

Attachment C: Tables 1 – 4. Impacts to waters of the U.S. based on vegetation type
Note: Table 4 contains mitigation requirements for the Project.

Table 1: Major construction - Towers/Line undergrounding/Road Widening

Project Description	Feature ID	Species	Vegetation Type	Impacts on Vegetation						Mitigation/ Watershed
				Temporary		Permanent		Linear Feet	Linear Feet	
				Acres	Linear Feet	Acres	Linear Feet			
Towers and Wire Stringing Sites IMPACT - These features will be temporarily impacted at a wire setup site/pulling site in support of stringing activities and removal of Structure M54-T1A.	7-2-S-1	Migratory Birds	Coastal Sage Scrub	0.002	347	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed
	7-2-S-2	Migratory Birds	Mixed Chaparral	0.0057		0	0	0	0	
	7-3-S-2	Migratory Birds	Mixed Chaparral	0.0078	340	0	0	0	0	
IMPACT - This feature will be temporarily and permanently impacted at Structure 4. Although the tower footings will not be placed in the drainage, SCE maintains a 50-foot buffer around each tower for vegetation removal and access during operations.	7-3-S-2	Migratory Birds	Coastal Sage Scrub	0.003	129	0.001	0.001	25	25	Non-Federal/ Los Angeles San Gabriel Watershed
IMPACT - This feature will be temporarily and permanently impacted at Structure 4. Although the tower footings will not be placed in the drainage, SCE maintains a 50-foot buffer around each tower for vegetation removal and access during operations.	7-3-S-7	Migratory Birds	Coastal Sage Scrub	0.001	31	0.001	0.001	55	55	Non-Federal/ Los Angeles San Gabriel Watershed
P7-1 - IMPACT AREA This feature would be temporarily and permanently impacted by the construction of Structure 15 M30-T1. The existing tower pad would be extended 30 feet northeast into jurisdictional waters to accommodate the new structure location. The pad would consist of clean fill material and rock similar to the existing tower pad. The existing tower would be removed.	7-8-S-3	Migratory Birds	Riversidean Alluvial Fan Sage Scrub	0.18	150	0.008	0.008	50	50	Federal/ Los Angeles San Gabriel Watershed
			Disturbed/Developed	0.32		0.009				
IMPACT - This feature will be temporarily and permanently impacted by the removal and replacement of Structure 21. Although the tower footings will not be placed in the drainage, SCE maintains a 50-foot buffer around each tower for vegetation removal and access during operations.	7-10-S-2	None	Mule Fat Scrub	0.01	100	0	0	0	0	Federal/ Los Angeles San Gabriel Watershed
			Disturbed/Developed	0.01		0.001				
IMPACT - This feature will be temporarily impacted at a pulling site. Following construction, the drainage will be restored to pre-project contours and revegetated.	8-11-S-3	Coastal California Gnatcatcher	Coastal sage scrub	0.01	107	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed
IMPACT - This feature will be temporarily impacted at a pulling site. Following construction, the drainage will be restored to pre-project contours and revegetated.	8-11-S-4	Coastal California Gnatcatcher	Coastal sage scrub	0.001	139	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed
			Ruderal Grassland	0.01		0	0	0	0	
IMPACT - This feature will be temporarily impacted at a guard structure.	8-20A-S-2	Migratory Birds	Coast live oak woodland	0.003	58	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed
			Disturbed/Developed	0.001		0	0	0	0	
IMPACT - This feature will be temporarily impacted at a guard structure.	8-38-S-1	Least Bell's Vireo and Migratory Birds	Southern Arroyo Willow Riparian Forest	0.003	50	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed
P8-11 - IMPACT AREA - This feature would be temporarily impacted during construction of Structure 80. Minor vegetation removal would be required but the new structure would not be located in jurisdictional	8-39-W-2	Least Bell's Vireo and Migratory Birds	Mulefat Scrub	0.07	50	0	0	0	0	Non-Federal/ Los Angeles San Gabriel Watershed

Project Description	Feature ID	Species	Vegetation Type	Impacts on Vegetation			Mitigation/ Watershed		
				Temporary Acres	Linear Feet	Permanent Acres		Linear Feet	
<p>waters:</p> <p>IMPACT - This feature will be temporarily and permanently impacted at Structure 131. Although the tower footings will not be placed in the drainage, SCE maintains a 50-foot buffer around each tower for vegetation removal and access during operations.</p> <p>IMPACT - Grading limits for the new access road were refined to adequately incorporate all temporary and permanent work areas. This feature will be permanently impacted at Structures M24-11 and M57-11. The drainage will be routed around the new towers and under the new access road (for 72 linear feet) and then routed around the proposed tower footings via another 24-inch CMP (180 linear feet). A rip-rap apron will also be installed at the outlet of each pipe for erosion control. To control for erosion on the new access road, McCarthy drains, retaining walls, a concrete v-ditch, and waterbars will be installed.</p>	8-56-S-1	None	Disturbed/Developed Ruderal grassland	0.003 0.135	200	0 0.02	0 0	Non-Federal/Santa Ana Watershed	
	8-33-S-200	None	Coast Live Oak Woodland	0.009	134	0.019	274	Non-Federal/ Los Angeles San Gabriel Watershed	
<p>Road Widening</p> <p>IMPACT - The existing access road at this drainage crossing turns at an angle less than 50 degrees. Large construction equipment cannot navigate this turn radius. The existing access road will be widened 30 feet on the upstream side creating a 30x20 foot turning radius that will safely allow construction equipment to pass.</p> <p>PR-6 - IMPACT AREA - This feature intersects an existing access road. Maintenance grading may be required to widen the road from approximately 12 feet in some areas to 18 feet to accommodate large construction equipment. Tree trimming and removal of riparian vegetation would be required.</p>	7-93-S-2	Least Bell's Vireo	Southern Willow Scrub	0.003	18	0.006	30	Non-Federal/ Los Angeles San Gabriel Watershed	
	8-14-S-2	Migratory Birds	Disturbed/Developed	0.002	18	0	0	Non-Federal/ Los Angeles San Gabriel Watershed	
	8-14-S-2		Southern Sycamore Alder	0.0004		0	0		
	8-14-S-3		Riparian Woodland		18	0	0		
	8-14-S-4		Coast Live Oak	0.0001	18	0	0		
	8-14-S-4		Coast Live Oak	0.0001	18	0	0		
	8-14-S-8		Coast Live Oak	0.0002	18	0	0	Non-Federal/ Santa Ana Watershed	
	8-14-S-9		Woodland		18	0	0		
				Malden Scrub	0.001	18	0	0	
	<p>Underground work</p> <p>IMPACT - This feature will be temporarily impacted by the installation of an underground 66kV vault and maintenance grading.</p>								Non-Federal/ Los Angeles San Gabriel Watershed
	7-35-S-1	Least Bell's Vireo, Coastal California Gnatcatcher	Disturbed/Developed	0.001	18	0	0		
<p>PR-13 - IMPACT AREA - This feature would be temporarily impacted during trenching activities related to the undergrounding of an existing 66kV line. Trenching and backfill by a backhoe or excavator would be required. Native soil material would be side-caste and used to backfill the trench following the placement of underground conduit.</p>								Non-Federal/ Santa Ana Watershed	
	8-50-S-1	Burrowing Owl and Migratory Birds	Ruderal Grassland	0.09	954	0.001	0		
	8-50-S-2		Ruderal Grassland	0.06	1630	0.001	0		
	8-50-S-3	Potential Burrowing Owl	Disturbed/Developed	0.012	100	0	0	Non-Federal/ Santa Ana Watershed	
TOTALS				0.95	4,645	0.039	434		

Table 2: New Roads

Project Description	Feature ID	Species	Vegetation Type	Impacts on Vegetation				Mitigation/ Watershed
				Temporary		Permanent		
				Acres	Linear Feet	Acres	Linear Feet	
IMPACT - This feature will be permanently impacted by the construction of a new access road to a wreck out site and temporary pulling site located between Structures 1 and 3. The new road will be contoured to direct flows across the natural (dirt) road surface maintaining the natural flow line to the greatest extent feasible.	7-2-S-3	Migratory Birds	Mixed Chaparral	0	0	0.0007	18	Non-Federal/ Los Angeles San Gabriel Watershed
IMPACT - Grading limits for the new access road were refined to adequately incorporate all temporary and permanent work areas, plus slight modification to road alignment. These features will be permanently impacted by the construction of a new access road to Structure 4. The new road will be contoured to direct flows across the natural (dirt) road surface maintaining the natural flow line to the greatest extent feasible. Feature 7-3-S-9 will be avoided by the access road construction.	7-3A-S-5	Migratory Birds	Coastal Sage Scrub	0.001	42	0.001	39	Non-Federal/ Los Angeles San Gabriel Watershed
[Permitted with Above]	7-3-S-6	Migratory Birds	Coastal Sage Scrub	0	0	0.002	18	Non-Federal/ Los Angeles San Gabriel Watershed
[Permitted with Above]	7-3-S-8	Migratory Birds	Coastal Sage Scrub	0	0	0.016	41	Non-Federal/ Los Angeles San Gabriel Watershed
IMPACT - This feature will be permanently impacted by the construction of a new access road to Structure 4. The new road will be contoured to direct flows across the natural (dirt) road surface maintaining the natural flow line to the greatest extent feasible.	7-3-S-6	Migratory Birds	Coastal Sage Scrub	0	0	0.002	18	Non-Federal/ Los Angeles San Gabriel Watershed
IMPACT - This feature will be permanently impacted by the construction of a new access road to Structure 4. The new road will be contoured to direct flows across the natural (dirt) road surface maintaining the natural flow line to the greatest extent feasible.	7-3-S-8	Migratory Birds	Coastal Sage Scrub	0	0	0.015	18	Non-Federal/ Los Angeles San Gabriel Watershed

Project Description	Feature ID	Species	Vegetation Type	Impacts on Vegetation				Mitigation/Watershed
				Temporary		Permanent		
				Acres	Linear Feet	Acres	Linear Feet	
IMPA CT - This feature will be impacted by the construction of a new access road to Structure M49-T1. Permanent impacts will be limited to the final proposed road footprint and supporting grading limits. Temporary impacts include the contractor work limits which may involve vegetation trimming and grading equipment access.	8-20-S-4	Migratory Birds	Coast Live Oak Woodland	0.002	75	0.007	190	Non-Federal/ Los Angeles San Gabriel Watershed
			Ruderal Grassland	0	0	0		
P8-14 IMPACT - New access road over unvegetated roadside ditch. Crossing will be at-grade.	8-50-S-4	Potential Burrowing Owl and Migratory Birds	Unvegetated	0	0	0.004	18	Non-Federal/ Santa Ana Watershed
TOTALS				0.005	117	0.046	360	

Table 3: Existing Roads - These features intersect an existing access road. Maintenance grading may be required.

Project Description	Feature ID	Species	Vegetation Type	Impacts on Vegetation				Mitigation
				Temporary		Permanent		
				Acres	Linear Feet	Acres	Linear Feet	
IMPACT - The road is currently passable and no evidence of flow across the road is present. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	7-2-S-12	None	Unvegetated	0.001	18	0	0	None
IMPACT - The road is currently passable and no evidence of flow across the road is present. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	7-2-S-13	None	Unvegetated	0.001	18	0	0	None
IMPACT - The existing access road between Structure M41-T1 and Structure 64 is currently 12 foot wide and passable. Vegetation trimming may be required to allow the SCE-standard 14 foot wide access. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	7-35-S-3	Least Bell's Vireo, Migratory Birds	Unvegetated/ Disturbed wetland	0.007	18	0	0	None
IMPACT - The existing access road between Structure M41-T1 and Structure 64 is currently 12 foot wide and passable. Vegetation trimming may be required to allow the SCE-standard 14 foot wide access. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	7-35-W-1	Least Bell's Vireo, Migratory Birds	Unvegetated	0.006	18	0	0	None
P7-3 Maintenance grading	7-37-S-1	Migratory Birds	Unvegetated	0.001	18	0	0	None
P7-6 - IMPACT AREA Maintenance grading	7-39-S-2	Migratory Birds	Unvegetated	0.003	18	0	0	None
IMPACT - The road is currently passable and no evidence of flow across the road is present. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	7-93-S-1	None	Unvegetated	0.0004	18	0	0	None
P8-7 Maintenance grading	8-17-S-5	Coastal California Gnatcatcher, Coastal California Gnatcatcher Critical Habitat	Unvegetated	0.0002	18	0	0	None
IMPACT - The road is currently passable. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	8-19A-S-1	Coastal California Gnatcatcher	Unvegetated	0.002	18	0	0	None
IMPACT - The road is currently passable. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road.	8-19A-S-2	Coastal California Gnatcatcher	Unvegetated	0.001	18	0	0	None
P8-8 Maintenance grading	8-19-S-2	Migratory Birds, Coastal California Gnatcatcher Critical Habitat	Unvegetated	0.001	18	0	0	None
IMPACT - Maintenance Grading. Newly mapped feature based on follow-up JD survey. The road is currently passable and no evidence of flow across the road is present. Maintenance grading may be required throughout the project as winter rain events may erode the existing access road. No vegetation trimming is expected to be required.	8-56-S-300	Migratory Birds	Unvegetated	0.01	18	0	0	None
TOTALS				0.03	216	0	0	

Table 4: Total Impacts to Waters of the U.S. and the State, and Mitigation Requirements for Segments 7 & 8

Impacts per Habitat Type	Streambed Impacts on Army Corps-Owned Lands		Streambed Impacts on Lands Not Owned by the Army Corps		Mitigation Ratios on Army Corps-Owned Lands		Mitigation Ratios on Lands Not Owned by the Army Corps		Total Temp Mitigation (acres)	Total Perm. Mitigation (acres)	Total Mitigation (acres) ¹
	Temp.	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.	Perm.			
Non-riparian											
Coastal Sage Scrub	-	-	0.018	0.021	2:1	5:1	1:1	1.5:1	0.018	0.0315	0.495
Coast Live Oak Woodland	-	-	0.015	0.026	1:1	5:1	1:1	1.5:1	0.015	0.039	0.054
Disturbed/Developed ("Barren/Developed")	0.33	0.01	0.019	0	1:1 ²	1:1 ²	1:1 ²	1:1 ²	0.349	0.01	0.359
Mixed Chaparral	-	-	0.014	0.001	1:1	3:1	1:1	1:1	0.014	0.001	0.015
Ruderal grassland	-	-	0.297	0.022	1:1 ²	1:1 ²	1:1 ²	1:1 ²	0.297	0.022	0.319
Unvegetated ("Barren/Developed")	- ²	-	-	0.004	1:1 ²	1:1 ²	1:1 ²	1:1 ²	0	0.004	0.004
Subtotal	0.33	0.01	0.36	0.074					0.69	0.11	0.80
Riparian											
Mulefat scrub	0.01	-	0.071	-	2:1	5:1	1:1	3:1	0.02	0.071	0.091
Riversidean Alluvial Fan Sage Scrub	0.18	0.008	-	-	2:1	5:1	1:1	3:1	0.36	0.04	0.40
Southern Arroyo Willow Riparian Forest	-	-	0.003	-	2:1	5:1	1:1	3:1	0.003	0	0.003
Southern Sycamore Alder Riparian Woodland	-	-	0.0004	-	2:1	5:1	1:1	3:1	0.0004	0	0.0004
Southern Willow Scrub	-	-	0.003	0.006	2:1	5:1	1:1	3:1	0.003	0.018	0.021
Subtotal	0.19	0.008	0.0774	0.006					0.3864	0.129	0.52
TOTAL⁴	0.52⁴	0.018	0.44	0.08					1.08	0.239	1.32⁴
No mitigation is proposed for 0.0265 acre of temporary impacts as a result of maintenance grading on existing access roads.											
Summary of Total Impacts (including 0.0265 acre of temporary impacts as a result of maintenance grading on existing access roads)											
Segment	Temporary Impacts (acres)⁴		Temporary Impacts (linear feet)		Permanent Impacts (acres)⁴		Permanent Impacts (linear feet)		TOTAL Impacts⁴ (acres)		TOTAL Impacts⁴ (linear feet)
Segment 7	0.56		1,301		0.05		276		0.61 (1,577)		
Segment 8	0.43		3,677		0.05		482		0.48 (4,159)		
TOTAL	0.99		4,978		0.10		758		1.09 (5,736)		
[1] All impacts to waters of the US and the State will be mitigated at the Upper Lemon Creek Mitigation Site (1.32 acres required).											
[2] This total excludes 0.0265 acre of temporary impacts to unvegetated road crossings as these areas will not be mitigated.											
[3] Non-native habitats will be reseeded with a native seed mix. Barren areas will be mitigated at a 1:1 ratio if they are determined to support sensitive wildlife (i.e. burrowing owls, etc.)											
[4] Rounded to the nearest hundredth.											