

**Preliminary Estimate of Natural Community and Covered Species Habitat Footprint Impacts  
(August 2009)**

	Existing Habitat	Max. Habitat ROA Restoration Footprint	East Alignment (Permanent)	East Alignment (Temporary)	Total Remaining Habitat	% Remaining
<b>Natural Community</b>						
Grassland	67,647	3,577.9	395.8	82.7	<b>63,590.6</b>	94.0
Inland dune scrub	19	0.0	0.0	0.0	<b>19.5</b>	100.0
Managed seasonal wetland	15,332	1,583.6	57.8	24.0	<b>13,667.1</b>	89.1
Managed Wetland	49,516	48,304.5	0.0	0.0	<b>1,211.6</b>	2.4
Natural seasonal wetland	6,183	315.7	7.0	0.0	<b>5,860.4</b>	94.8
Nontidal freshwater permanent emergent	378	55.9	0.0	0.0	<b>321.7</b>	85.2
Nontidal perennial aquatic	5,287	383.1	111.1	20.8	<b>4,771.7</b>	90.3
Tidal Brackish Emergent Wetland	8,351	5,758.7	0.0	0.0	<b>2,592.3</b>	31.0
Tidal Freshwater Emergent	9,713	1,411.9	17.3	10.0	<b>8,273.9</b>	85.2
Tidal Perennial Aquatic	86,302	32,692.6	48.1	48.1	<b>53,513.7</b>	62.0
Valley Riparian	17,340	1,203.5	78.4	29.8	<b>16,027.9</b>	92.4
Agricultural land	503,789	55,218.5	7,088.0	1,612.5	<b>439,870.1</b>	87.3
<b>Species Habitat - animals</b>						
California Black Rail*	33,566.1	<b>21,725.1</b>	0.0	0.0	<b>11,841.0</b>	35.3
California Clapper Rail*	26,475.7	<b>21,832.4</b>	0.0	0.0	<b>4,643.3</b>	17.5
California Red-legged Frog	24,685.4	0.0	726.6	0.0	<b>23,958.8</b>	97.1
<i>Aquatic Habitat</i>	117.4	<b>0.0</b>	1.1	0.0	<b>116.3</b>	99.1
<i>Upland Cover and Dispersal Habitat</i>	4,995.0	<b>0.0</b>	85.5	0.0	<b>4,909.5</b>	98.3
<i>Dispersal Habitat</i>	19,573.0	<b>0.0</b>	640.0	0.0	<b>18,933.0</b>	96.7
<i>Aquatic Habitat (miles)</i>	24.8	<b>0.0</b>	0.0	0.0	<b>24.8</b>	100.0
California Tiger Salamander	20,613.4	880.9	92.3	10.6	<b>19,629.6</b>	95.2
<i>Aquatic Habitat</i>	211.3	<b>0.2</b>	0.0	0.0	<b>211.1</b>	99.9
<i>Breeding and Upland Habitat</i>	20,402.1	<b>880.7</b>	92.3	10.6	<b>19,418.5</b>	95.2
<b>Fairy Shrimp</b>						
<i>Conservancy Fairy Shrimp</i>	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
<i>Longhorn Fairy Shrimp</i>	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
<i>Midvalley Fairy Shrimp</i>	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
<i>Vernal Pool Fairy Shrimp</i>	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
<i>Vernal Pool Tadpole Shrimp</i>	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
<b>Giant Garter Snake</b>						
Greater SandHill Crane	177,601.1	8,428.6	3,082.4	771.9	<b>165,318.2</b>	93.1
<i>Primary Use Area</i>	108,169.4	<b>7,255.8</b>	1,855.7	622.5	<b>98,435.4</b>	91.0
<i>Secondary Use Area</i>	69,431.7	<b>1,172.8</b>	1,226.7	149.4	<b>66,882.8</b>	96.3
Riparian Brush Rabbit	1,680.7	<b>6.0</b>	0.0	0.0	<b>1,674.7</b>	99.6
Riparian Woodrat	1,077.7	<b>2.9</b>	0.0	0.0	<b>1,074.8</b>	99.7
Salt Marsh Harvest Mouse*	13,877.0	13,616.4	0.0	0.0	<b>260.6</b>	1.9
<i>Wetland Habitat</i>	11,122.5	<b>11,043.7</b>	0.0	0.0	<b>78.8</b>	0.7
<i>Upland Habitat</i>	2,754.5	<b>2,572.7</b>	0.0	0.0	<b>181.8</b>	6.6
San Joaquin Kit Fox	18,481.6	0.0	14.3	0.0	<b>18,467.3</b>	99.9
<i>Breeding, Foraging, and Dispersal Habitat</i>	3,971.0	<b>0.0</b>	2.9	0.0	<b>3,968.1</b>	99.9
<i>Foraging and Dispersal Habitat</i>	14,510.6	<b>0.0</b>	11.4	0.0	<b>14,499.2</b>	99.9
Suisun Shrew	28,742.1	<b>23,769.8</b>	0.0	0.0	<b>4,972.3</b>	17.3
Suisun Song Sparrow	26,959.5	<b>22,543.5</b>	0.0	0.0	<b>4,416.0</b>	16.4
Swainson's Hawk	445,932.8	53,299.6	5,581.3	1,212.9	<b>385,839.0</b>	86.5
<i>Foraging Habitat</i>	435,784.3	<b>52,531.8</b>	5,530.2	1,199.0	<b>376,523.3</b>	86.4
<i>Nesting Habitat*</i>	10,148.5	<b>767.8</b>	51.1	13.9	<b>9,315.7</b>	91.8
Townsend's Western Big-eared Bat*	771,229.9	151,434.4	7,803.6	1,833.5	<b>610,158.4</b>	79.1
<i>Primary Foraging</i>	10,882.7	<b>1,007.5</b>	57.8	23.9	<b>9,793.5</b>	90.0
<i>Roosting and Primary Foraging</i>	6,891.9	<b>406.3</b>	26.0	11.5	<b>6,448.1</b>	93.6
<i>Secondary Foraging</i>	753,455.3	<b>150,054.7</b>	7,719.7	1,798.1	<b>593,882.8</b>	78.8

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Tricolored Blackbird	399,576.7	56,474.4	4,477.9	833.9	337,790.5	84.5
<i>Nesting Habitat</i>	24,036.4	<b>11,316.9</b>	36.4	26.8	<b>12,656.3</b>	52.7
<i>Foraging Habitat: Non Agriculture</i>	99,601.5	<b>15,216.0</b>	460.6	106.7	<b>83,818.2</b>	84.2
<i>Foraigng Habitat: Agriculture</i>	275,938.8	<b>29,941.5</b>	3,980.9	700.4	<b>241,316.0</b>	87.5
Valley Elderberry Longhorn Beetle	53,038.7	7,203.6	267.6	106.5	45,461.1	85.7
<i>Riparian Vegetation</i>	16,383.5	<b>1,275.0</b>	78.4	35.3	<b>14,994.7</b>	91.5
<i>Non-riparian Channels and Grasslands</i>	36,655.2	<b>5,928.5</b>	189.1	71.1	<b>30,466.4</b>	83.1
Western Burrowing Owl	374,378.0	67,196.9	5,759.1	1,237.3	300,184.7	80.2
<i>High Value</i>	78,448.0	<b>9,861.1</b>	395.8	82.7	<b>68,108.4</b>	86.8
<i>Moderate Value Habitat</i>	52,800.0	<b>8,583.8</b>	106.1	23.8	<b>44,086.4</b>	83.5
<i>Low Value Habitat</i>	243,130.0	<b>48,752.0</b>	5,257.2	1,130.8	<b>187,989.9</b>	77.3
Western Pond Turtle	665,109.3	121,047.7	7,903.6	1,879.8	534,278.2	80.3
<i>Aquatic Habitat*</i>	73,224.2	<b>19,381.5</b>	229.0	103.0	<b>53,510.7</b>	73.1
<i>Dispersal Habitat*</i>	517,539.1	<b>90,640.1</b>	7,214.2	1,662.7	<b>418,022.1</b>	80.8
<i>Upland nesting and overwintering</i>	74,346.0	<b>11,026.1</b>	460.3	114.2	<b>62,745.4</b>	84.4
Western Spadefoot Toad	20,634.8	887.4	92.3	10.6	19,644.5	95.2
<i>Aquatic Breeding Habitat</i>	232.7	<b>6.7</b>	0.0	0.0	<b>226.0</b>	97.1
<i>Terrestrial Cover and Aestivation Habitat</i>	20,402.1	<b>880.7</b>	92.3	10.6	<b>19,418.5</b>	95.2
<i>Aquatic Breeding Habitat (miles)</i>	40.5	<b>2.2</b>	0.0	0.0	<b>38.3</b>	94.6
White-tailed Kite	491,967.4	94,393.0	7,581.8	1,748.3	388,244.3	78.9
<i>Breeding/Roosting Habitat*</i>	13,713.6	<b>1,028.1</b>	60.6	30.2	<b>12,594.8</b>	91.8
<i>Foraging Habitat</i>	478,253.8	<b>93,364.9</b>	7,521.2	1,718.2	<b>375,649.5</b>	78.5
Yellow-breasted Chat	14,170.8	1,360.0	67.3	33.9	12,709.6	89.7
<i>Primary Nesting and Migratory Habitat*</i>	7,384.4	<b>579.8</b>	36.3	16.3	<b>6,752.0</b>	91.4
<i>Secondary Nesting and Migratory Habitat*</i>	5,530.4	<b>570.1</b>	31.0	17.6	<b>4,911.7</b>	88.8
<i>Suisun Marsh Nesting and Migratory Habitat</i>	1,256.0	<b>210.1</b>	0.0	0.0	<b>1,045.9</b>	83.3
<b>Species Habitat - plants</b>						
Alkali Milk-vetch	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
Boggs Lake Hedge-hyssop	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
Brittlescale	496.1	<b>37.6</b>	0.0	0.0	<b>458.5</b>	92.4
Caper-fruited Tropicocarpum	1,424.1	<b>0.0</b>	0.0	0.0	<b>1,424.1</b>	100.0
Carquinez Goldenbush	1,142.3	<b>59.4</b>	0.0	0.0	<b>1,082.9</b>	94.8
Delta Button-celery*	3,344.9	<b>0.0</b>	9.3	0.0	<b>3,335.6</b>	99.7
Delta Mudwort*	8,045.1	<b>1,258.0</b>	15.8	15.0	<b>6,756.3</b>	84.0
Delta Tule Pea*	5,130.7	<b>3,033.5</b>	4.6	1.9	<b>2,090.6</b>	40.7
Heartscale	496.0	<b>37.6</b>	0.0	0.0	<b>458.4</b>	92.4
Heckard's Pepper-grass	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
Legenere	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
Lesser Saltscale	496.0	<b>37.6</b>	0.0	0.0	<b>458.4</b>	92.4
Mason's Lilaeopsis*	8,045.1	<b>1,237.3</b>	15.8	15.0	<b>6,777.0</b>	84.2
San Joaquin Spearscale	10,425.2	<b>706.4</b>	10.1	0.0	<b>9,708.8</b>	93.1
Slough Thistle*	1,914.4	<b>0.0</b>	0.0	0.0	<b>1,914.4</b>	100.0
Soft Bird's beak	707.2	<b>597.5</b>	0.0	0.0	<b>109.7</b>	15.5
Suisun Marsh Aster	5,130.7	<b>3,033.5</b>	4.6	1.9	<b>2,090.6</b>	40.7
Suisun Thistle*	1,981.7	<b>1,008.8</b>	0.0	0.0	<b>972.9</b>	49.1

\*It is anticipated that BDCP restoration of tidal marsh, riparian, channel margin, and seasonally inundated floodplain habitats will replace these species' affected habitats or result in a net increase in species habitat area.