

APPENDIX 3.7-B

**Special-Status Plant and Wildlife Species
Potentially Affected by the HST Alternatives**

ATTACHMENT 1

Special-Status Plant Species Potentially Affected During the Construction Period

Table 3.7B1-1
Special-Status Plant Species Potentially Affected During the Construction Period of the UPRR/SR 99 and Downtown Fresno Station
Alternatives (acres^a)

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Sanford's arrowhead	7	9	8	--	--	7 to 9
Delta button-celery	5	6	6	--	--	5 to 6
spiny-sepaed button-celery	6	7	7	--	--	6 to 7
Hoover's calycadenia	44	45	51	<0.5	--	44 to 52
Coulter's goldfields	5	6	6	--	--	5 to 6
Hartweg's golden sunburst	4	4	4	--	--	4
Wright's trichocoronis	5	6	6	--	--	5 to 6
Heckard's pepper-grass	4	4	5	--	--	4 to 5
caper-fruited tropidocarpum	4	4	4	--	--	4
dwarf downingia	3	3	3	--	--	3
heartscale	4	4	5	--	--	4 to 5
brittlescale	6	7	7	--	--	6 to 7
San Joaquin spearscale	6	7	7	--	--	6 to 7
lesser saltscale	6	7	7	--	--	6 to 7
vernal pool smallscale	6	7	7	--	--	6 to 7

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
subtle orache	4	4	4	--	--	4
Lost Hills crownscale	6	7	7	--	--	6 to 7
Hoover's spurge	6	7	7	--	--	6 to 7
alkali milk-vetch	6	7	7	--	--	6 to 7
Merced phacelia	4	4	4	--	--	4
Keck's checkerbloom	8	9	9	--	--	8 to 9
beaked clarkia	4	4	4	--	--	4
Henderson's bent grass	3	3	3	--	--	3
California satintail	2	3	3	--	--	2 to 3
Colusa grass	3	3	3	--	--	3
San Joaquin Valley Orcutt grass	3	3	3	--	--	3
hairy Orcutt grass	3	3	3	--	--	3
Greene's tuctoria	3	3	3	--	--	3
pincushion navarretia	3	3	3	--	--	3
shining navarretia	7	7	7	--	--	7
prostrate vernal pool navarretia	7	7	7	--	--	7
recurved larkspur	4	4	4	--	--	4

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
little mouseltail	3	4	3	--	--	3 to 4
succulent owl's-clover	3	3	3	--	--	3
palmate-bracted bird's-beak	4	4	4	--	--	4
Boggs Lake hedge-hyssop	3	4	3	--	--	3 to 4
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.						

Table 3.7B1-2
Special-Status Plant Species Potentially Affected During the Construction Period of the BNSF and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined		Total Range of Impacts ^b
	BNSF North–South Alignment with Ave 24 Wye	BNSF North–South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
Sanford's arrowhead	7	5	1	2	3	2	--	--	8 to 10	6 to 8	6 to 10
Delta button-celery	6	5	1	1	3	2	--	--	7 to 9	6 to 8	6 to 9
spiny-sepaled button-celery	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
Hoover's calycadenia	41	40	5	8	26	6	<0.5	--	46 to 68	45 to 67	45 to 68
Coulter's goldfields	6	5	1	1	3	4	--	--	7 to 10	6 to 9	6 to 10
Hartweg's golden sunburst	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
Wright's trichocoronis	6	5	1	1	3	3	--	--	7 to 9	6 to 8	6 to 9
Heckard's pepper-grass	5	5	1	1	6	3	--	--	6 to 11	6 to 11	6 to 11
caper-fruited tropidocarpum	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
dwarf downingia	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
heartscale	5	5	1	1	6	3	--	--	6 to 11	6 to 11	6 to 11
brittlescale	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
San Joaquin spearscale	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
lesser saltscale	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
vernal pool smallscale	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
subtle orache	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
Lost Hills crownscale	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
Hoover's spurge	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
alkali milk-vetch	9	8	1	1	7	4	--	--	6 to 9	6 to 9	6 to 9
Merced phacelia	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
Keck's checkerbloom	10	9	1	1	7	5	--	--	11 to 17	10 to 16	10 to 17
beaked clarkia	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
Henderson's bent grass	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
California satintail	2	2	<0.5	<0.5	1	2	--	--	3 to 4	3 to 4	3 to 4
Colusa grass	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined		Total Range of Impacts ^b
	BNSF North–South Alignment with Ave 24 Wye	BNSF North–South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
San Joaquin Valley Orcutt grass	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
hairy Orcutt grass	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
Greene's tuctoria	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
pincushion navarretia	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
shining navarretia	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
prostrate vernal pool navarretia	9	8	1	1	7	4	--	--	10 to 16	9 to 15	9 to 16
recurved larkspur	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
little mousetail	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
succulent owl's-clover	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
palmate-bracted bird's-beak	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
Boggs Lake hedge-hyssop	4	4	1	1	2	2	--	--	5 to 6	5 to 6	5 to 6
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.											
^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.											

Table 3.7B1-3
Special-Status Plant Species Potentially Affected During the Construction Period of the Hybrid and
Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Sanford's arrowhead	7	11	--	--	7 to 11
Delta button-celery	4	10	--	--	4 to 10
spiny-sepaed button-celery	7	11	--	--	7 to 11
Hoover's calycadenia	30	45	<0.5	--	30 to 46
Coulter's goldfields	4	10	--	--	4 to 10
Hartweg's golden sunburst	4	4	--	--	4
Wright's trichocoronis	5	10	--	--	5 to 10
Heckard's pepper-grass	5	5	--	--	5
caper-fruited tropidocarpum	4	4	--	--	4
dwarf downingia	3	6	--	--	3 to 6
heartscale	5	5	--	--	5
brittlescale	7	11	--	--	7 to 11
San Joaquin spearscale	7	11	--	--	7 to 11
lesser saltscale	7	11	--	--	7 to 11
vernal pool smallscale	7	11	--	--	7 to 11
subtle orache	4	4	--	--	4
Lost Hills crownscale	7	11	--	--	7 to 11
Hoover's spurge	7	11	--	--	7 to 11
alkali milk-vetch	7	11	--	--	7 to 11
Merced phacelia	4	4	--	--	4
Keck's checkerbloom	8	14	--	--	8 to 14
beaked clarkia	4	4	--	--	4
Henderson's bent grass	3	6	--	--	3 to 6
California satintail	2	3	--	--	2 to 3

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Colusa grass	3	6	--	--	3 to 6
San Joaquin Valley Orcutt grass	3	6	--	--	3 to 6
hairy Orcutt grass	3	6	--	--	3 to 6
Greene's tuctoria	3	6	--	--	3 to 6
pincushion navarretia	3	6	--	--	3 to 6
shining navarretia	7	11	--	--	7 to 11
prostrate vernal pool navarretia	7	11	--	--	7 to 11
recurved larkspur	4	5	--	--	4 to 5
little mousetail	3	6	--	--	3 to 6
succulent owl's-clover	3	6	--	--	3 to 6
palmate-bracted bird's-beak	4	4	--	--	4
Boggs Lake hedge-hyssop	3	6	-	-	3 to 6
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.					

Table 3.7B1-4
Special-Status Plant Species Potentially Affected During the Construction Period of the HMF Alternatives (acres^a)

	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
Sanford's arrowhead	1	--	--	<0.5	<0.5
Delta button-celery	<0.5	--	--	<0.5	1
spiny-sepaled button-celery	<0.5	--	--	<0.5	1
Hoover's calycadenia	9	--	--	--	<0.5
Coulter's goldfields	<0.5	--	--	<0.5	1
Hartweg's golden sunburst	--	--	--	--	<0.5
Wright's trichocoronis	1	--	--	<0.5	1
Heckard's pepper-grass	--	--	--	--	<0.5
caper-fruited tropidocarpum	--	--	--	--	<0.5
dwarf downingia	1	--	--	<0.5	<0.5
heartscale	--	--	--	--	<0.5
brittlescale	<0.5	--	--	<0.5	1
San Joaquin spearscale	<0.5	--	--	<0.5	1
lesser saltscale	<0.5	--	--	<0.5	1
vernal pool smallscale	<0.5	--	--	<0.5	1
subtle orache	--	--	--	--	<0.5
Lost Hills crownscale	<0.5	--	--	<0.5	1
Hoover's spurge	<0.5	--	--	<0.5	1

	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
alkali milk-vetch	<0.5	--	--	<0.5	1
Merced phacelia	--	--	--	--	<0.5
Keck's checkerbloom	<0.5	--	--	<0.5	1
beaked clarkia	--	--	--	--	<0.5
Henderson's bent grass	1	--	--	<0.5	<0.5
California satintail	<0.5	--	--	--	<0.5
Colusa grass	1	--	--	<0.5	<0.5
San Joaquin Valley Orcutt grass	1	--	--	<0.5	<0.5
hairy Orcutt grass	1	--	--	<0.5	<0.5
Greene's tuctoria	1	--	--	<0.5	<0.5
pincushion navarretia	1	--	--	<0.5	<0.5
shining navarretia	1	--	--	<0.5	1
prostrate vernal pool navarretia	1	--	--	<0.5	1
recurved larkspur	<0.5	--	--	--	<0.5
little mouseltail	1	--	--	<0.5	<0.5
succulent owl's-clover	1	--	--	<0.5	<0.5
palmate-bracted bird's-beak	--	--	--	--	<0.5
Boggs Lake hedge-hyssop	1	--	--	<0.5	<0.5
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.					

ATTACHMENT 2

Special-Status Wildlife Species Potentially Affected During the Construction Period

Table 3.7B2-1
Special-Status Wildlife Species Potentially Affected During the Construction Period of the UPRR/SR 99 and Downtown Fresno
Station Alternatives (acres^a)

	Impacts by Project Alternative			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Conservancy fairy shrimp	1	1	1	--	--	1
vernal pool fairy shrimp	1	1	1	--	--	1
vernal pool tadpole shrimp	1	1	1	--	--	1
valley elderberry longhorn beetle	2	3	3	--	--	2 to 3
Kern brook lamprey	2	2	2	--	--	2
Central Valley steelhead	2	2	2	--	--	2
Central Valley spring-run Chinook salmon	2	2	2	--	--	2
Chinook salmon - Central Valley fall / late fall-run ESU	2	2	2	--	--	2
hardhead	2	2	2	--	--	2
San Joaquin roach	2	2	2	--	--	2
California tiger salamander	1	1	1	--	--	1
western spadefoot	4	4	4	--	--	4
western pond turtle	7	9	9	--	--	7 to 9
fulvous whistling-duck	9	11	10	--	--	9 to 11
redhead	9	11	10	--	--	9 to 11

	Impacts by Project Alternative			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
American white pelican	4	5	5	--	--	4 to 5
least bittern	4	4	3	--	--	3 to 4
white-tailed kite	232	279	237	<0.5	--	232 to 280
bald eagle	4	5	5	--	--	4 to 5
northern harrier	228	274	232	<0.5	--	228 to 275
Swainson's hawk	232	280	235	<0.5	--	232 to 281
golden eagle	170	212	166	--	--	166 to 212
American peregrine falcon	366	441	395	5	2	368 to 446
lesser sandhill crane	153	190	144	--	--	144 to 190
greater sandhill crane	153	190	144	--	--	144 to 190
snowy plover	3	4	3	--	--	3 to 4
mountain plover	96	95	87	<0.5	--	95 to 97
whimbrel	1	2	1	--	--	1 to 2
long-billed curlew	5	5	5	--	--	5
marbled godwit	1	2	1	--	--	1 to 2
red knot	1	2	1	--	--	1 to 2
short-billed dowitcher	1	2	1	--	--	1 to 2
black tern	46	61	43	--	--	43 to 61

	Impacts by Project Alternative			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
western burrowing owl	295	351	306	5	2	297 to 356
long-eared owl	212	264	217	--	--	212 to 264
short-eared owl	96	130	110	--	--	96 to 130
Costa's hummingbird	183	236	214	<0.5	<0.5	184 to 237
loggerhead shrike	293	349	304	5	2	295 to 354
Least Bell's vireo	2	3	3	--	--	2 to 3
yellow-billed magpie	292	357	301	4	2	294 to 361
purple martin	87	94	89	4	2	89 to 98
bank swallow	2	3	3	--	--	2 to 3
yellow warbler	2	3	3	--	--	2 to 3
yellow-breasted chat	2	3	3	--	--	2 to 3
spotted towhee	110	142	138	<0.5	<0.5	111 to 143
Oregon vesper sparrow	81	86	77	<0.5	<0.5	78 to 87
Belding's savannah sparrow	2	2	2	--	--	2
grasshopper sparrow	56	82	68	--	--	56 to 82
song sparrow ("Modesto" population)	3	3	3	--	--	3
tricolored blackbird	56	81	51	--	--	51 to 81
yellow-headed blackbird	115	162	129	--	--	115 to 162

	Impacts by Project Alternative			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Lawrence's goldfinch	180	223	229	1	<0.5	181 to 230
western red bat	339	404	358	4	2	341 to 408
pallid bat	258	318	276	<0.5	--	258 to 319
western mastiff bat	339	404	358	4	2	341 to 408
San Joaquin kit fox	248	277	267	5	2	250 to 282
American badger	170	188	177	<0.5	<0.5	171 to 189
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.						

Table 3.7B2-2
Special-Status Wildlife Species Potentially Affected During the Construction Period of the BNSF and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
Conservancy fairy shrimp	1	1	<0.5	<0.5	2	1	--	--	2 to 3	2 to 3	2 to 3
vernal pool fairy shrimp	1	1	<0.5	<0.5	2	1	--	--	2 to 3	2 to 3	2 to 3
vernal pool tadpole shrimp	1	1	<0.5	<0.5	2	1	--	--	2 to 3	2 to 3	2 to 3
valley elderberry longhorn beetle	2	1	<0.5	<0.5	1	1	--	--	3	2 to 3	2 to 3
Kern brook lamprey	3	3	<0.5	<0.5	1	1	--	--	4	4	4
Central Valley steelhead	3	3	<0.5	<0.5	1	1	--	--	4	4	4
Central Valley spring-run Chinook salmon	3	3	<0.5	<0.5	1	1	--	--	4	4	4
Chinook salmon - Central Valley fall / late fall-run ESU	3	3	<0.5	<0.5	1	1	--	--	4	4	4
hardhead	3	3	<0.5	<0.5	1	1	--	--	4	4	4
San Joaquin roach	3	3	<0.5	<0.5	1	1	--	--	4	4	4
California tiger salamander	1	1	<0.5	<0.5	2	1	--	--	2 to 3	2 to 3	2 to 3
western spadefoot	5	5	1	1	4	3	--	--	6 to 9	6 to 9	6 to 9
western pond turtle	6	5	1	1	2	2	--	--	7 to 9	6 to 7	6 to 9
fulvous whistling-duck	8	6	1	2	4	3	--	--	9 to 12	7 to 10	7 to 12
redhead	8	6	1	2	4	3	--	--	9 to 12	7 to 10	7 to 12
American white pelican	8	6	<0.5	<0.5	1	2	--	--	9 to 10	7 to 8	7 to 10
least bittern	4	4	<0.5	<0.5	1	1	--	--	5	5	5
white-tailed kite	204	119	29	33	49	34	<0.5	--	233 to 254	148 to 169	148 to 254
bald eagle	5	4	<0.5	1	1	2	--	--	6 to 7	5 to 6	5 to 7
northern harrier	199	115	28	32	48	32	<0.5	--	227 to 248	143 to 164	143 to 248
Swainson's hawk	205	118	27	33	48	34	<0.5	--	232 to 254	145 to 164	145 to 254
golden eagle	128	66	20	21	19	16	--	--	144 to 149	82 to 87	82 to 149
American peregrine falcon	378	246	53	62	84	66	5	2	433 to 467	301 to 335	301 to 467
lesser sandhill crane	113	54	20	21	18	16	--	--	129 to 134	70 to 75	70 to 134
greater sandhill crane	113	54	20	21	18	16	--	--	129 to 134	70 to 75	70 to 134

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
snowy plover	4	3	<0.5	<0.5	1	1	--	--	5	4	4 to 5
mountain plover	75	56	11	15	33	11	<0.5	--	86 to 109	67 to 90	67 to 109
Whimbrel	1	1	<0.5	<0.5	<0.5	--	--	--	1 to 2	1 to 2	1 to 2
long-billed curlew	6	5	1	1	4	3	--	--	7 to 10	6 to 9	6 to 10
marbled godwit	2	1	<0.5	<0.5	<0.5	--	--	--	2 to 3	1 to 2	1 to 3
red knot	2	1	<0.5	<0.5	<0.5	--	--	--	2 to 3	1 to 2	1 to 3
short-billed dowitcher	2	1	<0.5	<0.5	<0.5	--	--	--	2 to 3	1 to 2	1 to 3
black tern	18	6	6	3	1	2	--	--	19 to 24	7 to 12	7 to 24
western burrowing owl	253	147	40	46	62	45	5	2	295 to 320	189 to 214	189 to 320
long-eared owl	237	136	29	42	40	48	--	--	266 to 285	175 to 184	175 to 285
short-eared owl	62	24	15	12	12	11	--	--	73 to 77	35 to 39	35 to 77
Costa's hummingbird	220	135	29	34	38	44	<0.5	<0.5	250 to 265	165 to 180	165 to 265
loggerhead shrike	249	145	40	46	61	44	5	2	291 to 315	187 to 211	187 to 315
Least Bell's vireo	2	1	<0.5	<0.5	1	1	--	--	3	2	2 to 3
yellow-billed magpie	312	181	43	54	53	59	4	2	357 to 375	227 to 244	227 to 375
purple martin	105	63	18	17	22	26	4	2	125 to 135	83 to 93	83 to 135
bank swallow	2	1	<0.5	<0.5	1	1	--	--	3	2	2 to 3
yellow warbler	2	1	<0.5	<0.5	1	1	--	--	3	2	2 to 3
yellow-breasted chat	2	1	<0.5	<0.5	1	1	--	--	3	2	2 to 3
spotted towhee	179	109	21	29	30	36	<0.5	<0.5	201 to 216	131 to 146	131 to 216
Oregon vesper sparrow	51	31	8	10	17	10	<0.5	<0.5	60 to 69	40 to 49	40 to 69
Belding's savannah sparrow	2	1	<0.5	1	2	1	--	--	3 to 4	2 to 3	2 to 4
grasshopper sparrow	63	34	9	10	11	8	--	--	71 to 74	42 to 45	42 to 74
song sparrow ("Modesto" population)	2	2	<0.5	1	2	1	--	--	3 to 4	3 to 4	3 to 4
tricolored blackbird	44	28	7	6	8	7	--	--	50 to 52	34 to 36	34 to 52
yellow-headed blackbird	92	47	15	13	8	8	--	--	100 to 107	55 to 62	55 to 107
Lawrence's goldfinch	235	164	28	40	61	45	1	<0.5	264 to 297	193 to 225	193 to 297
western red bat	362	234	50	62	78	64	4	2	414 to 444	286 to 316	286 to 444

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
pallid bat	261	174	33	47	58	40	<0.5	--	294 to 320	207 to 233	207 to 320
western mastiff bat	362	234	50	62	78	64	4	2	414 to 444	286 to 316	286 to 444
San Joaquin kit fox	225	138	38	41	63	42	5	2	265 to 293	178 to 203	178 to 293
American badger	164	96	25	28	48	30	<0.5	<0.5	190 to 213	122 to 145	122 to 213
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.											

Table 3.7B2-3
Special-Status Wildlife Species Potentially Affected During the Construction Period of the Hybrid and
Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Conservancy fairy shrimp	1	1	--	--	1
vernal pool fairy shrimp	1	1	--	--	1
vernal pool tadpole shrimp	1	1	--	--	1
valley elderberry longhorn beetle	2	3	--	--	2 to 3
Kern brook lamprey	2	5	--	--	2 to 5
Central Valley steelhead	2	5	--	--	2 to 5
Central Valley spring-run Chinook salmon	2	5	--	--	2 to 5
Chinook salmon - Central Valley fall / late fall-run ESU	2	5	--	--	2 to 5
hardhead	2	5	--	--	2 to 5
San Joaquin roach	2	5	--	--	2 to 5
California tiger salamander	<0.5	1	--	--	<0.5 to 1
western spadefoot	4	4	--	--	4
western pond turtle	6	13	--	--	6 to 13
fulvous whistling-duck	8	14	--	--	8 to 14
redhead	8	14	--	--	8 to 14
American white pelican	4	9	--	--	4 to 9
least bittern	4	6	--	--	4 to 6
white-tailed kite	227	246	<0.5	--	227 to 247
bald eagle	4	9	--	--	4 to 9
northern harrier	223	236	<0.5	--	223 to 237
Swainson's hawk	228	243	<0.5	--	228 to 244
golden eagle	168	169	--	--	168 to 169

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
American peregrine falcon	357	439	5	2	359 to 444
lesser sandhill crane	154	154	--	--	154
greater sandhill crane	154	154	--	--	154
snowy plover	3	6	--	--	3 to 6
mountain plover	74	102	<0.5	--	74 to 108
whimbrel	1	1	--	--	1
long-billed curlew	5	5	--	--	5
marbled godwit	1	1	--	--	1
red knot	1	1	--	--	1
short-billed dowitcher	1	1	--	--	1
black tern	51	3	--	--	3 to 51
western burrowing owl	269	327	5	2	271 to 332
long-eared owl	235	253	--	--	235 to 253
short-eared owl	99	95	--	--	95 to 99
Costa's hummingbird	213	234	<0.5	<0.5	214 to 235
loggerhead shrike	268	321	5	2	270 to 326
Least Bell's vireo	2	3	--	--	2 to 3
yellow-billed magpie	304	339	4	2	306 to 343
purple martin	93	122	4	2	95 to 126
bank swallow	2	4	--	--	2 to 4
yellow warbler	2	4	--	--	2 to 4
yellow-breasted chat	2	4	--	--	2 to 4
spotted towhee	140	166	<0.5	<0.5	141 to 167
Oregon vesper sparrow	59	95	<0.5	<0.5	60 to 96
Belding's savannah sparrow	2	1	--	--	1 to 2
grasshopper sparrow	61	60	--	--	60 to 61
song sparrow ("Modesto" population)	2	4	--	--	2 to 4

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
tricolored blackbird	69	53	--	--	53 to 69
yellow-headed blackbird	123	110	--	--	110 to 123
Lawrence's goldfinch	182	251	1	<0.5	183 to 252
western red bat	342	404	4	2	344 to 408
pallid bat	255	290	<0.5	--	255 to 291
western mastiff bat	342	404	4	2	344 to 408
San Joaquin kit fox	215	296	5	2	217 to 301
American badger	162	200	<0.5	<0.5	163 to 201
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.					

Table 3.7B2-4
Special-Status Wildlife Species Potentially Affected During the Construction Period of HMF Alternatives (acres^a)

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
Conservancy fairy shrimp	--	--	--	--	<0.5
vernal pool fairy shrimp	--	--	--	--	<0.5
vernal pool tadpole shrimp	--	--	--	--	<0.5
valley elderberry longhorn beetle	<0.5	--	--	--	<0.5
Kern brook lamprey	<0.5	--	--	<0.5	<0.5
Central Valley steelhead	<0.5	--	--	<0.5	<0.5
Central Valley spring-run Chinook salmon	<0.5	--	--	<0.5	<0.5
Chinook salmon - Central Valley fall / late fall-run ESU	<0.5	--	--	<0.5	<0.5
hardhead	<0.5	--	--	<0.5	<0.5
San Joaquin roach	<0.5	--	--	<0.5	<0.5
California tiger salamander	--	--	--	--	<0.5
western spadefoot	--	--	--	--	<0.5
western pond turtle	<0.5	--	--	<0.5	<0.5
fulvous whistling-duck	1	--	--	<0.5	1
redhead	1	--	--	<0.5	1
American white pelican	<0.5	--	--	<0.5	1
least bittern	1	--	--	<0.5	<0.5
white-tailed kite	17	--	3	<0.5	1
bald eagle	1	--	--	<0.5	<0.5

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
northern harrier	16	--	3	<0.5	1
Swainson's hawk	17	--	3	<0.5	1
golden eagle	6	--	3	<0.5	1
American peregrine falcon	51	--	3	1	8
lesser sandhill crane	6	--	3	<0.5	1
greater sandhill crane	6	--	3	<0.5	1
snowy plover	<0.5	--	--	<0.5	<0.5
mountain plover	11	--	<0.5	<0.5	<0.5
whimbrel	<0.5	--	--	<0.5	<0.5
long-billed curlew	<0.5	--	--	<0.5	<0.5
marbled godwit	<0.5	--	--	<0.5	<0.5
red knot	<0.5	--	--	<0.5	<0.5
short-billed dowitcher	<0.5	--	--	<0.5	<0.5
black tern	3	--	1	<0.5	<0.5
western burrowing owl	50	--	3	<0.5	1
long-eared owl	8	--	3	<0.5	8
short-eared owl	4	--	1	<0.5	1
Costa's hummingbird	6	--	1	<0.5	8
loggerhead shrike	50	--	3	<0.5	1
Least Bell's vireo	<0.5	--	--	--	<0.5
yellow-billed magpie	39	--	3	<0.5	8

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
purple martin	33	--	<0.5	<0.5	<0.5
bank swallow	<0.5	--	--	--	<0.5
yellow warbler	<0.5	--	--	--	<0.5
yellow-breasted chat	<0.5	--	--	--	<0.5
spotted towhee	4	--	--	<0.5	7
Oregon vesper sparrow	5	--	<0.5	<0.5	<0.5
Belding's savannah sparrow	<0.5	--	--	--	<0.5
grasshopper sparrow	1	--	2	--	1
song sparrow ("Modesto" population)	<0.5	--	--	<0.5	<0.5
tricolored blackbird	3	--	3	<0.5	1
yellow-headed blackbird	4	--	3	<0.5	<0.5
Lawrence's goldfinch	15	--	--	<0.5	8
western red bat	48	--	3	1	8
pallid bat	15	--	3	1	8
western mastiff bat	48	--	3	1	8
San Joaquin kit fox	48	--	<0.5	<0.5	1
American badger	14	--	<0.5	<0.5	1
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.					

ATTACHMENT 3

Special-Status Plant Species Potentially Affected During the Project Period

Table 3.7B3-1

Special-Status Plant Species Potentially Affected During the Project Period of UPRR/SR 99 and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Sanford's arrowhead	36	29	29	--	--	29 to 36
Delta button-celery	19	14	9	--	--	9 to 19
spiny-sepaed button-celery	21	19	18	--	--	18 to 21
Hoover's calycadenia	121	122	141	16	16	137 to 157
Coulter's goldfields	19	14	9	--	--	9 to 19
Hartweg's golden sunburst	12	12	13	--	--	12 to 13
Wright's trichocoronis	25	18	10	--	--	10 to 25
Heckard's pepper-grass	13	13	14	--	--	13 to 14
caper-fruited tropidocarpum	12	12	13	--	--	12 to 13
dwarf downingia	15	11	6	--	--	6 to 15
heartscale	15	14	16	--	--	14 to 16
brittlescale	21	19	18	--	--	18 to 21
San Joaquin spearscale	21	19	18	--	--	18 to 21
lesser saltscale	21	19	18	--	--	18 to 21
vernal pool smallscale	21	19	18	--	--	18 to 21

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
subtle orache	12	12	13	--	--	12 to 13
Lost Hills crownscale	21	19	18	--	--	18 to 21
Hoover's spurge	21	19	18	--	--	18 to 21
alkali milk-vetch	21	19	18	--	--	18 to 21
Merced phacelia	12	12	13	--	--	12 to 13
Keck's checkerbloom	32	27	23	--	--	23 to 32
beaked clarkia	13	13	14	--	--	13 to 14
Henderson's bent grass	15	11	6	--	--	6 to 15
California satintail	10	7	4	--	--	4 to 10
Colusa grass	15	11	6	--	--	6 to 15
San Joaquin Valley Orcutt grass	15	11	6	--	--	6 to 15
hairy Orcutt grass	15	11	6	--	--	6 to 15
Greene's tuctoria	15	11	6	--	--	6 to 15
pincushion navarretia	15	11	6	--	--	6 to 15
shining navarretia	27	23	19	--	--	19 to 27
prostrate vernal pool navarretia	27	23	19	--	--	19 to 27
recurved larkspur	13	13	14	--	--	13 to 14
little mousetail	15	11	6	--	--	6 to 15

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
succulent owl's-clover	15	11	6	--	--	6 to 15
palmate-bracted bird's-beak	12	12	13	--	--	12 to 13
Boggs Lake hedge-hyssop	15	11	6	--	--	6 to 15
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.						

Table 3.7B3-2
Special-Status Plant Species Potentially Affected during the Project Period of BNSF and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
Sanford's arrowhead	30	28	15	17	9	10	--	--	39 to 47	37 to 45	37 to 47
Delta button-celery	18	14	11	11	10	9	--	--	27 to 29	23 to 25	23 to 29
spiny-sepaled button-celery	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
Hoover's calycadenia	183	175	115	71	80	39	16	16	238 to 314	230 to 306	230 to 314
Coulter's goldfields	18	14	11	11	10	9	--	--	27 to 29	23 to 25	23 to 29
Hartweg's golden sunburst	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
Wright's trichocoronis	19	15	11	11	10	9	--	--	28 to 30	24 to 26	24 to 30
Heckard's pepper-grass	58	49	73	61	74	36	--	--	94 to 132	85 to 122	85 to 132
caper-fruited tropidocarpum	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
dwarf downingia	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
heartscale	60	51	73	31	74	36	--	--	91 to 134	82 to 125	82 to 134
brittlescale	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
San Joaquin spearscale	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
lesser saltscale	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
vernal pool smallscale	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
subtle orache	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
Lost Hills crownscale	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
Hoover's spurge	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
alkali milk-vetch	64	53	74	63	76	38	--	--	102 to 140	91 to 129	91 to 140
Merced phacelia	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
Keck's checkerbloom	70	58	75	64	78	42	--	--	112 to 148	100 to 136	100 to 148
beaked clarkia	55	45	64	53	69	33	--	--	60 to 124	78 to 114	78 to 124
Henderson's bent grass	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
California satintail	6	4	1	1	3	4	--	--	7 to 10	5 to 8	5 to 10
Colusa grass	12	11	10	10	7	5	--	--	12 to 22	16 to 21	15 to 22

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
San Joaquin Valley Orcutt grass	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
hairy Orcutt grass	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
Greene's tuctoria	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
pincushion navarretia	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
shining navarretia	64	54	74	63	76	38	--	--	102 to 140	92 to 130	92 to 140
prostrate vernal pool navarretia	64	54	74	63	76	38	--	--	102 to 140	92 to 130	92 to 140
recurved larkspur	55	46	64	54	69	34	--	--	89 to 124	80 to 115	80 to 124
little mousetail	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
succulent owl's-clover	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
palmate-bracted bird's-beak	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
Boggs Lake hedge-hyssop	12	11	10	10	7	5	--	--	17 to 22	16 to 21	16 to 22
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.											
^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.											

Table 3.7B3-3

Special-Status Plant Species Potentially Affected during the Project Period of the Hybrid and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Sanford's arrowhead	40	33	--	--	33 to 40
Delta button-celery	20	13	--	--	13 to 20
spiny-sepaled button-celery	59	58	--	--	58 to 59
Hoover's calycadenia	161	174	16	16	177 to 190
Coulter's goldfields	20	13	--	--	13 to 20
Hartweg's golden sunburst	47	48	--	--	47 to 48
Wright's trichocoronis	25	14	--	--	14 to 25
Heckard's pepper-grass	57	53	--	--	53 to 57
caper-fruited tropidocarpum	47	48	--	--	47 to 48
dwarf downingia	18	10	--	--	10 to 18
heartscale	54	55	--	--	54 to 55
brittlescale	59	58	--	--	58 to 59
San Joaquin spearscale	59	58	--	--	58 to 59
lesser saltscale	59	58	--	--	58 to 59
vernal pool smallscale	59	58	--	--	58 to 59
subtle orache	47	48	--	--	47 to 48
Lost Hills crownscale	59	58	--	--	58 to 59
Hoover's spurge	59	58	--	--	58 to 59
alkali milk-vetch	59	58	--	--	58 to 59
Merced phacelia	47	48	--	--	47 to 48
Keck's checkerbloom	69	63	--	--	63 to 69
beaked clarkia	49	51	--	--	49 to 51
Henderson's bent grass	18	10	--	--	10 to 18
California satintail	8	4	--	--	4 to 8

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Colusa grass	18	10	--	--	10 to 18
San Joaquin Valley Orcutt grass	18	10	--	--	10 to 18
hairy Orcutt grass	18	10	--	--	10 to 18
Greene's tuctoria	18	10	--	--	10 to 18
pincushion navarretia	18	10	--	--	10 to 18
shining navarretia	65	58	--	--	58 to 65
prostrate vernal pool navarretia	65	58	--	--	58 to 65
recurved larkspur	49	51	--	--	49 to 51
little mousetail	18	10	--	--	10 to 18
succulent owl's-clover	18	10	--	--	10 to 18
palmate-bracted bird's-beak	47	48	--	--	47 to 48
Boggs Lake hedge-hyssop	18	10	--	--	10 to 18
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.					

Table 3.7B3-4
Special-Status Plant Species Potentially Affected During the Project Period of the HMF Alternatives (acres^a)

	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
Sanford's arrowhead	9	<0.5	1	5	4
Delta button-celery	2	<0.5	<0.5	5	4
spiny-sepaled button-celery	2	<0.5	<0.5	4	74
Hoover's calycadenia	28	2	<0.5	11	73
Coulter's goldfields	2	<0.5	<0.5	5	4
Hartweg's golden sunburst	--	--	--	--	72
Wright's trichocoronis	2	<0.5	1	5	4
Heckard's pepper-grass	<0.5	--	--	--	73
caper-fruited tropidocarpum	--	--	--	--	72
dwarf downingia	2	<0.5	<0.5	4	3
heartscale	<0.5	--	--	--	73
brittlescale	2	<0.5	<0.5	4	74
San Joaquin spearscale	2	<0.5	<0.5	4	74
lesser saltscale	2	<0.5	<0.5	4	74
vernal pool smallscale	2	<0.5	<0.5	4	74
subtle orache	--	--	--	--	72
Lost Hills crownscale	2	<0.5	<0.5	4	74
Hoover's spurge	2	<0.5	<0.5	4	74

	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
alkali milk-vetch	2	<0.5	<0.5	4	74
Merced phacelia	--	--	--	--	72
Keck's checkerbloom	2	<0.5	<0.5	4	75
beaked clarkia	--	--	--	--	72
Henderson's bent grass	2	<0.5	<0.5	4	3
California satintail	<0.5	<0.5	<0.5	1	1
Colusa grass	2	<0.5	<0.5	4	3
San Joaquin Valley Orcutt grass	2	<0.5	<0.5	4	3
hairy Orcutt grass	2	<0.5	<0.5	4	3
Greene's tuctoria	2	<0.5	<0.5	4	3
pincushion navarretia	2	<0.5	<0.5	4	3
shining navarretia	2	<0.5	<0.5	4	74
prostrate vernal pool navarretia	2	<0.5	<0.5	4	74
recurved larkspur	<0.5	--	--	--	72
little mousetail	2	<0.5	<0.5	4	3
succulent owl's-clover	2	<0.5	<0.5	4	3
palmate-bracted bird's-beak	--	--	--	--	72
Boggs Lake hedge-hyssop	2	<0.5	<0.5	4	3
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.					

ATTACHMENT 4

Special-Status Wildlife Species Potentially Affected During the Project Period

Table 3.7B4-1

Special-Status Wildlife Species Potentially Affected During the Project Period of UPRR/SR 99 and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Conservancy fairy shrimp	1	1	2	--	--	1 to 2
vernal pool fairy shrimp	1	1	2	--	--	1 to 2
vernal pool tadpole shrimp	1	1	2	--	--	1 to 2
valley elderberry longhorn beetle	9	6	4	--	--	4 to 9
Kern brook lamprey	8	6	3	--	--	3 to 8
Central Valley steelhead	8	6	3	--	--	3 to 8
Central Valley spring-run Chinook salmon	8	6	3	--	--	3 to 8
Chinook salmon - Central Valley fall / late fall-run ESU	8	6	3	--	--	3 to 8
hardhead	8	6	3	--	--	3 to 8
San Joaquin roach	8	6	3	--	--	3 to 8
California tiger salamander	1	1	2	--	--	1 to 2
western spadefoot	12	12	13	--	--	12 to 13
western pond turtle	31	24	26	--	--	24 to 31
fulvous whistling-duck	39	31	31	--	--	31 to 39
redhead	39	31	31	--	--	31 to 39

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
American white pelican	17	13	7	--	--	7 to 17
least bittern	21	16	8	--	--	8 to 21
white-tailed kite	1,058	1,030	839	16	16	855 to 1,074
bald eagle	17	13	8	--	--	8 to 17
northern harrier	1,040	1,016	830	16	16	846 to 1,056
Swainson's hawk	1,061	1,023	818	16	16	834 to 1,077
golden eagle	864	845	620	--	--	620 to 864
American peregrine falcon	1,921	1,880	2,001	63	62	1,942 to 2,064
lesser sandhill crane	724	682	521	--	--	521 to 724
greater sandhill crane	724	682	521	--	--	521 to 724
snowy plover	14	11	7	--	--	7 to 14
mountain plover	341	351	309	16	16	325 to 367
whimbrel	7	6	4	--	--	4 to 7
long-billed curlew	19	17	17	--	--	17 to 79
marbled godwit	7	6	4	--	--	4 to 7
red knot	7	6	4	--	--	4 to 7
short-billed dowitcher	7	6	4	--	--	4 to 7
black tern	297	203	144	--	--	144 to 297

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
western burrowing owl	1,493	1,434	1,330	63	62	1,392 to 1,556
long-eared owl	1,007	958	1,101	--	--	958 to 1,101
short-eared owl	478	439	366	--	--	366 to 478
Costa's hummingbird	948	921	1,082	<0.5	<0.5	922 to 1,083
loggerhead shrike	1,486	1,428	1,327	63	62	1,389 to 1,549
Least Bell's vireo	9	6	4	--	--	4 to 9
yellow-billed magpie	1,409	1,360	1,439	32	31	1,391 to 1,471
purple martin	327	303	316	32	32	335 to 359
bank swallow	9	6	4	--	--	4 to 9
yellow warbler	9	7	4	--	--	4 to 9
yellow-breasted chat	9	7	4	--	--	4 to 9
spotted towhee	486	522	804	<0.5	<0.5	487 to 805
Oregon vesper sparrow	597	615	586	15	15	601 to 630
Belding's savannah sparrow	8	7	5	--	--	5 to 8
grasshopper sparrow	219	261	227	--	--	219 to 261
song sparrow ("Modesto" population)	11	8	5	--	--	5 to 11
tricolored blackbird	350	243	164	--	--	164 to 350
yellow-headed blackbird	649	621	459	--	--	459 to 649

	Impacts by Project Combination			Fresno HST Station Alternatives		Total Range of Impacts ^b
	UPRR/SR 99 with West Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 24 Wye	UPRR/SR 99 with East Chowchilla Design Option & Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Lawrence's goldfinch	974	1,021	1,349	31	31	1,005 to 1,380
western red bat	1,534	1,495	1,596	48	47	1,542 to 1,644
pallid bat	1,239	1,218	1,307	16	16	1,234 to 1,323
western mastiff bat	1,534	1,495	1,596	48	47	1,542 to 1,644
San Joaquin kit fox	1,169	1,226	1,211	63	62	1,231 to 1,289
American badger	610	664	618	16	16	626 to 680
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.						

Table 3.7B4-2
Special-Status Wildlife Species Potentially Affected During the Project Period of BNSF and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
Conservancy fairy shrimp	6	6	8	8	6	3	--	--	9 to 14	9 to 14	9 to 14
vernal pool fairy shrimp	6	6	8	8	6	3	--	--	9 to 14	9 to 14	9 to 14
vernal pool tadpole shrimp	6	6	8	8	6	3	--	--	9 to 14	9 to 14	9 to 14
valley elderberry longhorn beetle	6	4	<0.5	<0.5	1	1	--	--	7	5	5 to 7
Kern brook lamprey	5	4	<0.5	<0.5	1	1	--	--	6	5	5 to 6
Central Valley steelhead	5	4	<0.5	<0.5	1	1	--	--	6	5	5 to 6
Central Valley spring-run Chinook salmon	5	4	<0.5	<0.5	1	1	--	--	6	5	5 to 6
Chinook salmon - Central Valley fall / late fall-run ESU	5	4	2	2	1	2	--	--	6 to 7	5 to 6	5 to 7
hardhead	5	4	2	2	1	2	--	--	6 to 7	5 to 6	5 to 7
San Joaquin roach	5	4	2	2	1	2	--	--	6 to 7	5 to 6	5 to 7
California tiger salamander	6	6	8	8	6	3	--	--	9 to 14	9 to 14	9 to 14
western spadefoot	52	43	64	53	69	33	--	--	85 to 121	76 to 112	76 to 121
western pond turtle	21	17	7	10	5	9	--	--	26 to 31	22 to 27	22 to 31
fulvous whistling-duck	34	29	16	18	11	13	--	--	45 to 52	40 to 47	40 to 52
redhead	34	29	16	18	11	13	--	--	45 to 52	40 to 47	40 to 52
American white pelican	12	8	3	3	4	6	--	--	15 to 18	11 to 14	11 to 18
least bittern	12	11	2	2	1	3	--	--	13 to 15	12 to 14	12 to 15
white-tailed kite	947	851	303	266	193	171	16	16	1,134 to 1,266	1,038 to 1,170	1,038 to 1,266
bald eagle	12	8	3	3	4	7	--	--	15 to 19	11 to 15	11 to 19
northern harrier	933	841	300	263	189	165	16	16	1,114 to 1,249	1,022 to 1,157	1,022 to 1,249
Swainson's hawk	908	806	301	265	191	170	16	16	1,094 to 1,225	992 to 1,123	992 to 1,225
golden eagle	637	573	237	231	153	125	--	--	762 to 874	698 to 810	698 to 874
American peregrine falcon	2,028	1,931	438	415	388	390	63	62	2,478 to 2,529	2,381 to 2,432	2,381 to 2,529
lesser sandhill crane	437	366	221	215	139	114	--	--	551 to 658	480 to 587	480 to 658

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
greater sandhill crane	437	366	221	215	139	114	--	--	551 to 658	480 to 587	480 to 658
snowy plover	11	10	2	2	1	3	--	--	12 to 14	11 to 13	11 to 14
mountain plover	271	253	166	135	102	70	16	16	357 to 453	339 to 435	339 to 453
whimbrel	7	6	1	1	<0.5	1	--	--	8	7	7 to 8
long-billed curlew	58	49	65	54	69	33	--	--	91 to 127	82 to 118	82 to 127
marbled godwit	7	6	1	1	<0.5	1	--	--	8	7	7 to 8
red knot	7	6	1	1	<0.5	1	--	--	8	7	7 to 8
short-billed dowitcher	7	6	1	1	<0.5	1	--	--	8	7	7 to 8
black tern	125	95	88	81	32	32	--	--	157 to 213	127 to 183	127 to 213
western burrowing owl	1,224	1,100	332	281	209	184	63	62	1,470 to 1,619	1,346 to 1,495	1,346 to 1,619
long-eared owl	1,075	985	307	338	319	340	--	--	1,382 to 1,413	1,292 to 1,323	1,292 to 1,413
short-eared owl	325	273	169	146	116	77	--	--	402 to 494	350 to 442	350 to 494
Costa's hummingbird	1,219	1,157	271	281	310	313	<0.5	<0.5	1,491 to 1,533	1,429 to 1,471	1,429 to 1,533
loggerhead shrike	1,219	1,096	330	279	208	182	63	62	1,463 to 1,612	1,340 to 1,489	1,340 to 1,612
least Bell's vireo	6	4	<0.5	<0.5	1	1	--	--	7	5	5 to 7
yellow-billed magpie	1,523	1,422	338	369	341	361	32	31	1,812 to 1,924	1,791 to 1,823	1,791 to 1,924
purple martin	396	340	30	30	42	51	32	32	458 to 479	402 to 423	402 to 479
bank swallow	6	4	1	1	3	4	--	--	7 to 10	5 to 8	5 to 10
yellow warbler	6	4	1	1	3	4	--	--	7 to 10	5 to 8	5 to 10
yellow-breasted chat	6	4	1	1	3	4	--	--	7 to 10	5 to 8	5 to 10
spotted towhee	841	808	105	134	195	236	<0.5	<0.5	947 to 1,078	914 to 1,045	914 to 1,078
Oregon vesper sparrow	466	452	157	143	120	84	15	15	565 to 638	551 to 624	551 to 638
Belding's savannah sparrow	12	12	8	8	6	4	--	--	16 to 20	16 to 20	16 to 20
grasshopper sparrow	262	232	86	73	88	54	--	--	316 to 350	286 to 320	286 to 350
song sparrow ("Modesto" population)	11	8	9	9	8	7	--	--	18 to 20	15 to 17	15 to 20

	Impacts by Project Combination		Le Grand Design Options				Fresno HST Station Alternatives		Impact of Components Combined ^b		Total Range of Impacts ^b
	BNSF North-South Alignment with Ave 24 Wye	BNSF North-South Alignment with Ave 21 Wye	Mission Ave	Mission Ave East of Le Grand	Mariposa Way	Mariposa Way East of Le Grand	Mariposa Street Station	Kern Street Station	BNSF Alternative with Ave 24 Wye	BNSF Alternative with Ave 21 Wye	
tricolored blackbird	244	196	167	152	112	79	--	--	323 to 411	275 to 363	275 to 411
yellow-headed blackbird	533	492	118	109	60	60	--	--	593 to 651	552 to 610	552 to 651
Lawrence's goldfinch	1,344	1,307	255	226	300	295	31	31	1,601 to 1,675	1,564 to 1,638	1,564 to 1,675
western red bat	1,700	1,603	393	386	358	369	48	47	2,105 to 2,141	2,008 to 2,044	2,008 to 2,141
pallid bat	1,328	1,283	369	364	320	326	16	16	1,664 to 1,713	1,619 to 1,668	1,619 to 1,713
western mastiff bat	1,700	1,603	393	386	358	369	48	47	2,105 to 2,141	2,008 to 2,044	2,008 to 2,141
San Joaquin kit fox	1,112	1,034	239	185	179	142	63	62	1,316 to 1,414	1,238 to 1,336	1,238 to 1,414
American badger	610	543	197	159	147	119	16	16	745 to 823	678 to 756	678 to 823
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.											
^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.											

Table 3.7B4-3

Special-Status Wildlife Species Potentially Affected During the Project Period of the Hybrid and Downtown Fresno Station Alternatives (acres^a)

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
Conservancy fairy shrimp	5	5	--	--	5
vernal pool fairy shrimp	5	5	--	--	5
vernal pool tadpole shrimp	5	5	--	--	5
valley elderberry longhorn beetle	7	4	--	--	4 to 7
Kern brook lamprey	7	4	--	--	4 to 7
Central Valley steelhead	7	4	--	--	4 to 7
Central Valley spring-run Chinook salmon	7	4	--	--	4 to 7
Chinook salmon - Central Valley fall / late fall-run ESU	7	4	--	--	4 to 7
hardhead	7	4	--	--	4 to 7
San Joaquin roach	7	4	--	--	4 to 7
California tiger salamander	5	5	--	--	5
western spadefoot	47	48	--	--	47 to 48
western pond turtle	31	27	--	--	27 to 31
fulvous whistling-duck	42	35	--	--	35 to 42
redhead	42	35	--	--	35 to 42
American white pelican	15	8	--	--	8 to 15
least bittern	19	9	--	--	9 to 19
white-tailed kite	1,279	1,012	16	16	1,028 to 1,295
bald eagle	15	9	--	--	9 to 15
northern harrier	1,262	1,001	16	16	1,017 to 1,278
Swainson's hawk	1,248	962	16	16	978 to 1,264
golden eagle	985	720	--	--	720 to 985
American peregrine falcon	2,281	2,138	63	62	2,200 to 2,344

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
lesser sandhill crane	789	575	--	--	575 to 789
greater sandhill crane	789	575	--	--	575 to 789
snowy plover	14	8	--	--	8 to 14
mountain plover	423	366	16	16	382 to 439
whimbrel	6	4	--	--	4 to 6
long-billed curlew	53	52	--	--	52 to 53
marbled godwit	6	4	--	--	4 to 6
red knot	6	4	--	--	4 to 6
short-billed dowitcher	6	4	--	--	4 to 6
black tern	328	166	--	--	166 to 328
western burrowing owl	1,577	1,336	63	62	1,398 to 1,640
long-eared owl	1,309	1,249	--	--	1,249 to 1,309
short-eared owl	530	416	--	--	416 to 530
Costa's hummingbird	1,309	1,281	<0.5	<0.5	1,282 to 1,310
loggerhead shrike	1,570	1,332	63	62	1,394 to 1,633
least Bell's vireo	7	4	--	--	4 to 7
yellow-billed magpie	1,775	1,627	32	31	1,658 to 1,807
purple martin	396	351	32	32	383 to 428
bank swallow	7	4	--	--	4 to 7
yellow warbler	8	4	--	--	4 to 8
yellow-breasted chat	8	4	--	--	4 to 8
spotted towhee	729	903	<0.5	<0.5	904 to 730
Oregon vesper sparrow	644	583	15	15	598 to 659
Belding's savannah sparrow	11	8	--	--	8 to 11
grasshopper sparrow	241	262	--	--	241 to 262
song sparrow ("Modesto" population)	12	8	--	--	8 to 12
tricolored blackbird	420	232	--	--	232 to 420

	Impacts by Project Combination		Fresno HST Station Alternatives		Total Range of Impacts ^b
	Hybrid North-South Alignment with Ave 24 Wye	Hybrid North-South Alignment with Ave 21 Wye	Mariposa Street Station	Kern Street Station	
yellow-headed blackbird	719	523	--	--	523 to 719
Lawrence's goldfinch	1,222	1,416	31	31	1,253 to 1,447
western red bat	1,927	1,796	48	47	1,843 to 1,975
pallid bat	1,563	1,474	16	16	1,490 to 1,579
western mastiff bat	1,927	1,796	48	47	1,843 to 1,975
San Joaquin kit fox	1,271	1,228	63	62	1,290 to 1,334
American badger	764	730	16	16	746 to 780
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre. ^b Total range of impacts includes the least amount of habitat affected by the HST alternative to the most amount of impact by the HST alternative. Where values of <0.01 or <0.5 acre are combined with larger values to calculate the minimum and maximum, the total has been rounded to the next whole number (<0.01 rounded to 0 and <0.5 rounded to 1). When the minimum or maximum of the range is <0.01 or <0.5 it is not rounded.					

Table 3.7B4-4
Special-Status Wildlife Species Potentially Affected During the Project Period of the HMF Alternatives (acres^a)

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
Conservancy fairy shrimp	<0.5	--	--	--	1
vernal pool fairy shrimp	<0.5	--	--	--	1
vernal pool tadpole shrimp	<0.5	--	--	--	1
valley elderberry longhorn beetle	<0.5	<0.5	<0.5	1	1
Kern brook lamprey	2	<0.5	<0.5	2	1
Central Valley steelhead	2	<0.5	<0.5	2	1
Central Valley spring-run Chinook salmon	2	<0.5	<0.5	2	1
Chinook salmon - Central Valley fall / late fall-run ESU	2	<0.5	<0.5	2	1
hardhead	2	<0.5	<0.5	2	1
San Joaquin roach	2	<0.5	<0.5	2	1
California tiger salamander	<0.5	--	--	--	1
western spadefoot	--	--	--	--	72
western pond turtle	8	<0.5	1	3	2
fulvous whistling-duck	9	<0.5	1	5	5
redhead	9	<0.5	1	5	5
American white pelican	2	<0.5	<0.5	5	2
least bittern	4	<0.5	<0.5	4	1
white-tailed kite	203	178	164	270	82
bald eagle	2	<0.5	<0.5	3	2

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
northern harrier	200	178	163	267	80
Swainson's hawk	205	178	174	270	82
golden eagle	160	176	163	254	77
American peregrine falcon	306	313	179	333	332
lesser sandhill crane	160	76	162	25	75
greater sandhill crane	160	76	162	25	75
snowy plover	3	<0.5	<0.5	2	2
mountain plover	69	2	72	23	73
whimbrel	1	--	<0.5	2	1
long-billed curlew	1	--	<0.5	2	73
marbled godwit	1	--	<0.5	2	1
red knot	1	--	<0.5	2	1
short-billed dowitcher	1	--	<0.5	2	1
black tern	7	75	87	2	1
western burrowing owl	301	80	178	45	80
long-eared owl	171	210	163	81	326
short-eared owl	119	76	87	12	75
Costa's hummingbird	135	309	88	299	327
loggerhead shrike	299	80	178	43	79
yellow-billed magpie	255	309	176	313	328
least Bell's vireo	<0.5	--	--	--	<0.5

	Castle Commerce Center	Harris- DeJager	Fagundes	Gordon- Shaw	Kojima Development
purple martin	95	<0.5	3	8	5
bank swallow	<0.5	<0.5	<0.5	1	1
yellow warbler	1	<0.5	<0.5	1	1
yellow-breasted chat	1	<0.5	<0.5	1	1
spotted towhee	84	134	1	68	252
Oregon vesper sparrow	60	2	75	18	74
Belding's savannah sparrow	1	--	<0.5	--	2
grasshopper sparrow	112	1	3	10	75
song sparrow ("Modesto" population)	1	--	<0.5	2	3
tricolored blackbird	9	76	90	3	74
yellow-headed blackbird	120	176	91	241	4
Lawrence's goldfinch	131	138	4	85	326
western red bat	283	312	166	327	330
pallid bat	195	312	164	321	328
western mastiff bat	283	312	166	327	330
San Joaquin kit fox	287	5	77	46	80
American badger	196	3	73	37	80
^a All values that are greater than 0.5 acres are rounded to the nearest whole number (e.g., 0.51 is reported as 1; 2.5 is reported as 2). Totals from 0.01 to 0.5 acre are stated as <0.5 acre. Totals below 0.01 acre are stated as <0.01 acre.					