181.62		181.62		182				
59,022	10.73	10.73	10.73	10.73		10.73		11				
58,333	30.76	30.76	30.76	30.76		30.76		31				
55,446	12.42	12.42	12.42	12.42		12.42		12				
53,806	6.31	6.31	6.31	6.31		6.31		6				
51,772	6.10	6.10	6.10	6.10		6.10		6				
50,121	57.02	57.02	57.02	57.02		57.02		57				
48,458	246.38	246.38	246.38	246.38		246.38		246				
46,260	23.22	23.22	23.22	23.22	2,894.47	10.73	1,337.25	11	1,337.25	-	0.538	0.538
44,357	413.30	413.30	413.30	413.30		190.94		191				
43,143	173.71	173.71	173.71	173.71		80.25		80				
39,600	24.77	24.77	24.77	24.77		11.44		11				
36,778	197.22	197.22	197.22	197.22		91.12		91				
35,564	149.16	149.16	149.16	149.16		68.91		69				
32,940	19.01	19.01	19.01	19.01		8.78		9				
27,756	982.33	982.33	982.33	982.33		453.84		454				
23,425	718.37	718.37	718.37	718.37		331.89		332				
19,160	24.95	24.95	24.95	24.95		11.52		12				
16,601	149.39	149.39	149.39	149.39		69.02		69				
13,451	19.05	19.05	19.05	19.05		8.80		9				
9,646	123.04	123.04	123.04	130.87	220.55	333.43	538.13	123	220.55	0.590	-	0.590
6,414	93.52	91.35	91.35	93.52		197.72		94				
5,344	2.56	1.79	1.79	1.83		3.88		3				
-	1.43	1.43	1.47	1.47		3.11		1				
Totals	4002.16	3999.22	3999.25	4009.31	4002.16	2762.52	2762.52	2,445	2444.94	0.074	0.360	0.434
79,364					4,002.16		2,762.52		2,444.94			

APPENDIX J

Noise Modeling Results

Appendix J
Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet

Project Name : UTR Marsh
Project Number : 110066.04
Modeling Condition : Existing
Ground Type : Soft
Metric (L_{eq}, L_{dn}, CNEL) : CNEL



K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	San Francisco Ave	Riverside Ave	US 50	1,000	25	16	98	1	1	85	10	5	0
2	Lakeview Avenue	Riverside Ave	US 50	2,100	25	20	97	2	1	85	10	5	0
3	East Venice Drive	Tahoe Keyes Blvd	Marina	1,500	25	24	96	3	1	85	10	5	0
4	Silver Dollar Ave	Ponderosa Street	US 50	1,250	25	12	98	1	1	85	10	5	0
5	Sunset Drive	Ponderosa Street	Conestoga St	85	25	12	98	1	1	85	10	5	0
6	US Highway 50	US 89 North	Up Truckee Brd	33000	35	34	96	3	1	77.9	12.6	9.5	
7	US Highway 50	Up Truckee Brd	Rufus Allen Blvd	32000	35	34	96	3	1	77.9	12.6	9.5	

Appendix J
Traffic Noise Prediction Model, (FWHA RD-77-108)
Predicted Noise Levels

Project Name : UTR Marsh
Project Number : 110066.04
Modeling Condition : Existing
Metric (Leq, Ldn, CNEL) : CNEL



Segment	Roadway	Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	San Francisco Ave	Riverside Ave	US 50	54.6	46.3	53.9	57.6	2	5	11	24	51
2	Lakeview Avenue	Riverside Ave	US 50	56.3	51.1	55.7	59.7	4	9	19	41	88
3	East Venice Drive	Tahoe Keyes Blvd	Marina	53.6	50.2	53.0	57.3	3	7	16	34	73
4	Silver Dollar Ave	Ponderosa Street	US 50	57.4	49.1	56.8	60.4	3	6	13	28	60
5	Sunset Drive	Ponderosa Street	Conestoga St	45.7	37.5	45.1	48.8	0	1	2	5	10
6	US Highway 50	US 89 North	Up Truckee Brd	70.0	64.7	65.1	72.1	47	101	218	470	1012
7	US Highway 50	Up Truckee Brd	Rufus Allen Blvd	69.9	64.5	65.0	72.0	46	99	214	460	991

Appendix J
Traffic Noise Prediction Model, (FWHA RD-77-108)
Model Input Sheet

Project Name : UTR Marsh
Project Number : 110066.04
Modeling Condition : Alt 1 Existing Plus Project
Ground Type : Soft
Metric (L_{eq}, L_{dn}, CNEL) : CNEL

K Factor :
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	San Francisco Ave	Riverside Ave	US 50	1,020	25	16	98	1	1	85	10	5	0
2	Lakeview Avenue	Riverside Ave	US 50	2,125	25	20	97	2	1	85	10	5	0
3	East Venice Drive	Tahoe Keyes Blvd	Marina	1,540	25	24	96	3	1	85	10	5	0
4	Silver Dollar Ave	Ponderosa Street	US 50	1,260	25	12	98	1	1	85	10	5	0
5	Sunset Drive	Ponderosa Street	Conestoga St	90	25	12	98	1	1	85	10	5	0
6	US Highway 50	US 89 North	Up Truckee Brd	33100	35	34	96	3	1	77.9	12.6	9.5	0
7	US Highway 50	Up Truckee Brd	Rufus Allen Blvd	32100	35	34	96	3	1	77.9	12.6	9.5	0

Appendix J
Traffic Noise Prediction Model, (FWHA RD-77-108)
Predicted Noise Levels

Project Name : UTR Marsh
Project Number : 110066.04
Modeling Condition : Alt 1 Existing Plus Project
Metric (Leq, Ldn, CNEL) : CNEL

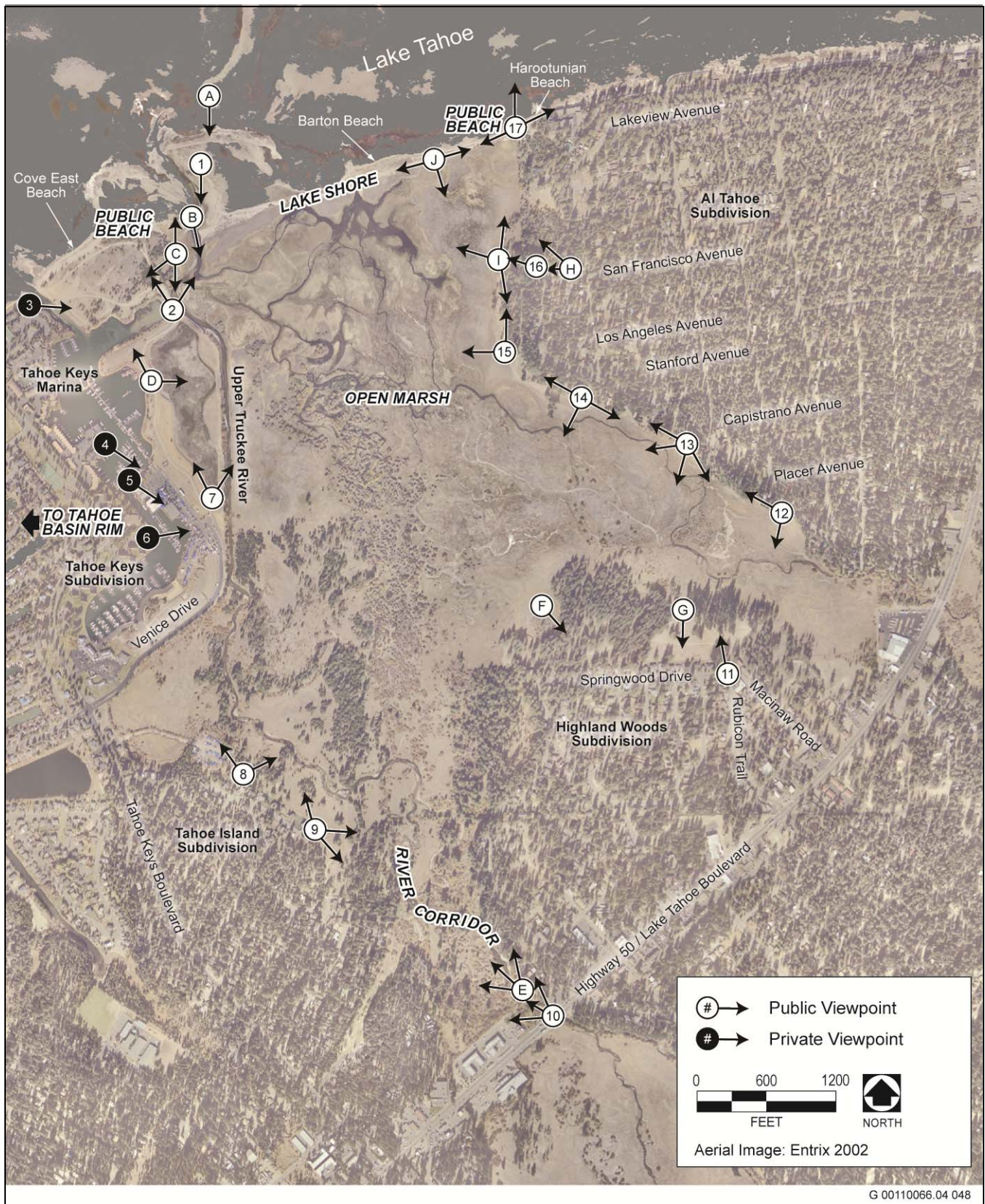
Segment	Roadway	Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	San Francisco Ave	Riverside Ave	US 50	54.7	46.4	54.0	57.7	2	5	11	24	52
2	Lakeview Avenue	Riverside Ave	US 50	56.4	51.1	55.7	59.7	4	9	19	41	89
3	East Venice Drive	Tahoe Keyes Blvd	Marina	53.7	50.3	53.1	57.4	3	7	16	35	75
4	Silver Dollar Ave	Ponderosa Street	US 50	57.5	49.2	56.8	60.5	3	6	13	28	60
5	Sunset Drive	Ponderosa Street	Conestoga St	46.0	37.7	45.3	49.0	0	1	2	5	10
6	US Highway 50	US 89 North	Up Truckee Brd	70.0	64.7	65.1	72.1	47	101	218	471	1014
7	US Highway 50	Up Truckee Brd	Rufus Allen Blvd	69.9	64.5	65.0	72.0	46	99	214	461	993

APPENDIX K

Photo Viewpoints

APPENDIX K PHOTO VIEWPOINTS

This appendix includes a complete index of the viewpoints from which photographs were taken for the project. Because of the large number of photographs and the similarities between many of them, a representative set of photographs was selected for inclusion in Section 3.14, “Scenic Resources.” The selected set of photographs in the scenic resources section is representative of the existing views of the study area. Photographs are identified by letters or numbers. The numbered viewpoints shown below are shown in the scenic resources section and follow the same numbering sequence used in that section. Lettered viewpoints shown below are in addition to those included in Section 3.14, “Scenic Resources.” Exhibit 1 provides an overview of the locations of the photo viewpoints.



Source: Data provided by ENTRIX 2002 and EDAW (now AECOM) in 2008

Photo Viewpoints of the Study Area

Exhibit 1



**View to the South toward the Mouth of the Truckee River,
0.25 Mile from the Shoreline (Viewpoint A)**
(Source: Photograph taken by EDAW [now AECOM] in 2007)



**View to the South at the Mouth of the Truckee River,
300 Feet from the Shoreline (Viewpoint 1)**
(Source: Photograph taken by EDAW [now AECOM] in 2007)



**View to the South at the Mouth of the Truckee River
from the Lake Tahoe Shoreline (Viewpoint B)**
(Source: Photograph taken by EDAW [now AECOM] in 2007)



**View to the North toward Lake Tahoe
from North of the Lower West Side Restoration Area (Viewpoint C)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the South of the Truckee River
from North of the Lower West Side Restoration Area (Viewpoint C)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Southwest toward the Sailing Lagoon
from North of the Lower West Side Restoration Site (Viewpoint C)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Northeast toward Lake Tahoe
from Just East of the Sailing Lagoon (Viewpoint D)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Northwest toward Lake Tahoe
from Just West of the Sailing Lagoon (Viewpoint D)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the East toward the Mouth of the Truckee River
from Condominiums near Lake Tahoe Shoreline (Viewpoint E)**
(Source: Photograph taken by EDAW [now AECOM] in 2007)



**View to the East toward the Lower West Side Restoration Area
from the West Edge of the Tahoe Keys Marina (Viewpoint F)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Northwest toward Lake Tahoe
from the West Edge of the Tahoe Keys Marina (Viewpoint F)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Southeast toward the Proposed Self-Service
Visitor Center Site from Condominiums along the Tahoe Keys
Marina (Viewpoint G)** (Source: Photograph taken by EDAW [now
AECOM] in 2007)



View to the Southeast toward the Proposed Self-Service Visitor Center Site from the Restaurant along the Tahoe Keys Marina (Viewpoint H) (Source: Photograph taken by EDAW [now AECOM] in 2007)



View to the East toward the Proposed Self-Service Visitor Center Site from Condominiums along Tahoe Keys Marina (Viewpoint 2) (Source: Photograph taken by EDAW [now AECOM] in 2007)



View to the Northeast toward the Truckee River from Venice Drive (Viewpoint I) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest toward Tahoe Keys Marina from Venice Drive (Viewpoint I) (Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the East toward the Truckee River
from an Informal Trail near the TKPOA Corporation Yard
(Viewpoint J) (Source: Photograph taken by EDAW [now AECOM] in
2008)**



**View to the Northwest toward Venice Drive
from an Informal Trail near the TKPOA Corporation Yard
(Viewpoint J) (Source: Photograph taken by EDAW [now AECOM] in
2008)**



**View to the East toward the Truckee River
from East of Tahoe Island Subdivision (Viewpoint 3)
(Source: Photograph taken by AECOM in 2008)**



**View to the Southeast toward the Truckee River
from East of the Tahoe Island Subdivision (Viewpoint 3)
(Source: Photograph taken by EDAW [now AECOM] in 2008)**



View to the Northwest toward the Truckee River from East of the Tahoe Island Subdivision (Viewpoint 3)
(Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the North of the Truckee River Corridor from the Footbridge across the River (Viewpoint K)
(Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West of Dense Vegetation from the Footbridge across the River (Viewpoint K)
(Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest of the Truckee River Corridor from the Footbridge across the River (Viewpoint K)
(Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the North of the Truckee River Corridor from U.S. 50 (Viewpoint 4) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West of Dense Vegetation from U.S. 50 (Viewpoint 4) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest of the Truckee River Corridor from U.S. 50 (Viewpoint 4) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Southeast toward Existing Trails and Residences (Viewpoint L) (Source: Photograph taken by EDAW [now AECOM] in 2007)



Matchline

View to South toward Houses and Existing Trails from Open Marsh (Viewpoint M) (Source: Photograph taken by EDAW [now AECOM] in 2007)



Matchline

View to South toward Houses and Existing Trails from Open Marsh (Viewpoint M) (Source: Photograph taken by EDAW [now AECOM] in 2007)



View to the North toward the Existing Bike Trail Entrance from the end of Macinaw Road (Viewpoint N) (Source: Photograph taken by EDAW [now AECOM] in 2007)



View to the Northwest toward the Open Marsh from El Dorado Avenue (Viewpoint O) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Southwest toward U.S. 50 from El Dorado Avenue (Viewpoint O) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest toward the Open Marsh from Capistrano Avenue (Viewpoint P) (Source: Photograph taken by EDAW [now AECOM] in 2008)



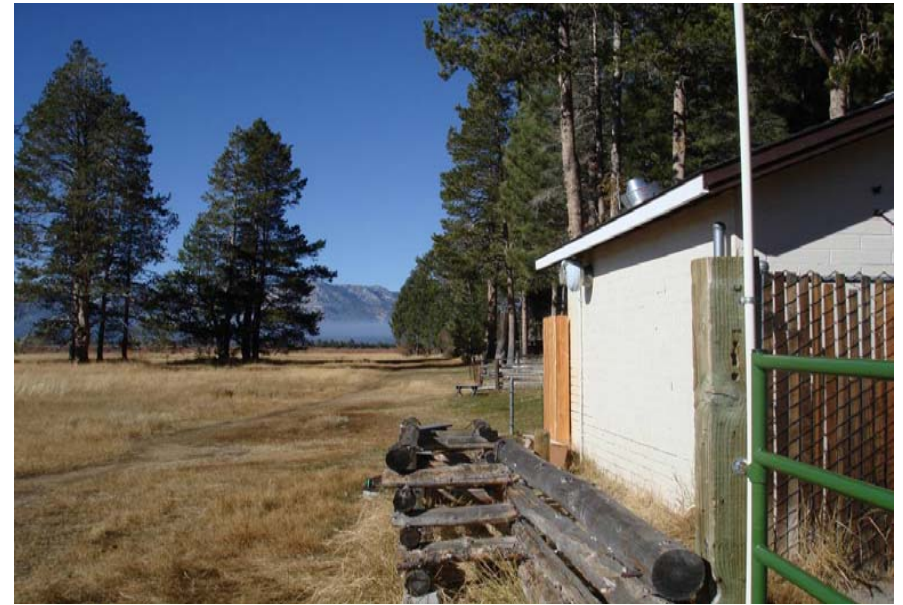
View to the South toward U.S. 50 from Capistrano Avenue (Viewpoint P) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Southwest toward the Highland Woods Subdivision from Capistrano Avenue (Viewpoint P) (Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the West toward the Open Marsh
from Capistrano Avenue (Viewpoint P)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Northwest toward the Open Marsh
from Stanford Avenue (Viewpoint 5)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Southeast toward El Dorado Avenue
from Stanford Avenue (Viewpoint 5)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



**View to the Southwest toward the Truckee River
from Stanford Avenue (Viewpoint 5)**
(Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the North toward Harootunian Beach from Los Angeles Avenue (Viewpoint Q) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West toward the Open Marsh from Los Angeles Avenue (Viewpoint Q) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest toward Lake Tahoe from the End of San Francisco Avenue (Viewpoint R) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West toward the Open Marsh from the End of San Francisco Avenue (Viewpoint R) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West toward the Open Marsh from San Francisco Avenue (Viewpoint S) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the North toward Harootunian Beach from the Edge of the Open Marsh near San Francisco Avenue (Viewpoint T) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the South toward the Highland Woods Subdivision from the Edge of the Open Marsh near San Francisco Avenue (Viewpoint T) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the Northwest toward Barton Beach from the Edge of the Open Marsh near San Francisco Avenue (Viewpoint T) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the North toward Lake Tahoe from Harootunian Beach (Viewpoint 6) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the East toward the AI Tahoe Subdivision from Harootunian Beach (Viewpoint 6) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the West toward Barton Beach from Harootunian Beach (Viewpoint 6) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the East toward Harootunian Beach from the Lakeshore (Viewpoint U) (Source: Photograph taken by EDAW [now AECOM] in 2008)



View to the South toward the Open Marsh from the Lakeshore (Viewpoint U) (Source: *Photograph taken by EDAW [now AECOM] in 2008*)



View to the West toward Barton Beach from the Lakeshore (Viewpoint U) (Source: *Photograph taken by EDAW [now AECOM] in 2008*)

APPENDIX L

Distribution List

EIR/EIS/EIS DISTRIBUTION LIST

Elected Officials and Representatives

U.S. House of Representatives - Tom McClintock

U.S. Government Departments and Agencies

U.S. Army Corps of Engineers
U.S. Department of Agriculture, Natural Resources
Conservation Service
U.S. Environmental Protection Agency – Region 9

U.S. Fish and Wildlife Services
U.S. Forest Service – Lake Tahoe Basin
Management Unit
U.S. Geological Survey

Washoe Tribe of Nevada and California

Environmental Department

State of California Government Agencies

State Assembly- Franklin E. Bigelow
State Senate - Ted Gaines
Department of Boating & Waterways
Department of Fish and Game
Department of General Services, Office of Real
Estate Services Division

Department of Transportation, District 3 – Tahoe
Lahontan Regional Water Quality Control Board
Office of the Attorney General
Sierra Nevada Conservancy
State Lands Commission

State of Nevada Government Agency

State of Nevada, Department of Environmental Protection

Local Government & Agencies

City of South Lake Tahoe
El Dorado County
Board of Supervisors, District 5

South Tahoe Public Utility District
Lake Tahoe Unified School District
Tahoe Resource Conservation District

Organizations

Caltrot
El Dorado County Vector Control District
League to Save Lake Tahoe
SBC California
Sierra Nevada Alliance
Sierra Sun
South Tahoe Chamber of Commerce

Tahoe Area Sierra Club
Tahoe Daily Tribune
Tahoe Keys Property Owners Association
Tahoe Keys Marina
Tahoe Mountain News
Tahoe Science Consortium

Individuals

Names withheld for privacy.