

Appendix 2.4-5
Cumulative Impacts: Potentially Impacted Special-Status Plant Species

Species Categorization			Rapid Model Inputs ²			Model Outputs			Conclusions	
Common Name	Species Name	Sensitivity ¹	Vegetation Community Input ³	Known Elevation (feet) ³	Buffered Elevation Input for GIS (feet)	Total Acreage Available ⁴	Cumulative Impact Acreage ⁵	Percent of Total Available ⁶	Significance of Direct Impacts ⁷	Rationale ⁸
Caraway-leaved woodland-gilia	<i>Saltugilia</i> [= <i>Gilia</i>] <i>caruifolia</i>	None/None/None/4.3	<ul style="list-style-type: none"> • Chaparral • Great basin scrub • Cismontane woodland 	2760-7546	2660-7646	310,088	1,184.7	0.38%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Desert beauty	<i>Linanthus bellus</i>	None/None/List B, MSCP/2.3	<ul style="list-style-type: none"> • Chaparral • Great basin scrub • Upper Sonoran subshrub scrub 	3280-4593	3180-4693	221,591	1,134.8	0.51%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Desert larkspur	<i>Delphinium parishii</i> ssp.	None/None/List D/4.3	<ul style="list-style-type: none"> • Chaparral • Cismontane 	1969-5906	1869-6006	396,616	2,195.3	0.55%	Less than significant	The cumulative

	<i>subglobosum</i>		<ul style="list-style-type: none"> woodland Great basin scrub Upper Sonoran subshrub scrub Pinon and Juniper Woodlands Sonoran Desert Scrub 							impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Desert monkey flower	<i>Mimulus aurantiacus</i> var. <i>aridus</i>	None/None/List D, MSCP/4.3	<ul style="list-style-type: none"> Chaparral Great basin scrub Upper Sonoran subshrub scrub Sonoran Desert Scrub 	2461-3937	2341-4037	265,743	2,050.3	0.77%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Engelmann oak	<i>Quercus engelmannii</i>	None/None/List D, MSCP/4.2	<ul style="list-style-type: none"> Chaparral Cismontane woodland Mixed oak woodland Riparian forest Riparian woodland Valley and foothill grassland 	164-4265	64-4365	366,078	2,018.4	0.55%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Jacumba milk-vetch	<i>Astragalus douglasii</i> var.	None/None/List A, MSCP/1B.2	<ul style="list-style-type: none"> Chaparral Cismontane 	2953-4495	2853-4595	225,706	1,214.5	0.54%	Less than significant	The cumulative

	<i>perstrictus</i>		<ul style="list-style-type: none"> woodland Valley and foothill grassland Pinon and Juniper Woodlands 							impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Low bush monkeyflower	<i>Mimulus aurantiacus</i> var. <i>aridus</i>	None/None/List D, MSCP/4.3	<ul style="list-style-type: none"> Chaparral Coastal scrub Great basin scrub Upper Sonoran subshrub scrub 	2460-3610	2360-3710	225,306	2,138.7	0.95%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Narrow-petaled rein orchid	<i>Piperia leptopetala</i>	None/None/List D, MSCP/4.3	<ul style="list-style-type: none"> Cismontane woodland Mixed oak woodland 	1250-7300	1150-7400	25,054	52.8	0.21%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Parish's rupertia	<i>Rupertia rigida</i>	None/None/List D, MSCP/4.3	<ul style="list-style-type: none"> Chaparral Cismontane 	2300-8200	2200-8300	384,398	2,177.5	0.57%	Less than significant	The cumulative

			<ul style="list-style-type: none"> woodland Great basin scrub Mixed oak woodland Valley and foothill grassland 							impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Payson's jewel-flower	<i>Caulanthus simulans</i>	None/None/List D, MSCP/4.2	<ul style="list-style-type: none"> Chaparral Coastal scrub Great basin scrub 	295-7218	195-7318	384,914	2,031.6	0.53%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Pride-of-California	<i>Lathyrus splendens</i>	None/None/List D, MSCP/4.3	<ul style="list-style-type: none"> Chaparral Coastal scrub Great basin scrub 	656-5003	565-5103	368,333	2,031.6	0.55%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
San Bernardino	<i>Symphotrichum defoliatum</i>	None/None/None/1B.2	<ul style="list-style-type: none"> Coastal scrub Cismontane 	5-6695	-95 - 6795	55,632	495.8	0.89%	Less than significant	The cumulative

aster			<ul style="list-style-type: none"> woodland Meadows and seeps Freshwater marsh Riparian scrub Valley and foothill grassland 							impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Sticky geraea	<i>Geraea viscida</i>	None/None/List B, MSCP/2.3	<ul style="list-style-type: none"> Chaparral 	1476-5577	1376-5677	368,111	1,721.9	0.47%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Tecate cypress	<i>Hesperocyparis forbesii</i>	None/None/List A, MSCP/1B.1	<ul style="list-style-type: none"> Chaparral Great basin Cismontane woodland Mixed oak woodland 	1480-4921	1380-5021	380,540	1,951.7	0.51%	Less than significant	The cumulative impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
Tecate tarplant	<i>Deinandra</i> [=Hemizonia]	None/None/List A, MSCP/1B.2	<ul style="list-style-type: none"> Chaparral Coastal scrub 	230-4000	130-4100	325,227	2,197.1	0.68%	Less than significant	The cumulative

	<i>floribunda</i>		<ul style="list-style-type: none"> • Great basin scrub • Upper Sonoran subshrub scrub • Sonoran Desert Scrub 							impacts to suitable habitat would not significantly reduce the plant's habitat in the study area.
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¹ USFWS, CDFW, CNPS County Rankings only

² Rapid Modeling refers to utilization of basic model inputs that are readily available, such as vegetation community, elevation, substrate, slope, etc. as applicable that are present within the Cumulative study area (See Figure 2-4-27)

³ Vegetation communities and elevation data from CNPS 2012 and Jepson eFlora 2013

⁴ Available within the cumulative study area

⁵ Includes project-specific impacts from Rugged Solar, Tierra del Sol (including Gen-tie), and 100% of vegetation communities mapped within LanEast and LanWest; and the following projects within the cumulative study area: Tule Wind Farm, Eco Substation, SDG&E MSUP, Star Ranch, Vaughn, McClintock, Bartlett, Tibbot, Dart, Grizzle, Arellano, Pijenburg, Portrero Valley Road, Level 3 Communications, Horizon Towner, SDG&E Mountain Empire Operator Training Facility, Adelaides Roman Catholic Church, Buckman Springs Road Bridge, and Rough Acres Foundation.

⁶ Percent of total cumulative study area cumulatively impacted

⁷ Significance determinations

⁸ Brief basis for significance determination

REFERENCES

CNPS (California Native Plant Society). 2012. *Inventory of Rare and Endangered Plants*. Online ed. Version 8-01a. Sacramento, California: CNPS. December 2010. Accessed April 2012. <http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi>.

Jepson Flora Project (eds.). 2013. *Jepson eFlora*, <http://ucjeps.berkeley.edu/IJM.html>. September 13, 2013

Appendix 2.4-5
Cumulative Impacts: Potentially Impacted Special-Status Wildlife Species

Species Categorization			Rapid Model Inputs ²		Model Outputs			Conclusions	
Common Name	Species Name	Sensitivity ¹	Vegetation Community Input	Elevation Input (feet)	Total Acreage Available ⁴	Cumulative Impact Acreage ⁵	Percent of Total Available ⁶	Significance ⁷	Rationale ⁸
Belding's orange-throated whiptail	<i>Aspidoscelis hyperythrus beldingi</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland (1, 2)	0-2001 (1, 2)	58,019	827.0	1.43%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Blainville's horned lizard	<i>Phrynosoma blainvillii</i>	None /SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Upper Sonoran subshrub scrub • Valley and foothill grassland • Pinon and Juniper Woodlands • Sonoran desert scrub 	0-6000 (1, 3)	429,751	2,586.7	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			(1, 3)						
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Pinon and Juniper Woodlands • Sonoran desert scrub (1) 	0-6988 (1)	393,855	2,294.0	0.58%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Pinon and Juniper Woodlands • Sonoran desert scrub (1, 2) 	0-6988 (1, 2)	427,594	2,357.2	0.55%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Cope's leopard lizard	<i>Gambelia copeii</i>	None/None/ MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub 	-40 (below sea level)-6000	393,951	2,298.8	0.58%	Less than significant	The additional loss of less than 1% of

			<ul style="list-style-type: none"> • Great basin scrub • Mixed oak woodland • Upper Sonoran subshrub scrub • Pinon and Juniper Woodlands • Sonoran desert scrub 	(1, 2)					suitable habitat within the study area would not result in significant impacts to species or their habitat.
Coronado skink	<i>Plestiodon skiltonianus interparietalis</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Pinon and Juniper Woodlands • Sonoran desert scrub 	0-8300 (1, 2)	438,494	2,597.0	0.59%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

Northern red-diamond rattlesnake	<i>Crotalus ruber</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Upper Sonoran subshrub scrub • Valley and foothill grassland • Pinon and Juniper Woodlands • Sonoran desert scrub (1) 	0-5000 (1)	412,580	2,586.7	0.63%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Rosy boa	<i>Charina trivirgata</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Pinon and Juniper Woodlands • Sonoran desert 	0-6791 (1, 2)	402,694	2,309.1	0.57%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			scrub (1, 2)						
San Diego banded gecko	<i>Coleonyx variegatus abbotti</i>	None/ None/ Group 1	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub (1, 2) 	0-4000 (1, 2)	317,152	2,152.8	0.68%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
San Diego ringneck snake	<i>Diadophis punctatus similis</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Great basin scrub • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Unvegetated habitat • Valley and foothill grassland • Pinon and Juniper Woodlands • Sonoran desert scrub (1) 	0-7217 (1)	432,618	2,391.6	0.55%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Silvery legless lizard	<i>Anniella pulchra</i>	None/SSC/ Group 2	<ul style="list-style-type: none"> • Cismontane woodland 	0-5905 (1)	49,760	494.0	0.99%	Less than significant	The additional loss of less than 1% of

	<i>pulchra</i>		<ul style="list-style-type: none"> • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub (1) 						suitable habitat within the study area would not result in significant impacts to species or their habitat.
Two-striped garter snake	<i>Thamnophis hammondi</i>	None/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> • Meadows and seeps • Freshwater Marsh • Alkali Marsh • Riparian forest • Riparian woodland • Riparian scrub (1, 2) 	0-6988 (1, 2)	15,288	79.0	0.52%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Large-blotched salamander	<i>Ensatina eschscholtzii klauberi</i>	None/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub (1) 	0-5003 (1)	33,515	63.1	0.19%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Western spadefoot	<i>Spea [=Scaphiopus] hammondi</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Meadows and Seeps • Freshwater Marsh 	0-4478 (1)	2,717	68.7	2.53%	Less than significant	The additional loss of less than 3% of suitable habitat within the study

			<ul style="list-style-type: none"> Alkali Marsh (1) 						area would not result in significant impacts to species or their habitat.
American peregrine falcon— foraging	<i>Falco peregrinus anatum</i>	BCC/WL/ Group 1	<ul style="list-style-type: none"> Chaparral Coastal scrub Cismontane woodland Great basin scrub Meadows and seeps Mixed oak woodland Riparian forest Riparian woodland Riparian scrub Pinon and Juniper Woodlands Sonoran desert scrub (2) 	0-9000 (2)	431,762	2,280.9	0.53%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Barn owl	<i>Tyto alba</i>	None/None/ Group 2	<ul style="list-style-type: none"> Chaparral Great basin scrub Riparian forest Riparian woodland Riparian scrub Valley and foothill grassland Pinon and 	0-5512 (2)	392,744	2,290.3	0.58%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> Juniper Woodlands Sonoran desert scrub (2) 						
Bell's sage sparrow	<i>Amphispiza belli belli</i>	BCC / WL/ Group 1, MSCP	<ul style="list-style-type: none"> Chaparral Coastal scrub Great basin scrub Upper Sonoran subshrub scrub Sonoran desert scrub (2, 4) 	2050-5600 (2, 4)	354,965	2,183.0	0.61%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Burrowing owl	<i>Athene cucularia</i>	BCC/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> Valley and foothill grassland Non-native vegetation (fallow fields) Upper Sonoran subshrub scrub Urban/developed (man-made drainages, structures, golf courses) Pinon and juniper woodlands Sonoran desert scrub (2) 	0-5249 (2)	31,536	793.1	2.51%	Less than significant	The additional loss of less than 3% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
California horned lark	<i>Eremophila alpestris actia</i>	None/WL/ Group 2, MSCP	<ul style="list-style-type: none"> Meadows and seeps Upper Sonoran 	0-2600 (2, 4)	7,218	307.0	4.25%	Less than significant	The additional loss of less than 5% of suitable habitat

			<ul style="list-style-type: none"> subshrub scrub Valley and foothill grasslands General agriculture (fallow fields) Freshwater Marsh Alkali Marsh Sonoran Desert Scrub (2, 4) 						within the study area would not result in significant impacts to species or their habitat.
Canada goose—wintering	<i>Branta canadensis</i>	None/None/Group 2	<ul style="list-style-type: none"> Meadows and seeps Valley and foothill grasslands Urban/developed (golf courses, parks) Other (lakes and brackish waters) Freshwater Marsh Alkali Marsh (2) 		29,736	442.0	1.49%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Cooper's hawk—foraging	<i>Accipiter cooperii</i>	None/WL/Group 1, MSCP	<ul style="list-style-type: none"> Chaparral Cismontane woodland Coastal scrub Great basin scrub Mixed oak 	0-8858 (2)	439,803	2,648.0	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> • woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Non-native vegetation • Urban/develop ed • Pinon and Juniper Woodlands • Sonoran desert scrub (2) 						
Cooper's hawk—nesting	<i>Accipiter cooperii</i>	None/WL/ Group 1, MSCP	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Pinon and Juniper Woodlands • (2) 	0-8858 (2)	34,189	153.6	0.45%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Ferruginous hawk (Wintering)	<i>Buteo regalis</i>	BCC/WL/ Group 1, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland (less likely during wintering) • Great basin 	0-7000 (2)	424,562	2,547.7	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant

			<ul style="list-style-type: none"> • scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • General Agriculture (cultivated fields with an abundance of food source) • Sonoran Desert Scrub • Pinon and Juniper Woodlands • (2) 						impacts to species or their habitat.
Golden eagle— foraging	<i>Aquila chrysaetos</i>	BCC/FP, WL/ Group 1, MSCP	<ul style="list-style-type: none"> • Coastal scrub • Great basin scrub • Meadows and seeps • Valley and foothill grassland • Upper Sonoran subshrub scrub • General Agriculture (cultivated areas such as row cropping; • Unvegetated Habitat (non-vegetated) 	0-11480 (2)	41,974	841.5	2.00%	Less than significant	The additional loss of 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> channels) Freshwater marsh Alkali Marsh (2) 						
Gray vireo—nesting	<i>Vireo vicinior</i>	BCC/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> Chaparral Cismontane woodland Mixed oak woodland Pinon and juniper woodlands (2) 	1969-6562 (2)	387,712	1,857.6	0.48%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Great blue heron—nesting colony	<i>Ardea herodias</i>	None/None/ Group 2	<ul style="list-style-type: none"> Cismontane woodland (near waters) Mixed oak woodland (near waters) Riparian woodland Riparian forest (2) 	0-9000 (2)	32,331	56.6	0.18%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Harris' hawk— foraging	<i>Parabuteo unicinctus</i>	None/WL/ None	<ul style="list-style-type: none"> Chaparral Great basin scrub 	1300-3280 (2, 4, 9)	200,630	2,137.9	1.07%	Less than significant	The additional loss of less than 2% of suitable habitat

			<ul style="list-style-type: none"> • Upper Sonoran subshrub scrub • Coastal scrub • Sonoran desert scrub • Cismontane forest • Mixed oak woodland • Pinon and juniper woodlands (2, 4, 9) 						within the study area would not result in significant impacts to species or their habitat.
Lawrence's goldfinch— foraging/wintering	<i>Carduelis lawrencei</i>	BCC/None/None	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub (4, 10) 	1500-4500 (4, 10)	333,689	2,017.6	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Lawrence's goldfinch—nesting	<i>Carduelis lawrencei</i>	BCC/None/None	<ul style="list-style-type: none"> • Cismontane woodland • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Pinon and juniper woodland (4, 10) 	0-9163 (4, 10)	41,889	205.0	0.49%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

Lewis' woodpecker—nesting	<i>Melanerpes lewis</i>	BCC/None/ Group 1	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • General Agriculture (commercial orchards) • Pinon and juniper woodlands (2) 	2000-3100 (nesting) 10-500 (migration) (11, 12)	22,097	139.2	0.63%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Loggerhead shrike—nesting	<i>Lanius ludovicianus</i>	BCC/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Sonoran desert scrub • Pinon and Juniper Woodlands • Chaparral? (2) 	-250 (below sea level)-7500 (2)	410,165	1,919.8	0.47%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Long-eared owl—foraging	<i>Asio otus</i>	None/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub 	0-7000 (2)	438,335	2,524.5	0.58%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species

			<ul style="list-style-type: none"> • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Other (agricultural lands) • Freshwater marsh • Alkali Marsh (2) 						or their habitat.
Long-eared owl—nesting	<i>Asio otus</i>	None/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Pinon and juniper woodlands (2) 	0-7000 (2)	34,189	153.6	0.45%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Merlin—Wintering	<i>Falco columbarius</i>	None/ WL/ Group 2	<ul style="list-style-type: none"> • Cismontane woodland • Meadows and seeps 	0-4921 (1)	70,308	857.7	1.22%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not

			<ul style="list-style-type: none"> • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Urban/develop ed • Valley and foothill grassland • General agriculture • Pinon and juniper woodlands • Alkali Marsh • Freshwater marsh (1) 						result in significant impacts to species or their habitat.
Mountain quail	<i>Oreortyx pictus eremophila</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Upper Sonoran subshrub scrub • Pinon and juniper 	0-9842 (2)	426,186	2,350.7	0.55%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> woodlands Sonoran desert scrub (2) 						
Northern harrier— foraging	<i>Circus cyaneus</i>	None/SSC/ Group 1, MSCP	<ul style="list-style-type: none"> Chaparral Coastal scrub Great basin scrub Valley and foothill grasslands Freshwater marsh Alkali Marsh Meadows and seeps (2) 	0-10000 (0-5577 nesting) (2)	402,472	2,340.2	0.58%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Prairie falcon— foraging	<i>Falco mexicanus</i>	BCC/WL/ Group 1	<ul style="list-style-type: none"> Great basin scrub Mixed oak woodland Valley and foothill grassland Upper Sonoran subshrub scrub Meadows and seeps Freshwater marsh Alkali Marsh General agriculture (2) 	0-11000 (2)	28,696	710.0	2.47%	Less than significant	The additional loss of less than 3% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Red-shouldered	<i>Buteo lineatus</i>	None/None/	<ul style="list-style-type: none"> Chaparral 	0-4921	421,975	2,621.4	0.62%	Less than	The additional loss

hawk—foraging		Group 1	<ul style="list-style-type: none"> • Cismontane woodland • Coastal scrub • Great basin scrub • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Freshwater marsh • Alkali Marsh • Pinon and juniper woodlands (2) 	(2)				significant	of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Red-shouldered hawk—nesting	<i>Buteo lineatus</i>	None/None/ Group 1	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Urban/Developed (occasionally) 	0-4921 (2)	45,969	444.1	0.97%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> • Pinon and juniper woodlands (2) 						
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	None/WL/ Group 1, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland (2, 4) 	0-9842 (2, 4)	397,938	2,392.6	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Swainson's hawk—foraging habitat during migration	<i>Buteo swainsoni</i>	BCC/ST/ Group 1, MSCP	<ul style="list-style-type: none"> • Great basin scrub • Coastal scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • General agriculture • Sonoran desert scrub • Meadows and seeps • Freshwater marsh • Alkali Marsh (2) 	0-4921 (2)	43,823	882.2	2.01%	Less than significant	The additional loss of 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Tricolored	<i>Agelaius</i>	BCC/SSC/	<ul style="list-style-type: none"> • Meadows and 	0-3280	13,002	314.6	2.42%	Less than	The additional loss

blackbird— foraging	<i>tricolor</i>	Group 1, MSCP	<ul style="list-style-type: none"> • seeps • Riparian scrub • Valley and foothill grassland • General agriculture • Freshwater marsh • Alkali Marsh (2) 	(2)				significant	of less than 3% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Turkey vulture— foraging	<i>Cathartes aura</i>	None/ None/ Group 1, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Non-native vegetation • General agriculture • Sonoran desert scrub • Pinon and juniper woodlands (2) 	0-10000 (5-80 nesting) (2)	411,459	2,632.6	0.64%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Yellow warbler	<i>Dendroica petechia brewsteri</i>	BCC/SCC/ Group 2, MSCP	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest 	0-7000 (2)	33,739	63.1	0.19%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant

			<ul style="list-style-type: none"> • Riparian woodland • Riparian scrub (2) 						impacts to species or their habitat.
Western bluebird	<i>Siala mexicana</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Sonoran desert scrub • Freshwater marsh • Alkali Marsh (2) 	198-3465 (2)	259,475	2,114.4	0.81%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
American badger	<i>Taxidea taxus</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Sonoran desert scrub 	Below sea level- 11811 (2)	402,897	2,436.9	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			(2)						
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	None/SSC/ Group 2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Cismontane woodland • Great basin scrub • Mixed oak woodland • Upper Sonoran subshrub scrub • Valley and foothill grassland • Sonoran desert scrub • Pinon and juniper woodlands (6, 7) 	0-3000 (6, 7)	148,745	2,342.9	1.58%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	None/SSC/ Group 2	<ul style="list-style-type: none"> • Coastal scrub • Chaparral • Great basin scrub • Valley and foothill grassland • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands (3) 	500-3000 (3)	141,158	2,304.5	1.63%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

Pallid San Diego pocket mouse	<i>Chaetodipus fallax pallidus</i>	None/SSC/ Group 2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Sonoran desert scrub • Pinon and juniper woodlands (5) 	4500-6000 (5)	65,532	1,351.9	2.06%	Less than significant	The additional loss of less than 3% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Merriam's kangaroo rat	<i>Dipodomys merriami trinidadensis</i>	None/ None/ MSCP	<ul style="list-style-type: none"> • Chaparral • Great basin scrub • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands (2) 	0-7000 (2)	382,089	2,161.3	0.57%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Mountain lion	<i>Puma [=Felis] concolor</i>	None/ None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Mixed oak woodlands • Riparian forest • Riparian woodland 	0-10000 (2)	423,339	2,059.0	0.49%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> • Riparian scrub • Sonoran desert scrub • Pinon and juniper woodlands (2) 						
Mule deer	<i>Odocoileus hemionus</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Coastal scrub • Great basin scrub • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Valley and foothill grassland • Sonoran desert scrub • Pinon and juniper woodlands • Freshwater marsh • Alkali Marsh (2) 	0-10000 (2)	443,028	2,544.6	0.57%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Ringtail	<i>Bassariscus astutus</i>	None/FP/ Group 2, MSCP	<ul style="list-style-type: none"> • Cismontane woodland 	0-8800 (2)	33,739	63.1	0.19%	Less than significant	The additional loss of less than 1% of

			<ul style="list-style-type: none"> • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Model area is limited to habitat types within 0.25 kilometers of a permanent source of water. (2) 						suitable habitat within the study area would not result in significant impacts to species or their habitat.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	None/SSC/Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Mixed oak woodland • Upper Sonoran subshrub scrub • Valley and foothill grassland • General agriculture • Freshwater marsh • Alkali Marsh • Meadows and seeps • Pinon and juniper woodland 	0-12000 (2, 4)	443,196	2,753.9	0.62%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> • Sonoran desert scrub • Cismontane forest (2, 4) 						
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	None/SSC/ Group 2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper sonoran subshrub scrub • Pinon and juniper woodland • Sonoran desert scrub • Cismontane forest • Mixed oak woodland (2, 4) 	0-8530 (2, 4)	418,964	2,346.8	0.56%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	None/SSC/ Group 2, MSCP	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Upper Sonoran subshrub scrub • Valley and foothill grassland • Sonoran desert scrub (2) 	0-4160 (2)	333,436	2,436.9	0.73%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Big free-tailed bat—foraging	<i>Nyctinomops macrotis</i>	None/SSC/ WBWG:MH,	<ul style="list-style-type: none"> • Meadow and seeps 	0-8000 (2, 5)	61,114	567.2	0.93%	Less than significant	The additional loss of less than 1% of

		Group 2	<ul style="list-style-type: none"> • Freshwater marsh • Alkali Marsh • Mixed oak woodland • Cismontane forest • Riparian forest • Riparian woodland • Riparian scrub • Unvegetated habitat • Urban/develop ed • Pinon and juniper woodlands • Sonoran desert scrub (2, 5) 						suitable habitat within the study area would not result in significant impacts to species or their habitat.
California leaf-nosed bat— foraging	<i>Macrotus californicus</i>	None/SSC/ Group 2, WBWG:H	<ul style="list-style-type: none"> • Riparian forest • Riparian woodland • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands (2) 	0-1969 (2)	2,020	1.8	0.09%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Greater western mastiff bat— foraging	<i>Eumops perotis californicus</i>	None/SSC/ Group 2, MSCP,	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland 	50-10000 (3)	422,624	2,345.7	0.56%	Less than significant	The additional loss of less than 1% of suitable habitat

		WBWG:H	<ul style="list-style-type: none"> • Meadows and seeps • Freshwater marsh • Alkali Marsh • Mixed oak woodland • Valley and foothill grassland • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands (3) 						within the study area would not result in significant impacts to species or their habitat.
Mexican long-tongued bat— foraging	<i>Choeronycteris mexicana</i>	None/SSC/ Group 2, WBWG: H	<ul style="list-style-type: none"> • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Sonoran desert scrub • Meadow and seeps • Freshwater marsh • Alkali Marsh (2) 	0-6200 (2)	22,371	244.5	1.09%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Pallid bat— foraging	<i>Antrozous pallidus</i>	None/SSC/ Group 2, WBWG:H	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak 	0-9840 (2)	51,608	623.8	1.21%	Less than significant	The additional loss of less than 2% of suitable habitat

			<ul style="list-style-type: none"> • woodland • Valley and foothill grassland • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands • Meadow and seeps • Freshwater marsh • Alkali Marsh (2) 						within the study area would not result in significant impacts to species or their habitat.
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	None/SSC/Group 2, WBWG:M	<ul style="list-style-type: none"> • Chaparral • Cismontane woodland • Great basin scrub • Riparian forest • Riparian woodland • Riparian shrub • Upper Sonoran subshrub scrub • Meadow and seeps • Freshwater marsh • Alkali Marsh • Pinon and juniper 	0-7000 (2)	417,317	2,244.1	0.54%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			woodlands (2)						
Hoary bat— foraging	<i>Lasiurus cinereus</i>	None/None/ WBWG: M	<ul style="list-style-type: none"> • Cismontane woodland • Meadows and seeps • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Freshwater marsh • Alkali Marsh • Pinon and juniper woodlands (2) 	0-13200 (2)	42,255	228.8	0.54%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Spotted bat— foraging	<i>Euderma maculatum</i>	None/SSC/ Group 2, WBWG:H	<ul style="list-style-type: none"> • Meadows and seeps • Cismontane woodland • Mixed oak woodland • Upper Sonoran subshrub scrub • Valley and foothill scrub • Other (rock crevices and cliffs) • Freshwater marsh • Alkali Marsh 	0-10600 (2)	51,608	623.8	1.21%	Less than significant	The additional loss of less than 2% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			<ul style="list-style-type: none"> • Sonoran desert scrub • Pinon and juniper woodlands (2) 						
Townsend's big-eared bat— foraging	<i>Corynorhinus townsendii</i>	None/SSC/ Group 2, MSCP, WBWG:H	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Upper Sonoran subshrub scrub • Sonoran desert scrub • Pinon and juniper woodlands (2) 	0-9500 (2)	42,680	325.6	0.76%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Western red bat— foraging	<i>Lasiurus blossevillii</i>	None/SSC/ Group 2, WBWG:H	<ul style="list-style-type: none"> • Cismontane woodland • Mixed oak woodland • Riparian forest • Riparian woodland • Riparian scrub • Valley and foothill grassland • Pinon and juniper 	0-8150 (2)	46,497	399.9	0.86%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

			woodlands (2)						
Monarch butterfly	<i>Danaus plexippus</i>	None/None/ Group 2	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Valley and foothill grassland • Freshwater marsh • Alkali Marsh • Meadows and seeps (4)	0-10000 (4)	400,340	2,163.2	0.54%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Peninsular metalmark	<i>Apodemia mormo peninsularis</i>	None/ None/ Group 1	<ul style="list-style-type: none"> • Chaparral • Coastal scrub • Great basin scrub • Freshwater marsh • Alkali Marsh • Meadows and seeps (8)	100-5500 (8)	384,746	2,100.3	0.55%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.
Thorne's hairstreak butterfly	<i>Callophrys (=Mitoura) thornei</i>	None/ None/ Group 1	<ul style="list-style-type: none"> • Coastal scrub • Chaparral • Cismontane woodland • Great basin scrub • Mixed oak woodland • Pinon and juniper woodlands 	1480-4291 (13)	358,976	2,167.3	0.60%	Less than significant	The additional loss of less than 1% of suitable habitat within the study area would not result in significant impacts to species or their habitat.

¹USFWS, CDFW, County Rankings only

²Rapid Modeling refers to utilization of basic model inputs that are readily available, such as vegetation community, elevation, substrate, slope, etc. as applicable that are present within the Cumulative study area (See Figure 2-4-27)

³Simplified Vegetation Communities

⁴Available within the cumulative study area

⁵Includes project-specific impacts from Rugged Solar, Tierra del Sol (including Gen-tie), and 100% of vegetation communities mapped within LanEast and LanWest; and the following projects within the cumulative study area: Tule Wind Farm, Eco Substation, SDG&E MSUP, Star Ranch, Vaughn, McClintock, Bartlett, Tibbot, Dart, Grizzle, Arellano, Pijnenburg, Portrero Valley Road, Level 3 Communications, Horizon Towner, SDG&E Mountain Empire Operator Training Facility, Adelaides Roman Catholic Church, Buckman Springs Road Bridge, and Rough Acres Foundation.

⁶Percent of total cumulative study area cumulatively impacted

⁷Significance determinations

⁸Brief basis for significance determination

References

- 1 Nafis 2012
- 2 Zeiner et al. 1988, 1990a–b
- 3 SDNHM 2012c
- 4 NatureServe 2012
- 5 CDFG 2012d
- 6 Brehme et al 2011
- 7 Hall 1981
- 8 Endangered Species Recovery Program, CSU Stanislaus. 2006
- 9 Truglio 2003
- 10 SDNHM 2013
- 11 Done 2001
- 12 National Audubon Society, Inc. 2013
- 13 CNPS (2012) (elevation range of Tecate cypress, this species' host plant)

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