December 19, 2025

VIA EMAIL

Connie Chen, CPUC
California Public Utilities Commission
Collinsville 500/230 Kilovolt Substation Project
c/o Panorama Environmental, Inc.
717 Market Street, #400
San Francisco, CA 94103
collinsville@panoramaenv.com

RE: LS Power Grid California, LLC Comments on the Draft Environmental Impact Report for the Collinsville 500/230 Kilovolt Substation Project (Application 24-07-018); State Clearinghouse No. 2025010149

Dear Ms. Chen:

LS Power Grid California ("LSPGC") has reviewed the Draft Environmental Impact Report ("EIR") dated November 4, 2025, for the Collinsville 500/230 kilovolt ("kV") Substation Project ("Project"). LSPGC appreciates this opportunity to comment on the Draft EIR, pursuant to the California Environmental Quality Act Guidelines. Please see **Attachment A**, LSPGC Draft EIR Comment Table and **Attachment B**, Editorial Suggestions Table, for the Collinsville 500/230 kV Substation Project Draft EIR.

In addition to the DEIR comment and editorial tables, also attached is the Collinsville 500/230 kV Substation Project Breeding Season Burrowing Owl Survey Report (**Attachment C**), the results of which should be included in the California Public Utilities Commission's Final EIR.

Should you have any questions or need any additional information, please do not hesitate to contact me at (925) 808-0291.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosures

cc: Jason Niven (LSPGC)
Doug Mulvey (LSPGC)
Clayton Eversen (LSPGC)
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Collinsville 500/230 Kilovolt Substation Project
Draft Environmental Impact Report (DEIR) Comments

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
Executive Summary				
1 1	ES-1	Paragraph 1	LS Power Grid California, LLC (LSPGC), filed an application for a certificate of public convenience and necessity (CPCN) from California Public Utilities Commission (CPUC) on July 30, 2024, to construct and operate the Collinsville 500/230 kV Substation Project in Solano, Sacramento, and Alameda counties (Proposed Project).	Contra Costa County should be included in this list of counties.
2	ES-2	Second paragraph	Based on the analysis in the Draft EIR and the substantial evidence supporting the analysis, it has been determined that the Proposed Project would result in significant and unavoidable impacts on air quality, biological resources, cultural resources, energy, greenhouse gases, land use, noise, and tribal cultural resources.	This sentence is missing a reference to Mineral Resources. It should be added for completeness if the significant and unavoidable impact to mineral resources remains in the Final EIR. However, there is no significant and unavoidable impact to mineral resources, as explained in comments below.
3	ES-2	Second full paragraph	Based on the analysis in the Draft EIR and the substantial evidence supporting the analysis, it has been determined that the Proposed Project would result in significant and unavoidable impacts on air quality, biological resources, cultural resources, energy, greenhouse gases, land use, noise, and tribal cultural resources.	In the first sentence, insert “minerals” before “noise”, consistent with Table ES-1.
4	ES-4	Section ES.3.2	Achieving commercial operation by June 2028 consistent with the timeline and policy goals included in the 2021-2022 Transmission Plan and reinforced by the 2024-2025 Transmission Plan2.	In the fourth sub-bullet, insert ”CAISO” before “2021-2022 Transmission Plan” and “2024-2025 Transmission Plan”.
5	ES-29	Table ES-2	Table ES-2	Add “NI” to the list of abbreviations beneath the table.
6	ES-32	Section ES.6, first paragraph, second sentence	The No Project Alternative is considered the environmentally superior alternative for CEQA purposes because it would avoid most of the Proposed Project significant and unavoidable impacts but would result in significant and unavoidable impacts from conflicts with state policy and plans for integration of renewable energy because the No Project Alternative would impair the ability to deliver renewable energy into the San Francisco Bay Area.	Replace “San Francisco Bay Area” with “Greater Bay Area”, to be consistent with the nomenclature in the CAISO Transmission Plan.
7	ES-32	Section ES.6, second paragraph, second sentence	Alternative 1 is environmentally to the Proposed Project in the comparable area of analysis and would avoid significant and unavoidable impacts on biological resources (Impact BIO-1D), energy (Impact EN-2), and greenhouse gases (Impact GHG-2) due to installation of much shorter 500 kV interconnection lines on TSPs only.	Insert “superior” after “Alternative 1 is environmentally…”
8	ES-33	Figure ES-1	Figure ES-1	Looking south to north in the Collinsville area, the first three structures along the transmission line route should be identified as being part of the proposed project (gray hatch), not Alternative 1 (orange hatch).
1. Introduction				
9	1-1	Section 1.1, second paragraph, last sentence	The CAISO 2024-2025 Transmission Plan reaffirmed the need for the Proposed Project and found the Proposed Project would also integrate wind energy from out of state as well as support increased load in the Bay Area (CAISO 2025).	Revise to, “The CAISO 2024-2025 Transmission Plan reaffirmed the need for the Proposed Project and found the Proposed Project would also help to integrate wind energy from out of state as well as support increased load in the Bay Area (CAISO 2025).”

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10	1-2	Second bullet point	PG&E would install and/or modify transposition structures at four locations along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line.	Please revise this section to indicate that the transposition structures are separate from the 500 kV Interconnection, making them two separate components. It is confusing to the reader that the transposition structures have been mentioned here, but also in a separate bullet point at the end of this list. It overstates the scope of work associated with the Proposed Project.
11	1-6	1.2.2 Environmental Analysis	"• Geology and Soils"	Per DEIR Volume 2, this bullet should also include Paleontological Resources.
2. Project Description				
12	2-7	Section 2.3.1	2.3.1 LSPGC Project Components LSPGC Collinsville Substation (Initial Buildout)	Delete reference to Initial Buildout.
13	2-7	Section 2.3.1, first paragraph.	"16.1-ohm series capacitor would be installed"	"16.15-ohm series capacitor would be installed"
14	2-8	Last paragraph, first sentence	"Substation would also include four enclosures, as summarized in Table 2-1. Personnel would be able to enter the GIS and control enclosures for construction…"	The substation will include ~~three~~ two enclosures (i.e., the GIS and control enclosures will be combined into a single enclosure for each voltage).
15	2-23	Paragraph 2	The U.S. Army Corps of Engineers (USACE) maintains two navigational channels crossed by the proposed submarine segment, including the San Joaquin Ship Channel and the Sacramento Deep Water Ship Channel. These channels are maintained at a depth of 30 and 35 feet, respectively. The existing channel depths along the submarine segment crossing locations range between 35 and 90 feet to the riverbed; therefore, the installation of submarine segment cables in the sediment of the riverbed at a depth of 6 feet or greater would be below the maintained navigational channel depths.	The U.S. Army Corps of Engineers (USACE) maintains two navigational channels crossed by the proposed submarine segment, including the ~~including the San Joaquin Ship Channel~~ New York/Suisun Bay Ship Channel (near Pittsburg) and the Sacramento Deep Water Ship Channel (near Collinsville).
16	2-23	Paragraph 3	LSPGC would install the submarine segment cables in the sediment of the riverbed consistent with the USACE requirements which include achieving minimum burial depths that vary based on location and utilizing cable protection methods where necessary. The USACE's anticipated minimum burial depths are 15 feet or greater within navigational channels, 10 feet or greater outside navigational channels, and 6 feet or greater in other areas (i.e., shallow areas near the shores).	The USACE did not specify a requirement for the shallow areas near the shoreline. LSPGC recommends removing the 6 foot or greater description near the shoreline.
17	2-31	Table 2-2	Table 2-2	Some items in Table 2-2 do not match the descriptions in the text. -pg. 2-16, says 230kV deadend TSP are supported on piers 15-50 deep. Table says 20-50' Please use 20-50 ft. -pg. 2-24, says H-frame riser would be 50-85 tall but table says 50-100 ft. Please use 50-100 ft. -pg. 2-27, Figure 2-15 shows 80-120' LSTs but table says 90-155 ft. Please use 90-155 ft.
18	2-34	Table 2-4	Includes "Other types of new permanent access roads" for New permanent access roads	There is no reason to include this as there are no other new permanent access roads for the proposed project.
19	2-37	Section 2.5.2, first paragraph	It is anticipated that up to approximately six staging areas would be used by both LSPGC and PG&E to support construction activities associated with the Proposed Project, as summarized in Table 2-5.	Table 2-5 lists seven (7) staging areas. Recommend revising the text in the associated paragraph to "seven staging areas".

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20	2-57	Paragraph 1	"Construction debris volumes are estimated at a total of 2,750 cubic yards. During construction, LSPGC would account for approximately 78 percent of the total waste volume and PG&E would account for the remaining 22 percent. Of the LSPGC waste volume allocation, LSPGC's substation construction would account for approximately 80 percent (approximately 1,700 cubic yards) of the waste volume and the 230 kV transmission line would account for approximately 20 percent (approximately 425 cubic yards). Estimated waste volumes for PG&E project components include approximately 360 cubic yards for the transmission and distribution construction and 250 cubic yards for the substation interconnection and communication yard.	The sum of the yardage components does not equal total. Recommend changing 425 cubic yards to 440 cubic yards to allow the math to equate.
21	2-77	Section 2.7.5, first paragraph	LSPGC may require up to 30 days of night work to support schedule recovery, such as due to weather delays, or for system commissioning of the proposed LSPGC Collinsville Substation.	LSPGC would limit night work to above-grade construction and testing and commissioning at the Collinsville Substation and 230 kV submarine segment installation. This language should be revised as follows: "With the exception of the 230 kV submarine segment, LSPGC may require up to 30 days of night work to support schedule recovery, such as due to weather delays, or for above-grade construction and system commissioning at ~~of~~ the proposed LSPGC Collinsville Substation."
22	2-83	First paragraph	The CPUC is the lead stage agency for the Proposed Project. LSPGC would comply with CPUC GO 131, which contains the permitting requirements for construction of the Proposed Project. This PEA was prepared as part of an application to obtain a CPCN for the Proposed Project. Although PG&E is not an applicant in LSPGC's application for a CPCN, PG&E's scope of work is needed to interconnect the Proposed Project to PG&E's electrical grid. PG&E would be responsible for complying with the CPUC's permitting requirements pursuant to GO 131 to construct their facilities associated with the Proposed Project.	The CPUC is the lead stage agency for the Proposed Project. LSPGC would comply with CPUC GO 131, which contains the permitting requirements for construction of the Proposed Project. ~~This PEA was prepared as part of an application to obtain a CPCN for the Proposed Project.~~ Although PG&E is not an applicant in LSPGC's application for a CPCN, PG&E's scope of work is needed to interconnect the Proposed Project to PG&E's electrical grid. PG&E would be responsible for complying with the CPUC's permitting requirements pursuant to GO 131 to construct their facilities associated with the Proposed Project.
3. Description of Alternatives				
23	3-6	Table 3.3-2	Table 3.3-2 Collinsville 500/230 kV Substation Project Alternatives	LSPGC requests that Alternative 4 (230 kV Overhead Segment Alternative Route) and Alternative 6a/b (Underground Portions of the 203 kV Line within Suisun Marsh Protection Plan Management Areas) be deemed infeasible, as PG&E has development plans for this parcel and the installation of a transmission line on the property would not be a compatible use. Specifically, in 2023, PG&E submitted an application to the U.S. Army Corps of Engineers for the Montezuma Island Mitigation Bank project on the land that is subject to Alternatives 4 and 6a/b. The aim of this project is to establish and enhance 31.38 acres of waters of the U.S., including wetlands, within the Suisun Bay watershed. This mitigation bank will provide compensatory mitigation credits for projects impacting waters of the U.S. under Section 404 of the Clean Water Act and may also offset impacts regulated under state and federal endangered species laws. PG&E has informed LSPGC that Alternative 4 and Alternative 6a/b would be inconsistent with the mitigation goals of the project. Additional information on the Montezuma Island Mitigation Bank can be found at: SPN-2019-00173 Proposed Montezuma Island Mitigation Bank, Sacramento and Solano Counties, California > San Francisco District > Public Notices.

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				Pursuant to CEQA Guidelines 15126.6[a], Draft EIR Section 3 (Description of Alternatives) and Section 6 (Comparison of Alternatives) should be updated accordingly as these alternatives are no longer feasible and should be excluded from the analysis in Section 4.0.
24	3-11	Table 3.4-3	Table 3.4-3 – Alternative 1	LSPGC has conducted a preliminary review of Alternative Site 1 and the 230kV transmission line needed for interconnection at that location using aerial imagery and publicly available data. However, a complete feasibility analysis has not been performed. Completing such an analysis and advancing the substation design would require physical site access to conduct necessary surveys and investigations. Access to Alternative Site 1 is not readily available, as described below. By contrast, LSPGC has extensive data for the Proposed site and has used that information to significantly advance the substation design. Given the limited information currently available for Alternative Site 1, the substation design for that location remains conceptual. Consequently, constructing this alternative would be incompatible with a major project objective: achieving in-service status by June 2028. Obtaining site specific topographic surveys, geotechnical data, soil infiltration testing, and electrical resistivity testing are standard engineering practices for substation design and are required to comply with applicable building code requirements and industry safety standards. These investigations must be conducted at the proposed alternative site itself and cannot be reliably substituted with data from other locations. These site-specific field investigations are reasonably necessary to support an engineering redesign of the Project, and to ensure that the substation and related facilities can be designed in a safe, constructible, and code-compliant manner. The safe and successful design and construction of transmission line facilities requires site-specific geotechnical data at or near proposed structure locations. This data includes, among other things, soil stratigraphy, moisture content, density, strength parameters, depth to groundwater, and seismic shear-wave velocity. All the required field investigation has been completed to support the design of the project at LSPGC's proposed substation location. None of these field investigations have been completed for the Alternative 1 location and will need to be completed ahead of redesigning the project to accommodate a change in substation location. Substantial engineering design work has been completed to support the project schedule required to meet the CAISO required in-service date. To support a June 2028 in-service date, construction on the Collinsville substation is schedule to start in 2Q 2026. Relocation of the substation will require significant redesign that cannot begin until after the new field investigations are completed. LSPGC has requested access from the landowner to complete the additional field investigations required to evaluate the impacts associated with relocating the project to Alternative 1 as well as allow for the start of the redesign engineering process. The landowner has formally denied access, meaning that LSPGC will again have to pursue court ordered access to complete these field investigations. It is challenging to determine the exact schedule impact associated with obtaining the field investigation

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				data needed to fully evaluate the Alternative 1 option since the time required to access the site is currently unknown and dependent upon the actions of the courts. Currently, engineering and design efforts for a substation at the Alternative 1 site are estimated to be approximately a year behind engineering and design efforts for the Proposed site. The project alternative that maintains the Proposed substation site while requiring the PG&E 500 kV line be constructed with tubular steel monopoles is an effective option for eliminating the biological, energy, and greenhouse gas substantial unavoidable impacts associated with the Proposed substation location while minimizing impacts to the project schedule. This seems like a reasonable option to reduce the identified significant impacts of the project without creating new energy and greenhouse gas impacts associated with delaying the in-service date for the Project.
25	3-23	Paragraph 2	Within the Alternative 4 alignment there are two underwater ridges that have a steep (near vertical) incline/decline.	Revise to Alternative 5.
4.0 Environmental Impacts Introduction				
26	N/A	N/A	N/A	The DEIR is inconsistent when addressing the portion of the Proposed Project within Alameda County (e.g., Telsa Substation). In some sections of the environmental analysis, Alameda County is addressed with a complete existing conditions/regulatory background (e.g., Aesthetics). In other sections (e.g., Agriculture and Forestry Resources and Biological Resources), Alameda County is not discussed in the regulatory background, but impacts have been addressed. Others (e.g., Cultural Resources and Utilities and Service Systems), have a brief reference to Alameda County in the regulatory background explaining why it does not warrant a detailed discussion (for varying reasons). The document would benefit from consistency in how this Proposed Project component is addressed. Rather than progressing through each category of analysis to make corrections, a discussion related to Alameda County/Tesla Substation could be provided in this section of the document to ensure the reader is aware of why the document includes existing conditions/regulatory background in some resource sections, yet omits it in others. This discussion could include some or all of the following: PG&E's existing Tesla Substation is the only Proposed Project component located in Alameda County. The proposed modifications at this existing facility would involve modifying existing line relays, removing a power line carrier, and conducting additional indoor work. All work would be conducted within the existing fence line and would not require any ground-disturbing activities, as described in Chapter 3 – Project Description. Due to the work occurring within previously disturbed areas at an existing substation and being conducted by limited equipment (e.g., bucket trucks) consistent with ongoing operations and maintenance activities, a detailed discussion of the regulatory background within Alameda County has only been included in resource sections where there is a potential for an impact to occur.
27	4.0-1	Table 4.01-1	Table 4.0-1 Ongoing and Planned Projects in the Vicinity of the Proposed Project and Alternatives	Add PG&E Montezuma Island Mitigation Bank (see comment above) to the table and the overall Final EIR cumulative analysis.

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28	4.0-3	Last paragraph, Second sentence	The locations of the cumulative projects are shown in Figure 4.0-1.	Not all projects listed in Table 4.0-1 are visible on Figure 4.0-1. A note should be added to this section indicating that projects without sufficient location data were not mapped and indicate which ones have not been mapped.
4.1 Aesthetics				
29	4.1-6	Figure 4.1-1	Figure 4.1-1 Landscape Character Units, Representative Viewpoints, and Key Observation Points	The label for Photo Location 6/KOP 2 is missing. Please add the label for consistency.
30	4.1-26	Table 4.1-7	"Overall, the resulting visual impact at KOP 1 would be perceptible, and the Proposed Project would reduce the natural harmony and project coherence by introducing a cultural infrastructure (i.e., built by man) into a perceived natural landscape."	The DEIR states that KOP 1 includes existing energy infrastructure (wind turbines).The statement "perceived natural landscape" therefore appears to be a misrepresentation of the existing conditions. Recommend revising this statement for clarification that KOP 1 includes existing energy infrastructure and that addition of the Proposed Project while additive, would be consistent with existing conditions.
31	4.1-29	Paragraph 3	Construction of the substation and construction of the overhead segment would involve vegetation clearing, grading, and other excavation to install the Proposed Project components.	This section of the document discusses the PG&E Project Components but uses the term "overhead segment." Throughout the document, "overhead segment" has been reserved for describing a portion of the 230 kV transmission line. The document should be revised to be specific about which PG&E component is being referred to in this discussion (e.g., 500 kV Interconnection Lines).
32	4.1-34	Paragraph 3, sentence 3	At transposition sites A, B, and D, one new TSP would be installed between existing LSTs.	This is inconsistent with the Project Description and should be revised to say "one new three-pole TSP structure would be installed between existing LSTs".
33	4.1-39	Paragraph 2	"Of the 21 projects listed in this table, three exhibit visual characteristics that could be cumulatively considerable in combination with the Proposed Project. These projects are as follows: • Bay Walk Mixed Use Project – Phases I, II, and III • AT&T Rooftop Wireless Facility"	The DEIR states that "three [projects] exhibit visual characteristics," but only list two. Recommend reviewing and revising to include the third project.
34	4.1-45	Paragraph 2	Existing visual character and quality as seen from KOP 5 and KOP 6 would be permanently reduced by introducing man-made structures to an undeveloped area…	This statement is somewhat misleading, as the locality is not entirely undeveloped; please revise as follows: "Existing visual character and quality as seen from KOP 5 and KOP 6 would be permanently reduced by introducing additional man-made structures to a~~n~~ relatively undeveloped area…"
35	4.1-47	Paragraph 3	As shown in the visual simulations for the Proposed Project at KOP 4, 6, 7, and 8 (Refer to Appendix D), the Alternative 2 substation would be visible from Talbert Lane, Birds Landing Road, Montezuma Hills Road, and the Pittsburg Marina…	As shown in the visual simulations for the Proposed Project at KOP 4, ~~6,~~ 7, and 8 (Refer to Appendix D), the Alternative 2 substation would be visible from ~~Talbert Lane,~~ Birds Landing Road, Montezuma Hills Road, and the Pittsburg Marina… The visual sim for KOP 6 does not show the Alternative 2 substation (it does show the T line that would extend to the Alternative 2 substation).
36	4.1-51	Second full paragraph	Despite the minor shift in components, Alternative 4 would have similar impacts to the Proposed Project due to the equivalent appearance of structures and location of Alternative 4 and the Proposed Project being nearly identical within the nonurbanized area neighboring the Community of Collinsville.	Despite the minor shift in components, Alternative 4 would have ~~similar~~ slightly greater visual impacts ~~to~~ than the Proposed Project due to the~~ equivalent appearance of~~ structures being closer and in a relatively flatter ~~and~~ location ~~of Alternative 4 and the Proposed Project being nearly identical within the nonurbanized area neighboring the Community of Collinsville.~~

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4.2 Agriculture and Forestry Resources				
37	4.2-18-20	N/A	N/A	The DEIR concludes under Impact AG-2 that "permanent development of the substation site within the Delta Plan Secondary Zone in areas zoned for agricultural use would conflict with both local and Statewide planning zoning [sic] for agricultural use." DEIR page 4.2-19. This is incorrect. Utility accessory uses such as substations are allowed in all zones in Solano County with appropriate authorization. Section 28.78.20(B)(9) of the Solano County Code provides that "*[a]ll utility accessory uses* and structures for transmission or distribution of electricity, gas, water, oil, gasoline, telephone, television or other utility services *may be permitted in any district*. Utility accessory uses and structures include, but are not limited to, compression, drying, regeneration stations, *substations*, or pumping stations." Solano County's ASM-160 zone (Collinsville Substation south of Stratton Lane) and A-160 zone (Collinsville Substation north of Stratton Lane) allow "utility facility[ies] or infrastructure" with a use permit. *See* Solano County Code Table 28.21A; Table 28.22A; *see also* DEIR page 4.2-3. Here, utility accessory uses such as the Collinsville Substation are allowed in the ASM-160 and A-160 zones with appropriate authorization, whether that be a Solano County use permit or a CPUC CPCN in lieu of a use permit pursuant to Section XIV.B of General Order 131-D, and therefore do not conflict with local planning and zoning regulations. Nor does the Project give rise to a significant impact under this criterion by conflicting with the Delta Plan. The Project does not conflict with the Delta Plan because: (1) the Delta Plan does not constitute "zoning," and (2) the Project is not a "covered action" subject to the Delta Plan. The Delta Plan does not constitute "zoning" for the purposes of inquiring whether the Project would "[c]onflict with existing zoning for agricultural use…" Unlike County General Plans and zoning ordinances, the Delta Plan does not dictate land uses. Rather, the legislature authorized the creation of the Delta Plan to promote the "coequal goals" of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." Cal. Water Code § 85054. The Act provides that the Delta Plan "shall include subgoals and strategies to assist in guiding state and local agency actions related to the Delta" and "may also identify specific actions that state or local agencies may take to implement the subgoals and strategies." Cal. Water Code § 85300. Furthermore, even if the Delta Plan did constitute "zoning" appropriate for evaluation under this CEQA criterion, the Delta Plan's regulatory policies only apply to "covered actions" within the planning area. As stated on page 4.11-30 of the DEIR, the Delta Stewardship Council, which administers the Delta Plan, has confirmed that the Proposed Project "is not a covered action" under the Delta Plan. *See also* DEIR page 4.11-49, fn. 4. Because the Proposed Project is not a "covered action" subject to the Delta Plan, the Project would not conflict with the Delta Plan even if the Delta Plan did constitute "zoning" for purposes of this CEQA impact criterion. The Project cannot conflict with a plan to which it is not subject.

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				"Covered actions" are those which meet all of the following criteria: "(1) Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh. (2) Will be carried out, approved, or funded by the state or a local public agency. (3) Is covered by one or more provisions of the Delta Plan. (4) Will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and state interests in the Delta." Cal. Water Code § 85057.5(a). The Collinsville Project is not a covered action because it would not "have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and state interests in the Delta." Cal. Water Code § 85057.5(a)(4). First, there is no indication that the Collinsville substation would hinder the reliability of the state's water supply. To the contrary, the project may support infrastructure necessary to power water projects in the Delta region. Second, the project would not have a "significant impact" on the DSC's ability to "protect[], restor[e], and enhanc[e] the Delta ecosystem." The Collinsville substation's 12.7-acre footprint is microscopic relative to the 1,300 square mile Delta and Suisun Marsh planning area, comprising some 0.000015% (that is, fifteen *millionths* of a percent) of the planning area. The substation and its associated environmental impacts pale in comparison to the vast infrastructure projects that have been deemed "covered actions" in the past. *See* DEIR page 2-7; Delta Plan page 3. The Collinsville project area is surrounded by existing development, including the nearby community of Collinsville, roads, agricultural operations, and large wind farms to the north. The project is not located on the water and would not block any waterways. These facts suggest that the project would not have a "significant impact" on the protection, restoration, and enhancement of the Delta ecosystem. Finally, there is no evidence that the project would impede implementation of government-sponsored flood control programs. For these reasons, the Collinsville substation is not a covered action under the Delta Plan. Because the Proposed Project would not conflict with existing zoning for agricultural use, there is no potentially significant impact and thus no mitigation is required. Accordingly, the AG-2 impact conclusion should be changed to less than significant (without mitigation) and the compensatory mitigation requirement of MM AG-1 should be removed.

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38	4.2-22-24	Not Applicable	Not Applicable	Impact AG-5 asks whether the Proposed Project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use" and incorrectly concludes the impact would be less than significant with implementation of MM AG-1. This conclusion is incorrect because, as the DEIR repeatedly states (*see*, *e.g.*, DEIR page 4.22), the Proposed Project would not result in the conversion of "Farmland," which, for CEQA purposes, is defined as "Prime Farmland, Unique Farmland, or Farmland of Statewide Importance." The Proposed Project would not induce development, and the DEIR does not identify *any* "other changes in the existing environment" due to the Proposed Project that would result in the conversion of Farmland to non-agricultural use. As such, this impact would in fact be less than significant and does not require mitigation in any form. Requiring compensatory mitigation under MM AG-1 therefore must be withdrawn because it is disproportionate to the impact of the Proposed Project (*see* 14 C.C.R. 15126.4 (mitigation measures must be consistent with constitutional nexus and proportionality requirements)).
39	4.2-23	Paragraph 2	Operation of the LSPGC 230 kV transmission line would result in permanent impacts where approximately three structures would be installed in areas within or adjacent to agricultural operations along the overhead segment. Operation and maintenance of the proposed 230 kV transmission line would not result in substantial effects on existing agricultural operations because the areas affected by transmission structures would be small and spread out, and overhead transmission would not prevent the agricultural operations from continuing. Impacts associated with the 230 kV transmission line would be less than significant.	This paragraph is located under the "LSPGC Collinsville Substation" header for Operations and Maintenance. This should be moved to the LSPGC 230kV transmission line section.
40	4.2-28	Paragraph 3	The Alternative 1 Collinsville Substation would permanently convert agricultural grazing lands under Williamson Act contract and zoned for agricultural use to a utility use (Figure 4.2-3). The impact from conflict with a Williamson Act contract, zoning for agricultural use, and conversion of grazing lands to non-agricultural use would be significant.	Section 51238(a) of the Williamson Act indicates that, unless the city or county determines otherwise after notice and a hearing, the erection, construction, alteration, and maintenance of gas, electric, water, or communication facilities are compatible with Williamson Act contracts. Therefore, the Alternative 1 substation would not create significant impacts to the Williamson Act contract. Impacts under AG-2 and AG-5 would be less than significant for the same reasons discussed with respect to the Proposed Project above.
41	4.2-32	Paragraph 4	The Alternative 2 Collinsville Substation would permanently convert agricultural grazing lands under Williamson Act contract and zoned for agricultural use to a utility use (Figure 4.2-4). The impact from conflict with a Williamson Act contract, zoning for agricultural use, and conversion of grazing lands to non-agricultural use would be significant.	Section 51238(a) of the Williamson Act indicates that, unless the city or county determines otherwise after notice and a hearing, the erection, construction, alteration, and maintenance of gas, electric, water, or communication facilities are compatible with Williamson Act contracts. Therefore, the Alternative 2 substation would not create significant impacts to the Williamson Act contract. Impacts under AG-2 and AG-5 would be less than significant for the same reasons discussed with respect to the Proposed Project above.

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4.3 Air Quality				
42	4.3-57	Paragraph 1	Alternative 1 would require more grading than the Proposed Project for preparation of the Collinsville Substation site. BAAQMD does not set a numerical threshold to evaluate the significance of fugitive dust emissions from construction projects. Rather, BAAQMD requires projects to implement all feasible BMPs to reduce fugitive dust emissions as provided in its CEQA Guidelines Chapter 5, Table 5-2. As with the Proposed Project, Alternative 1 would implement MM AQ-1, which requires implementation of all dust-control BMPs required by BAAQMD (refer to Section 4.3.14). The impact from fugitive dust within the jurisdiction of BAAQMD would be less than significant with mitigation.	This paragraph should be discussing Alternative 2. Verify that the proper alternatives are discussed in their respective sections.
43	4.3-63	MM AQ-2:	MM AQ-2: Watercraft Emission Reduction LSPGC shall use marine vessels (e.g., tug boards and support vessels) that meet U.S. Environmental Protection Agency (EPA) Tier 4 engine standards to the extent commercially available and operating in the Bay Area during construction. If marine vessels with EPA Tier 4 engines are not available, LSPGC shall submit to the CPUC evidence documenting good faith effort to obtain watercraft with EPA Tier 4 engines. Where watercraft with Tier 4 engines are not available, LSPGC shall ensure that all marine vessels used during in-water construction activities are powered by engines that meet EPA Tier 3 emission standards for marine compression-ignition engines, as defined in Title 40 of the Code of Federal Regulations (CFR) Part 1042.	LSPGC requests the following changes to MM AQ-2: LSPGC shall use marine vessels (e.g., tug boards and support vessels) that meet U.S. Environmental Protection Agency (EPA) Tier 4 engine standards to the extent commercially available and operating in the Bay Area during construction. If marine vessels with EPA Tier 4 engines are not <u>commercially or regionally</u> available, LSPGC shall submit to the CPUC evidence documenting good faith effort to obtain <u>local</u> watercraft with EPA Tier 4 engines. Where watercraft with Tier 4 engines are not <u>commercially and regionally</u> available, LSPGC shall ensure that all marine vessels used during in-water construction activities are powered by engines that meet EPA Tier 3 emission standards for marine compression-ignition engines, as defined in Title 40 of the Code of Federal Regulations (CFR) Part 1042
4.4 Biological Resources				
44	4.4-1	4th Bullet	"The EIR should analyze potential effects to sensitive and special-status species and Suisun Bay watershed, the Mendocino National Forest, and the proposed PG&E Montezuma Island Mitigation Bank."	See previous comment regarding the feasibility of the Alternatives 4 and 6a/b.
45	4.4-1	Bullet Point 4	The EIR should analyze potential effects to sensitive and special-status species and Suisun Bay watershed, the Mendocino National Forest, and the proposed PG&E Montezuma Island Mitigation Bank.	Mendocino National Forest is not near the Proposed Project. Please delete this reference.
46	4.4-12	Bullet Point 2	For plants, recent occurrences have been recorded within 0.25 mile, but the species was not observed during floristic surveys or was surveyed outside of the species' known bloom period.	All species with the potential to occur have been surveyed during their appropriate bloom period. As a result, this additional statement is not required and the following edit should be made: "For plants, recent occurrences have been recorded within 0.25 mile, but the species was not observed during floristic surveys ~~or was surveyed outside of the species' known bloom period~~."
47	4.4-13	Paragraph 2	One species was determined to be present in the biological study area during field surveys.	As indicated elsewhere in the DEIR, three special status species were determined to be present: Swainson's hawk and northern harrier in the initial survey area and golden eagle were observed in the transposition tower survey area

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48	4.4-29	Table 4.4-4, Row 3	burrowing owl	Findings from the burrowing owl habitat assessment and protocol-level breeding season surveys have not been, but need to be considered in this determination. The habitat assessment and breeding season protocol-level surveys conducted in 2025 identified no evidence of burrowing owl or burrowing owl sign within the initial survey area. Suitable burrow habitat within the initial survey area was already extremely limited, as documented in the 2023 habitat assessments, and these conditions remained unchanged during the 2025 protocol-level surveys. Given these findings, the determination of moderate nesting potential within the survey area is no longer appropriate and should be revised to low. The BUOW survey results are attached to this comment response table.
49	4.4-31	Table 4.4-4, Row 4	Clark's grebe	GLOBAL: The potential to occur determinations for BCC species do not adhere to the stated definitions in many cases. Where there is suitable habitat but no occurrence data, it is not correct to list them as “High.” The criteria more closely fit the “Moderate” designation. Species for which this revision is applicable: California gull (*Larus californicus*) Clark’s grebe (*Aechmophorus clarkii*) Lawrence’s goldfinch (*Spinus lawrencei*) Marbled godwit (*Limosa fedoa*) Short-billed dowitcher (*Limnodromus griseus*) Western grebe (*Aechmophorus occidentalis*) Western gull (*Larus occidentalis*) Willet (*Tringa semipalmata*)
50	4.4-42	Table 4.4-4, Row 2	vernal pool fairy shrimp	A potential to occur of moderate is not appropriate given the criteria. No suitable vernal pool habitat is present within the initial survey area. The conditions and occurrence data are consistent with Conservancy fairy shrimp which has been designated as “Low.”
51	4.4-42	Table 4.4-4, Row 3	vernal pool tadpole shrimp	A potential to occur of moderate is not appropriate given the criteria. No suitable vernal pool habitat is present within the initial survey area. The conditions and occurrence data are consistent with Conservancy fairy shrimp which has been designated as “Low.”
52	4.4-74	Paragraph 1	This EIR incorporates by reference the avoidance and minimization measures (AMMs) in Chapter 5.5.1.2 of PG&Es Bay Area HCP (ICF 2017). These AMMs include specific plant and wildlife species impact avoidance and minimization measures as well as general measures such as personnel training. The complete list of measures may be found in Table 5-1 of the Bay Area HCP. The measures would apply to all PG&E operation and maintenance activities and the transposition structure installation activities conducted under the HCP.	This statement suggests that every measure would be applied; however, only the applicable measures should be applied to operation and maintenance activities. Suggest the following edit to the final sentence: “The <u>applicable</u> measures would apply to all PG&E operation and maintenance activities and the transposition structure installation activities conducted under the HCP.”

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53	4.4-200	MM BIO-1	Special-status plant surveys shall be conducted during the appropriate blooming period for each species. Surveys shall occur prior to construction and operation and maintenance activities for all work areas occurring off existing access roads in natural areas, including overland travel routes, and areas of existing roads that require modifications.	LSPGC suggests removing operation and maintenance from MM BIO-1 because operations and maintenance ground disturbance is often unscheduled and cannot feasibly wait for spring or fall seasonal surveys; in the alternative, plant surveys could be required for greenfield operations and maintenance work, but would not be limited to blooming season.
54	4.4-81	Paragraph 2	MM BIO-2 also requires restoration and revegetation of temporary impact areas within all project components and the implementation of a Revegetation, Restoration, and Monitoring Plan that addresses procedures for restoring special status plant populations in areas of temporary impact (refer to Section 4.4.14 for the complete text of these MMs).	This appears to refuse acknowledgement of APM BIO-2, which would create a Project specific restoration plan.
55	4.4-94	Paragraph 3, last sentence	However, California black rail, Ridgway's rail, burrowing owl, golden eagle, Swainson's hawk, and western snowy plover are discussed in greater detail below due to impacts specific to these species.	This statement should be revised to add "potential" before "impacts." Impacts to these species are not a foregone conclusion.
56	4.4-96	Paragraph 2	Burrowing owl	This section makes no mention of the protocol-level breeding season surveys conducted in 2025 for the species. Findings of this survey found no evidence of breeding for this species within the survey area. Accordingly, please add the following sentence "In additional, LS Power conducted protocol-level surveys for burrowing owl during 2025 and no burrowing owls or potential burrows were identified (Insignia, 2025).
57	4.4-96	Paragraph 4	During field surveys, Swainson's hawks were observed north of the Delta flying overhead, foraging, and nesting.	Swainson's hawk were not observed nesting. They were observed flying overhead/foraging during field surveys, as stated in the Terrestrial Technical Report Biological (Insignia, 2025). Suggest revising the first sentence to state "During field surveys, Swainson's hawks were observed soaring over the Project area, but no foraging or nesting behavior was observed."
58	4.4-97	Paragraph 2	No trees are proposed for removal during construction of the Proposed Project and so there would be no significant impacts on nesting habitat.	For consistency with the rest of the document, this should be revised to say that impacts would be less than significant.
59	4.4-119	Paragraph 3, last sentence	Because of the limited in-water work window (APM BIO-18) and implementation of APMs BIO-19 through BIO-22, which would require intake screens to minimize fish entrainment, implement invasive species management measures, screen and test aquatic sediment, and implement an aquatic spill prevention and control plan, impacts from sediment or hazardous materials to special-status marine mammals would be less than significant.	This section of the document should be addressing mammals, not fish. Recommend that this sentence be revised to indicate that the fish screens would help avoid entrainment of mammals or remove reference to this measure altogether.
60	4.4-125	Paragraph 2	However, the increased presence of invasive species such as golden mussel in the region could result in inadvertent transportation of invasive species from the project area after construction is complete and could introduce invasive species to other areas.	Please delete this statement. Inadvertent transportation of an invasive species after the completion of construction and unrelated to Proposed Project activities cannot reasonably be considered to be an impact associated with the Proposed Project.
61	4.4-130	Paragraph 2	MM HYD-1 defines specific procedures for restoration, monitoring, and adaptive management for temporary impacts on wetlands and compensatory mitigation for any permanent impacts to wetlands (refer to Section 4.10: Hydrology for the complete text of this MM)	GLOBAL: The Hydrology and Water Quality section of this DEIR proposes MM HYD-1 to mitigate impacts associated with the alternatives, not the Proposed Project. Impacts in Section 4.10 were found to be less than significant or to result in no impact for the Proposed Project. Therefore, it is not appropriate to apply this mitigation measure to the Proposed Project in the Biological Resources section.

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62	4.4-136	Paragraph 4	While routine maintenance activities would have a less than significant impact on avian nursery sites, non-routine cable replacement/repair activities could require trenching to replace a defective cable. Cable replacement would require separate authorization. If the trenching is required in areas containing nesting habitat, the impact on avian nursery sites would be equivalent to construction and would be significant. MM BIO-7 defines requirements for pre-activity nesting bird surveys in suitable habitat and requires nest avoidance buffers and monitoring where nests are found. The impact on nursery sites during cable replacement maintenance activities would be less than significant with mitigation.	This section is tailored to the planned operation and maintenance of the LSPGC Collinsville Substation, 230 kV overhead and underground segments, and telecommunication interconnection lines; however, the language in the last paragraph of the section is referring to potential future replacement of the submarine segment. This language is not appropriate for this section of the EIR and should be removed.
63	4.4-193	Paragraph 1, last sentence and first full paragraph	Alternative 6a/6b impacts on special-status birds would be equivalent to the Proposed Project components replaced by Alternative 6a/6b. Indirect on special-status birds during construction would be the same as the Proposed Project and are described in Section 4.4.5.	This statement is incorrect. Because Alternative 6a/6b is located in the Suisun Marsh management area, involves more work closer to the open waters of the Delta, and is more intrusive, the direct and indirect impacts to California black rail, California Ridgway's rail, western snowy plover, and double-crested cormorant would likely be greater than the LSPGC proposal.
64	4.4-201	Paragraph 4	Salvage and replanting plan: For impacts on state or federally listed or CRPR 1 or 2 plants that cannot be avoided, the qualified botanist shall prepare and implement a Salvage and Replanting Plan	Salvage and transplant is not one-size-fits-all. Mason's lilaeopsis and delta mudwort, due to their small size and creeping or annual growth habits, are not practical to transplant successfully. The current literature and existing restoration guidance for these species advocate either topsoil salvage (San Joaquin Conty Multi-Species Habitat Conservation Plan; ITP #2081-2018-066-03 Winter Island Tidal Habitat Restoration Project) or passive revegetation (Grewell et al. 2013), neither of which is presented as an alternative in the plan requirements. Both species readily recolonize unvegetated mud within intertidal areas following disturbance (ITP #2081-2018-066-03 Winter Island Tidal Habitat Restoration Project), either through the existing seed bank or through rhizome or stolon fragments in the mud or in adjacent undisturbed habitats (Grewell et al. 2013). This measure should be revised as follows to leave the door open for restoration through natural recolonization or through topsoil salvage and redispersal for species where that approach is appropriate: Salvage and replanting plan: For impacts on state or federally listed or CRPR 1 or 2 plants that cannot be avoided, the qualified botanist shall prepare and implement a Salvage and Replanting Plan. The Salvage and Replanting Plan would specify, at a minimum, the following: • Location of the mitigation site(s) (extent of the plants within and adjacent to project areas **and site conditions that support recolonization**). • Procedures for procuring plants, **if appropriate,** such as transplanting plants or collecting seed from plants to be impacted, including storage locations and methods to preserve the plants. **If collecting seed or transplanting plants are not appropriate the plan shall document justification and propose alternative strategies (e.g. preserving topsoil, protecting adjacent populations to facilitate passive revegetation)** • Procedures for propagating collected ~~seed~~ **materials**, **or topsoil storage and redistribution methods.** ~~including storage methods.~~ • Quantity and species of plants to be planted or transplanted, **if applicable.**

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				• Planting procedures, including the use of soil preparation and irrigation, **if applicable**. • Schedule and action plan to maintain and monitor the mitigation site for a minimum 3-year period. • Reporting procedures, including the contents of annual progress reports. • List of criteria **tailored to species-specific attributes (e.g., cover, survival, spatial extent)** ~~(e.g., growth, plant cover, survivorship) by which to measure success of the plantings.~~ • Contingency measures, **such as adaptive management actions (e.g., supplemental plantings, weed control, seed broadcasting) if performance criteria are not met**. ~~to implement if the plantings are not successful (i.e., weed removal, supplemental plantings, etc.).~~ Grewell, B. et al. (2013). *Case studies in rare plant conservation from the San Francisco Estuary.* San Joaquin County Multi-Species Habitat Conservation Plan (2000) CDFW Incidental Take Permit No. 2081-2018-066-03 (Winter Island Restoration), Amendment 1 (2023)
65	4.4-202	Paragraph 2	If CPUC or CDFW determines that the Salvage and Replanting Plan is not likely to be successful (due to the species' life form, habitat requirements, or other factors), then LSPGC/PG&E shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1, 2, 3, or 4 ranked plant occurrences at a 1:1 ratio of acreage for any occupied habitat affected by the project.	Request the removal of the mitigation requirement for CRPR 3 and 4 plants because the DEIR does not identify a potentially significant impact on any CRPR 3 or 4 plants that also meet the definition of endangered, threatened, or rare under 14 C.C.R. 15380 and therefore no mitigation is required.
66	4.4-203	Paragraph 6	A qualified biologist or botanist shall monitor vegetation resources that are impacted annually until performance standards have been met. Monitoring shall be conducted once a year during the blooming period to verify species composition and cover within all areas of temporary disturbance.	This measure, as written, is inconsistent. The measure requires that surveys be conducted once a year, but also during the appropriate blooming period. It is more appropriate for the measure to require an annual survey during the growing period as dictated by local climate conditions. The measure should be revised to change "blooming period" to "growing period."
67	4.4-204	Paragraph 7, Timing	Restoration of temporary impact areas shall occur within one year following completion of temporary disturbance	This sentence is unclear as prepared. It suggests that all restoration criteria must be met within one year, which is not practical nor is it consistent with the rest of the measure. This statement should be refined to say "restoration of temporary impact areas shall be initiated within one year following completion of temporary disturbance."
68	4.4-206	Paragraph 1	Control. Invasive plant infestations must be controlled or eradicated as soon as possible upon discovery, and before they go to seed, or when appropriate with the goal to prevent further spread.	This should be corrected to "new invasive plant infestations." The Project is not responsible for existing infestations.
69	4.4-206	Paragraph 5, MM BIO-4	Within 7 days prior to ground disturbance in each work area, a qualified biologist shall investigate each work area for the presence of burrows suitable for California tiger salamander and California red-legged frog.	Surveys for these burrows should only be required within suitable upland habitat within the species' known dispersal range from suitable aquatic habitat, not all work areas. Suggested change "Within 7 days prior to ground disturbance in each work area <u>within the species' known dispersal range from suitable aquatic habitat</u>, a qualified biologist shall investigate each work area for the presence of burrows suitable for California tiger salamander and California red-legged frog."

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70	4.4-207	Paragraph 4, Pre-construction surveys	the potential to occur	As prepared this measure would require surveys for special-status species with any potential to occur, which is infeasibly and unjustifiably broad and . This language should be revised to apply only to special-status species with a “moderate or higher potential to occur.”
71	4.4-208	Paragraph 3, Resource Avoidance	Resource avoidance	The way that this measure is prepared, it suggests that all special-status species habitat, sensitive natural communities, wetlands, and riparian areas will be avoided by construction. This is not the case and is why permits are being secured for the project. This measure must be revised to allow flexibility for construction to proceed and should be refined as follows: “Prior to construction or access in any work area containing or potentially containing special-status species habitats, sensitive natural communities, riparian areas, or wetlands, the biological monitor shall mark or otherwise delineate the limits of special-status species habitat, sensitive natural communities, riparian areas, and wetlands for avoidance, to the extent feasible. Where necessary, post signs at access route entrances to inform workers of special access considerations (i.e., seasonal restrictions, biological monitor escort, etc.).”
72	4.4-209	Paragraph 2	Pre-activity nest surveys will be conducted prior to any construction activities within suitable habitat scheduled during the breeding period	Requiring preconstruction surveys prior to “any construction activity” is inconsistent with the language earlier in the measure under Avoidance of Work During Nesting and Breeding Season, since that section specifically calls for avoiding work during the breeding season for vegetation clearing and ground disturbance. The following revision will make this measure consistent with the rest of the document: Pre-activity nest surveys will be conducted prior to ~~any construction~~ vegetation clearing and ground disturbance activities within suitable habitat scheduled during the breeding period
73	4.4-209	Paragraph 6, Nest Buffers and Acceptable Activities	In some cases, active nests may be found while work is underway. Therefore, a protocol shall be implemented for stopping ongoing work within the buffer area, securing the work site, and removing personnel and equipment from the buffer	A nest established during construction clearly shows acclimation to the existing activities on-site. If a nest is established during construction, the measure language should allow for the possibility of an alternative scenario, to be discussed with and evaluated by the CPUC and relevant agencies, in which the nest will be monitored for disturbance and to ensure no direct impacts or failure and that a no-disturbance buffer be established if a biologist determines that changes in disturbance levels or visible responses from the nesting pair indicate that the nest is at risk of failure. Suggest the following edit: In some cases, active nests may be found while work is underway. In the event that a bird nest is established by a species that carries no state or federal listing status, within the work area during construction, work will temporarily halt within the prescribed buffer for that species, but may resume within a reduced buffer area, agreed upon in writing by the CPUC under the condition that the nest be monitored continuously for a period of 2 days after construction recommences. If nest behavior is not affected during the 2-day monitoring period, construction may continue within the reduced buffer without dedicated monitoring. Therefore, a protocol shall be implemented for stopping ongoing work within the buffer area, securing the work site, and removing personnel and equipment from the buffer

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74	4.4-209	Paragraph 7	a 300-foot buffer shall apply as a standard buffer distance for migratory birds	A 150-foot buffer is more appropriate for non-special-status species.
75	4.4-211	Paragraph 3	A qualified biologist shall conduct a habitat assessment and surveys, if warranted based on the habitat assessment, following the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology(https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and prepare a report documenting the survey results. The qualified biologist shall have a minimum of two years of experience implementing the above methodology resulting in burrowing owl detections.	A habitat assessment for this species has already been completed and is included as Attachment C. An additional habitat assessment is not warranted. The parameters of this measure may require access outside of our current ROW/areas where we have landowner consent to survey.
76	4.4-211	Paragraph 3	Burrowing Owl Habitat Assessment and Surveys:	This measure needs to be re-evaluated to consider the temporal constraints imposed by the implementation of protocol-level breeding season surveys, and to a lesser extent, the non-breeding season surveys. Requiring a protocol-level breeding season survey prior to work occurring during the breeding season dramatically reduces the potential start time of construction within the February 1 – August 31 breeding season window, as the earliest that these surveys can be completed, in accordance with the protocol is June 16. Only 1.5 months of the breeding season would be left for construction initiation. The same issue is also present, but to a slightly more ambiguous extent for the non-breeding season. In this case the protocol requires non-breeding season surveys consist of “at least four (4) visits, spread evenly, throughout the nonbreeding season”. It is unclear from the measure what adequate survey temporal spacing would be and how construction might plan it’s commencement during the non-breeding season while accommodating the protocol. The following language was accepted on a recent LSPGC project (Manning 500/230kV Substation Project). Please revise the language in the Mitigation Measure to the following: “If Project activities commence in after January 31, surveys will be conducted to determine whether burrowing owls are present within the Habitat Assessment Area during the breeding season (February 1-August 31). Complete breeding season surveys in accordance with the Survey Protocol will not be conducted if construction begins prior to June 16, as following the survey timing requirements in the Protocol would not be possible during that time period. Instead, an abbreviated protocol will be followed (i.e., fewer survey visits) at the discretion and in the best judgement of the project biologist. If construction begins after June 16, the full breeding season survey will be conducted in accordance with the Survey Protocol. In accordance with the Survey Protocol, *“…non-breeding season surveys may be warranted (i.e., if the site is believed to be a wintering site only based on negative breeding season results).”* These surveys will follow the Survey Protocol and will be used to determine whether overwintering owls are present within the Habitat Assessment Area during the non-breeding season (September 1–January 31).”

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77	4.4-211	Paragraph 3	The habitat assessment and surveys shall encompass the project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the project site pursuant to the above methodology, unless otherwise approved in writing by CDFW	Appendix C of the CDFW protocol specifies a 150-meter buffer zone for habitat assessments. The measure should be revised to specify a 150-meter buffer zone.
78	4.4-214	Paragraph 4	Crotch's Bumble Bee Surveys	The surveys are not recommended pursuant to Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). This measure should be revised to conform with current regulatory guidance from CDFW. Further, the link provided in the measure directs to the home page for the California Bumblebee Atlas, not the survey guidelines. In addition, the protocols available through that site require the collection of bees, which conflicts with the language later in the measure that requires surveys to be conducted using non-take methods. The measure references a peak flying time of March to August; however, conflicts with CDFW's current guidance as presented in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023) where the colony active period for this species (i.e. highest detection probability) April-August. The measure should be revised for consistency with the CDFW guidance. Please see comment for page 4.4-215 for a comprehensive proposed revision.
79	4.4-215	Paragraph 1	Surveys shall be conducted no more than 30 days prior to the start of project construction activities, assessing all areas of suitable habitat for overwintering, nesting and foraging at, and within 100 feet of the proposed work area.	Nesting and foraging habitats potentially suitable for Crotch's bumble bee are present in the project work areas. However, according to the best available science regarding bumble bees, including bumble bees in California, overwintering habitat consists of woodlands and woodland or forest edges where leaf or needle litter is present (CDFW 2023; USFWS 2021; Williams et al. 2014; Williams et al. 2019). Bumble bees in California have been documented overwintering under 1 to 2 inches of duff, between leaf or needle litter and mineral soil. All work areas and their surrounding 100-foot buffers, which have been mapped previously to the alliance level, do not contain woodland habitat or areas where leaf or needle litter could accumulate. Fully floristic surveys conducted within LSPGC work areas and within 100 feet of these work areas further corroborated these findings. In a recent (June 2025) IS/MND analysis of the LSPGC Manning 500/230 kV Substation Project (Manning Project), the CPUC stated that it did not consider the overwintering life history stage for Crotch's bumble bee in its impact analysis. The CPUC noted that the project alignment area does not contain woodland habitat or areas where leaf or needle litter could accumulate. The CPUC further concluded that because overwintering habitat is not present within the project alignment area, surveys conducted during the overwintering period are not likely to result in detection of the species. The CPUC also noted that implementation of a limited operating period during the colony active period, if feasible, would avoid take of individual Crotch's bumble bees. Because overwintering habitat is not present within work areas or within 100 feet of these areas, Crotch's bumble bees have potential to occur in work areas only during the colony active period, gyne flight period, and queen flight period. Surveys during the overwintering period are not likely to result in detection of the species. Further, detection of dispersing queens and gynes is expected to be exceptionally difficult given the low number of dispersing individuals relative to the quantities detectable during the colony active period. These findings are consistent with the determinations

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				made for the Manning Project which determined that Crotch's bumble bees have potential to occur only during the colony active period.
				
				As the habitat conditions between the Proposed Project and the Manning Project, as they pertain to overwintering habitat, are similar, LSPGC proposes replacing the language in MM BIO-12 with the following mitigation measure language drafted by the CPUC for the Manning Project which is consistent with the regulatory guidance put forth by the CDFW in their Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023):
				
				- Initial ground-disturbing work (e.g., grading, vegetation removal, staging) in grassland habitat or agricultural areas that contain grasses or forbs shall take place between August 15 and March 15, if feasible to avoid impacts on nesting Crotch's bumble bees.
				- If the above limited operating period is not feasible (i.e., if limiting ground disturbance to the period between August 15 and March 15 would preclude achieving most of all of the project objectives) as determined by LSPGC with concurrence from the CPUC, a qualified biologist approved by the CPUC, familiar with bumble bees of California and experienced using survey methods for bumble bees, shall conduct a habitat assessment and focused survey for Crotch's bumble bee before the start of any ground disturbing activities in grassland habitat or edges of agricultural areas that contain grasses or forbs. Surveys shall be performed when Crotch's bumble bee is most likely to be identified, typically from April through August (i.e., the colony active period) when floral resources and ideal weather conditions are present, and shall follow the methods in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Surveys shall be conducted during the colony active period the same year as the start of planned construction activities.
				- LSPGC shall submit a survey report to the CDFW and the CPUC within 1 month of survey completion and shall notify the CDFW and the CPUC within 24 hours if Crotch's bumble bees are detected.
				- If Crotch's bumble bees are detected during the focused survey, appropriate avoidance measures shall be implemented. Avoidance measures shall include, but not be limited to, the following:
				  o Protective buffers shall be implemented around active nesting colonies until these sites are no longer active. A qualified biologist, in coordination with the CDFW, shall determine the appropriate buffer size to protect nesting colonies.
				  o If nesting colonies are detected, avoidance areas shall be implemented in areas near the colony location that contain significant floral resources for the colony, if present. A qualified biologist shall determine the appropriate avoidance area size to protect foraging resources.
				  o If project activities involving temporary disturbance (e.g., staging) would occur where a nesting colony was detected after the nesting colony is no longer active, the area shall be restored to original

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				conditions after the temporary disturbance is complete such that habitat for Crotch's bumble bee would be available. - If take of Crotch's bumble bee cannot be avoided, LSPGC shall obtain an Incidental Take Permit (ITP) from the CDFW and shall implement all avoidance measures included in the ITP. The CDFW may also require compensatory mitigation through on-site habitat restoration or purchase of credits at an appropriate mitigation bank. Avoidance measures included in the ITP would reduce the likelihood of take of Crotch's bumble bees such that impacts on the species would be fully mitigated. These measures would include but not be limited to: o specifications for construction timing and sequencing requirements to avoid impacts on nesting Crotch's bumble bees; o pre-construction surveys conducted within 30 days prior to the start of ground-disturbing activities; o establishment of seasonal no-disturbance buffers around nest sites; o construction monitoring; o restrictions associated with construction practices, equipment, or materials that may harm bumble bees (e.g., BMPs to minimize the spread of invasive plant species); and o provisions to avoid Crotch's bumble bees or potential Crotch's bumble bees if observed away from a nest during project activity (e.g., ceasing of project activities until the animal has left the work area). Documentation of compliance with this mitigation measure and any required coordination with the CDFW or acquisition of an ITP shall be provided to the CPUC before commencement of any project construction activities. California Department of Fish and Wildlife. 2023. (June). *The Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. US Fish and Wildlife Service. 2021. *Recovery Plan for Rusty Patched Bumble Bee (*Bombus affinis*)*. Williams, P. H., R. W. Thorp, L. L. Richardson, and S. R. Colla. 2014. *Bumble Bees of North America*. Williams, N. L., J. M. Mola, C. Stuligross, T. Harrison, M. L. Page, R. M. Brennan, N. M. Rosenberger, and M. Rundlof. 2019. "Fantastic Bees and Where to Find Them: Locating the Cryptic Overwintering Queens of a Western Bumble Bee."

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80	4.4-216	MM BIO-17	LSPGC shall submit this plan to CPUC for review and approval at least 60 days before the start of marine activities and shall submit the plan to USACE, NMFS, and CDFW for review. Vessels originating outside San Francisco Bay shall follow existing compliance measures established by the CSLC as part of the Marine Invasive Species Program, relating to hull fouling and ballast water control.	LSPGC requests that the plan only be submitted to the CPUC and CSLC for review. The USACE, NMSF and CDFW have limited or no jurisdiction over marine invasive species and should only require plan submittal to the extent required by applicable regulations and/or permits. Accordingly, please make the following edit:. LSPGC shall submit this plan to CPUC for review and approval at least 60 days before the start of marine activities and shall submit the plan to USACE, NMFS, and CDFW for review <u>if required by applicable regulations and/or permits.</u> Vessels originating outside San Francisco Bay shall follow existing compliance measures established by the CSLC as part of the Marine Invasive Species Program, relating to hull fouling and ballast water control.
81	4.4-217	MM BIO-18	MM BIO-18: Compensatory Mitigation for Permanent Impacts to Benthic Habitat LSPGC shall implement compensatory mitigation for permanent impacts on benthic habitat at a ratio of 1:1 or greater, subject to approval by the appropriate resource agencies (e.g., U.S. Army Corps of Engineers, CDFW, and SWRCB).	Revise MM BIO-18 to "<u>If the Project requires the use of concrete mattresses or builders for submarine cable protection</u>, LSPGC shall implement compensatory mitigation for permanent impacts on benthic habitat at a ratio of 1:1 or greater, subject to approval by the appropriate resource agencies (e.g., U.S. Army Corps of Engineers, CDFW, and SWRCB).
4.5 Cultural Resources				
82	4.5-2	Paragraph 2	The tallest structure would be the microwave tower up to 200 feet tall.	The microwave tower has a maximum vertical high of 199 feet.
83	4.5-18	Paragraph 2	An underwater paleo landform was also located and determined to have low sensitivity for cultural deposits (ASM Affiliates and Insignia Environmental 2025).	Please clarify that this is the same paleo landform discussed in the previous paragraph.
84	4.5-18	Paragraph 5	During consultations, the Native American representatives discussed the presence of significant tribal cultural resources including a potential historic Native American village site along the northern bank of the Sacramento River near the Proposed Project.	This statement is misleading because no village has in fact been identified. Please revise to "<u>potential</u> presence of significant tribal cultural resources"
85	4.5-29 to 4.5-30	Table 4.5-3	APM CUL-3	In order to more clearly reflect the requests of the Confederated Village of Lisjan Nation and the Yocha Dehe Winton Nation that tribal artifacts that cannot be avoided be reburied outside of impacted areas, LSPGC has revised the last sentence of APM CUL-3 as follows and request corresponding edits to the DEIR to reflect same: "Archaeological materials recovered during any investigation would be reburied <u>outside areas impacted by the Proposed Project</u>, curated at an accredited curation facility, or transferred to the appropriate tribal organization."
86	4.5-33 to 4.5-37	Paragraph 3	Due to likelihood of encountering precontact resources along portions of the 230 kV line and because it may not be possible to avoid a historic Native American village or human remains (if they occur in the construction area), impacts would be significant and unavoidable.	The Draft EIR correctly acknowledges that extensive cultural resources surveys (including records reviews and field surveys) have been performed for the project site and surrounding areas, and that no historical resources have been identified that the project would impact significantly. As the Draft EIR also properly notes, as part of these efforts, both LSPGC and CPUC have conducted tribal outreach. (The Amah Mutsun Tribal Band of San Juan Bautista recommended cultural sensitivity training for project workers, as well as archaeological and tribal monitoring during earth movement activities. The Confederated Village of Lisjan Nation and the Yocha Dehe Winton Nation requested monitoring of ground-disturbing activities, cultural sensitivity training, meetings between tribal representatives, and reburial of isolated artifacts outside areas impacted by the Project.)

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				The Draft EIR ultimately concludes that potential project impacts to unanticipated, precontact discoveries along portions of the 230 kV alignment would be significant and unavoidable. While LSPGC does not request that the Final EIR be revised to reflect a different impact conclusion, for the reasons explained below, the record supports a "less than significant with mitigation" conclusion, and the Final EIR should at minimum be updated to clarify that a "significant and unavoidable" conclusion represents a highly conservative approach. The measures identified in the Draft EIR provide robust, comprehensive protections consistent with applicable law to ensure the project does not cause significant impacts to previously unidentified cultural or tribal resources. For example, in addition to providing worker education and archaeological and Native American monitoring, these measures require work to immediately stop in the event of unanticipated discoveries of cultural resources, consistent with CEQA Guidelines Section 15064.5. (See APM CUL-1 through CUL-4; CM CUL-1 through CUL-3; MMs CUL-1 through CUL-6). Furthermore, the measures identified in the DEIR prioritize preservation in place if historical, archaeological, or tribal cultural resources are found, consistent with Guidelines Section 15126.4(b)(3)(A) and Public Resources Code Section 21084.3. (See APM CUL-3, MM CUL-2). As specified in Section 15126.4(b)(3)(B), preservation in place may be accomplished through planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering the archaeological sites with a layer of chemically stable soil before facilities on the site; or deeding the site into a permanent conservation easement. Preservation in place would ensure adverse impacts are avoided altogether. Because the location and extent of unanticipated discoveries, if any, is inherently unknown at this time, it is not currently feasible to determine the extent of such resources or whether they can be avoided or otherwise preserved in place, and if so which preservation in place methods may be feasible. In the unlikely event that data recovery through excavation is the only feasible mitigation option, the cultural resource measures of the EIR comply with Guidelines Section 15126.4(b)(3)(C) by requiring treatment plans that ensure recovery of scientifically consequential information and require consultation with CPUC and Tribes to make sure recovered materials are treated properly and curated at appropriate facilities or transferred to appropriate Tribal organizations. (See APM CUL-3, MM CUL-2). (Because the resource(s) that would be subject to such plans are currently unknown, it is infeasible to provide detailed plans at this point). Additional safeguards would apply in the event human remains are discovered. *See* Public Resources Code 5097.98 and Health and Safety Code section 7050.5, APM CUL-3, MM CUL-2. Contrary to the Draft EIR's statements that it would not be feasible to rebury human remains or other artifacts outside of areas impacted by the Project "because the applicant does not have the land rights for the 230 kV overhead or submarine segment," we hereby confirm that in the unlikely event such resources are encountered during construction, particularly given the relatively low ground-

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				disturbance footprint of these features, reburial along the transmission alignment but outside impacted areas is expected to be feasible. LSPGC and its archaeologists have been unable to identify any additional feasible mitigation measures. However, taken together, these measures are more than sufficient to ensure impacts are less than significant. (*See* Public Resources Code 21084.3 (methods to mitigate impacts to tribal cultural resources to less than significant levels include preservation in place or "treating the resource with culturally appropriate dignity") and Guidelines Section 15126.4(b)(3)(C) ("When data recovery through excavation is the only feasible mitigation, a data recovery plan … shall be prepared. … If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation").) However, out of an abundance of caution, LSPGC does not object to the EIR's ultimate conclusion that impacts would be significant and unavoidable.
87	4.5-54	Paragraph 3	If a tribal monitor is unavailable to support the monitoring effort, LSPGC shall provide documentation to the CPUC on outreach efforts to AB 52 consulting tribes (Yocha Dehe Wintun Nation, Confederated Villages of Lisjan Nation) regarding cultural resource monitoring.	This language should be included for all tribal monitoring measures.
88	4.5-58	Paragraph 4	MM CUL-4 requires avoidance of ground disturbing activities within the boundaries of RP-03 and RP-04 as well as use or soil protections to avoid rutting from access road use.	This should reference MM CUL-5.
89	4.5-54	MM CUL-1	If historic resources cannot be avoided additional treatment measures, such as curation at an accredited curation facility.	This statement in the measure does not appear complete. Recommend completing this sentence with: "will be developed by the qualified archaeologist, in coordination with tribal monitors as appropriate, in a treatment plan using the standards set forth in Public Resources Code Sections 5097.98, 21083.2, and 21084.3; Health and Safety Code Section 7050.5; and CEQA Guidelines Sections 15064.5 and 15126.4."
90	4.5-55	MM CUL-5	Additional measures shall be applied as needed to protect avoid disturbance of buried sediments such as use of matting or plating.	Please clarify this portion of the measure would be applied during wet conditions, rather than all the time, which is consistent with the previous sentence.
91	4.5-55	MM CUL-6	If historic resources cannot be avoided additional treatment measures, such as curation at an accredited curation facility.	This statement in the measure does not appear complete. Recommend completing this sentence with: "will be developed by the qualified archaeologist, in coordination with tribal monitors as appropriate, in a treatment plan using the standards set forth in Public Resources Code Sections 5097.98, 21083.2, and 21084.3; Health and Safety Code Section 7050.5; and CEQA Guidelines Sections 15064.5 and 15126.4."
4.6 Energy				
92	4.6-5	Paragraph 4	PRC Section 25301(a) requires the CEC to develop an Integrated Energy Policy Report (IEPR) at least every 2 years for electricity, natural gas, and transportation fuels. The current IEPR (2021 edition, updated in 2022) calls for the state to assist in the decarbonization of buildings and the agricultural sector, ensuring electricity reliability in a changing climate, decarbonizing the state's gas systems, and improving electricity demand forecasting.	This section of the EIR should be updated to reflect the current 2023 IEPR.
93	4.6-14	Paragraph 1	LSTs have substantially more cross-arms compared to TSPs	This statement is inaccurate. Both types of structures have three crossarms per circuit. An LST is built using multiple steel members, so those members may provide additional perching and nesting options.

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94	4.6-14	Paragraph 2	Curtailment of renewable energy generation at SMUD's Solano 4 Wind Project site would reduce overall generation of renewable energy and SMUD's ability to comply with their renewable energy plans including IEPR, which would be a conflict with a State plan for renewable energy. The reduced renewable energy generation/output would be a significant impact. No feasible mitigation is available to reduce the impact due to the location of the proposed 500 kV interconnection lines and the nature/design of LSTs could not be modified to substantially reduce perching or nesting opportunities. Therefore, the impact from conflicting with State plans for renewable energy generation would be significant and unavoidable.	The DEIR incorrectly concludes under Impact EN-2 that the Proposed Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency, specifically the IEPR, because the PG&E 500 kV lines could increase avian perching opportunities within the Solano 4 wind project, which could contribute to increased mortality, which could result in curtailment of the wind project. In addition to being based on clearly tenuous, speculative causal reasoning that fails to meet the reasonably foreseeable requirements of Guidelines Section 15064(d)(3), this analysis also fails to acknowledge the overall objectives of the Proposed Project, stated elsewhere in the DEIR, which include the following: • Facilitating deliverability of load from existing and proposed renewable generation projects in the northern Greater Bay Area and corresponding progress toward achieving California's RPS goals in a timely and cost-effective manner by California utilities. • Facilitating deliverability of generation and energy storage resources in the Solano area, progressing California's renewable energy goals. Because the Proposed Project would facilitate the integration of existing and proposed future renewable energy generation projects in the greater region, consistent with the IEPR and other state and local plans for renewable energy, on a much greater scale than a single wind project, the Proposed Project will have a net positive impact on regional and statewide renewable energy generation. Accordingly, balancing the Proposed Project's positive impact on regional and statewide renewable energy generation with the speculative potential to cause curtailment of the Solano 4 wind project, impacts would be less than significant.
4.8 Greenhouse Gas Emissions				
95	4.8-25	Paragraph 5	Curtailment of renewable energy generation at the Solano 4 Wind Project would reduce overall generation of renewable energy, which would be a conflict with SB 100, which requires increased renewable energy generation. Since SMUD has informed the CPUC that curtailment of energy generation associated with exceedance of the avian fatalities would significantly affect SMUD's delivery of energy to its customers, the impact of the LSTs would be significant. Since the impact would be due to the presence of the LSTs within the wind farm, no mitigation would feasibly reduce the impact from introduction of the LSTs within the wind farm. The impact from conflict with state plans for GHG reduction would be significant and unavoidable.	The DEIR incorrectly concludes under Impact GHG-2 that the Proposed Project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Specifically, the DEIR states that the PG&E 500 kV lines could increase avian perching opportunities within the Solano 4 wind project, which could contribute to increased mortality, which could result in curtailment of the wind project, which "would reduce overall generation of renewable energy, which would be a conflict with SB 100, which requires increased renewable energy generation." The analysis fails to balance the speculative, tenuously reasoned possibility of curtailment of the Solano 4 facility with the statements in the immediately preceding paragraph that "[b]y increasing the capacity and reliability of the regional transmission system, the Project would facilitate integration of clean energy resources into the grid and generally support statewide decarbonization goals," and that the Proposed Project would do so on a regional scale, as opposed to the unreasonably foreseeable potential for curtailment of a single generating facility. Accordingly, the *net* effect of the Proposed Project on greenhouse gas reduction plans is anticipated to be positive, and any impacts would be less than significant.

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4.9 Hazards, Hazardous Materials, and Public Safety				
96	4.9-10	Paragraph 4	***Wind Turbine Hazard Throw Zones*** Existing wind turbines associated with the SMUD Solano 4 Wind Project are located in the vicinity of the proposed LSPGC Collinsville Substation and 230 kV overhead segment, and the existing PG&E 500 kV line and proposed interconnection lines. If a turbine component were to strike an electrical facility, it could result in an electrical arc and potential ignition of surrounding vegetation. This unique condition introduces a reasonably foreseeable wildfire risk that is independent of typical electrical equipment failure scenarios. As discussed in Section 4.20: Wildfire, Figure 4.20-3 shows the wind turbine hazard throw zones in the Proposed Project vicinity. Approximately 430 feet of the proposed 230 kV overhead segment is within a wind turbine hazard throw zone for one wind turbine located approximately 600 feet northeast. No other Proposed Project components are within a wind turbine hazard throw zone, including the existing PG&E 500 kV Vaca Dixon-Tesla Transmission Line.	The definition/size of wind turbine hazard throw zone is not defined in the DEIR. LSPGC revised the 230kV Overhead transmission line alignment in response to CPUC Data Request #3. With this revision, only the right-of-way was within the hazard throw zone, but the actual transmission line is outside of the zone. Therefore, the odds of blade throw colliding with the 230kV line is not a significant impact. CEQA regulations provide that "[a] change which is speculative or unlikely to occur is not reasonably foreseeable." 14 CCR 15064(d)(3). The likelihood of blade throw occurring at the existing wind site in general is already extremely low, and the likelihood of it occurring so precisely as to strike the 230 kV line even if it were within the hazard throw zone is so minimal as to be insignificant. The U.S. National Renewable Energy Laboratory (NREL) states that wind turbine blade failures are "an extremely rare occurrence." NREL, *Wind Power Reliability Research*, available at https://www.nrel.gov/wind/reliability. A report for an Illinois wind project prepared by Persimia in 2024 indicates a blade failure rate of approximately 1 per 10,000 (10^{-4}) turbines per year, of which only a part would result in actual blade throw instead of triggering rotor shutoff. Persimia, *Panther Grove 2 Wind Energy Project Ice Shed and Blade Failure Risk Assessment*, available at https://cms3.revize.com/revize/livingstocountyil/Documents/Department/Regional%20Planning%20%26%20Zoning/Panther%20Grove%202/PG2%20Exhibit%2025.pdf. A report for an Australian wind project prepared by DNV in 2022 indicates that at a distance of half the rotor diameter, the risk of a blade throw collision or tower collapse impact from a fixed location is less than 10^{-5} per year (1-in-100,000), and at a distance of either the turbine tip height or the maximum theoretical throw distance for an entire blade, the risk of blade throw collision or tower collapse impact is less than 10^{-6} per year (1-in-1 million). DNV, *Valley of the Winds Wind Farm Blade Throw Assessment*, available at https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10461%2120220331T064949.710+GMT.
97	4.9-47	Paragraph 2	The secondary containment system would be designed consistent with the California Fire Code §1207 requirements for stationary storage battery systems, including spill control and neutralization (§1207.6.2),	Chapter 12 of the California Fire Code is not applicable to the Substation, as per California Fire Code §1201 "It shall not apply to equipment associated with the generation, control, transformation, transmission, or distribution of energy installations that is under the exclusive control of an electric utility or lawfully designated agency". The substation's battery storage would fall under the National Electrical Safety Code, Part 1, Section 14 140.F.
98	4.9-52	Impact HAZ-4	Less than significant	This impact is listed as "No Impact" in the summary table. Revise to be consistent.

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99	4.9-62	Paragraph 2	"Because the proposed LSPGC 230 kV overhead segment would be within the hazard throw zone of an existing turbine, this rare but reasonably foreseeable event could result in contact with the line, creating an electrical arc and potential ignition of vegetation. As such, this condition represents a significant hazard irrespective of the low likelihood of occurrence. The impact from location of the 230 kV transmission line within the hazard throw zone would be significant. "	LSPGC revised the 230kV Overhead transmission line alignment in response to Data Request #3. With this revision, only the right-of-way was within the hazard throw zone but the actual transmission line is outside of the zone), such that the risk of an impact from blade throw striking the line is less than significant Furthermore, even if such an impact were significant, it would be addressed by Compliance with PUC § 8386. In the extremely unlikely event of a wind turbine blade hitting LSPGC line, and resulting in a wildfire, LSPGC would adhere to PUC § 8386 and implement its required wildfire management plan to reduce risk of wildfire during operation and maintenance of the 230 kV overhead line. The wildfire management plan would apply equally to any line failure whether caused by blade strike or a tower failure or any other event compromising the line and causing conductors to touch ground. Furthermore, the possibility of the turbine failure could cause a fire. The addition of LSPGC's transmission line would not increase or create a significant impact for turbine failure. CEQA regulations provide that "[a] change which is speculative or unlikely to occur is not reasonably foreseeable." 14 CCR 150664(d)(3). The likelihood of blade throw occurring at the existing wind site in general is already extremely low, and the likelihood of it occurring and striking the transmission line even if it were within the hazard throw zone is so minimal as to be insignificant. The U.S. National Renewable Energy Laboratory (NREL) states that wind turbine blade failures are "an extremely rare occurrence." NREL, Wind Power Reliability Research, available at https://www.nrel.gov/wind/reliability. A report for an Illinois wind project prepared by Persimia in 2024 indicates a blade failure rate of approximately 1 per 10,000 (10-4) turbines per year, of which only a part would result in actual blade throw instead of triggering rotor shutoff. Persimia, Panther Grove 2 Wind Energy Project Ice Shed and Blade Failure Risk Assessment, available at https://cms3.revize.com/revize/livingstocountyil/Documents/Department/Regional%20Planning%20%26%20Zoning/Panther%20Grove%202/PG2%20Exhibit%2025.pdf. A report for an Australian wind project prepared by DNV in 2022 indicates that at a distance of half the rotor diameter, the risk of a blade throw collision or tower collapse impact from a fixed location is less than 10-5 per year (1-in-100,000), and at a distance of either the turbine tip height or the maximum theoretical throw distance for an entire blade, the risk of blade throw collision or tower collapse impact is less than 10-6 per year (1-in-1 million). DNV, Valley of the Winds Wind Farm Blade Throw Assessment, available at https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-10461%2120220331T064949.710+GMT.

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100	4.9-62	Paragraph 3	LSPGC is required to operate and maintain equipment in a CPUC HFTD in accordance with a WMP, which is filed with the Office of Energy Infrastructure and Safety. The WMP is updated annually. The current LSPGC WMP does not address the LSPGC Collinsville Substation or 230 kV overhead segment as neither have been approved nor are in operation. Since the Proposed Project is not in a CPUC HFTD, it is uncertain whether LSPGC would include the Proposed Project in its WMP.	Please delete MM FIRE-1. Compliance with PUC § 8386 already addresses this impact and reduces it to less than significant, without need for further mitigation. As described in PUC § 8386, all electrical corporations are required to prepare and submit Wildfire Mitigation Plans and "Each electrical corporation shall annually prepare and submit a wildfire mitigation plan to the Wildfire Safety Division for review and approval." Since the Collinsville Substation and associated 230kV Transmission Line would be owned and operated by LSPGC, a regulated public utility, LSPGC would be required by State Code (PUC § 8386) to include the new substation and transmission line into the overall WMP. Therefore, because LSPGC is already obligated by state code, this mitigation measure is unnecessary.
101	4.9-63	Paragraph 2	Impacts would be reduced to less than significant levels for each individual project component through compliance with CPUC General Order 95, PRC vegetation clearance requirements, and California Fire Code standards, and through implementation of MM FIRE-1 which requires LSPGC and PG&E to prepare project-specific WMPs (refer to Section 4.9.13).	Please delete reference to MM FIRE-1. Conformance with PUC § 8386 already addresses this impact and reduces it to less than significant, without need for further mitigation. As described in PUC § 8386 all electrical corporations are required to prepare and submit Wildfire Mitigation Plans and "Each electrical corporation shall annually prepare and submit a wildfire mitigation plan to the Wildfire Safety Division for review and approval." Since the Collinsville Substation and associated 230kV Transmission Line would be owned and operated by LSPGC, a regulated public utility, LSPGC would be required by State Code (PUC § 8386) to include the new substation and transmission line into the overall WMP. Therefore, because LSPGC is already obligated by state code, this mitigation measure is unnecessary.
102	4.9-74	Paragraph 4	MM FIRE-1, required for the Proposed Project, would also apply to Alternative 1 230 kV overhead segment only and would ensure implementation of project-specific fire-safety protocols, maintenance of fire-suppression equipment, and coordination with local fire agencies during construction and operation (refer to Section 4.9.13). With implementation of MM FIRE-1 and compliance with applicable fire-prevention regulations, wildfire-related impacts would be less than significant with mitigation.	Please delete reference to MM FIRE-1. Conformance with PUC § 8386 already addresses this impact and reduces it to less than significant, without need for further mitigation. As described in PUC § 8386 all electrical corporations are required to prepare and submit Wildfire Mitigation Plans and "Each electrical corporation shall annually prepare and submit a wildfire mitigation plan to the Wildfire Safety Division for review and approval." Since the Collinsville Substation and associated 230kV Transmission Line would be owned and operated by LSPGC, a regulated public utility, LSPGC would be required by State Code (PUC § 8386) to include the new substation and transmission line into the overall WMP. Therefore, because LSPGC is already obligated by state code, this mitigation measure is unnecessary.
103	4.9-77	Paragraph 3	MM FIRE-1 required for the Proposed Project, would also apply to Alternative 2 230 kV overhead segment only and would ensure implementation of project-specific fire-safety protocols, maintenance of fire-suppression equipment, and coordination with local fire agencies during construction and operation (refer to Section 4.9.13). With implementation of MM FIRE-1 and compliance with applicable fire-prevention regulations, wildfire-related impacts would be less than significant with mitigation.	Please delete reference to MM FIRE-1. Conformance with PUC § 8386 already addresses this impact and reduces it to less than significant, without need for further mitigation. As described in PUC § 8386 all electrical corporations are required to prepare and submit Wildfire Mitigation Plans and "Each electrical corporation shall annually prepare and submit a wildfire mitigation plan to the Wildfire Safety Division for review and approval." Since the Collinsville Substation and associated 230kV Transmission Line would be owned and operated by LSPGC, a regulated public utility, LSPGC would be required by State Code (PUC § 8386) to include the new substation and transmission line into the overall WMP. Therefore, because LSPGC is already obligated by state code, this mitigation measure is unnecessary.

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104	4.9-80	Paragraph 4	MM FIRE-1 requires preparation and implementation of a project-specific fire-prevention and emergency-response plan, maintenance of fire-suppression equipment at all active work areas, establishment of fire-watch procedures during high-risk operations, and coordination with local fire-protection agencies (refer to Section 4.9.13). Implementation of MM FIRE-1 would reduce the potential for ignition and ensure prompt response capability in the unlikely event of a fire. The impact would be less than significant with mitigation and the risk would be the same as the Proposed Project.	Please delete reference to MM FIRE-1. Conformance with PUC § 8386 already addresses this impact and reduces it to less than significant, without need for further mitigation. As described in PUC § 8386 all electrical corporations are required to prepare and submit Wildfire Mitigation Plans and "Each electrical corporation shall annually prepare and submit a wildfire mitigation plan to the Wildfire Safety Division for review and approval." Since the Collinsville Substation and associated 230kV Transmission Line would be owned and operated by LSPGC, a regulated public utility, LSPGC would be required by State Code (PUC § 8386) to include the new substation and transmission line into the overall WMP. Therefore, because LSPGC is already obligated by state code, this mitigation measure is unnecessary.
4.11 Land Use and Planning				
105	4.11-45 to 4.11-54	See Comment Text	See Comment Text	The DEIR states that the location of the Collinsville Substation and 230 kV transmission line overhead segment within the Suisun Marsh Priority Habitat Management Area designated by the Delta Plan would result in a significant and unavoidable impact under Impact LU-2: "Would the Proposed Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?" This is incorrect. First, as stated in the DEIR and discussed above with respect to Agriculture, the Project "is not a covered action" subject to the Delta Plan and thus it cannot conflict with the Delta Plan. *See* DEIR pages 4.11-30; 4.11-49, fn. 4. Second, even if the Project was a covered action, the Delta Plan recognizes the need for energy infrastructure within the planning area. Specifically, Administrative Measure DP R19-01 of the Delta Plan directs DSC to "Identify Actions to Address Energy Development, Storage, and Distribution." The Delta Plan's regulatory policies similarly provide: "The council, in consultation with the State Energy Resources Conservation and Development Commission and the Public Utilities Commission, may incorporate into the Delta Plan additional actions to address the needs of Delta energy development, energy storage, and energy distribution." (Cal. Water Code § 85307(d)). According to DSC's website, the agency is behind schedule in fulfilling this obligation, and therefore the Delta Plan currently does not comprehensively account for energy infrastructure in its policies. However, it is clear that energy infrastructure development is not categorically inconsistent with the Delta Plan. Accordingly, any impacts related to conflict with the Delta Plan are less than significant. The DEIR also identifies the Proposed Project's conflict with the Suisun Marsh Protection Plan and Local Protection Program as potentially significant under Impact LU-2 absent mitigation. The DEIR's treatment of the Suisun Marsh Protection Plan and the Suisun Marsh Local Protection Program is internally inconsistent. The Hydrology section states that "[t]he Proposed Project is a regulatory action and is therefore not a covered action under the Suisun Marsh Protection Plan, as discussed further in Section 4.11: Land Use and Planning." DEIR pages 4.10-18-19. Because the Suisun Marsh Protection Plan does not appear to contain an exception for "regulatory actions" (as the Delta Plan does), we presume the statement on page 4.10-18-19 is in error and should be revised. Elsewhere in the Hydrology section, the DEIR instead correctly states "[t]he proposed LSPGC 230 kV submarine segment alignment is located within the Primary

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				Management Area, which triggers the requirement to obtain a Marsh Development Permit from the BCDC. The proposed LSPGC Collinsville Substation site and portion of the proposed PG&E 12 kV distribution line alignment are located in the Secondary Management area and is therefore subject to the Suisun Marsh LPP, as discussed in Section 4.11: Land Use and Planning." DEIR page 4.10-20. The Land Use and Planning section also indicates that the Proposed Project is covered by the Plans. With respect to impact LU-2, the DEIR concludes that "approximately 12 acres within the SMPP Secondary Management Area would still be permanently converted to utility uses and, therefore, the Proposed Project would conflict with policies outlined in the SMPP which are designed to reduce environmental effects, and would result in a significant impact." DEIR page 4.11-47. The DEIR fails to substantiate the assertion that the Proposed Project would conflict with policies in the SMPP or the Local Protection Plan. *See also* DEIR pages 4.11-52-54. The DEIR incorrectly states that "[t]he SMPP requires maintaining agricultural uses consistent with protection of the Marsh, such as grazing and grain production, in the Secondary Management Area; however, in the event such uses are infeasible, other compatible uses consistent with the Marsh are permitted." DEIR page 4.11-47, 4.11-50. This is incorrect because the SMPP does not "require" maintaining agricultural uses consistent with protection of the Marsh; rather, it says that such uses "*should* continue." *See also* Local Protection Plan Policy SM.P-8. "Should" is not synonymous with "must" or "required." "Should" allows flexibility to account for significant overriding considerations, such as the fact that CAISO and the CPUC has identified the Collinsville Project as necessary to "address critical reliability issues within the transmission system." DEIR page ES-3. Furthermore, the DEIR must assess the Project's consistency with the SMPP as a whole, not with a single policy. As described in the Land Use Plans and Policies Consistency Analysis contained in Attachment 5.11-B of the Proponent's Environmental Analysis, the Proposed Project is consistent with the majority of the relevant policies. Because the Proposed Project does not conflict with the Delta Plan, the Suisun Marsh Protection Plan, or the Suisun Marsh Local Protection Program, the LU-2 impact conclusion must be changed to less than significant without mitigation and the compensatory mitigation requirement of MM AG-1 must be removed because it is disproportionate to the impact of the Proposed Project (*See* 14 C.C.R. 15126.4 (mitigation measures must be consistent with constitutional nexus and proportionality requirements)).

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
106	4.11-50	Paragraph 2	As the pole footprints are small and interspersed, the 500 kV interconnection lines support structures and 12 kV distribution support poles would not conflict with restoration goals of the SMPP. Following restoration, the telecommunication yard area would be permanently converted to utility uses, which would conflict with policies outlined in the SMPP. The Project would be required to implement MM AG-1, which requires mitigation of permanent impacts on agricultural land through granting of an agricultural conservation easement at a 1.5:1 mitigation ratio consistent with the Solano County Agricultural Mitigation Program. Because the implementation of MM AG-1 would result in conservation of lands with similar value to those impacted by the Proposed Project, the Proposed Project would not conflict with SMPP requirements for maintaining agricultural uses. The impacts related to conflict with SMPP policies adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant with mitigation.	As discussed above, the SMPP does not "require" maintaining agricultural uses consistent with protection of the Marsh; rather, it says that such uses "*should* continue." *See also* Local Protection Plan Policy SM.P-8. "Should" is not synonymous with "must" or "required." "Should" allows flexibility to account for significant overriding considerations, such as the fact that CAISO and the CPUC have identified the Collinsville Project as necessary to "address critical reliability issues within the transmission system." DEIR page ES-3. Furthermore, the DEIR must assess the Project's consistency with the SMPP as a whole, not with a single policy. As described in the Land Use Plans and Policies Consistency Analysis contained in Attachment 5.11-B of the Proponent's Environmental Analysis, the Proposed Project is consistent with the majority of the relevant policies.
107	4.11-51	Paragraph 1	MM AG-1 which requires lands with similar agricultural or farmland value to those impacted by the Proposed Project to be conserved and would mitigate impacts related to the loss of agricultural lands; however, MM AG-1 would not address the restoration value of the converted lands. Since the impact would be caused by the location of the telecommunications yard within the Suisun Marsh Priority Habitat Restoration Area, the impact would be significant and unavoidable.	The location of the telecommunications yard within the Suisun Marsh Priority Habitat Restoration area would not conflict with the Delta Plan. First, as stated in the DEIR and discussed above with respect to Agriculture, the Project "is not a covered action" subject to the Delta Plan and thus it cannot conflict with the Delta Plan. *See* DEIR pages 4.11-30; 4.11-49, fn. 4. Second, even if the Project was a covered action, the Delta Plan recognizes the need for energy infrastructure within the planning area. Specifically, Administrative Measure DP R19-01 of the Delta Plan directs DSC to "Identify Actions to Address Energy Development, Storage, and Distribution." The Delta Plan's regulatory policies similarly provide: "The council, in consultation with the State Energy Resources Conservation and Development Commission and the Public Utilities Commission, may incorporate into the Delta Plan additional actions to address the needs of Delta energy development, energy storage, and energy distribution." (Cal. Water Code § 85307(d)). According to DSC's website, the agency is behind schedule in fulfilling this obligation, and therefore the Delta Plan currently does not comprehensively account for energy infrastructure in its policies. However, it is clear that energy infrastructure development is not categorically inconsistent with the Delta Plan. Accordingly, any impacts related to conflict with the Delta Plan are less than significant.
4.12 Mineral Resources				
108	4-12.8	Paragraph 3	LSPGC would obtain a lease agreement and a lease encumbrance permit from the CSLC ensuring LSPGC's access to the area during construction of the submarine segment cables; however, the overall availability of sand and gravel resources would be largely unaffected by construction activities for the submarine segment due to the size of the lease area and short duration of construction within the lease area, which would be approximately 4.5 months for cable installation.	LSPGC would obtain a lease agreement with CSLC and a consent agreement with the current lease holder, rather than a lease encumbrance permit.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
109	4-12.9	Paragraph 4	Operation of the LSPGC 230 kV submarine segment would permanently restrict dredging for sand mining within 75 feet of the outer edge of the cables on either side, which would restrict minerals extraction within approximately 44 acres of the Suisun Associates sand and gravel dredging operation (Lease No. 7781) in the Suisun Bay. LSPGC has completed a scour analysis along the proposed submarine segment path and has defined the depth of the cable at approximately 6 to 15 feet to account for USACE maintenance dredging activities (Coast and Harbor Engineering 2025). Additionally, the CSLC has an existing lease for sand and gravel mining in the area, and CSLC requires LSPGC to coordinate with the entities who hold the sand and gravel mining lease to resolve conflicts prior to granting an easement to LSPGC within the existing sand and gravel mining lease. However, even after coordination, the dredging operator Suisun Associates has indicated that it would not continue sand and gravel mining operations in an approximately 52-acre area of the total 886-acre lease area after cable installation due to risk of cable strike (J. Niven and S. Heim, "Re: *ext* Collinsville Progress Meeting Agenda 7/17/25," July 23, 2025). Therefore, the impact on the availability of mineral resources would be significant. MM MIN-1 (refer to Section 4.12.13) requires LSPGC to design the submarine cable to avoid impacts on proposed sand and gravel mining operations to the extent feasible and coordinate with individuals with sand and gravel mining leases in the area to minimize impacts on the sand and gravel mining operations. While MM MIN-1 would reduce the impact on sand and gravel mining, the presence of the submarine cable would still restrict areas available for mining and the resulting impact on the availability of mineral resources would be significant and unavoidable.	The temporary restriction of sand mining operations during the in-service lifespan of the submarine cables would not represent a permanent loss of mineral resources of regional value given that this area would be available for mining once the commercial and operational viability of the submarine cables has concluded. Furthermore, the temporary loss of 52 acres of available mining would not amount to a significant impact to the overall local/regional availability of sand and gravel given the remaining 834 acres of the lease area would still be available to mine. This represents less than 6% of Lease No. 7781 and under 2% of the combined Central San Fransico, Suisun Bay, and Private Middle Ground Lease areas. Within this lease area, there is an approximate volume of 59,522,600 cubic yards available for mining, while only a volume of 2,350,000 cubic yard is proposed to be mined, indicating that removal of this acreage from the available mining area would not result in a significant deterioration of ongoing activities. In addition, this area of Lease No. 7781 has not been historically mined as CSLC historical records indicate. Suisun Associates' business or operational decision not to mine around the cable is not substantial evidence of the loss of availability of a known mineral resource of value to the region and the residents of the state.
110	4.12-11	Paragraph 1	The resulting impact on a locally important mineral resource recovery site would be significant.	The sand within Lease No. 7781 is not delineated in any general plan, specific plan, or other land use plans as a locally important mineral resource, as stated in the San Francisco Bay and Delta Sand Mining Draft Supplemental Environmental Impact Report dated August 2025. See page 3.3-10 of the SEIR ("[N]one of the plans identify mineral resources within the water areas where sand mining would be conducted."). Because no general plan, specific plan, or other land use plan delineates the sand as a locally important mineral resource, it is not possible for there to be a significant impact under this criterion.
111	4.12-12	Paragraph 1	The Proposed Project would impact approximately 52 acres of the mineral lease area (see impact MIN-1), which would contribute considerably to the cumulative impact on availability of sand and gravel mining resources.	The temporary loss of 52 acres of available mining would not 'contribute considerably' to the cumulative impact because this is not a significant impact to the overall local/regional availability of sand and gravel given the remaining 834 acres would still be available to mine.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
112	4.12-19	Paragraph 1	The loss of access to 38 acres of the sand and mining lease area would result in loss of availability of a known mineral resource of value to the region and a locally important mineral resource, which would be a significant impact. MM MIN-1 (refer to Section 4.12.13) would be implemented and requires LSPGC to design the submarine cable to avoid impacts on proposed sand and gravel mining operations to the extent feasible and coordinate with individuals with sand and gravel mining leases in the area to minimize impacts on the sand and gravel mining operations. While MM MIN-1 would reduce the impact on sand and gravel mining, and would result in an overall reduction in the impact to the sand and gravel mining lease, the presence of the Alternative 5 submarine cable would still restrict areas available for mining by approximately 38 acres and the impact from loss of availability of known mineral resource of value to the region and locally important mineral resource would remain be significant and unavoidable.	The temporary restriction of sand mining operations during the in-service lifespan of the submarine cables would not represent a permanent loss of the mineral resources given that this area would be available for mining once the commercial and operational viability of the submarine cables has concluded. Furthermore, the temporary loss of 38 acres of available mining would not amount to a significant impact to the overall local/regional availability of sand and gravel given the remaining acres would still be available to mine. In addition, this area of Lease No. 7781 has not been historically mined as CSLC historical records indicate. Suisun Associates' business or operational decision not to mine around the cable is not substantial evidence of the loss of availability of a known mineral resource of value to the region and the residents of the state.
4.13 Noise				
113	4.13-15	Entire page	Solano County Noise Ordinance	The "Solano County Noise Ordinance (Solano County 2017)" was published as a draft document but never adopted into the Solano County Code. Please remove all references to this ordinance. The applicable noise threshold in Solano County for purposes of construction is found in the Solano County General Plan's Public Health and Safety Element, Policy HS.I-67: "Require noise mitigation to reduce construction and other short-term noise impacts as a condition of approval for development projects by applying the performance standards outlined in **Table HS-5**." The noise analysis should reference this threshold when assessing whether Project construction will exceed local noise ordinances in Solano County. Please correct all construction noise discussion in this chapter. The applicable noise threshold in Solano County for purposes of Project operation is found in Section 28.70.10.B.1 of the County Code: "All uses of land and structures shall be conducted in a manner, and provide adequate controls and operational management to prevent... Noise that exceeds 65 dBA at any property line." The noise analysis should reference this threshold when assessing whether Project operation will exceed local noise ordinances in Solano County. Please correct all operational noise discussion in this chapter.
114	4.13-26	Paragraph 2, Solano County	See Appendix I for further detailed analysis of noise levels that would result at NR1 from the Proposed Project.	Portions of this appendix (heading tables in the supplementary portion provided by the CPUC) are formatted incorrectly. Letters in table headings appear to be missing or formatted as the same color as the heading background making them impossible to read. The formatting of this appendix should be fixed so that all characters are legible.
115	4.13-31	Paragraph 1	The Solano County Noise ordinance permits construction noise to exceed the exterior noise standard of 55 dBA by 20 dBA (75 dBA total) when construction occurs during the hours of 9 a.m. to 4 p.m.	The "Solano County Noise Ordinance (Solano County 2017)" was published as a draft document but never adopted into the Solano County Code. Please remove all references to this ordinance. The applicable noise threshold in Solano County for purposes of construction is found in the Solano County General Plan's Public Health and Safety Element, Policy HS.I-67: "Require noise mitigation to reduce construction and other short-term noise impacts as a condition of approval for development projects by applying the performance standards outlined in **Table HS-5**." The noise analysis should reference this threshold when assessing whether Project construction will exceed local noise ordinances in Solano County. DEIR Table 4.13-14 shows construction noise levels of up to 68 dBA at the nearest sensitive receptor, which is below the 70 dBA daytime threshold in Solano County. Accordingly, daytime construction noise impacts would be less than significant.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
116	4.13-31	Paragraph 1	The impact from exceedance of the Solano County construction noise standards (construction before 9 a.m. or after 4 p.m.) and exceedance of the daytime noise standard for residential properties would remain significant and unavoidable.	With the exception of the 230 kV submarine segment, any additional night work would be limited to above-grade construction and testing and commissioning at the Collinsville Substation. Appendix J of the DEIR identifies a 57 dBA noise level for aboveground construction at the Collinsville substation at NR 2. LSP's noise report did not calculate commissioning and testing noise at NR 2, but commissioning and testing noise at NR 1 is identified as 62 dBA; such noise would be lower at NR 2 (estimated at 55.5 dBA). Accordingly, nighttime construction noise levels would be below the 65 dBA nighttime threshold in Solano County at the nearest occupied sensitive receptor. DEIR Table 4.13-14 shows construction noise levels of up to 68 dBA at the nearest sensitive receptor, which is below the 70 dBA daytime threshold in Solano County. Accordingly, daytime and nighttime construction noise impacts would be less than significant.
117	4.13-31	Paragraph 3	LSPGC has proposed construction at the substation and 230 kV overhead segment for up to 30 days at night to meet the construction schedule. Nighttime construction activities would conflict with the Solano County construction hours (9 a.m. to 4 p.m.) and noise levels generated at the nearest receptor would exceed the nighttime noise standard of 45 dBA Leq at NR2 in Solano County as summarized in Table 4.13-14.	With the exception of the 230 kV submarine segment, any additional night work would be limited to above-grade construction and testing and commissioning at the Collinsville Substation. Appendix J of the DEIR identifies a 57 dBA noise level for aboveground construction at the Collinsville substation at NR 2. LSP's noise report did not calculate commissioning and testing noise at NR 2, but commissioning and testing noise at NR 1 is identified as 62 dBA; such noise would be lower at NR 2 (estimated at 55.5 dBA). Accordingly, nighttime construction noise levels would be below the 65 dBA nighttime threshold in Solano County at the nearest occupied sensitive receptor. Accordingly, nighttime construction noise impacts would be less than significant.
118	4.13-31	Paragraph 2	MM NOI-2 requires the installation of sound barriers (e.g., blankets attached to the substation fence or other acoustic barrier) to reduce noise levels at sensitive receptors.	MM NOI-2 is no longer necessary, as the Project would not create potentially significant impacts to noise.
119	4.13-32	Paragraph 2	Table 4.13-21, below, lists the nearest sensitive receptor, distance to the receptor, and noise levels that would result from Proposed Project construction at the nearest receptor during construction at each transposition site.	All table references in this document need to be reviewed and revised for accuracy. Many of the references point to the incorrect tables.
120	4.13-33	Paragraph 1	The Solano County Noise ordinance permits construction noise to exceed the exterior noise standard of 55 dBA when construction occurs during the hours of 9 a.m. to 4 p.m. The ordinance allows for a 20 dB exceedance of the exterior noise standard during this timeframe, which would be 75 dBA.	DEIR Table 4.13-14 shows construction noise levels of up to 68 dBA at the nearest sensitive receptor, which is below the 70 dBA daytime threshold in Solano County. Accordingly, daytime construction noise impacts would be less than significant.
121	4.13-50	Paragraph 3	All other project components would be constructed as described for the Proposed Project and significant unavoidable impacts related to construction of the substation would still occur.	See previous comments that the Proposed Project would not create potentially significant noise impacts.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
122	4.13-52	Paragraph 1	Noise generated from construction of the Alternative 4 230 kV submarine cable would be approximately 51 dBA at the nearest receptor. 230 kV overhead segment construction would generate noise levels between 56 dBA (without helicopters) and 61 dBA (with helicopters) and would exceed the Solano County 55 dBA daytime noise standard. The impact from generation of temporary noise in excess of local standards would be significant. MM NOI-1 restricts the use of helicopters to the hours of 9 a.m. to 4 p.m., It is not feasible to limit ground-based construction of the 230 kV overhead segment to the hours of 9 a.m. to 4 p.m. without extending the construction schedule, which would not meet project objectives. Even with implementation of MM NOI-1, construction noise from ground-based equipment would still exceed the 55 dBA threshold because MM NOI-1 does not limit the use of ground-based equipment. The impact from generation of noise during construction of the 230 kV overhead segment would remain significant and unavoidable.	The correct daytime construction noise threshold in Solano County is 70 dBA. Accordingly, daytime construction noise impacts would be less than significant.
123	4.13-55	Paragraph 1	Alternative 6a/6b would result in noise levels exceeding the 55 dBA daytime standard outside of the permitted hours for temporary construction noise exceeding the standard at NR1, which would be a significant impact. Limiting construction to the hours of 9 a.m. to 4 p.m., consistent with the Solano County zoning code, is not feasible as the shortened hours of construction would extend the construction duration and would not meet project objectives for the in service date. As a result, the Alternative 6a/6b construction would generate noise in excess of noise standards in the local general plan and the impact would remain significant and unavoidable.	The correct daytime construction noise threshold in Solano County is 70 dBA. Accordingly, daytime construction noise impacts would be less than significant.
124	4.13-56	Paragraph 3	MM NOI-2	MM NOI-2 is no longer necessary, as the Project would not create potentially significant impacts to noise.
125	4.13-56	Paragraph 4	MM NOI-4	MM NOI-4 is no longer necessary, as the Project would not create potentially significant impacts to noise.
4.14 Population and Housing				
126	4.14-8	Paragraph 2	“The Proposed Project would not serve new users or expand service areas and would not indirectly induce population growth.”	This could be misinterpreted as the Proposed Project may directly induce population growth. The sentence should be clarified: “The Proposed Project would not serve new users or expand service areas and would not directly or indirectly induce population growth.”
4.15 Public Services				
127	4.15-1	Paragraph 2	County-level responses and planning regarding emergency services in the Proposed Project vicinity are coordinated by the Solano County Office of Emergency Services (OES), Contra Costa Office of the Sheriff Emergency Services Division, and Sacramento County Office of Emergency Service (SacOES).	Alameda County should be addressed as well.
128	4.15-4	Paragraph 2	No police services are required for the Sacramento-San Joaquin River Delta.	Revise this statement to acknowledge that Sacramento County, Solano County, and Contra Costa County sheriffs have marine patrol departments. This should also be addressed in the discussion of Alternative 5.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
129	4.15-17	Paragraph 3	"The PG&E project components would introduce long-term fire risk due to the overhead electrical lines, which would increase wildfire ignition risk. Electrical transmission lines in California are required to comply with fire break clearance requirements in GO 95, PRC section 4292 and title 14, section 1254 of the CCR. Accordingly, LSPGC would need to trim or remove flammable vegetation in the area surrounding the Proposed Project facilities."	This statement is located under *PG&E Project Components*. LSPGC should not be responsible for trimming or removing flammable vegetation surrounding PG&E project components.
130	4.15-20	Paragraph 2	Construction of the proposed 230 kV underground segment and telecommunication lines would not occur in proximity to any schools or hospitals and would not affect any schools or hospitals.	The telecommunications lines would be constructed directly adjacent to Saint Peter Martyr School. This discussion should be updated to reflect the presence of the school and how sensitive noise receptor impacts would be less than significant due to APM PUB-1. APM PUB-1: School Access. Construction of the proposed LSPGC Telecommunication Line within 320 feet of Saint Peter Martyr School would be coordinated with the school's administration and conducted during the summer months, at a time when school is out of session, in order to minimize disruptions to school access. With implementation of APM PUB-1, impacts to school operation would be less than significant.
4.16 Recreation				
131	4.16-1	Paragraph 2	Recreational facilities in the vicinity of the Proposed Project are shown on Figure 4.16-1, Figure 4.16-2, and listed in Table 4.16-1	The Vaca Dixon and Tesla substations are not included in this table. Include recreation areas and facilities in the vicinity of these substations or describe in the Recreation section why recreation areas were not included or for these substations.
132	4.16-4, 4.16-5	Table 4.16-1, Paragraph 2	"The Sacramento-San Joaquin River Delta (Delta) spans 738,000 acres throughout Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties (DPC, n.d.)."	Table 4.16-1 identifies the Delta Waterways facility size as 85,000 acres, but paragraph 2 of page 4.16-5 states that the Delta spans 738,000 acres. The size of the Delta is unclear.
133	4.16-10	Paragraph 6	Appendix G of the CEQA Guidelines ask whether a project would:	Appendix G does not ask all five of these questions, just the first two. The last three questions are suggested additional CEQA impact questions from the CPUC's PEA Guidelines. As written, this statement is inaccurate. This should be checked and revised globally to properly attribute the source of the questions.
134	4.16-16	Paragraph 3	While the barge would be larger than typical boats utilizing the Delta, the barge would be mobile and the presence of the barge would be temporary, therefore the barge and construction activities would be relatively consistent with the existing scenic environment of the Delta and is unlikely to result in impacts to the scenic quality experienced by recreationalists.	Previously, it was stated that the barge would be a similar size to other vessels: "The barge would not reduce or prevent access to the Delta as the barge would be similar to other vessels moving through the waterway" (Page 4.16-14). Revise the language for consistency throughout the section to indicate that barges would be of similar size to other vessels in the Delta.
4.17 Transportation				
135	4.17-51	Paragraph 2	Helicopters are anticipated to support the construction of the Collinsville Substation	Helicopter use to support substation construction is not anticipated. References to helicopter use at the substation site should be removed.
136	4.17-51	Paragraph 2, last sentence	These activities may include transportation of construction workers, delivery of equipment and materials to temporary construction areas, refueling at local airports, hardware installation, and/or installation/removal of overhead conductor/cable.	This section of the EIR refers to the Collinsville Substation and the 230 kV Transmission Line. These facilities do not exist yet; therefore, there is no conductor to remove and the word "remove" should be eliminated from the sentence.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
137	4.17-52	Paragraph 2	APM HAZ-1 requires that LSPGC comply with all applicable FAA regulations regarding air traffic within 2 miles of the LSPGC project components in Solano County and the City of Pittsburg	Remove City of Pittsburg from this paragraph as helicopter use in the City of Pittsburg is not anticipated.
138	4.17-56	Paragraph 2	and 230 kV transmission line on private property or within approved easements and would be designed in accordance with all relevant County roadway design standards.	Permanent roads associated with the 230 kV line are not planned. Remove references to these roads.
139	4.17-85	MM TRA-3	to the construction standard of the affected local jurisdiction	MM TRA-3 requires roadways to be rebuilt to a construction standard that could far exceed "existing conditions." CEQA Guidelines 15126.4(a)(4) restates constitutional law prohibiting mitigation that is disproportionate to the impacts of a project, which in turn prohibits mitigation requiring the Proposed Project to bring all roadways in the area to the latest standard; mitigation can only require the Proposed Project to return the roads to pre-construction conditions. Please revise MM TRA-3 to require that roadways be restored to pre-construction conditions.
4.18 Tribal Cultural Resources				
140	4.18-2	Paragraph 1	The tallest structure would be the microwave tower up to 200 feet tall.	As noted in the Project Description, the tallest structure would be up to 199 feet tall, not 200 feet tall.
141	4.18-19 to 4.18-21	Impact TCR-1	The DEIR concludes that LSPGC and cumulative impacts would be significant and unavoidable.	Please see the comment on pages 4.5-33 to 4.5-37 above. For the reasons articulated there, the record supports a “less than significant with mitigation” conclusion for this alternative as well, and the Final EIR should be revised to clarify that a “significant and unavoidable” conclusion is a highly conservative approach.
4.20 Wildfire				
142	4.20-20	Paragraph 5	The following policies from the Public Health and Safety Chapter of the Solano County General Plan are relevant to the Proposed Project:	All policies need to be reviewed for accuracy and applicability to the wildfire section. The policy numbering and language do not match the 2008 General Plan language. For example, Policy HS.P-20 is related to seismic hazards, not fire.
143	4.20-39	Paragraph 3	“The LSPGC 230 kV overhead segment is also within a hazard throw zone for a wind turbine within the Solano 4 Wind Project, and there is a reasonably foreseeable potential for a turbine to dislodge and strike the conductor which could create an electrical arc that could potentially ignite a wildfire.”	For the reasons stated above in our comments on the hazards section of the DEIR, the risk of blade throw striking the project’s 230kV line and causing a fire is less than significant.
144	4.20-57	Paragraph 6	“The LSPGC 230 kV submarine segment would be directly buried in the riverbed of the Sacramento River and would not be on land within an SRA or land classified as a very high FHSZ. This differs from the Proposed Project, which includes overhead 230 kV transmission facilities that traverse areas mapped as high and very high FHSZs; therefore, Alternative 5 would avoid placement of new electrical infrastructure within mapped wildfire hazard zones. No fire risk is associated with areas under water.”	This is incorrect. Alternative 5 only reroutes the submarine cable, there is no change in the overhead facilities.
Chapter 5 Other CEQA Considerations				
145	5-5	Paragraph 3	As such there is a reasonably foreseeable potential for a turbine to dislodge and contact the conductor or anyone working in the area, which would result in irreversible damage.	This is not a reasonably foreseeable impact. Please see comments in the Hazards section.
146	5-5	Paragraph 2	As such there is a reasonably foreseeable potential for a turbine to dislodge and contact the conductor or anyone working in the area, which would result in irreversible damage.	This is not a reasonably foreseeable impact. Please see comments in the Hazards section.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
147	5-6	Second full paragraph	No mitigation can feasibly avoid special status avian species perching on the LSTs, as the impact would be a result of the LST structure form and location within a wind farm.	Recommend listing the special status avian species that could perch and/or nest on LST, as not all of the special status species listed in Table 4.4-4 exhibit such behavior.
148	5-6	Paragraph 1	MM AQ-2 requires use of BAAQMD recommended fugitive dust control BMPs. While the use of fugitive dust control BMPs would reduce fugitive dust emissions, the emissions would still exceed BAAQMD thresholds during Year 2 and the impact would be significant and unavoidable	Section 4.3 does not report an exceedance of PM emissions in the BAAQMD. This section should be revised to be consistent with the impact conclusions in Section 4.3. The BAAQMD requires all feasible BMPs to be implemented.
149	5-8	First full paragraph	Additionally, the operation of the 230 kV transmission lines could create the potential for an impact to the larger sand and gravel mining operation if the location of the buried 230 kV submarine segment was not properly communicated as the sand and gravel mining operation would need to avoid the buried cables.	Recommend removal of this statement because the Project's USACE permit will require an as-built survey of the submarine cables that must be submitted to the USACE. The as-built survey will likely be shared with Suisun Associates.

Collinsville 500/230 Kilovolt Substation Project
Draft Environmental Impact Report (DEIR) Grammar/Editorial Comments

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
Executive Summary				
1	ES-5	First paragraph		Insert “Impact” between “Environmental” and “Analysis”.
2	ES-31	First paragraph		Insert “Impact” between “Environmental” and “Analysis”.
1. Introduction				
3	1-1	First paragraph	certificate of public convenience and necessity	Ccertificate of Ppublic Cconvenience and Nnecessity
4	1-1	Second paragraph, first sentence	“The California Independent System Operators (CAISO) 2021-2022 Transmission Plan…”	“The California Independent System Operator’s (CAISO) 2021-2022 Transmission Plan…” Added ‘ to “Operators”
5	1-1	Second paragraph, last sentence	“The CAISO 2024-2025 Transmission Plan reaffirmed the need for the Proposed Project and found the Proposed Project would also integrate wind energy from out of state as well as support increased load in the Bay Area(CAISO 2025).”	“The CAISO 2024-2025 Transmission Plan reaffirmed the need for the Proposed Project and found the Proposed Project would also integrate wind energy from out of state as well as support increased load in the Bay Area (CAISO 2025).”
6	1-2	First full paragraph, first sentence	In April 2024, 2023-2024 Transmission Plan was approved by CAISO, and it identified the Collinsville 230 kV Reactor Project as a needed near-term policy driven upgrade to the proposed Collinsville-Pittsburg 230 kV transmission lines.	Insert “the” before “2023-2024 Transmission Plan”.
7	1-2	First full paragraph, third sentence	As such, LSPGC included the components associated with the Collinsville 230 kV Reactor Project as part of the Collinsville Substation 500/230 kV Substation Project’s PEA.	As such, LSPGC included the components associated with the Collinsville 230 kV Reactor Project as part of the Collinsville ~~Substation~~ 500/230 kV Substation Project’s PEA.
8	1-3	Section 1.1.1, last sentence	The locations of the Proposed Project is shown on maps provided in Section 2 and Appendix A.	The locations of the Proposed Project are ~~is~~ shown on maps provided in Section 2 and Appendix A.
9	1-4	Bullet #8	“• Meet the Proposed Project need in a safe, cost-effective manner and consistent with • LSPGC’s cost containment agreement in the Approved Project Sponsor Agreement.”	There is a bullet on the second line of this objective that should be removed.
10	1-5	Paragraph 1 Bullet #2	“Reliably and economically supporting increased energy demand in the greater Bay Area”	The second bullet in this list is missing a period at the end.
11	1-6	Section 1.2.2		Replace “Geology and Soils” with “Geology, Soils, and Paleontological Resources”.
12	1-8	Section 1.4.1, first paragraph, last sentence	The Proposed Project’s Scoping Report is available at the following CPUC webpage:	The Proposed Project’s Scoping Report is available in Appendix B and at the following CPUC webpage:
13	1-8	Paragraph 3	“The CPUC mailed approximately notices to individuals, organizations, elected officials, tribes, and federal, state, and local agencies during scoping.”	This sentence is missing a word after the word ‘approximately’
14	1-8	Paragraph 3	“The agencies and tribes that were contacted during the scoping process are documented in the Scoping Report (Appendix B)”	This sentence is missing a period at the end.
15	1-8	First paragraph after “Scoping Meeting”	In addition to soliciting written scoping comments through public notifications, the CPUC held a public scoping meetings to solicit comments for consideration in determining the scope of the EIR.	In addition to soliciting written scoping comments through public notifications, the CPUC held a public scoping meeting~~s~~ to solicit comments for consideration in determining the scope of the EIR.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
16	1-9	Address listed in Section 1.4.2	"c/o Panorama Environnemental, Inc."	"c/o Panorama ~~Environnemental~~Environmental, Inc."
17	1-9	1.4.2 Comments on the EIR	"An public workshop on the EIR will be held:"	Should be "A public workshop…"
18	1-9	Section 1.5.1		This DEIR does not include a Glossary section.
19	1-10	Sixth bullet		This DEIR does not include a Section 8
2. Project Description				
20	2-1	Paragraph 1	"In addition, this section also identifies anticipated permits and approvals that - would be required to implement the project as well as measures intended to address potential environmental impacts that are incorporated into the Proposed Project, including LSPGC applicant proposed measures (APMs) and PG&E construction measures (CMs).	APM and CM were already defined in 1.5.1 CEQA Process and Lead Agency: Section 8 Mitigation Monitoring and Reporting Plan.
21	2-2	Section 2.2.1, last paragraph	A schematic diagram of these existing system transmission system components is provided in Figure 2-3.	A schematic line diagram of these existing ~~system~~ transmission system components is provided in Figure 2-3.
22	2-10	First full paragraph, second sentence	As required by 29 CFR 1910.303(e) (part of OSHA's General Industry Electrical Standards) caution signage must be posted at substations (as well as mental-enclosed switchgear, transformers, pull boxes and connection boxes) to notify the public of potential electrical dangers.	As required by 29 CFR 1910.303(e) (part of OSHA's General Industry Electrical Standards) caution signage must be posted at substations (as well as me~~n~~tal-enclosed switchgear, transformers, pull boxes and connection boxes) to notify the public of potential electrical dangers.
23	2-10	Second full paragraph	The facility would not require 24-hour illumination. Motion detection photocell lighting would be used to provide safety lighting at a level sufficient for safe entry and exit of the substation and control equipment enclosure.	The facility would not require 24-hour exterior illumination. Motion detection photocell lighting would be used to provide safety lighting at a level sufficient for safe entry and exit of the substation and control equipment enclosures.
24	2-14	Figure 2-8		This figure should be moved to Section 2.3.2, where it is first referenced.
25	2-24	Paragraph 5	"From the overhead riser structures, a two OPGW would be installed along the overhead segment above the primary conductors until reaching the Collinsville Substation, completing the second telecommunication path."	There is an extra "a" after "structures,"
26	2-24	First full paragraph, third sentence		Replace Figure 2-11 with Figure 2-12.
27	2-24	Paragraph 5, final sentence	From the overhead riser structures, a two OPGW would be installed along the overhead segment above the primary conductors until reaching the Collinsville Substation, completing the second telecommunication path.	The is a word missing in this sentence. Revise for accuracy.
28	2-25	Section 2.3.2, second paragraph	A drawing representing the design typical of the LSTs and three-pole TSP structures anticipated to be used for the proposed PG&E 500 kV interconnection lines is provided as Figure 2-15 and Figure 2-16, and the typical dimensions associated with these structures are provided in Table 2-2.	~~A d~~Drawings representing the design typical of the LSTs and three-pole TSP structures anticipated to be used for the proposed PG&E 500 kV interconnection lines are ~~is~~ provided as Figure 2-15 and Figure 2-16, respectively, and the typical dimensions associated with these structures are provided in Table 2-2.
29	2-26	First paragraph, third bullet	• **Transposition Site C:** Remove two existing lattice steel poles (LSP) and replace two adjacent existing lattice steel towers (LST) with two three-pole TSPs. Transposition site C is in unincorporated Solano County north of Montezuma Hills Road and south of Birds Landing Road.	**Transposition Site C:** Remove two existing lattice steel poles (LSP) and replace two adjacent existing ~~lattice steel towers (~~LST~~)~~ with two three-pole TSPs. Transposition site C is in unincorporated Solano County north of Montezuma Hills Road and south of Birds Landing Road.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
30	2-30	Second paragraph	The telecommunication yard fence would be similar to the proposed Collinsville Substation fence and is expected to be an approximately 10-foot-tall wall or expanded metal fence barrier with top guard constructed of fiber-reinforce polymer.	The telecommunication yard fence would be similar to the proposed Collinsville Substation fence and is expected to be an approximately 10-foot-tall wall or expanded metal fence barrier with top guard constructed of fiber-reinforced polymer.
31	2-31	Table 2-2		Not applicable is abbreviated as NA and n/a throughout the table. Based on the note below the table, all of the "n/a" should be NA.
32	2-32	Second paragraph and Table 2-3		Since the second paragraph and Table 2-3 pertain to all three of the PG&E substations, I recommend moving these to before the "PG&E Pittsburg Substation" section above.
33	2-36	Paragraph 5	"Helicopter use is anticipated to support the construction or replacement of proposed PG&E 500 kV transpositions structures at PG&E transposition sites C and D."	"Transpositions" should be singular, not plural.
34	2-37	Paragraph 1		Insert a line break after "Appendix A: Detailed Route Maps."
35	2-39	Surveying and Staking	Any sensitive biological, cultural, paleontological, or hydrological resources, where appropriate, would also be clearly marked to restrict construction activities and equipment from entering such areas.	Any restricted areas containing known sensitive environmental ~~biological, cultural, paleontological, or hydrological resources~~, ~~where appropriate,~~ would also be clearly marked to restrict construction activities and equipment from entering such areas, where appropriate.
36	2-39	Utilities Identification and Marking	Prior to initiation of construction in any given area, all utility companies with utilities located within or crossing the Proposed Project ROW would be notified and directed to locate and mark existing underground facilities along the entire length of the Proposed Project's current construction area. No subsurface work would be conducted that would conflict with (i.e., directly impact or compromise the integrity of) a buried utility.	Prior to initiation of construction in any given area, all utility companies with utilities located within the Project's footprint of disturbance ~~or crossing the Proposed Project ROW~~ would be notified and directed to locate and mark existing underground facilities in the vicinity of the construction area. ~~along the entire length of the Proposed Project's current construction area~~. No subsurface work would be conducted that would conflict with (i.e., directly impact or compromise the integrity of) a buried utility, unless the conflict has been approved by the utility owner.
37	2-40	First full paragraph	The Transbay Cable exits the water and connects to PG&E's existing Pittsburg Substation. The proposed underground segment of the LSPGC 230 kV transmission line will cross under the existing underground Transbay Cable near PG&E's existing Pittsburg Substation. LSPGC would coordinate with Trans Bay Cable LLC/NextEra Energy Transmission, LLC, to facilitate this crossing and any requirements that the utility may require.	At the southern shore of the Delta, the Transbay Cable exits the Delta ~~water~~ and connects to PG&E's existing Pittsburg Substation. The proposed underground segment of the LSPGC 230 kV transmission line will cross under the existing underground Transbay Cable near PG&E's existing Pittsburg Substation. LSPGC would coordinate with Trans Bay Cable LLC/NextEra Energy Transmission, LLC, to facilitate this crossing and address any requirements ~~that the utility may require~~.
38	2-42	Paragraph 1	All spoils that are not usable and/or contaminated would be sent to a properly licensed landfill facility.	All spoils that are not usable, including any ~~and/or~~ contaminated soil, would be sent to a properly licensed landfill facility.
39	2-47	Paragraph 1	"North of the shoreline, a long-reach excavator would dig trenches on land for approximately 270 feet. cable path of any buried or submerged obstructions and achieve the target burial depth. North of the shoreline, a long-reach excavator would dig trenches on land for approximately 270 feet."	After "270 feet.", there is an accidental repeat of the previous 2 lines of text.
40	2-47	First full paragraph		Replace Section 2.5.7 with Section 2.5.9.
41	2-47	Paragraph 5	"An approximately two 2-inch-diameter conduit would also be included to house ground-continuity conductor, and multiple 2-inch-diameter conduits would also be included to house the communication fibers."	There is an extra "two" before "2".
42	2-50	Paragraph 2	In the event that the required burial depth cannot be met using these methods, then cable protection measures, such as concrete mattresses or rock over, may be installed using a barge and crane would be used to install the protective cover.	In the event that the required burial depth cannot be met using these methods, then cable protection measures, such as concrete mattresses and/or rock over, may be installed above these segments of cable using a barge and crane ~~would be used to install the protective cover.~~

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
43	2-50	Paragraph 4	Prior to the installation of the submarine segment, LSPGC would coordinate with USACE and the *U.S. Coast Guard* (USCG), incorporate necessary design specifications, and obtain applicable permits and approvals to ensure the installation work does not conflict with the navigational channels.	Prior to the installation of the submarine segment, LSPGC would coordinate with USACE and the *U.S. Coast Guard* (USCG), incorporate necessary design specifications, and obtain applicable permits and approvals to ensure the installation work does not conflict with the use of the federal navigational channels to be crossed.
44	2-51	Paragraph 1	As described in Section 4.12: Mineral Resources, the submarine segment cables of the proposed LSPGC 230 kV transmission line would cross Lind Marine, Hanson Aggregates, and Suisun Associates (Suisun Associates) active dredging operations in Suisun Bay.	As described in Section 4.12: Mineral Resources, the submarine cable corridor ~~segment cables~~ of the proposed LSPGC 230 kV transmission line would cross Lind Marine, Hanson Aggregates, and Suisun Associates (Suisun Associates) active dredging operations in Suisun Bay.
45	2-51	Paragraph 2	In addition, fencing driveways and gates would be installed (some on a temporary basis) to provide site security during construction activities.	In addition, fencing, driveways, and gates would be installed (some on a temporary basis) to provide site security during construction activities.
46	2-52	First full paragraph	A proposed stormwater detention basin at the southern boundary of the proposed LSPGC Collinsville Substation has been included in the preliminary design, as depicted in Figure 2-6 and Appendix A: Detailed Route Maps.	Since the proposed stormwater basin is not labeled or clearly noticeable in the Appendix A maps, I suggest that the reference to Appendix A be deleted.
47	2-85	Table 2-11, Solano County row	Construction of structures within the Collinsville Substation	The other triggers in this table are generic, while this one is Proposed Project-specific. This should be revised to indicate the actual trigger (i.e., construction of structures not exempted by California Building Code section 105.2).
48	2-90 to 2-91	Table 2-12	APM BIO-18: In-Water Work Window. To minimize potential impacts to fish during in-water work (i.e., disturbance to the Delta substrate or placement of construction materials below the waterline) both from general disturbance or from the potential introduction of deleterious materials that may disrupt both migratory events and cause impacts to species during key times of year when more sensitive life stages (i.e., eggs and fry) are present, a work window of July 1 to November 30 would be enacted.	APM BIO-18: In-Water Work Window. To minimize potential impacts to fish during in-water work (i.e., disturbance to the Delta substrate or placement of construction materials below the waterline) ~~both~~ from general disturbance or from the potential introduction of deleterious materials that may disrupt ~~both~~ migratory events and/or ~~and~~ cause impacts to species during key times of year when more sensitive life stages (i.e., eggs and fry) are present, a work window of July 1 to November 30 would be enacted.
49	2-91	Table 2-12	APM BIO-19: Intake Screening. To minimize the potential for fish to be entrained by the Proposed Project, any pumps or water intakes used by the Proposed Project would be screened in accordance with the following CDFW and NMFS screening requirements for water diversions within the Delta (CDFG 2000, NMFS 1997). If any variation from these criteria is necessary, the Proponent would consult with the agency responsible for the species for recommendations to protect fish.	APM BIO-19: Intake Screening. To minimize the potential for fish to be entrained by the Proposed Project, any pumps or water intakes used by the Proposed Project would be screened in accordance with ~~the following~~ CDFW and NMFS screening requirements for water diversions within the Delta (CDFG 2000, NMFS 1997). If any variation from these criteria is necessary, the Proponent would consult with the agency responsible for the species for recommendations to protect fish.
50	2-92	Table 2-12	APM CUL-1: Worker's Environmental Awareness Program	APM CUL-1: Worker's Environmental Awareness Program Training (add "Training" to be consistent with APM BIO-3)
3. Description of Alternatives				
51	3-1	Section 3.2	The alternatives screening process culminated in the identification and screening of 16 potential alternatives. Six alternatives were retained for analysis in this EIR, and nine alternatives were eliminated from further analysis.	The counts in these sentences do not match Table 3.3-2. Also, 6 + 9 = 15 (not 16).
52	3 2	Section 3.3, Step 4	Step 4: Evaluate each alternative ability to meet basic project objectives, feasibility, and ability to avoid or substantially lessen an environmental impact.	Step 4: Evaluate each alternative's ability to meet basic project objectives, feasibility, and ability to avoid or substantially lessen an environmental impact.
53	3-7	Table 3.3-2	Transition Structure	Transmission Structure?
54	3-12	Paragraph 1	"The Alternative 2 substation site is also located east of existing wind energy substations including approximately 650 feet northeast of Russel Substation (owned and operated by SMUD) and 500 east of Birds Landing Switching Station (owned and operated by PG&E)."	The units after "500" are not identified, add in "feet".

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
55	3-16	Paragraph 2	agh	All caps in acronym list
56	3-16	Section 3.4.3	The location of the monopole TSPs and three-pole TSPs for Alternative 3 is shown on Figure 3.4-3.	The locations of the monopole TSPs and three-pole TSPs for Alternative 3 areis shown on Figure 3.4-3.
57	3-23	Paragraph 3	The total area of impact would be approximately 7,000 cubic yards and would require additional federal and state permits.	No additional USACE permit would be required for the dredging. I'm not sure about the need for an additional state permit.
58	3-23	Paragraph 2	"Within the Alternative 4 5 alignment there are two underwater ridges that have a steep (near vertical) incline/decline."	This sentence is located within the discussion for Alternative 5.
59	3-23	Paragraph 2, third paragraph	Site preparation activities would occur within the Stockton Navigation Channel—a maintained shipping channel.	Alternative 5 affects the Suisun Bay/New York Slough channel, not the Stockton Channel.
60	3-24	Last paragraph, first sentence	Alternative 6a/6b would include the installation of four transition vaults approximately 350 feet north of the Delta shoreline where the 230 kV transmission line transmissions to a submarine position.	Alternative 6a/6b would include the installation of four transition vaults approximately 350 feet north of the Delta shoreline where the 230 kV transmission line would transition transmissions to a submarine position.
61	3-30	First paragraph	Operation and maintenance of the 230 kV of the underground segment identified for Alternative 6a/6b would include different activities from those described for the 230 kV overhead segment of the Proposed Project…	Operation and maintenance of the 230 kV of the underground segment identified for Alternative 6a/6b would include different activities from those described for the 230 kV overhead segment of the Proposed Project…
4.0 Environmental Impact Analysis				
62	4.0-3	Bullet 1	For evaluation of cumulative impacts, this EIR uses a list of past, present, and probable future projects producing related or cumulative impacts, based on the timeframe associated with the Proposed Project construction, as described in section 15130 of the State CEQA Guidelines.	For evaluation of cumulative impacts, this EIR uses a list of past, present, and probable reasonably foreseeable future projects producing related or cumulative impacts, based on the timeframe associated with the Proposed Project construction, as described in section 15130 of the State CEQA Guidelines.
63	4.0-4	Footer	4.0-1	The page numbering in this section should be updated so that it is continuous.
64	4.0-4	Table 4.0-1, Row 1	The existing PG&E 500 kV Interconnection crosses the planned California Forever LP Project. The proposed LSPGC Collinsville Substation site is located approximately 7 miles south of the potential development area shown on the California Forever project website (https://californiaforever.com/)	There is no existing interconnection. Revise to say the "proposed PG&E 500 kV Interconnection Lines" for consistency with the Project Description.
65	4.0-1	Table 4.0-1		Fix project numbers; numbering after #9 needs adjustment.
4.1 Aesthetics				
66	4.1-5	Paragraph 3	"Three of the viewpoints were selected as KOPs for visual simulation and impact analysis (refer to Appendix D, Figure D-1 through D-6. because they represent the most important visual conditions where views of key Project features would occur."	There should not be a period between "D-6" and "because". Close parentheses.
67	4.1-6	Figure 4.1-1		Label KOP2.
68	4.1-13	Caption for Photo 6c	Photograph 6c (looking southeast).	The corresponding arrow in Figure 4.1-1 points south.
69	4.1-17	First full paragraph.	The viewer sensitivity rating scale definitions are provided in Table 4.1-1.	The viewer sensitivity rating scale definitions are provided in Table 4.1-41.
70	4.1-19	Sacramento County section	The only Proposed Project component site located within Sacramento County is a portion of the LSPGC 230 kV submarine segment.	The only Proposed Project component site located within Sacramento County is a portion of the LSPGC 230 kV submarine segment.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
71	4.1-24	Paragraph 2	"Therefore, the PG&E project components would not result in substantial adverse effects on a scenic visit."	"Visit" should be "vista".
72	4.1-27	Table 4.1-7		Table is missing a line between KOP 2 and KOP 3.
73	4.1-28	Second paragraph	The submarine segment would be installed over an approximately 6-month period.	The submarine segment would be installed over an approximately 5~~6~~-month period. The barge and support vessels would be similar in appearance to other marine vessels operating in the Delta.
74	4.1-29	Paragraph 3	"The temporary visibility of construction activities would not substantially degrade the existing visual character or quality of public views Impacts would be less than significant."	Missing a period between "views" and "Impacts".
75	4.1-30	Paragraph 1, first sentence	Construction activities at the transposition sites would involve accessing existing structures, installing new transposition structures, and removing existing structures with PG&E's existing ROW for the Vaca Dixon-Tesla 500 kV Transmission Line.	Construction activities at the transposition sites would involve accessing existing structures, installing new transposition structures, and removing existing structures within PG&E's existing ROW for the Vaca Dixon-Tesla 500 kV Transmission Line.
76	4.1-30	Paragraph 1, first sentence	As discussed above, three viewpoints were selected as for visual simulation…	As discussed above, three viewpoints were selected ~~as~~ for visual simulation…
77	4.1-33	Paragraph 2	While the PG&E facilities have somewhat unique visual characteristics, they are still similar to the LSPGC project components, and the associated visual impacts are considered in combination and not independently.	While the PG&E facilities have somewhat unique visual characteristics, they are still similar to the LSPGC project components, and the associated visual impacts are considered in combination with the LSPGC project components, ~~and~~ not independently.
78	4.1-34	First full paragraph, second sentence	In these areas, viewer sensitivity is generally expected to be low, and visual quality is generally expected to be low to moderate (refer to Figure 4.1 3).	In these areas, viewer sensitivity is generally expected to be low, and visual quality is generally expected to be low to moderate (refer to Figure 4.1-3).
79	4.1-35	Paragraph 3, third sentence	The easter portion of the underground LSPGC telecommunication interconnection lines (approximately 0.7 mile), would be constructed within residential areas along public roadways.	The eastern portion of the underground LSPGC telecommunication interconnection lines (approximately 0.7 mile), would be constructed within residential areas along public roadways.
80	4.1-35	Paragraph 3, fifth sentence	Therefore, the combined visual impact associated with the construction and operation of the LSPGC and PG&E project components within the City of Pittsburg would not result in a significant impacts or substantially greater impacts beyond those addressed for each project component alone, and would not conflict with applicable zoning and other regulations governing scenic quality.	Therefore, the combined visual impact associated with the construction and operation of the LSPGC and PG&E project components within the City of Pittsburg would not result in ~~a~~ significant impacts or substantially greater impacts beyond those addressed for each project component alone, and would not conflict with applicable zoning and other regulations governing scenic quality.
81	4.1-38	Paragraph 1	These project components would not require lighting or become a source glare that would adversely affect day or nighttime views. Impacts would be less than significant.	These project components would not require lighting or become a source of glare that would adversely affect day or nighttime views. Impacts would be less than significant.
82	4.1-39	Paragraph 1	Similarly, the area where the LSPGC 230 kV underground segment, a portion of the LSPGC telecommunication interconnection lines, and the location of the existing PG&E Pittsburg Substation that would be modified, all would be constructed and operate within the City of Pittsburg.	Similarly, the area where the LSPGC 230 kV underground segment, a portion of the LSPGC telecommunication interconnection lines, and the location of the existing PG&E Pittsburg Substation that would be modified, all would be constructed and operated within the City of Pittsburg.
83	4.1-39	Paragraph 1	Therefore, the light and glare resulting from construction equipment, permanent lighting fixtures, or other sources of construction and operational lighting and glare at outlined above, would not combine to result in a significant source of light or glare that could impact individuals in the community of Collinsville or those within the city of Pittsburg.	Therefore, the light and glare resulting from construction equipment, permanent lighting fixtures, or other sources of construction and operational lighting and glare as ~~at~~ outlined above, would not combine to result in a significant source of light or glare that could impact individuals in the community of Collinsville or those within the city of Pittsburg.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
84	4.1-39	Paragraph 2	"Of the 21 projects listed in this table, three exhibit visual characteristics that could be cummulatively considerable in combination with the Proposed Project. These projects are as follows:"	Cumulatively is misspelled. Only two projects listed after this sentence; four if the three phases of the Bay Walk project are counted separately.
85	4.1-39	Paragraph 2		Here the AT&T project is referred to as the "AT&T Rooftop Wireless Facility", which is inconsistent with the project name in Table 4.0-1 ("Pittsburg Landing AT&T Wireless Facility"). Please revise all occurrences for consistency.
86	4.1-39	Paragraph 2	The projects with the potential to combine with the Proposed Project and result in cumulative impacts are listed in Table 4.0-1 of Section 1: Introduction and…	The projects with the potential to combine with the Proposed Project and result in cumulative impacts are listed in Table 4.0-1 of Section 4.0.2~~1: Introduction~~ and…
87	4.1-40	Paragraph 2	The Bay Walk project would involve decommissioning existing industrial facilities and converting the areas to residential and commercial uses.	The Bay Walk project would involve decommissioning existing industrial facilities, site remediation activities, and converting the areas to residential and commercial uses.
88	4.1-40	Paragraph 3		Here the AT&T project is referred to as the "AT&T Rooftop Wireless Facility", which is inconsistent with the project name in Table 4.0-1 ("Pittsburg Landing AT&T Wireless Facility"). Please revise all occurrences for consistency.
89	4.1-43	Table 4.1-8	KOP 5. Talbert Lane (Looking West)	KOP 5. Talbert Lane (Looking ~~West~~ East) Also fix captions for KOP 5 in Appendix D.
90	4.1-43	Table 4.1-8	KOP 6. Talbert Lane (Looking East)	KOP 6. Talbert Lane (Looking West ~~East~~) Also fix captions for KOP 6 in Appendix D.
91	4.1-43	Table 4.1-8	Visual quality comments for KOP 6: "Dry grassland, short view with lattice tower and wind turbines over the crest of the hill."	Regarding the visual quality comments for KOP 6, I (Don) don't see lattice towers over the crest of the hill, or anywhere in the photograph of existing conditions.
92	4.1-43	Table 4.1-8	KOP 8. Montezuma Hills Roak (Looking West)	KOP 8. Montezuma Hills Roak (Looking North~~W~~west) Also fix captions for KOP 8 in Appendix D.
93	4.1-44	Third paragraph	Notably, however, under Alternative 1, excavation would require approximately 60,000 more cubic yards of cut and fill than the Proposed Project and grading activity would be extended by approximately 2 months.	Notably, however, under Alternative 1, excavation would require approximately 60,000 more cubic yards of cut and fill than the Proposed Project and grading activity would be longer~~extended~~ by approximately 2 months.
94	4.1-47	First full paragraph	… however, in comparison to the Proposed Project, the visibility of the Alternative 2 substation site would be reduced in comparison to the Proposed Project as this site is more integrated into the existing wind development in the area and is located away from roadways, as discussed above. The existing visual quality in the area ranges would be identical to the Proposed Project in this area…	… however, in comparison to the Proposed Project, the visibility of the Alternative 2 substation site would be reduced in comparison to the Proposed Project as this site is more integrated into the existing wind development in the area and is located further away from roadways, as discussed above. The existing visual quality in the area ~~ranges~~ would be identical to the Proposed Project in this area…
95	4.1-47	First full paragraph	Construction activities, similar to the Proposed Project, would temporarily degrade visual character and quality in the area where the construction activities would be visible, such as, but not limited to, public viewing locations on Talbert Lane (KOPs 4), Montezuma Hills Road (KOP 8), Birds Landing Road (KOP 7), and distant views from the Pittsburg Marina (KOP 4).	Construction activities, similar to the Proposed Project, would temporarily degrade visual character and quality in the area where the construction activities would be visible, such as, but not limited to, public viewing locations on Talbert Lane (KOPs 5 and 64), Montezuma Hills Road (KOP 8), Birds Landing Road (KOP 7), and distant views from the Pittsburg Marina (KOP 4).
96	4.1-47	Second full paragraph	Notably, however, under Alternative 2, excavation would require approximately 40,000 more cubic yards of cut and fill than the Proposed Project and grading activity would be extended by 1 month.	Notably, however, under Alternative 2, excavation would require approximately 40,000 more cubic yards of cut and fill than the Proposed Project and grading activity would be longer~~extended~~ by 1 month.
97	4.1-47	Third full paragraph	…however, the Alternative 2 substation is more integrated into the existing wind development in the area and is located away from roadways in comparison to the Proposed Project.	…however, the Alternative 2 substation is more integrated into the existing wind development in the area and is located further away from roadways in comparison to the Proposed Project.
98	4.1-48	First line	…KOP 4 (Appendix D, Figure D-8),…	…KOP 4 (Appendix D, Figure D-9~~8~~),…

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
99	4.1-48	First full paragraph	Existing visual character and quality as seen from KOP 6, KOP 7, and KOP 8 would be permanently reduced by introducing man-made structures to an undeveloped area; however, the visual change would not be substantial due to the presence of existence wind energy facilities…	Existing visual character and quality as seen from KOP 6, KOP 7, and KOP 8 would be permanently reduced by introducing additional man-made structures to an undeveloped area; however, the visual change would not be substantial due to the presence of existing~~existence~~ wind energy facilities…
100	4.1-51	Second full paragraph	Despite the minor shift in components, Alternative 4 would have similar impacts to the Proposed Project due to the equivalent appearance of structures and location of Alternative 4 and the Proposed Project being nearly identical within the nonurbanized area neighboring the Community of Collinsville.	Despite the minor shift in components, Alternative 4 would have similar visual impacts to the Proposed Project due to the equivalent appearance of structures and location of Alternative 4 and the Proposed Project being nearly identical within the nonurbanized area neighboring the Community of Collinsville.
101	4.1-53	Paragraphs 2 and 3	"Any required submarine cable or cable segment replacement would involve similar methods and impacts as those associated with initial construction .during the life of the project "	Period should be moved from before "during" to after "project".
4.2 Agriculture and Forestry Resources				
102	4.2-2	Paragraph 4	"Lands subject Williamson Act contracts are located along portions of PG&E's existing 500 kV Vaca Dixon-Tesla Transmission Line and within portions of the Solano Wind Resource Area."	There is a "to" missing between subject and Williamson.
103	4.2-10	Paragraph 2	Portions of the Proposed Project that are within the Primary and Secondary Zones are identified in Table 4.11-2 and Figure 4.11-5 fo Section 4.11: Land Use and Planning.	"Figure 4.11-5 fo Section 4.11: Land Use and Planning" should be Figure 4.11-5 of Section 4.11: Land Use and Planning."
104	4.2-11	Paragraph 3	"There are no policies in Solano County's Geneal Plan related to forestry resources that apply to the Proposed Project."	General is misspelled.
105	4.2-14	Paragraph 3	"There are no policies in Contra Costa County's Geneal Plan related to forestry resources that apply to the Proposed Project."	General is misspelled.
106	4.2-14	Paragraph 4	"Prime Farmland, Unique Farmland, or Farmland of Statewide Importance lands are not found in the City of Pittsburg's Planning Area."	"Lands" after "Importance" should be removed.
107	4.2-23	Paragraph 3	The proposed Collinsville Substation site is within the Delta Plan Secondary Zone (refer to Figure 4.11-3 in Section 4.11, Land Use and Planning), and a loss of agricultural land for the permanent development of the substation site within the Delta Plan area would be a significant impact due to the conversion of zoned and designated Farmland to non-agricultural use.	The correct figure to refer to is 4.11-5 not 4.11-3.
108	4.2-28	Paragraph 2	"The Alternative 1 500 kV interconnection lines would be shorter than the Proposed Project interconnection line, which would reduce the overall extent of temporary ground disturbance on agricultural land Similar to the Proposed Project, the 500 kV interconnection lines would cross land zoned for agricultural use (Figure 4.2-3) …"	Missing a period between agricultural land and Similar.
109	4.2-34	Paragraph 3	"While Alternative 3 would include more TSPs than the Proposed Project. This change in structure type and quality would not alter the compatibility of the transmission lines agricultural zoning or Williamson Act contracts and would not result in additional conversion of Farmland to a non-agricultural use."	There should be a comma between Proposed Project and This change instead of a period.
110	4.2-36	Paragraph 7	Alternative 6a/6b would impacts from conflicts with a Williamson Act contract or zoning for agricultural use (Impact AG-2)…	There appears to be a missing word after Alternative 6a/6b.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
4.3 Air Quality				
111	4.3-27	Paragraph 5	Relevant YSAQMD rules that apply to the portion of the Proposed Project site (Transposition Site C) within the jurisdiction of YSAQMD are Rule 2.3 (Ringelmann Chart), Rule 2.5 (Nuisance), Rule 2.11 (Particulate Matter), Rule 2.14 (Architectural Coatings), and Rule 2.28 (Cutback and Emulsified Asphalt).Local	"Local" should be a separate heading and not included at the end of this sentence.
112	4.3-31	Bullet Point 2	For operation and maintenance of the Proposed Project, annual emissions were calculated for the following sources: • Exhaust and entrained dust from on-road vehicle travel Electricity consumption at the proposed LSPGC Collinsville Substation and adjacent PG&E telecommunications yard	The second bullet point should be removed, as criteria air pollutant emissions were not calculated for that source.
113	4.3-31	Paragraph 3	The resulting annual emissions estimates were then compared to applicable BAAQMD and SMAQMD thresholds in order to determine the significance of impacts from operation and maintenance emissions.	We have no planned O&M in SMAQMD; therefore, reference to their thresholds should be removed from this discussion. The sentence should read: "The resulting annual emissions estimates were then compared to applicable BAAQMD thresholds in order to determine the significance of impacts from operation and maintenance emissions."
114	4.3-40	Footnote	See Section 3.4 Biological Resources	See Section ~~3~~4.4 Biological Resources
4.4 Biological Resources				
115	4.4-2	Special-Status Species, first bullet	Species listed or proposed for listing as threatened or endangered under FESA (50 CFR § 17.12 [listed plants] and § 17.11 [listed animals]) or through notices in the Federal Register [FR], referred to in this document as *proposed species*	Species listed or proposed for listing as threatened or endangered under FESA (50 CFR § 17.12 [listed plants] and § 17.11 [listed animals]) or through notices in the Federal Register [FR], referred to in this document as *listed* or *proposed species*
116	4.4-6	Paragraph 3, first sentence	This community is found in foothills, disturbed areas, rangelands, and opening in woodlands.	This community is found in foothills, disturbed areas, rangelands, and openings in woodlands.
117	4.4-10	Third paragraph, first sentence	*Submerged aquatic vegetation* (SAV), was mapped within the Proposed Project area, using side-scan sonar across the 1,167 acre study area (WRA Environmental Consultants [WRA] 2024) (Appendix F.3).	*Submerged aquatic vegetation* (SAV)~~,~~ was mapped within the Proposed Project area~~,~~ using side-scan sonar across the 1,167 acre study area (WRA Environmental Consultants [WRA] 2024) (Appendix F.3).
118	4.4-12	Heading	special status	Global - special-status should be hyphenated
119	4.4-27	Table 4.4-4	suitable burrows refugia	suitable burrow~~s~~ refugia
120	4.4-32	Table 4.4-4	A pair of golden eagles was observed on during field surveys	A pair of golden eagles was observed ~~on~~ during field surveys
121	4.4-45	Table 4.4-4; northwestern pond turtle	FPT	~~F~~PT
122	4.4-53	Last paragraph	No critical habitat is found within the biological study area. However, the estuarine, open water habitat within the proposed submarine segment site and surrounding Sacramento River is designated as critical habitat for delta smelt (*Hypomesus transpacificus*) and proposed as critical habitat for longfin smelt (*Spirinchus thaleichthys*).	~~No critical habitat is found within the biological study area~~The estuarine, open water habitat within the proposed submarine segment site and surrounding Sacramento River is designated as critical habitat for delta smelt (*Hypomesus transpacificus*) and proposed as critical habitat for longfin smelt (*Spirinchus thaleichthys*).
123	4.4-54	Second paragraph, last sentence	There are no conservation areas that are defined within the Proposed Project areas and LSPGC and PG&E are not parties to the NCCP.	There are no conservation areas that are defined within the Proposed Project areas and LSPGC and PG&E are not parties to the HNCCP.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
124	4.4-54	Third paragraph	Although the Proposed Project area is located within the boundaries of the Bay Area HCP, construction of the 500 kV interconnection lines, 12 kV distribution line, and IT yard within the Collinsville Substation…	Although the Proposed Project area is located within the boundaries of the Bay Area HCP, construction of the 500 kV interconnection lines, 12 kV distribution line, and telecommunications~~IT~~ yard within the Collinsville Substation…
125	4.4-54	Section 4.4.3	Federal, state, and local regulations were reviewed for applicability to the Proposed Project and alternatives.	Federal, state, and local regulations were reviewed for applicability to the Proposed Project and alternatives, as summarized below.
126	4.4-54	Paragraph 2	East Contra Costa County Habitat and Natural Community Conservation Plan	This is not the correct name of the plan. It should be East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan
127	4.4-56	Waters of the US section		Mention the proposed WOTUS rule (11/17/2025).
128	4.4-57	Section 404	Nationwide permits are a type of general permit issued to cover activities that the USACE has determined to have minimal adverse effects, such as routine maintenance (e.g., Nationwide Permit 3) or utility line activities (e.g., Nationwide Permit 12). Each NWP specifies particular conditions that must implemented by the permittee.	Nationwide permits are a type of general permit issued to cover activities that the USACE has determined to have minimal adverse effects, such as routine maintenance (e.g., Nationwide Permit 3) or utility line activities (e.g., Nationwide Permit 12). Each NWP specifies particular conditions that must be satisfied~~implemented~~ by the permittee.
129	4.4-57	Last paragraph, second sentence	Section 2052 require that…	Section 2052 requires that…
130	4.4-63	First paragraph, last sentence	The complete text of all mitigation measures appears in Section 4.4.8.	The complete text of all mitigation measures appears in Section 4.4.148.
131	4.4-63	Paragraph 1	LSGPC	Global: fix all to LSPGC
132	4.4-86	Paragraph 3	within and adjacent access roads and work areas.	within and adjacent to access roads and work areas.
133	4.4-90	Paragraph 2	within or adjacent a Proposed Project	within or adjacent to a Proposed Project
134	4.4-104	Fourth full paragraph	Six special-status invertebrate species have potential to occur within the transposition site work areas: conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, western bumble bee, and Crotch's bumble bee.	Five~~Six~~ special-status invertebrate species have potential to occur within the transposition site work areas: conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, western bumble bee, and Crotch's bumble bee.
135	4-4.110	Paragraph 2	San Joaquin kit fox less than significant	San Joaquin kit fox would be less than significant
136	4.4-110	Paragraph 4	salt mouse harvest mouse	salt ~~mouse~~ marsh harvest mouse
137	4.4-116	Paragraph 2, sentence 2	seal	seal~~l~~
138	4.4-118	Paragraph 1	The impact was calculated at 163 dB for pile driving with a vibratory hammer (WRA Environmental Consultants 2025) which is below the PTS level of 201 dB for sea lion and 219 dB for harbor seal for non-impulsive sounds (Appendix F.3).	The sentence should state "noise level," not "impact" was calculated.
139	4.4-121	Paragraph 1	…APM BIO-21 would require screening and testing of aquatic sediments would be screened and tested before they are disturbed to reduce the risk of exposing hazardous sediments to the marine environment.	…APM BIO-21 would require screening and testing of aquatic sediments ~~would be screened and tested~~ before they are disturbed to reduce the risk of exposing hazardous sediments to the marine environment.
140	4.4-128	Paragraph 3	Replacement of a damaged segment of 230 kV submarine could involve trenching.	Replacement of a damaged segment of 230 kV submarine cable could involve trenching.
141	4.4-128	Paragraph 3, third sentence	MM BIO-19 requires of avoidance of sensitive natural communities wherever possible and, in the event that sensitive natural communities cannot be avoided	MM BIO-19 requires ~~of~~ avoidance of sensitive natural communities wherever possible and, in the event that sensitive natural communities cannot be avoided

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
142	4.4-134	Paragraph 4	…APM BIO-21 would require screening and testing of aquatic sediments would be screened and tested before they are…	…APM BIO-21 would require screening and testing of aquatic sediments ~~would be screened and tested~~ before they are…
143	4.4-152	Third full paragraph		Fix periods after third and fourth sentences.
144	4.4-153	Table 4.4-14, heading of second column	LSPGC Collinsville Substation	~~LSPGC Collinsville~~ Alternative 1 Substation
145	4.4-154	Table 4.4-15	LSPGC Collinsville Substation	~~LSPGC Collinsville~~ Alternative 1 Substation
146	4.4-164	Table 4.4-16, heading of second column	LSPGC Collinsville Substation	~~LSPGC Collinsville~~ Alternative 2 Substation
147	4.4-165	Table 4.4-17	LSPGC Collinsville Substation	~~LSPGC Collinsville~~ Alternative 2 Substation
148	4.4-191	Table 4.4-21		In the caption, fix spacing between potential and wetlands.
149	4.4-194	First full paragraph	Indirect on special-status birds during construction would be the same as the Proposed Project and are described in Section 4.4.5.	Indirect impacts on special-status birds during construction would be the same as the Proposed Project and are described in Section 4.4.5.
150	4.4-208	Paragraph 2	Where special-status species (e.g., amphibians, reptiles, birds, mammals, reptiles), sensitive natural communities…	Where special-status species (e.g., amphibians, reptiles, birds, mammals~~, reptiles~~), sensitive natural communities…
4.5 Cultural Resources				
151	4.5-2	Paragraph 1	three artifacts(Office of Historic Preservation 1989).	Missing a space.
152	4.5-54	Paragraph 2	If historic resources cannot be avoided additional treatment measures, such as curation at an accredited curation facility	Revise this sentence to include a verb.
153	4.5-56	Paragraph 2	If a historic resource cannot be avoided, additional treatment measures such as curation at an accredited curation facility	Revise this sentence to include a verb.
4.6 Energy				
154	4.4-3	Paragraph 2, last sentence	Project area Project area	Project area ~~Project area~~
4.9 Hazards, Hazardous Materials, and Public Safety				
155	4.9-4	Table 4.9-1	proposed telecommunications lines interconnection line	It is unclear which component is being referenced here. Revise for consistency.
156	4.9-15	Paragraph 5	". The RCRA, as amended in 1984 by the Hazardous and Solid Waste Act, gives the EPA the authority to control hazardous waste from the "cradle to grave" (15 U.S.C. §2601 et seq. (1976), n.d.; 42 U.S.C. §6901 et seq. (1976), n.d.)"	This sentence is missing a period at the end.
157	4.9-18	Paragraph 2	"Information is to be communicated through comprehensive hazard communication programs, which are required to include container labeling and other forms of warning, Material Safety Data Sheets, and employee training (OSHA n.d.)"	This sentence is missing a period at the end.
158	4.9-18	Paragraph 3	"Any overhead line is to be considered energized unless the owner of the line or the electric utility company indicates that it has been de-energized and it is visibly grounded (29 CFR 1926.550 (a)(15)(vi)) (OSHA n.d.) "	This sentence is missing a period at the end.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
159	4.9-15	Bullet 4	"Outdoor smoking is confined to an area that is at least 1 meter in diameter and cleared to mineral soil by removal of flammable vegetation (PRC § 4423.4)"	This sentence is missing a period at the end.
160	4.9-33	Paragraph 4	"The City of Pittsburg 2040 General Plan includes policies applicable to redevelopment and reuse of areas within the Proposed Project area as summarized below (City of Pittsburg 2024)"	This sentence is missing a period or colon at the end.
161	4.9-47	Paragraph 2	"The secondary containment system would be designed consistent with the California Fire Code §1207 requirements for stationary storage battery systems, including spill control and neutralization (§1207.6.2), the International Fire Code §608.5) criteria (flooded systems sized to contain a spill from the largest battery; valve-regulated lead-acid [VRLA] systems sized to neutralize 3 percent of the largest cell or block to pH 7-9), Cal/OSHA regulations (8 CCR §5184) requiring equipment and procedures to preclude, detect, and control failures, and IEEE Standard 484-2019 recommended practices for stationary lead-acid battery installations."	There is an extra ")" after 608.5
162	4.9-50	Paragraph 4	"Impacts from use of hazardous materials during maintenance of PG&E project components is address in Impact HAZ-1."	Address should be addressed.
163	4.9-51	Paragraph 2	"CEQA Guidelines §15186(b)(1) requires the lead agency to consult with the agency responsible for oversight of such sites (e.g., DTSC or RWQCB) to ensure appropriate protective measures are in place."	Should either be Guideline or require for the correct form of the verb.
164	4.9-61	Paragraph 2	"Implementation of CM FIRE-1and compliance with the PRC would minimize the potential for construction-related ignition and the exposure of workers or nearby properties to wildfire hazards."	Needs a space between "CM FIRE-1" and "and."
165	4.9-66	Paragraph 1	"Helicopters use during operation and maintenance of the LSPGC project components is not anticipated."	Helicopters should be helicopter.
166	4.9-70	Paragraph 2	"While the simulated touch voltage under fault conditions exceed the IEEE allowable limit of 359.5 V under four of the five pipeline coating types evaluated; however, the pipeline is not accessible in the area where the threshold could be exceeded.(Kinetrics AES 2025)."	This sentence has an extra period after "exceeded" and does not make sense. Either "While" or "however" should be removed.
167	4.9-71	Paragraph 5	"The Proposed Project site is not listed on the Cortese List or other federal/state hazardous materials databases; however, the existing PG&E Pittsburg Substation is identified in the SWRCB GeoTracker database. for historical releases that have been remediated and remain under regulatory oversight."	There is an extra period after "Geotracker database".
168	4.9-71	Paragraph 5	"Because activities at the listed facility would not encounter or exacerbate existing contamination, and because other project components would not occur on hazardous materials sites, the Proposed Project a significant cumulative impact related to location on a hazardous materials site would not occur."	The last clause of this sentence does not make sense.
169	4.9-82	Paragraph 1	"Because the Alternative 5 segment is located within the river and there are no known hazardous material sties or schools in proximity to the Alternative 5 segment, Alternative 5 would have no impact associated with hazardous emissions or handling hazardous materials …"	"Sites" is misspelled.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
170	4.9-82	Paragraph 2	"The impacts of Alternative 5 related to the routine transport, use, or disposal of hazardous materials (Impact HAZ-1); and upset and accidental conditions involving the release of hazardous materials (Impact HAZ-2). are discussed below."	There is an extra period after "(Impact HAZ-2)".
171	4.9-83	Paragraph 1	"No gas pipeline or other metallic pipelines are located in proximity to Alternative 6a/6b"	This sentence is missing a period at the end.
4.10 Hydrology and Water Quality				
172	4.10-39	Paragraph 3	PM HYD-1, which requires use of in-waters sediment controls such as turbidity curtains for trenching in the marine environment.	As written, this is not a complete sentence. Revise to make a complete sentence.
173	4.10-40	Heading 1	LSPGC Telecommunication Lines	GLOBAL: This is referred to interchangeably at Telecommunications line, Telecommunication lines, and Telecommunication line. Make consistent.
174	4.10-40	Paragraph 3	freak-out	~~freak~~frac-out
175	4.10-40	Paragraph 4	LSGPC	GLOBAL: Correct all instances of LSGPC to LSPGC.
176	4.10-46	Construction paragraph	operation	GLOBAL: Correct all instances to operation and maintenance.
177	4.10-47	Paragraph 3	CM BIO-3, which requires worker training on proper handling of hazardous materials. CM HYD-2, which includes implementation of measures to address hazardous materials spills.	As prepared, these are not complete sentences. Revise to make complete sentences.
4.13 Noise				
178	4.13-3	Paragraph 2, second to last sentence	Excess ground attenuation can increase this 1.5 dBA to 4.5 dBA per doubling of distance.	Excess ground attenuation can increase ~~this~~ by 1.5 dBA to 4.5 dBA per doubling of distance.
179	4.13-32	Paragraph 2	Transposition Sites: NR4, NR, and NR6	Transposition Sites: NR4, NR5, and NR6
4.14 Population and Housing				
180	4.14-1	Paragraph 1	"This section includes existing population and housing information applicable regulations, environmental impacts, and mitigation measures to reduce or avoid significant effects for the Proposed Project and alternatives, where feasible."	This sentence is missing a comma after "housing information."
181	4.14-4	Paragraph 4	The descriptions of population and housing in Solano County and city of Pittsburg are applicable to the 230 kV underground segment.	The descriptions of population and housing in ~~Solano~~ Contra Costa County and city of Pittsburg are applicable to the 230 kV underground segment.
182	4.14-5	Bullet 4	"Balance disproportionate household income distributions (more high-income allocation to lower-income areas, and vice-versa)"	This sentence is missing a period at the end.
4.15 Public Services				
183	4.15-1	Paragraph 6	"Portions of the Proposed Project area in the city of Pittsburg would be within the jurisdiction of ConFire."	There should be a space between "Con" and "Fire."
184	4.15-3	Paragraph 4	"Transposition Site B and C and associated work areas fall within the Montezuma FPD jurisdiction, and the nearest station for both sites is Station 52 in Birds Landing (Solano County 2020)."	"Transposition Site" should be plural.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
185	4.15-3	Paragraph 5	“The existing PG&E’s Pittsburg Substation is located within the jurisdiction of ConFire and is approximately 1 mile northwest of Contra Costa Fire Station 84.”	There should be a space between “Con” and “Fire.”
186	4.15-4	Paragraph 1	“The LSPGC Collinsville Substation site islocated approximately 10 miles southwest of the City of Rio Vista Police Department, which is under the purview of the Solano County Sheriff’s Office, located at 50 Poppy House Road in Rio Vista (Solano County 2025b)”	This sentence is missing a period at the end.
187	4.15-4	Paragraph 3	“The Antioch Police Department has 115 sworn officers and 33 non-sworn employees.(City of Antioch 2025).”	There is an extra period after “employees” that should be removed.
188	4.15-4	Paragraph 4	“The proposed PG&E 500 kV interconnection lines and 12 kV distribution line alignments are also located within the jurisdiction of the Solano County Sheriff’s Office (Solano County 2008)”	This sentence is missing a period at the end.
189	4.15-4	Paragraph 4	“The proposed PG&E 500 kV interconnection lines and 12 kV distribution line alignments are located approximately 9 miles southwest of the City of Rio Vista Police Department (CalOES 2019)”	This sentence is missing a period at the end.
190	4.15-5	Paragraph 2	“The nearest police facility to the existing PG&E Tesla Substation is the Livermore Police Department located at 1110 South Livermore Avenue in Livermore, located approximately 10 miles west of the substation (CalOES 2019)”	This sentence is missing a period at the end.
191	4.15-5, 4.15-6	Paragraph 6, Paragraph 1	“NorthBay Health Medical Center is approximately 16 miles northwest from the PG&E 12 kV distribution line and 16.5 miles northwest from the proposed PG&E 500 kV interconnection lines. (NorthBay Health, n.d.).”	There is an extra period after “interconnection lines.”
192	4.15-6	Paragraph 3	“The Pittsburg Health Center is located approximately 2.4 miles southeast of the existing PG&E Pittsburg Substation (Contra Costa Health 2025).The nearest hospital to the existing PG&E Tesla Substation is Sutter Tracy Community Hospital, located at 1420 North Tracy Boulevard, approximately 7 miles northeast of the substation (Sutter Health 2025).”	There is a space missing between these two sentences.
193	4.15-7	Paragraph 3	“Work occurring at the existing PG&E Tesla and Vaca-Dixon substations would occur within the existing substation fence lines, and no schools are located within 1 mile of the existing substations ”	This sentence is missing a period at the end.
194	4.15-10	Paragraph 2, Bullet 3	“Eight minutes or less response time for an initial full alarm assignment at a fire suppression incident that does not involve a high-rise building, 90 percent of the time”	This bullet is missing a period at the end.
195	4.15-11	Paragraph 1, Bullet 1	“Ensure that all areas of the city are accessible to emergency response providers. Keep emergency access routes free of traffic impediments”	The second sentence of this bullet is missing a period at the end.
196	4.15-16	Paragraph 2	“The PG&E 500 kV interconnection lines and PG&E 12 kV distribution line within a mapped high FHSZ in an LRA (CAL FIRE 2025). (refer to Section 4.20: Wildfire).”	There is an extra period after “(CAL FIRE 2025)” that should be removed.
197	4.15-17	Paragraph 3	“Therefore, operation and maintenance of the PG&E project components would have a less-than-significant impact on the demand for fire response and would not require the construction of new facilities.”	Primarily, hyphens are not used in the “less than significant impact” phrase throughout the DEIR. The phrasing should be consistent between uses.
198	4.15-20	Paragraph 1	“As described in Section 4.16:Recreation, several parks and recreational areas occur near the LSPGC Collinsville Pittsburg Substation and 230 kV overhead segment …”	This sentence is missing a space between “Section 4.16” and “Recreation”.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
199	4.15-21	Paragraph 3	"Therefore, operation and maintenance of the PG&E project components would have a less-than -significant impact on the demand for schools, parks, and other public facilities."	There is an extra space in "less-than- significant".
200	4.15-22	Paragraph 2	"Alternative 1 would not involve changes to any of the other Proposed Project component, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 1."	"Proposed Project component" should be plural.
201	4.15-22	Paragraph 3	"Alternative 1 would not occur in proximity to any school, park, hospital, or other public service facility area Alternative 1 would not prevent access to boat launches specifically used to enter regional or local recreational areas and facilities."	There is a period missing between "public service facility area" and "Alternative 1".
202	4.15-23	Paragraph 2	"Alternative 2 would not involve changes to any of the other Proposed Project component, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 2."	"Proposed Project component" should be plural.
203	4.15-24	Paragraph 1	"Alternative 3 would not involve changes to any of the other Proposed Project component, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 3."	"Proposed Project component" should be plural.
204	4.15-24	Paragraph 3	"Alternative 4 would not involve changes to any of the other Proposed Project component, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 4."	"Proposed Project component" should be plural.
205	4.15-25	Paragraph 2	"Alternative 5 would not involve changes to any of the other Proposed Project component, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 5."	"Proposed Project component" should be plural.
206	4.15.-25	Heading 4.15.10	"4.15.10Alternative 6a/6b: Underground Portions of the 230 kV Transmission Line within Suisun Marsh Protection Plan Management"	There is a space missing between "4.15.10" and "Alternative 6a/6b".
4.16 Recreation				
207	4.16-7	Paragraph 2	"Table 4.16-1 provides information on the amenities provided and each park and the approximate size."	This sentence should read "Table 4.16-1 provides information on the amenities provided by each park and the approximate size."
208	4.16-18	Paragraph 1	"… channel depth and, therefore, would not affect fishing, powerboating, sailing, kayaking, or canoeing .In area areas where the cables cannot otherwise meet the required burial depths …"	The period between these two sentences should have a space after it instead of before it.
209	4.16-23	Paragraph 3	"As with the Proposed Project 500 kV interconnection lines, Alternative 3 would have no impact on physical deterioration of a recreational facility (REC-1), construction or expansion of recreational facilities (REC-2), access to recreational facilities (REC-3)."	This sentence is missing an "or" before "access to recreational facilities (REC-3)."
210	4.16-23	Paragraph 3	"The Alternative 3 impacts on recreational value of the area (REC-4) and damage to recreational facilities (REC-5) due to impacts on Suisun Marsh would be less than significant and as described PG&E project components described in Section 4.16.4."	The last line of this sentence needs to be reworded.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
211	4.16-25	Paragraph 1	"Alternative 4 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (REC-1) or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (REC2)."	This sentence is located within Impact Analysis – Alternative 5, so the reference to "Alternative 4" should be corrected to "Alternative 5".
212	4.16-25	Paragraph 2	"Alternative 5 is located within a ridgeline area where more extensive site preparation would be required, which would prolong the duration of in water work."	This sentence is missing a hyphen between "in" and "water".
4.17 Transportation				
213	4.17-3	Paragraph 3	"The I-80/SR 12 interchange is located approximately 16 miles northwest of the Proposed Project Components near the community of Collinsville."	"Components" should not be capitalized.
214	4.17-12	Paragraph 2	"Route 387 provides broader weekday service between 4:45 a.m. and 10:15 p.m. from the Antioch BART station to the Pittsburg-Bay Point BART station, with stops along Willow Pass Road, West 10th Street, and Black Diamond Street within one half mile of the PG&E Pittsburg Substation and LSPGC telecommunication interconnection lines(Tri Delta Transit 2025b)."	This sentence is missing a space between "interconnection lines" and "(Tri Delta …".
215	4.17-12	Paragraph 4	"The San Francisco Bay Area Rapid Transit District (BART) is a heavy-rail public transit system that connects the San Francisco Peninsula with communities in the East Bay and South Bay."	The acronym "BART" is used several times on Page 4.17-23 before being defined in Paragraph 4.
216	4.17-13	Paragraph 3	"Approximately 7 miles north of the Proposed Project components near the community of Collinsville SR 12 at the SR 113/Birds Landing Road roundabout includes pavement marking for share bicycle use but no other bicycle facilities."	"Approximately 7 miles north of the Proposed Project components near the community of Collinsville SR 12 at the SR 113/Birds Landing Road roundabout includes pavement marking for shared bicycle use but no other bicycle facilities."
217	4.17-35, 4.17-36	Paragraph 1	"Implementation of the LSPGC project Components would not permanently alter the physical transportation network or adversely affect the implementation of any proposed transportation network improvements in Solano County, Contra Costa County, or the City of Pittsburg. Therefore, the LSPGC project Components would not conflict with plans, programs, ordinances, or policies of Solano County, Contra Costa County or the City of Pittsburg including general plans and comprehensive transportation plans promoting a safe multi-modal transportation circulation system."	"Components" should not be capitalized.
218	4.17-38	Paragraph 3	"As described in Section 4.17.1there are no bicycle or pedestrian facilities in the vicinity of the LSPGC project components in Solano County."	There is a space missing between "Section 4.17.1" and "there".
219	4.17-41	Paragraph 4	"Traffic disruptions may also occur due to temporary road or lane closures to ensure the safe accommodation of construction truck traffic during peak construction periods and for deliveries of oversized loads., e.g., Stratton Lane near the community of Collinsville and the access road to the Pittsburg Substation in the City of Pittsburg."	There is an extra period after "oversized loads".
220	4.17-47,48	Paragraph 3, Paragraph 2	"Approximately 67 percent of all worker vehicle trips would be attributable to the LSPGC project components …" "Approximately 32 percent of all worker vehicle trips would be attributable to the PG&E project components …"	These distributions do not add up to 100%.
221	4.17-48	Paragraph 2	southeastern Contra Cost County	This should say "northeastern Contra Costa County"
222	4.17-50	Paragraph 2	"As an industrial center, the City of Pittsburg generates a fair amount of freight and trucking activities due to major industries(City of Pittsburg 2024)."	There is a space missing after "industries".

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
223	4.17-51	Paragraph 1	“Although use of a HDD boring method for installation of the fiber optic lines would limit disruptions to surface transportation along the alignment and the duration of the disruption would be short term (typically lasting less than 1 week) and localized construction activities could create temporarily hazardous conditions for people driving, walking, or bicycling and interfere with transit, walking or bicycling accessibility.”	This sentence needs a comma after “localized”.
224	4.17-54	Paragraph 1	“PG&E would obtain all applicable encroachment and transportation permits, including those required for oversized vehicle movement, from the appropriate regulatory agencies prior to commencement of construction(Caltrans 2023a; 2023c).”	There is a space missing after “construction”.
225	4.17-75	Paragraph 3	“Alternative 3 would not involve changes to any of the other Proposed Project components, which would have the same impacts as described throughout this Draft EIR for the Proposed Project or the other alternatives if selected in combination with Alternative 3.The environmental setting for Alternative 3 transportation is the same as the setting for the PG&E 500 kV interconnection lines addressed in Section 4.17.1.”	There is a space missing between these sentences.
226	4.17-75	Paragraph 4	“Similar to the Proposed Project, Alternative 3 would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) as discussed in Impact TRA-2 in Section 4.17.4and is not discussed further. Impacts TRA-1, TRA-3, and TRA-4 are discussed below.”	There is a space missing after “4.17.4”.
227	4.17-77	Paragraph 3	“Alternative 4 would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) as discussed in Impact TRA-2 in Section 4.17.4and is not discussed further.”	There is a space missing after “4.17.4”.
228	4.17-77	Paragraph 3	“Impacts TRA-1 and Impact TRA-3 are addressed together because the same APMs and MMs address both impacts for Alternative 4.”	No MMs are discussed for Alternative 4 impacts. “Impact” before “TRA-3” should be removed.
229	4.17-78	Paragraph 5	“Impacts TRA-1 and Impact TRA-3 are addressed together because the same APMs and mitigation measures address both impacts for Alternative 5.”	No MMs are discussed for Alternative 5 impacts. “Impact” before “TRA-3” should be removed.
230	4.17-80	Paragraph 3	“Alternative 6a/6b would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) as discussed in Impact TRA-2 in Section 4.17.4and is not discussed further.”	There is a space missing after “4.17.4”.
4.18 Tribal Cultural Resources				
231	4.18-2	Paragraph 1	“The indirect API includes accounts for visual, audible, or atmospheric intrusions; shadow effects; vibrations from construction activities; or change in access or use as a result of the Proposed Project (Caltrans 2020).The following section briefly summarizes characteristics of each group.”	There is a space missing between these sentences.
232	4.18-2	Paragraph 2	“The Ompin group of Bay Miwok are associated with the eastern and southeastern Suisan Marsh edges, where the San Joaquin and Sacramento rivers enter the Suisun Bay.”	“Suisun Marsh” is misspelled.
233	4.18-8	Bullet 1	“Location is the place where the historic property was constructed or the place where the historic event occurred.”	Bullet text is not aligned with the following bullets.
4.19 Utilities and Service Systems				
234	4.19-1	Paragraph 6	“The proposed 500 kV interconnection lines alignment ~~is~~ tra~~ns~~verses the Solano 4 Wind Project.”	Please incorporate the edits identified.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
235	4.19-2	Bullet 3	"The proposed PG&E 500 kV interconnection lines parallel the natural gas pipeline at a distance of approximately 35 feet for approximately 2,000 feet (Kinetrics AES 2025; PHMSA 2025)."	Please incorporate the edits identified.
236	4.19-3	Paragraph 1	"SCWA provides water for municipal, industrial, and agricultural uses in Fairfield, Suisun City, Vacaville, Vallejo, Benicia, the Solano Irrigation District and Maine Prairie Water District service areas, University of California Davis, and the California State Prison in Solano County (Solano County 2025c)"	There is a period missing after this sentence.
237	4.19-3	Paragraph 1	"As of July 29, 2025, Lake Berryessa stored 1,438,401AF of water (SCWA 2025)."	There is a space missing between "1,438,401" and "AF".
238	4.19-23	Paragraph 2	"~~These factors indicate.~~ Given the limited total volume of water required for Proposed Project construction (i.e., 17.4 AF over 2 years), the City's groundwater system has sufficient capacity to accommodate the water needs of the Proposed Project without requiring new entitlements, infrastructure, or extraction permits."	Please incorporate the edits identified.
239	4.19-31	Paragraph 1	"These facilities ~~there~~ have more than adequate capacity to accommodate the 0.002 mgd sanitary waste generated during peak sanitary waste generation for the Proposed Project."	Please incorporate the edits identified.
240	4.19-31	Paragraph 4	"In addition, an estimated 1,500 cubic yards of earthen spoil materials ~~be~~ from grading would not be suitable for reuse on site and would therefore be disposed of."	Please incorporate the edits identified.
241	4.19-31	Paragraph 4	"Reuse and recycling rates would be consistent with CALGreen's 65-percent diversion requirement and actual material recovery performance for concrete, wood, metals, drywall, and other materials, as enforced through Solano County and Contra Costa County C~~U~~&D debris diversion programs, as shown in ~~reuse and recycling rates would be consistent with CALGreen's 65-percent diversion requirement and actual material recovery performance for concrete, wood, metals, drywall, and other materials, as enforced through Solano County and Contra Costa County C&D debris diversion programs as shown in~~ Table 4.19-3."	Please incorporate the edits identified.
242	4.19-32	Table 4.19-3		Why does the estimated portion of total waste by weight (percent) add up to 100.6%?
243	4.19-38	Paragraph 3	"As with the Proposed Project, the cumulative projects considered would be required to conform with federal, state and local regulations pertaining to solid waste disposal and recycling, including SB 1383 and the CALGreen Code, and the programs and regulations through which CALG~~R~~reen is enforced locally in Solano County and Contra Costa County."	Please incorporate the edits identified.
244	4.19-40	Paragraph 1	"~~And t~~The City of Rio Vista pumped 733 million gallons of groundwater in 2024."	Please incorporate the edits identified.
245	4.19-42	Paragraph 2	"Similar to the Proposed Project, the Alternative 1 230 kV overhead segment would not generate AC current on the pipeline in excess of thresholds and the impact would be less than significant."	"AC current" is redundant, as AC stands for Alternating Current.
246	4.19-43	Paragraph 1	"Historical and projected water budgets developed for the Solano subbasin indicate~~s~~ surplus groundwater conditions (Solano Subbasin Groundwater Sustaina~~i~~bility Agency [Solano GSA] 2021)."	Please incorporate the edits identified.
247	4.19-43	Paragraph 1	"~~And t~~The City of Rio Vista pumped 733 million gallons of groundwater in 2024."	Please incorporate the edits identified.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
248	4.19-47	Paragraph 4	"As with the Proposed Project, solid waste generated ~~be~~ during construction would not exceed the capacity of local disposal facilities in combination with existing needs."	Please incorporate the edits identified.
249	4.19-47	Paragraph 4	"Alternative 3 would be unmanned during operation, and maintenance activities would generate~~d~~ little to no solid waste."	Please incorporate the edits identified.
250	4.19-53	Paragraph 3	"Excavation for the duct banks and transition vaults under Alternative 6a would generate~~d~~ approximately 5,100 CY of earthen spoils and, under Alternative 6b, approximately 5,500 CY."	Please incorporate the edits identified.
251	4.19-54	Paragraph 1	"The Alternative 6a/6bLSPGC 230 kV overhead segment would not generate AC ~~current~~ on the pipeline in excess of thresholds, and the impact would be less than significant.	"AC current" is redundant, as AC stands for Alternating Current.
252	4.19-55	Paragraph 2	"LSPGC shall implement the specialist's~~:~~ recommendations to avoid or minimize impacts on the ADLS or microwave tower operations in the Alternative 2 Final Design, to the extent feasible."	This paragraph identifies a single specialist.
4.20 Wildfire				
253	4.20-36	Paragraph 1	"Mitigation strategies in LSPGC's current WMP that would apply to the Collinsville Substation project include integration of the facilities into LSPGC's emergency management system; …"	Please incorporate the edits identified.
254	4.20-52	Paragraph 4	"Alternative 2 would result in the same wildfire impacts as the Proposed Project under Impact~~s~~ WF-4."	Please incorporate the edits identified.
Chapter 5 Other CEQA Considerations				
255	5-2	Paragraph 2		Split this paragraph after the third sentence.
256	5-4	Paragraph 1	Implementation of the Proposed Project would require temporary and permanent loss of vegetation and terrestrial and benthic habitat that could potentially support sensitive wildlife and fish species due to construction activities.	Implementation of the Proposed Project would require temporary and permanent loss of vegetation and terrestrial and benthic habitat that could potentially support sensitive wildlife and fish species ~~due to construction activities~~.
257	5-4	Paragraph 3	The No Project Alternative would, by contrast, result in continued consumption of non-renewable energy resources consistent as those resources would not be retired to meet peak demand without the ability to deliver more renewable energy.	The No Project Alternative would, by contrast, result in continued consumption of non-renewable energy resources ~~consistent~~ as those resources would not be retired to meet peak demand without the ability to deliver more renewable energy.
258	5-5	Paragraph 3	As described in Section 4.9: Hazards and Hazardous Materials,…	As described in Section 4.9: Hazards, ~~and~~ Hazardous Materials, and Public Safety…
259	5-7	First full paragraph	Increased bird strikes/avian mortality within the windfarm could affect SMUD's ability to operate the wind farm under their existing permit programmatic incidental take permit (ITP, Permit #MB02735B-0) from USFWS and could result in the potential curtailment of wind generation,…	Increased bird strikes/avian mortality within the windfarm could affect SMUD's ability to operate the wind farm under their existing ~~permit~~ programmatic incidental take permit (ITP, Permit #MB02735B-0) from USFWS and could result in the potential curtailment of wind generation,…
260	5-7	Third full paragraph	Construction of the Collinsville Substation would permanenly impact approximately 12 acres and temporarily disturb approximately 16 acres of land that fall wthin the Suisun Marsh Priority Habitat Restoration Area,…	Construction of the Collinsville Substation would permanently impact approximately 12 acres and temporarily disturb approximately 16 acres of land that fall within the Suisun Marsh Priority Habitat Restoration Area,…
261	5-8	Second line	The conflicts is caused by the location of the Collinsville Substation within the Suisun Marish Priority Habitat Restoration Area and is significant and unavoidable.	The conflict~~s~~ is caused by the location of the Collinsville Substation within the Suisun Marish Priority Habitat Restoration Area and is significant and unavoidable.

Comment Number	DEIR Page #	DEIR Paragraph or Table #	Original DEIR Text	Comment
Chapter 6 Comparison of Alternatives				
262	6-7	Paragraph 2	greenhouse gas emission	"greenhouse gas emissions"
263	6-9	Table 6.4-2, Air quality row, third column	The impact would be remain significant and unavoidable.	The impact would ~~be~~ remain significant and unavoidable.
264	6-14	First Paragraph	Alternative 3 was developed to address the Proposed Project impacts from installation of LSTs along the PG&E 500 kV interconnection lines which could encourage avian perching and nesting within a windfarm and increase avian mortality impacts.	Alternative 3 was developed to address the Proposed Project impacts from installation of LSTs along the PG&E 500 kV interconnection lines which could encourage avian perching and nesting within a windfarm and potentially increase avian mortality impacts.
265	6-18	Last paragraph	While Alternative 3 is environmentally superior to the Proposed Project when comparing just the 500 kV interconnection lines assuming the same Collinsville Substation location, Alternative 1 would be environmentally to Alternative 3. The Alternative 1 500 kV interconnection lines is much shorter than the Alternative 3 500 kV interconnection lines and similarly avoids the significant and unavoidable impacts from installation of LSTs that would be avoided by Alternative 3.	While Alternative 3 is environmentally superior to the Proposed Project when comparing just the 500 kV interconnection lines assuming the same Collinsville Substation location, Alternative 1 would be environmentally superior to Alternative 3. The Alternative 1 500 kV interconnection lines are~~is~~ much shorter than the Alternative 3 500 kV interconnection lines and similarly avoid~~s~~ the significant and unavoidable impacts from installation of LSTs that would be avoided by Alternative 3.
266	6-22	Table 6.4-6	..	Remove second period.
267	6-22	Table 6.4-6, biological resources row, Alternative 6a/6b	**Ranking = 3.** Alternative 6a/6b would involve greater impacts on habitat and sensitive natural communities than the Proposed Project and Alternative 4 and greater impacts on salt marsh harvest habitat due to…	**Ranking = 3.** Alternative 6a/6b would involve greater impacts on habitat and sensitive natural communities than the Proposed Project and Alternative 4 and greater impacts on salt marsh harvest mouse habitat due to…
268	6-28	Table 6.4-7, Alternative 5, second bullet	No significand and unavoidable impacts are avoided	No significant~~d~~ and unavoidable impacts are avoided.
269	6-28	Table 6.4-8, bio resources, Alternative 5 column	Because activities would be conducted over two seasons and would change the channel bottom configuration, the impact may be considered permanent and the impacts would be greater than the Proposed Project.	Because activities would be conducted over two seasons and would change the channel bottom configuration, ~~the impact may be considered permanent and~~ the impacts would be permanent and greater than the Proposed Project.
270	6-29	Table 6.4-8	Mineral Resources	Alternative 5 says “Preferred” but it should say “Ranking=1 (Preferred)”.
271	6-29	Table 6.4-8	Preferred	For consistency, this should be "Ranking = 1 (Preferred)"
272	6-32	Paragraph 3, second sentence	As discussed in Section 6.4.1, Alternative 1 is environmentally to the Proposed Project…	As discussed in Section 6.4.1, Alternative 1 is environmentally superior to the Proposed Project…

INSIGNIA ENVIRONMENTAL

LS POWER GRID CALIFORNIA, LLC

COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT

BREEDING SEASON BURROWING OWL SURVEY REPORT

OCTOBER 2025

PREPARED FOR:

LS Power

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1 – INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct a habitat assessment and focused surveys for the western burrowing owl (*Athene cunicularia hypogea*) for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project) in Contra Costa, Sacramento, and Solano counties in California. The Proposed Project would involve the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that will loop Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that would connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project's general location is depicted in Figure 1: Project Overview Map, and the Proposed Project components are depicted in Figure 2: Project Components Map.

Insignia conducted a habitat assessment for the Proposed Project in 2023, as documented in Attachment A: Collinsville 500/230 Kilovolt Substation Project Burrowing Owl Habitat Assessment Memo. This report acts as an extension of the habitat assessment and documents the methodology and results of the breeding season survey conducted by Insignia between April 2025 and June 2025. Additionally, this report fulfills the reporting requirements outlined in the *Staff Report on Burrowing Owl Mitigation* (Survey Protocol) (California Department of Fish and Wildlife [CDFW] 2012).

1.0 PROJECT DESCRIPTION

1.0.0 Project Location

As depicted in Figure 1: Project Overview Map, the proposed LSPGC Collinsville Substation would be located near the unincorporated community of Collinsville in the southwestern portion of Solano County. The burrowing owl survey area is bordered on the south and southwest by the Sacramento River, where it debouches into Suisun Bay; on the west by the Montezuma Hills and Suisun Marsh; and to the north and east by agricultural lands. The Proposed Project would create a connection to PG&E's existing Pittsburg Substation, which is located in the city of Pittsburg in the northern portion of Contra Costa County. The Proposed Project is mapped on the Antioch North, California, United States (U.S.) Geological Survey (USGS) 7.5-minute series topographic quadrangles (USGS 2025).

1.0.1 Project Overview

The main components are depicted on Figure 2: Project Components Map and include the following:

- Constructing a new 500/230 kV substation (the proposed LSPGC Collinsville Substation).
- Constructing two new approximately 1.2-mile-long, single-circuit 500 kV transmission line segments extending to interconnect (or "loop") PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation.

- Constructing a new approximately 6-mile-long, double-circuit 230 kV transmission line to connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation.

- Extending and connecting PG&E's existing 12 kV Peabody 2107 Circuit distribution line to the proposed LSPGC Collinsville Substation.

- Constructing two new telecommunications paths to the proposed LSPGC Collinsville Substation, including a new microwave tower that would be constructed and owned by PG&E at the proposed substation, as well as a new fiber optic path consisting of two fiber optic cables for redundancy that would be installed between existing fiber in the city of Pittsburg and the proposed substation.

- Constructing three new PG&E 500 kV transposition structures, removing two existing lattice steel poles (LSPs), and replacing two existing lattice steel towers with two new three-pole dead-end tubular steel poles along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line.

1.1 BURROWING OWL NATURAL HISTORY

The burrowing owl is a small ground-dwelling owl. The owl is long-legged and short-tailed, with relatively long, narrow wings and a flat head with no ear tufts. Distinguishing markings on the burrowing owl include pale eyebrows, a white throat, and a spotted dark brown and buffy breast (Sibley 2000). Burrowing owls are comparatively easy to see because they are often active in daylight, and they are surprisingly bold and approachable. The females are usually darker than the males (The Institute for Bird Populations 2007).

The burrowing owl prefers annual and perennial grasslands, typically with sparse or nonexistent tree or shrub canopies (covering less than 30 percent of the ground surface), but it persists and even thrives in some landscapes that are highly altered by human activity. The overriding characteristic of suitable habitat appears to be burrows for roosting or nesting; in California, burrowing owls are found in close association with California ground squirrel (*Otospermophilus beecheyi*). Ground squirrels provide nesting and refuge burrows, and aid in the maintenance of short vegetation height, which provides foraging habitat and allows for visual detection of avian predators by burrowing owls. In the absence of ground squirrel populations, burrowing owls may use surrogate burrows (e.g., standpipes, debris piles, rock piles, and other man-made structures) for nesting (Shuford and Gardali 2008). Western burrowing owl was declared a candidate species for listing under the California Endangered Species Act by the CDFW on October 10, 2024.

Figure 1: Project Overview Map **Collinsville 500/230 Kilovolt Substation Project**

- Proposed LSPGC Collinsville Substation
- Existing PG&E Pittsburg Substation
- Proposed PG&E 500 kV Transposition Structure
- Proposed Project Transmission Lines
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Telecommunications Line
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Navigational Channel

1:250,000

0 2 4 Miles

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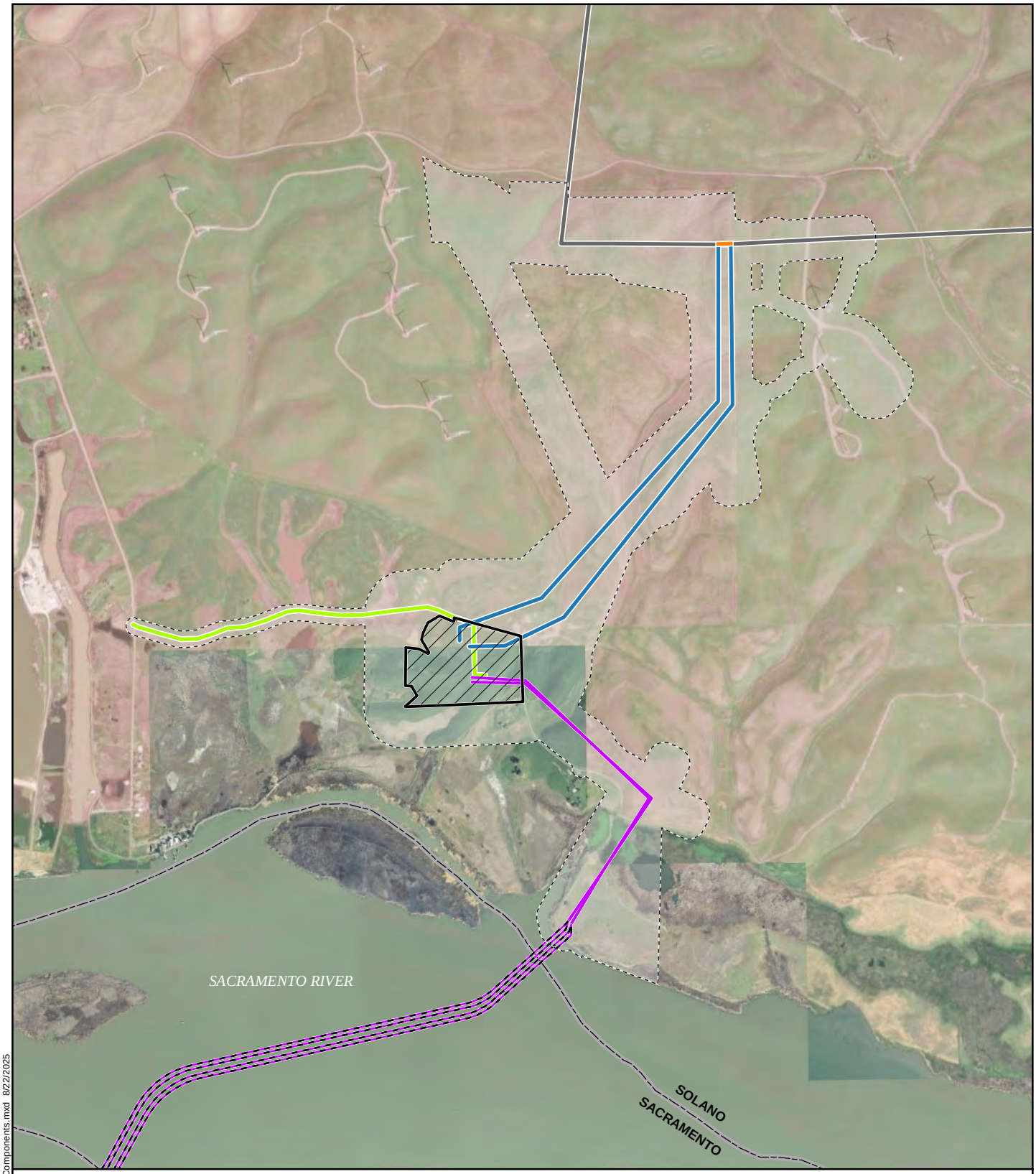

Figure 2: Project Components Map 1 of 2 **Collinsville 500/230 Kilovolt Substation Project**

- Existing PG&E 500 kV Overhead Transmission Line
- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 500 kV Interconnection
- Existing PG&E 500 kV Overhead Transmission Line to be Removed
- County Boundary
- Habitat Assessment Area
- Proposed Collinsville Substation

1:20,000
0 500 1,000 Feet

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Figure 2: Project Components Map 2 of 2 — **Collinsville 500/230 Kilovolt Substation Project**

- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed LSPGC Telecommunications Line
- Habitat Assessment Area
- Existing PG&E Pittsburg Substation
- Proposed Riser
- Proposed Utility Vault

1:8,000

0 500 1,000 Feet

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2 – METHODS

Prior to initiating field surveys, a review of previous reports, electronic databases, and other sources was conducted to assess the history of burrowing owl presence, activity, and habitat suitability in the Proposed Project vicinity (i.e., within 5 miles of the Proposed Project). Sources reviewed included the following:

- Database searches of the California Natural Diversity Database (CDFW 2025),
- Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium [CBOC] 1993),
- Survey Protocol (CDFW 2012),
- Soil Survey (U.S. Department of Agriculture [USDA] 2025), and
- Aerial photography.

2.0 SURVEY PROTOCOL

As documented in Attachment A: Collinsville 500/230 Kilovolt Substation Project Burrowing Owl Habitat Assessment Memo and in accordance with Appendix C of the Survey Protocol, a habitat assessment was conducted within the Proposed Project's Habitat Assessment Area[1] to determine whether the site contained habitat suitable for burrowing owls.

The assessment concluded that the Habitat Assessment Area provides only marginal habitat for burrowing owl occupation. Marginal habitat is present in nonnative annual grasslands located in the immediate uplands surrounding aquatic features, along fence lines, and adjacent to unpaved access roads. However, these areas lack suitable burrows or burrow surrogates, and the presence of fossorial mammals (which are essential for creating burrows) was limited. In addition, the soil types in grassland habitats surrounding aquatic features are poorly draining, further reducing suitability for burrowing owl habitation.

Although only marginal habitat was identified within the Habitat Assessment Area—not meeting the full definition of suitable habitat outlined in Appendix A of the Survey Protocol—the Proposed Project's Proponent's Environmental Assessment (Insignia 2024a) commits LSPGC to conducting up to four protocol-level surveys for burrowing owl, in accordance with the Survey Protocol, prior to the initiation of construction. Accordingly, Insignia staff conducted breeding season surveys in accordance with Appendix D of the Survey Protocol within all accessible portions of the Habitat Assessment Area. These surveys were designed to determine whether potential burrows or live owls were present within marginal burrowing owl habitat identified during the habitat assessment. For purposes of the Survey Protocol, potential burrows are defined

[1] As documented in Attachment A: Collinsville 500/230 Kilovolt Substation Project Burrowing Owl Habitat Assessment Memo, the Proposed Project-specific habitat assessment accounted for a majority of the potentially suitable habitat within 500 feet of the Proposed Project; substantial portions of the unassessed areas are developed or are open water and lack suitable habitat for the species. All areas north of the Sacramento-San Joaquin River Delta (Delta) were covered by a previous habitat assessment associated with the Solano Phase 4 Wind Project. Further, LSPGC does not have landowner permission to conduct any additional field surveys. Due to the consistent nature of the vegetation, soil types, and land use in the vicinity of the Proposed Project and ample previous studies in the area, the desktop analysis was sufficient to identify burrowing owl habitat within the Habitat Assessment Area.

as burrows showing burrowing owl sign (e.g., the presence of owls, pellets, prey remains, whitewash, or decoration).

Four survey visits were completed in accordance with the Survey Protocol between April and June 2025, as detailed in Table 1: Survey Data. One survey visit was conducted between February 15 and April 15, 2025, and three additional visits were conducted between April 15 and July 15, 2025; each visit was at least 3 weeks apart.

Insignia biologists walked transects spaced no more than 10 meters (approximately 100 feet) apart within marginal burrowing owl habitat to document potential burrows. The locations of potential burrows were recorded using a submeter-accurate Global Positioning System device. At the beginning of each transect, and at least every 100 meters, the entire visible Proposed Project area was scanned with binoculars. Bird vocalizations were also monitored while biologists walked transects.

Breeding season surveys were conducted during weather conditions conducive to observing owls outside their burrows and detecting burrowing owl sign, and in the morning during the optimal detectability window (i.e., between the 2 hours before sunrise and 1 hour after sunrise). Surveys were not conducted during rain; within 5 days of a rain event; or under high winds (i.e., winds greater than 20 miles per hour [mph]), dense fog, or temperatures exceeding 90 degrees Fahrenheit (°F). Although surveys frequently extended beyond the optimal detectability window for the species, all suitable burrowing owl habitat identified within the Habitat Assessment Area was evaluated during the optimal detectability window. The remainder of each survey day (i.e., the time outside the optimal detectability window) was used to evaluate suitable burrowing owl habitat within suitable landcover types where fossorial mammal activity had not previously been recorded. These land cover types were exclusively located north of the Delta.

Table 1: Survey Data

Date	Survey Time	Biologists	Temperature (°F)	Precipitation (inches)	Wind Speed (mph)	Cloud Cover (%)	Visibility (miles)
04/10/2025	0500-1300	Mark Oates and Joshua Rodriguez	51-79	0.0	0-9	0	10
05/01/2025	0500-1300	Mark Oates and Sidney Wells	51-79	0.0	0-10	0	10
05/22/2025	0500-1200	Mark Oates and Sidney Wells	62-79	0.0	6-12	0	10
06/16/2025	0500-1100	Mark Oates and Sidney Wells	51-86	0.0	13-20	0	10

All Insignia biologists who conducted surveys for this burrowing owl protocol-level survey fulfilled all the biologist qualifications outlined in the Survey Protocol, including:

- Familiarity with the species and its local ecology;
- Experience conducting habitat assessments and non-breeding and breeding season surveys or experience conducting them under the direction of an experienced surveyor;
- Familiarity with the appropriate state and federal statutes related to burrowing owl, scientific research, and conservation; and
- Experience with analyzing impacts of development on burrowing owls and their habitat, as detailed in Table 1: Survey Data.

3 – RESULTS

3.0 SURVEY

No burrowing owls or potential burrows were detected during breeding season surveys. The Habitat Assessment Area continues to provide only marginal habitat for the species. However, in one area just south of Talbert Lane, along a north-south fence line, ground squirrels were observed establishing burrows. This activity was not recorded during the 2023 habitat assessment, indicating that the area has only recently been colonized. These burrows would be suitable for burrowing owl occupation and are shown on pages 8 and 9 of Attachment B: Burrowing Owl Survey Results and Vegetation Communities Map. However, they are located along an electrified barbed-wire fence line and did not contain any burrowing owl sign. A representative photograph of this suitable habitat is provided in Attachment C: Photograph.

No other suitable burrowing owl habitat was observed within the Habitat Assessment Area, and no ground squirrels or other fossorial mammals were observed at any additional locations.

3.1 GENERAL WILDLIFE SPECIES

Other wildlife species observed during surveys include 11 species of birds and four species of mammals. The following species were identified:

- Black-tailed jackrabbit (*Lepus californicus*),
- Coyote (*Canis latrans*),
- Desert cottontail (*Sylvilagus audubonii*),
- Great egret (*Ardea alba*),
- House finch (*Haemorhous mexicanus*),
- Killdeer (*Charadrius vociferus*),
- Mallard (*Anas platyrhynchos*),
- Northern harrier (*Circus cyaneus*),
- Red-tailed hawk (*Buteo jamaicensis*),
- Red-winged blackbird (*Agelaius phoeniceus*),
- Ring-necked pheasant (*Phasianus colchicus*),
- River otter (*Lontra canadensis*),
- Turkey vulture (*Cathartes aura*),

- White-crowned sparrow (*Zonotrichia leucophrys*), and
- White pelican (*Pelecanus erythrorhynchos*).

Notably, coyotes and red-tailed hawks—both known burrowing owl predators—were observed within the Habitat Assessment Area during surveys. No evidence of burrowing owl predation was observed.

4 – CONCLUSIONS

Burrowing owls and burrowing owl sign were not detected during the surveys. The timing and weather conditions under which breeding season surveys were conducted met the requirements of the Survey Protocol: surveys occurred during the breeding season, they occurred between the 2 hours before sunrise and 1 hour after sunrise, and they were not conducted under adverse weather conditions (e.g., rain, within 5 days of a rain event, winds greater than 20 mph, dense fog, or temperatures exceeding 90°F). Therefore, if burrowing owls or their sign had been present on site, the probability of detection during the surveys would have been high.

As presented in Attachment A: Collinsville 500/230 Kilovolt Substation Project Burrowing Owl Habitat Assessment Memo, habitat suitable for nesting and overwintering is scarce; however, burrowing owls may still forage and disperse within the Habitat Assessment Area north of the Delta. Several records of overwintering owls occur within 5 miles of the Proposed Project, but no records have been documented within the Habitat Assessment Area itself. Further, breeding season records from the area north of the Delta—where soils and vegetation may otherwise be suitable—have either been potentially extirpated or show no evidence of breeding activity for nearly 25 years. In addition, the presence of predators such as coyotes and red-tailed hawks, both known burrowing owl predators, further reduces the suitability of the area for burrowing owl occupation. Suitable burrow habitat established by ground squirrels in the northern portion of the Habitat Assessment Area may provide overwintering habitat or stopovers for dispersing owls. However, the presence of an electrified fence immediately adjacent to these burrows may limit their suitability.

In summary, breeding season surveys indicate that no habitat within the Habitat Assessment Area is currently being used by breeding burrowing owls.

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ATTACHMENT A: COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT BURROWING OWL HABITAT ASSESSMENT MEMO

MEMO

Collinsville 500/230 Kilovolt Substation Project Burrowing Owl Habitat Assessment Memo

To: Dustin Joseph, LS Power Grid California (LSPGC)

From: Mark Oates, Insignia Environmental (Insignia)

Date: December 4, 2024

INTRODUCTION

LSPGC retained Insignia to conduct a habitat assessment for the western burrowing owl (*Athene cunicularia hypogea*) for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). The Proposed Project's general location and the Proposed Project components are depicted in Attachment A: Project Overview Map. The Proposed Project involves the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that would interconnect Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that would connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project has been designed to address overloads on the existing Contra Costa-Newark 230 kV corridor and provide an additional supply into the northern greater San Francisco Bay Area to increase reliability to the area and advance additional renewable generation.

This Burrowing Owl Habitat Assessment Memo was prepared to evaluate the likelihood that the Proposed Project and its associated habitat assessment area support burrowing owl individuals or suitable habitat for the species, in accordance with the habitat assessment recommendations outlined in *Appendix C, Habitat Assessment and Reporting Details* of the *Staff Report on Burrowing Owl Mitigation* (Protocol) (California Department of Fish and Wildlife [CDFW] 2012). A habitat assessment is the first step in evaluating the potential impacts of the Proposed Project on the species and will inform whether focused surveys for the species are necessary.

PROJECT COMPONENTS

The main components of the Proposed Project are depicted in Attachment A: Project Overview Map and include the following:

- A new approximately 11-acre 500/230 kV substation near the unincorporated community of Collinsville in Solano County (Proposed LSPGC Collinsville Substation);
- Two new approximately 1.5-mile-long single-circuit 500 kV onshore transmission line segments (Proposed PG&E 500 kV Interconnection) that would interconnect PG&E's

existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation;[1]

- A new approximately 6-mile-long double-circuit 230 kV transmission line that would connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation, including the following components:

    - An approximately 1-mile-long overhead transmission line segment that would connect the proposed Collinsville Substation to transition structures on the north side of the Sacramento-San Joaquin River Delta (Delta) waterways (Proposed LSPGC 230 kV Overhead Segment),

    - Four approximately 4.5-mile-long submarine cables installed 6 to 15 feet below the sediment surface (Proposed LSPGC 230 kV Submarine Segment), and

    - An onshore underground utility vault near PG&E's existing Pittsburg Substation that would transition the submarine cables to underground cables that would terminate at approximately two new riser poles adjacent to PG&E's existing Pittsburg Substation (Proposed LSPGC 230 kV Underground Segment), where the conductors would transition from underground cables to overhead lines; and

- Two new telecommunications paths to the proposed Collinsville Substation (a new microwave tower that would be constructed at the substation and a new fiber optic path that would be installed between existing fiber in the City of Pittsburg and the proposed Collinsville Substation (Proposed LSPGC Telecommunications Extension).

METHODS

Desktop Review

Ahead of all field surveys, a review of previous reports, electronic databases, and other sources was conducted to assess the history of burrowing owl presence, activity, and habitat suitability in the Proposed Project vicinity (up to 5 miles). Sources reviewed included the following:

- Aerial photography (Google Earth 2024),
- Database searches of the California Natural Diversity Database (CNDDB) (CDFW 2024a),[2]
- California Wildlife Habitat Relationships (CWHR) species range maps (CDFW 2024b),
- Web Soil Survey (Natural Resources Conservation Service [NRCS] 2024),
- Sacramento Municipal Utility District Solano 4 Wind Project (Solano 4), Burrowing Owl Habitat Assessment (AECOM 2018), and
- The Solano County General Plan Land Use Element (Solano County 2008).

[1] PG&E would be responsible for the final configuration of the northern tie-in of the 500 kV loop-in between the proposed Collinsville Substation and the existing Vaca Dixon-Tesla 500 kV Transmission Line. LSPGC would be responsible for the installation of dead-end structures near the proposed Collinsville Substation to facilitate looping in the 500 kV lines.

[2] The CNDDB search included a 5-mile buffer around the Proposed Project footprint.

Field Survey Method

The geographical boundaries of the Proposed Project components were provided by LSPGC in the form of Geographic Information System shapefiles. As outlined in Attachment B: Biological Resources Map, a habitat assessment area was established to include all terrestrial areas within 100 to 500 feet of Proposed Project components.

On the dates of May 23 to 26, 30, and 31; June 9; July 10, 11, and 12; September 21 and 22; and December 19, 2023, Insignia biologists conducted habitat assessments to characterize the existing conditions within the habitat assessment area and identify potential biological resources, including habitat for burrowing owl, that may occur. Approximately 569.7 acres of terrestrial habitat and land cover were surveyed.

Insignia biologists searched for areas of potential burrowing owl habitat by walking meandering transects that covered 100 percent of the habitat assessment area that was accessible. Areas that were inaccessible due to tall, non-transparent fencing and/or lack of landowner permission were observed to the greatest extent feasible from adjacent and accessible properties. Biologists noted the presence or absence of burrows and conducted an inspection of burrows for burrowing owl sign as defined by the Protocol, including tracks, molted feathers, cast pellets, prey remains, eggshell fragments, owl whitewash, nest burrow decoration materials, possible owl perches, and other relevant indicators.

As part of the habitat assessment, natural communities were mapped; other non-vegetative land covers were documented as well. The biologists identified dominant species and mapped the natural community and land cover boundaries using a submeter-accurate Global Positioning System unit.

Surveys were conducted during daylight hours with clear to partly cloudy skies and did not occur in inclement weather conditions or fog cover. Temperatures ranged from 65 to 91 degrees Fahrenheit with wind speeds between 5 and 20 miles per hour.

RESULTS

Desktop Review

Range and Occurrence Data

As shown in Attachment C: Burrowing Owl Range and Occurrence Data, CWHR maps indicate that the entire habitat assessment area occurs within the recognized year-round range of burrowing owl (CDFW 2024a). Further, as shown in Attachment C: Burrowing Owl Range and Occurrence Data, there are 17 CNDDB records of burrowing owls within 5 miles of the Proposed Project. The closest burrowing owl observation was recorded in 2010, approximately 0.3 mile from the Proposed Project, in the Collinsville-Montezuma Hills Wind Resource Area with a record accuracy of 80 meters (CDFW 2024a). The closest CNDDB record of a breeding pair of burrowing owls is an observation from 2000 in the Montezuma Wetlands, approximately 1.2 miles from the Proposed Project. However, the last observation of owls at this location occurred during protocol-level burrowing owl surveys conducted in accordance with the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium 1993) in 2007, in association with Phase 1 of the Montezuma Wetlands Restoration Project. Subsequent protocol-level surveys conducted for this project in 2010 and 2011 did not detect any burrowing owls. The next-closest CNDDB record of a breeding pair is 1.6 miles from the Proposed Project, also in the Montezuma Wetlands, and is potentially extirpated. No other CNDDB records of breeding pairs of burrowing owls occur within 5 miles of the Proposed

Project north of the Delta. A 2007 CNDDB record of a nesting pair was recorded within 2.6 miles of the Proposed Project south of the Delta.

Prior Assessments

The most recent burrowing owl habitat assessment was conducted in a location that fully overlaps the Proposed Project habitat assessment area (AECOM 2018) in support of the Solano 4 Environmental Impact Report (EIR). That assessment determined that suitable habitat for burrowing owl nesting and wintering sites may occur within isolated and limited patches of habitat or under specific conditions within the Proposed Project's habitat assessment area. These areas include annual grassland habitat with sparse vegetation, undisked agricultural lands, and unvegetated areas near fence lines and buildings, or where erosion exposes soil. No evidence of burrowing owl occupancy was detected during this habitat assessment. Focused surveys and take avoidance surveys for the species, in accordance with the Protocol, were proposed as a mitigation measure in the Solano 4 EIR; however, focused surveys were not conducted prior to the drafting and submittal of the Solano 4 EIR.

Soils

As depicted in Attachment D: Soils Crossed by the Proposed Project, the Proposed Project would be constructed on the following soil types:

- Clear Lake clay (Cc),
- Diablo-Ayar clays (DaC),
- Diablo-Ayar clays eroded (DaE2),
- Omni silt clay (Ob),
- Rincon clay loam (RbC),
- Tamba mucky clay (Ta),
- Valdez silty clay loam (Vd), and
- Valdez silt loam (Va).

DaE2, DaC, and RbC soil types are well-draining and would be suitable for burrowing owl occupancy. These soil types are present at the Proposed PG&E 500 kV Interconnection and portions of the Proposed LSPGC 230 kV Overhead Segment, Proposed PG&E 12 kV Distribution Line, and Proposed LSPGC Telecommunications Line.

Land Use

The Proposed PG&E 500 kV Interconnection, Proposed LSPGC Collinsville Substation, Proposed LSPGC 230 kV Overhead Segment, and Proposed PG&E 12 kV Distribution Line would be located on lands designated as Agriculture by the Solano County General Plan Land Use Element and within the Solano County-identified Montezuma Hills agricultural region (Solano County 2008). Management practices include:

- Disking;
- Periodic agricultural burning;
- Grazing;
- Management for fire control; and
- Crop planting, growth, and harvest within a 3-year period.

The areas adjacent to the proposed PG&E 500 kV Interconnection, LSPGC Collinsville Substation, LSPGC 230 kV Overhead Segment have been developed and are in use as an

active windfarm. The Proposed LSPGC 230 kV Underground Segment and Proposed LSPGC Telecommunications Line would be located in industrial and residential areas within the city of Pittsburg.

Field Survey

Biological Setting

The habitat assessment area north of the Delta (Sections 22, 23, and 26; Township 3 North; Range 1 East; Mount Diablo Principal Meridian) consists of a series of gently rolling hills that transition to low-lying wetlands as they approach the Delta, while the habitat assessment area south of the Delta (Section 00; Township 2 North; Range 1 East; Mount Diablo Principal Meridian) is relatively flat and developed.

Vegetation

Vegetation within the habitat assessment area consists primarily of nonnative annual grasslands, particularly in the area north of the Delta. Portions of these areas were undergoing harvest at the time of the survey. In areas where agricultural harvest was not underway, evidence of livestock grazing and disking was observed, including extensive hoofprints and furrowing along hillsides that is indicative of prior disking. Vegetation varied in height, ranging from 1 to 6 feet in stands of black mustard (*Brassica nigra*), but was uniformly dense throughout; exposed soils were scarce and were primarily found along the edges of aquatic features. Freshwater and brackish wetland vegetation is found in the southern portion of the habitat assessment area north of the Delta, along with scattered shrubland and willow communities. Disturbed and developed land covers constitute the majority of the habitat assessment area south of the Delta where vegetation is ruderal, ornamental, or entirely absent.

Prey Availability

Multiple avian prey species for the burrowing owl were observed throughout the habitat assessment area north of the Delta and found to be abundant, including songbirds such as the house finch (*Haemorhous mexicanus*) and song sparrow *(Melospiza melodia*). Reptilian and amphibian prey species were not observed in the habitat assessment area, and suitable mammalian prey species, including California ground squirrel (*Otospermophilus beecheyi*), were found to be scarce throughout the area.

Burrows and Burrow Surrogates

Throughout the habitat assessment area, fossorial mammal activity was rare, and no small mammal burrows suitable for burrowing owl occupation (i.e., with burrow entrance diameters measuring 3 to 5 inches) were observed. Further, burrow surrogates (e.g., culverts, piles of concrete rubble, piles of soil, burrows created along soft banks of ditches and canals, pipes, and similar structures that could offer suitable alternative nesting and roosting habitat for the species) were not observed within the habitat assessment area. No evidence of burrowing owl presence nor their sign was observed.

CONCLUSION

The habitat assessment area provides limited suitable habitat for burrowing owl occupation. Marginal habitat is present in nonnative annual grasslands located in the immediate uplands surrounding aquatic features, along fence lines, and adjacent to unpaved access roads. However, these areas lack suitable burrows and burrow surrogates; in addition, the presence of fossorial mammals, which are essential for creating burrows, was limited. Further, in grassland

habitats surrounding aquatic features, the soil types are not well-draining (e.g., TA and VA), making them unsuitable for burrowing owl habitation.

Land use practices north of the Delta further reduce habitat suitability and limit the availability of habitat for burrowing owls and the fossorial mammals on which they depend for food and burrows. In fields surrounding the Proposed LSPGC 230 kV Overhead Segment and the Proposed PG&E 12 kV Distribution Line, fossorial mammals are scarce, but may reoccupy grassland habitats if these fields are left fallow, potentially creating suitable nesting and overwintering habitat, as well as additional foraging opportunities for burrowing owls. South of the Delta, existing development limits the availability of suitable habitat for the species.

Although habitat for nesting and overwintering is scarce, burrowing owls may still forage and disperse within the habitat assessment area north of the Delta. There are several records of overwintering owls within 5 miles of the Proposed Project, but no records have been documented within the habitat assessment area itself. Further, records documented during the breeding season in the area north of the Delta, where soils and vegetation may be suitable for the species, have either been potentially extirpated or show no recorded breeding activity in nearly 25 years. Nevertheless, the proximity of the habitat assessment area to recent records and the presence of suitable prey species within the area provide suitable foraging habitat for the species and potential dispersal habitat between breeding and overwintering sites. Therefore, while there is a low potential for burrowing owls to nest or overwinter within the habitat assessment area, there is a moderate potential for the species to use the site for foraging or dispersal.

As depicted in Attachment E: Habitat Assessment Area Comparison, the Proposed Project-specific habitat assessment accounted for a majority of the potentially suitable habitat within 500 feet of the Proposed Project (substantial portions of the unassessed areas are developed or are open water and lack suitable habitat for the species). All areas north of the Delta were covered by the previous habitat assessment associated with the Solano 4 project. Further, LSPGC does not have landowner permission to conduct any additional field surveys. Due to the consistent nature of the vegetation, soil types, and land use in the vicinity of the Proposed Project and ample previous studies in the area, no additional habitat assessment surveys are warranted.

As presented in the Proposed Project's Proponent's Environmental Assessment (Insignia 2024), LSPGC has committed to conducting up to four protocol-level surveys for burrowing owl, in accordance with the CDFW's staff report, within suitable grassland habitat prior to the initiation of construction. Take avoidance surveys for any active burrows would also be conducted prior to the start of construction.

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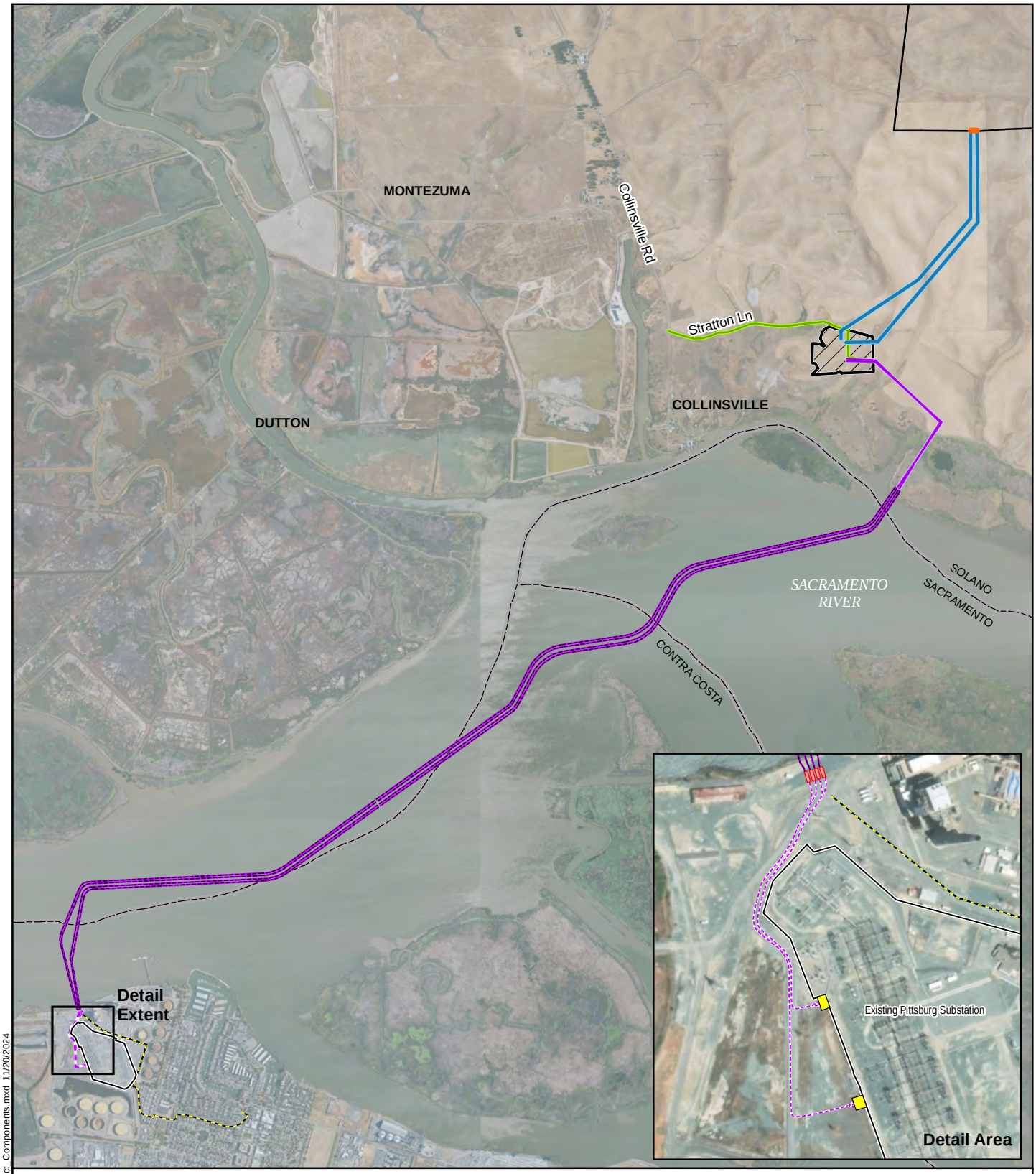
ATTACHMENT A: PROJECT OVERVIEW MAP



Attachment A: Project Overview Map

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed PG&E 500 kV Interconnection
- Proposed PG&E 12 kV Distribution Line
- Existing PG&E 500 kV Transmission Line to be Removed
- County Boundary
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Existing Pittsburg Substation
- Proposed LSPGC Collinsville Substation Site
- Proposed LSPGC Telecommunications Line
- Proposed Riser
- Proposed Utility Vault

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LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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ATTACHMENT B: BIOLOGICAL RESOURCES MAP

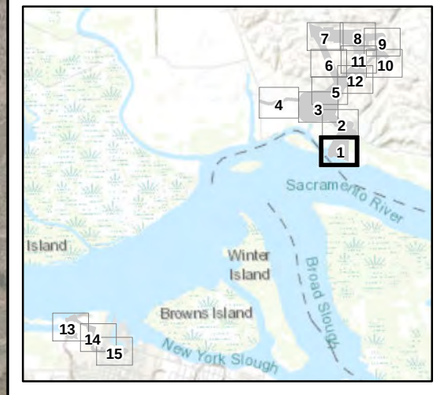
Attachment B:
Biological Resources Map
Map 1 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Survey Area

Vegetation Community and Land Covers

- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Juncus arcticus (var. balticus, mexicanus)* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Rosa californica* Shrubland Alliance
- *Salix exigua* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Schoenoplectus acutus/rosa californica* Association
- Road/Bare Ground
- Open Water



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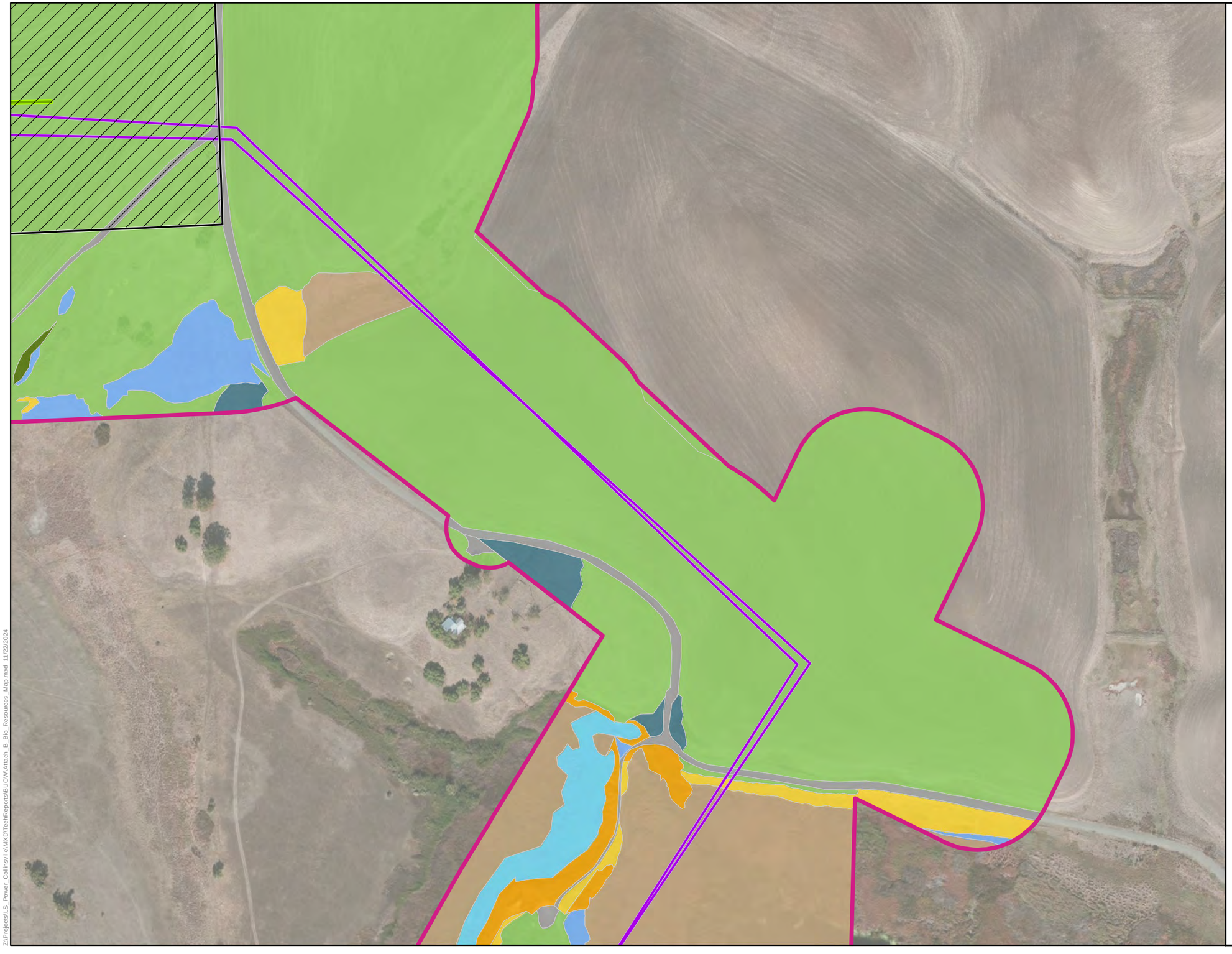


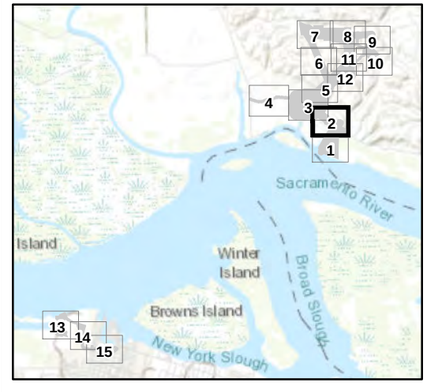
Attachment B:
Biological Resources Map
Map 2 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Collinsville Substation Site
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Polygonum lapathifolium - Xanthium strumarium* Herbaceous Alliance
- *Rosa californica* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- Road/Bare Ground
- Open Water



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LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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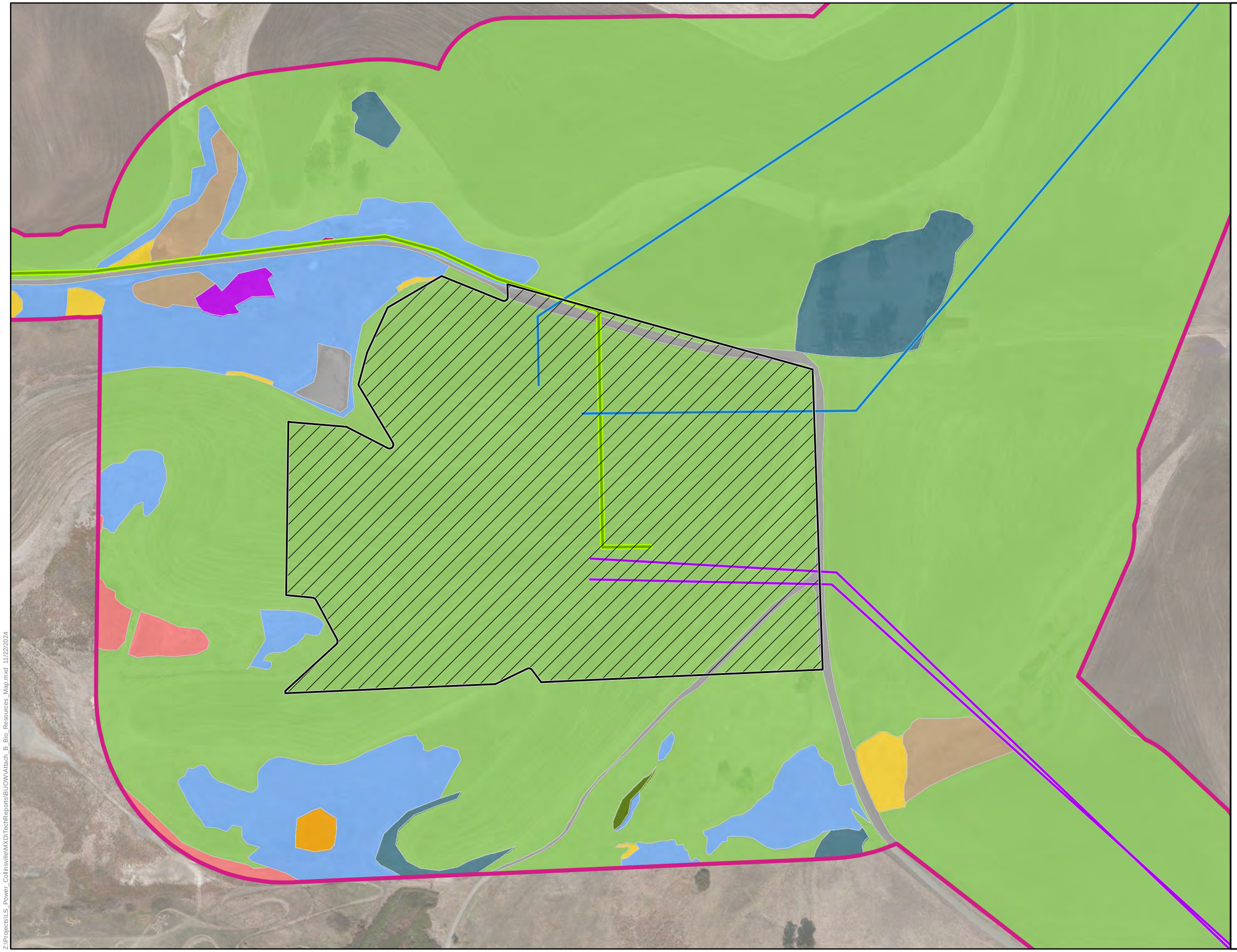


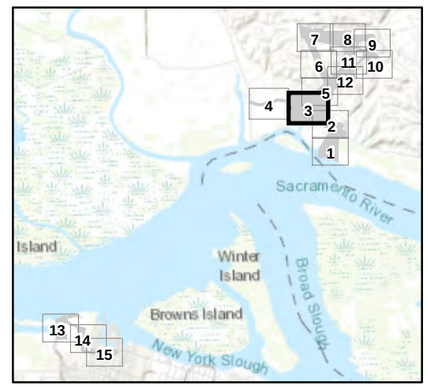
Attachment B:
Biological Resources Map
Map 3 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed PG&E 500 kV Interconnection
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Collinsville Substation Site
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Polygonum lapathifolium - Xanthium strumarium* Herbaceous Alliance
- *Sarcocornia pacifica* Herbaceous Alliance
- *Rosa californica* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Schoenoplectus americanus* Herbaceous Alliance
- *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance
- Road/Bare Ground



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LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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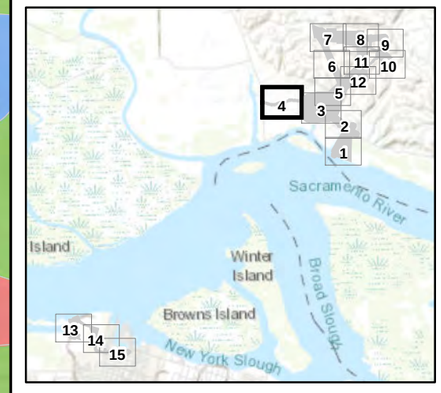
Attachment B:
Biological Resources Map
Map 4 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 12 kV Distribution Line
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Sarcocornia pacifica* Herbaceous Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- Road/Bare Ground
- Developed



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LS POWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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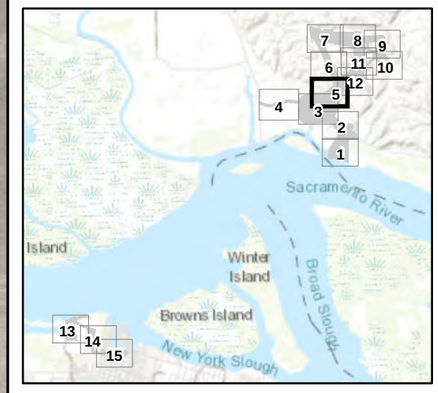
Attachment B:
Biological Resources Map
Map 5 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Interconnection
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Collinsville Substation Site
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance
- Road/Bare Ground



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0 125 250 500 Feet

LSPOWER GRID CALIFORNIA

INSIGNIA ENVIRONMENTAL

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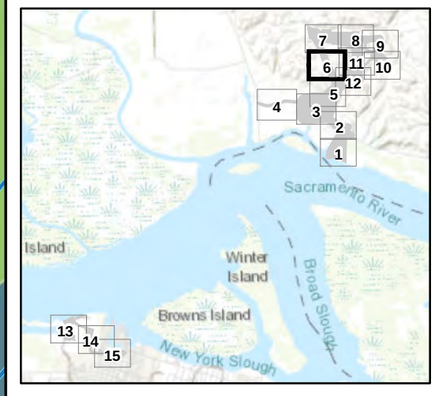
Attachment B:
Biological Resources Map
Map 6 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Interconnection
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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LS POWER GRID CALIFORNIA

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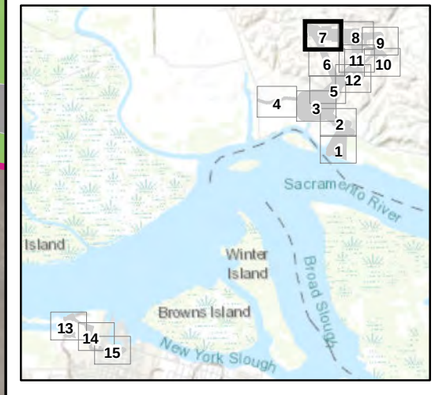
Attachment B:
Biological Resources Map
Map 7 of 15

Collinsville 500/230 Kilovolt Substation Project

- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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LS POWER GRID CALIFORNIA

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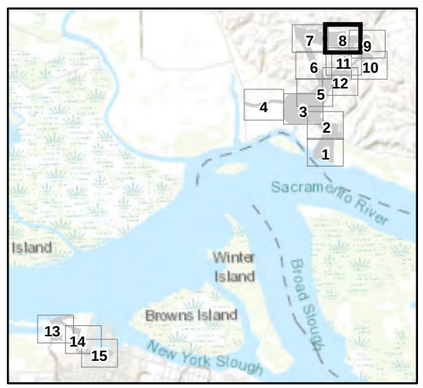
Attachment B:
Biological Resources Map
Map 8 of 15

Collinsville 500/230 Kilovolt Substation Project

- Existing PG&E 500 kV Transmission Line to be Removed
- Proposed PG&E 500 kV Interconnection
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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LS POWER GRID CALIFORNIA

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Attachment B:
Biological Resources Map
Map 9 of 15

Collinsville 500/230 Kilovolt Substation Project

Existing PG&E Vaca Dixon-Tesla Transmission Line

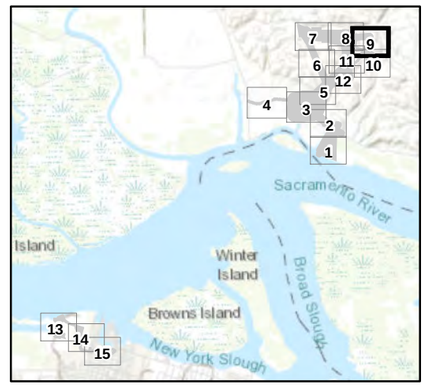
Survey Area

Vegetation Community and Land Covers

Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

Lolium perenne Herbaceous Semi-Natural Alliance

Road/Bare Ground



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LSPOWER GRID CALIFORNIA

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Attachment B:
Biological Resources Map
Map 10 of 15

Collinsville 500/230 Kilovolt Substation Project

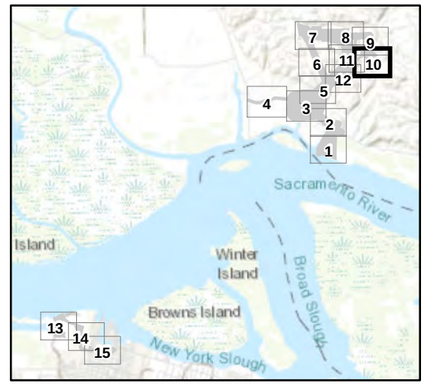
Survey Area

Vegetation Community and Land Covers

Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

Lolium perenne Herbaceous Semi-Natural Alliance

Road/Bare Ground



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LS POWER GRID CALIFORNIA

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Attachment B:
Biological Resources Map
Map 11 of 15

Collinsville 500/230 Kilovolt Substation Project

Proposed PG&E 500 kV Interconnection

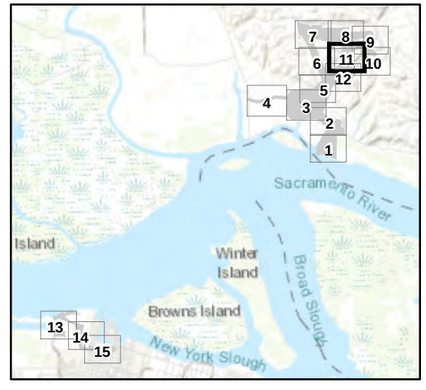
Survey Area

Vegetation Community and Land Covers

Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

Lolium perenne Herbaceous Semi-Natural Alliance

Road/Bare Ground



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LS POWER GRID CALIFORNIA

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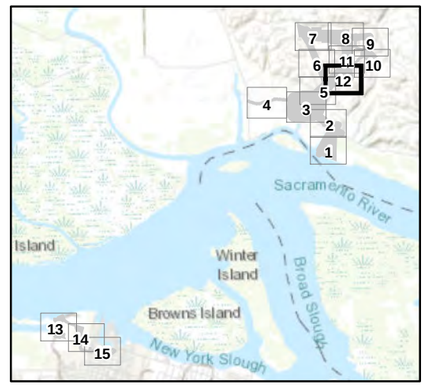
Attachment B:
Biological Resources Map
Map 12 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Interconnection
- Survey Area

Vegetation Community and Land Covers

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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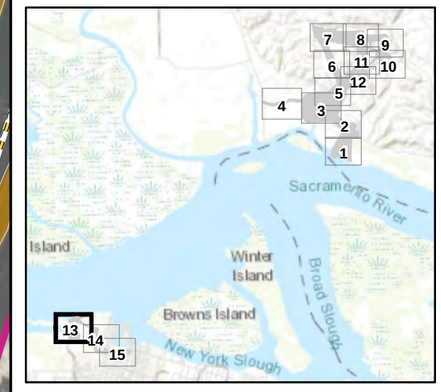
Attachment B:
Biological Resources Map
Map 13 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed Underground Telecommunication Cable Route
- Vault
- Existing PG&E Pittsburg Substation
- Survey Area

Vegetation Community and Land Covers

- *Lepidium latifolium – Lactuca serriola* Herbaceous Alliance
- Ornamental Vegetation
- *Juncus arcticus (var. balticus, mexicanus)* Herbaceous Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Baccharis pilularis* Shrubland Alliance
- Disturbed
- Road/Bare Ground
- Rip Rap
- Open Water
- Developed
- Not Surveyed



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LSPOWER GRID CALIFORNIA

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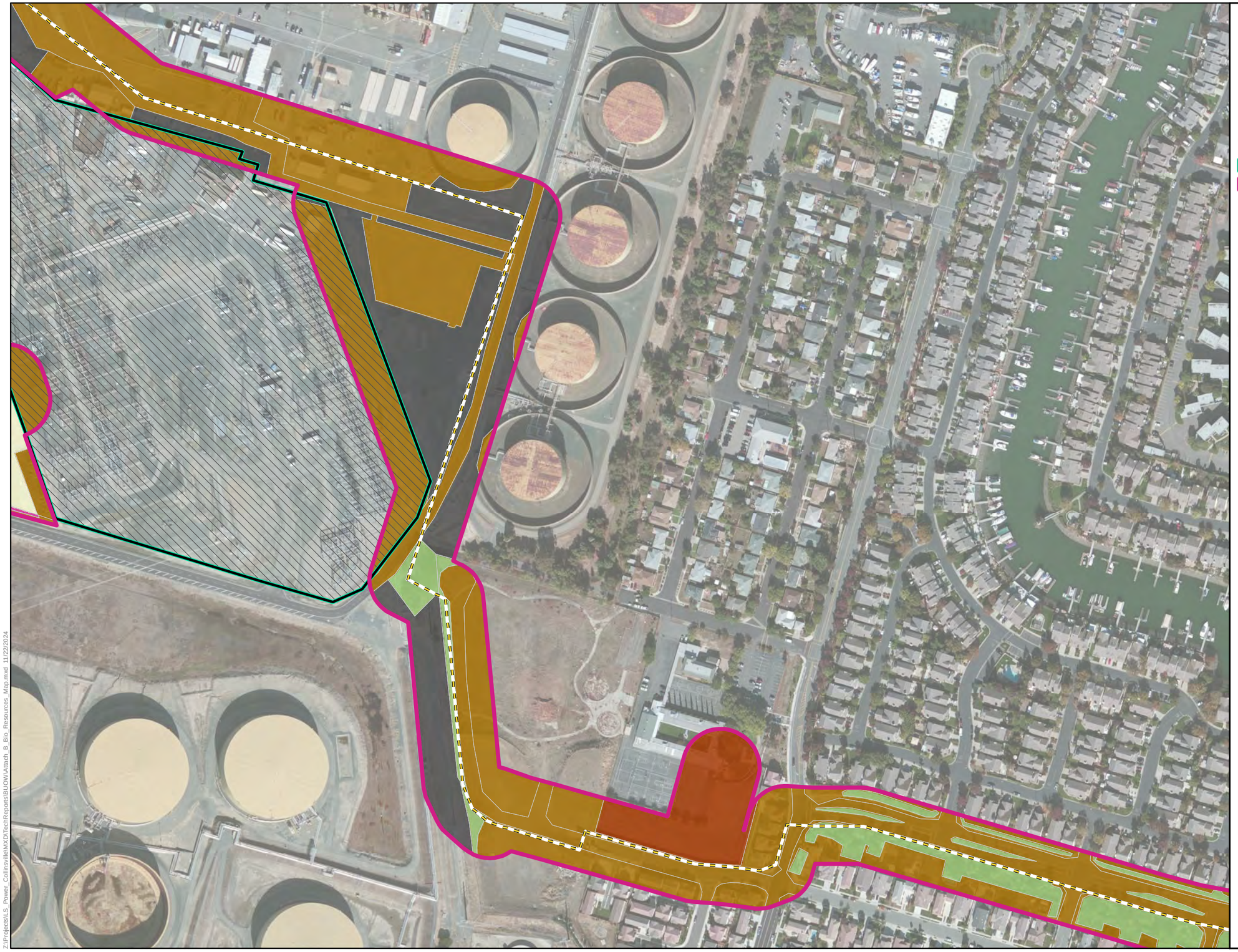


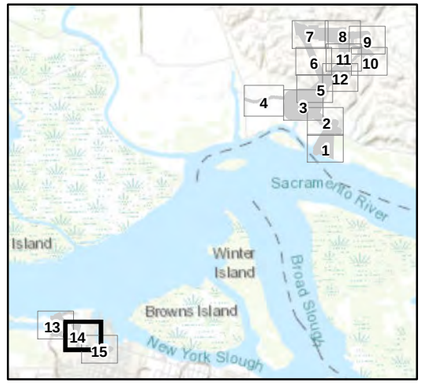
Attachment B:
Biological Resources Map
Map 14 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed Underground Telecommunication Cable Route
- Existing PG&E Pittsburg Substation
- Survey Area

Vegetation Community and Land Covers

- *Lepidium latifolium – Lactuca serriola* Herbaceous Alliance
- Ornamental Vegetation
- *Baccharis pilularis* Shrubland Alliance
- Disturbed
- Developed
- Not Surveyed



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Attachment B:
Biological Resources Map
Map 15 of 15

Collinsville 500/230 Kilovolt Substation Project

Proposed Underground Telecommunication Cable Route

Survey Area

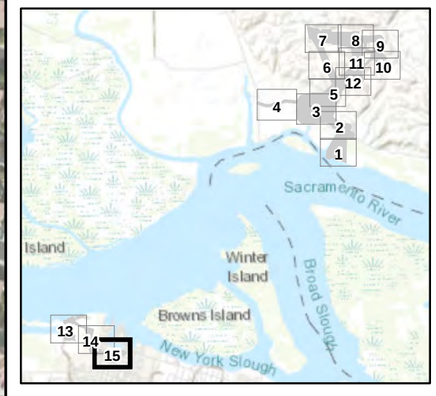
Vegetation Community and Land Covers

Ornamental Vegetation

Disturbed

Developed

Not Surveyed



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0 125 250 500 Feet

LS POWER GRID CALIFORNIA

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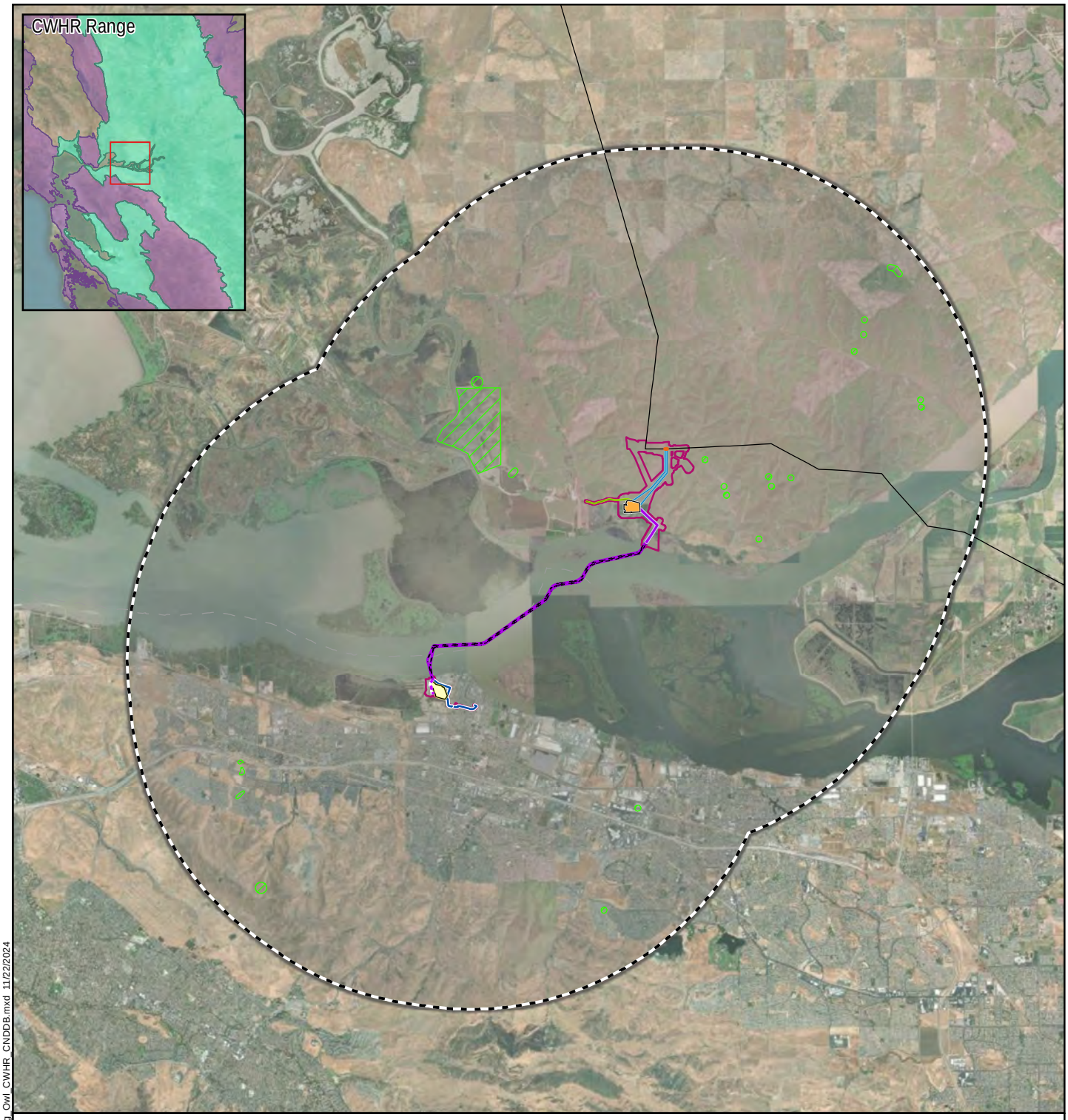
ATTACHMENT C: BURROWING OWL RANGE AND OCCURRENCE DATA



Attachment C: Burrowing Owl Range and Occurrence Data

Collinsville 500/230 Kilovolt Substation Project

- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Existing PG&E 500 kV Transmission Line to be Removed
- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed PG&E 500 kV Interconnection
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Telecommunications Line
- Proposed LSPGC Collinsville Substation Site
- Existing PG&E Pittsburg Substation
- 5-Mile Buffer
- Survey Area
- California Natural Diversity Database Burrowing Owl (*Athene cunicularia hypugaea*) Occurrence
- California Wildlife Habitat Relationships Winter Range (Inset)
- California Wildlife Habitat Relationships Yearly Range (Inset)

1:150,000

0 2 4 Miles

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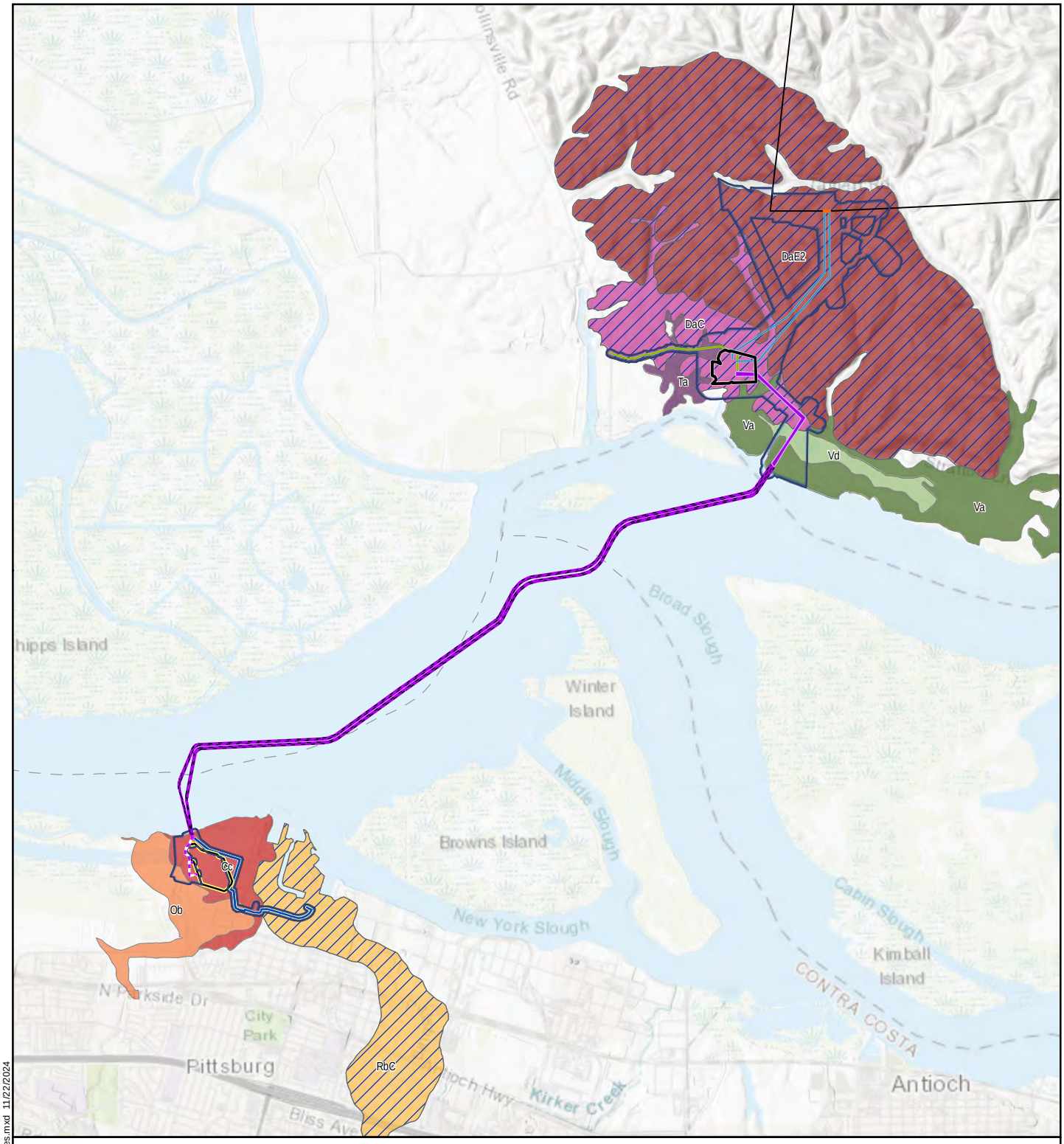
ATTACHMENT D: SOILS CROSSED BY THE PROPOSED PROJECT



Attachment D: Soils Crossed by the Proposed Project

Collinsville 500/230 Kilovolt Substation Project

- Ta
- Vd
- Cc
- Ob
- RbC
- Va
- DaE2
- DaC

- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Existing PG&E 500 kV Transmission Line to be Removed
- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed PG&E 500 kV Interconnection
- Proposed PG&E 12 kV Distribution Line
- Proposed LSPGC Telecommunications Line

- Proposed LSPGC Collinsville Substation Site
- Existing PG&E Pittsburg Substation
- Well-Draining Soils
- Habitat Assessment Area

1:55,000

0 4,000 8,000 Feet

LSPOWER GRID CALIFORNIA INSIGNIA ENVIRONMENTAL

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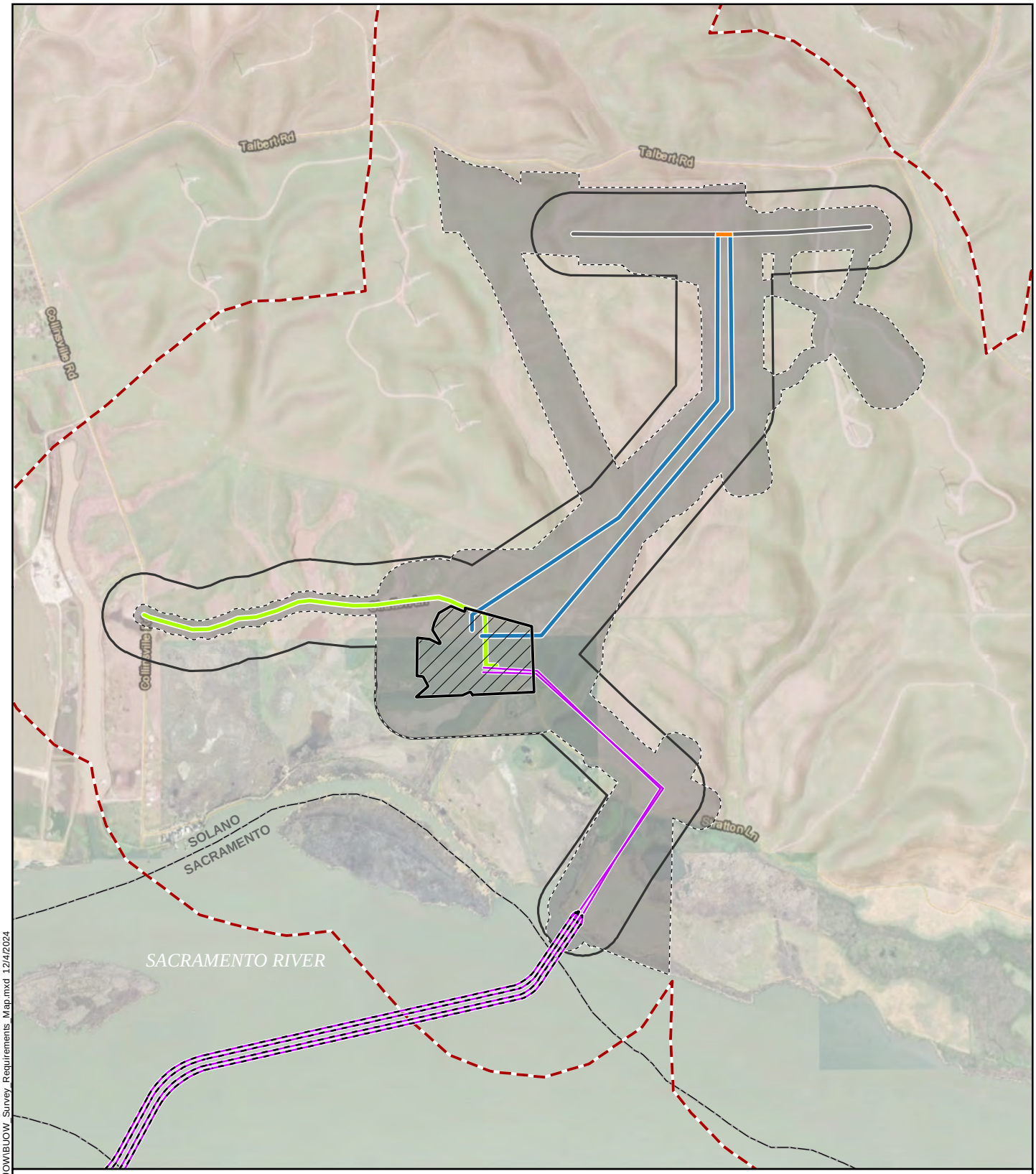
ATTACHMENT E: HABITAT ASSESSMENT AREA COMPARISON



Attachment E: Habitat Assessment Area Comparison

Collinsville 500/230 Kilovolt Substation Project

- Existing PG&E 500 kV Overhead Transmission Line
- Existing PG&E 500 kV Overhead Transmission Line to be Removed
- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 500 kV Interconnection
- County Boundary
- 500-Foot Buffer
- Completed BUOW Habitat Assessment Area
- Solano 4 Habitat Assessment Area
- Proposed Collinsville Substation

1:20,000

0 800 1,600 Feet

LS POWER GRID CALIFORNIA

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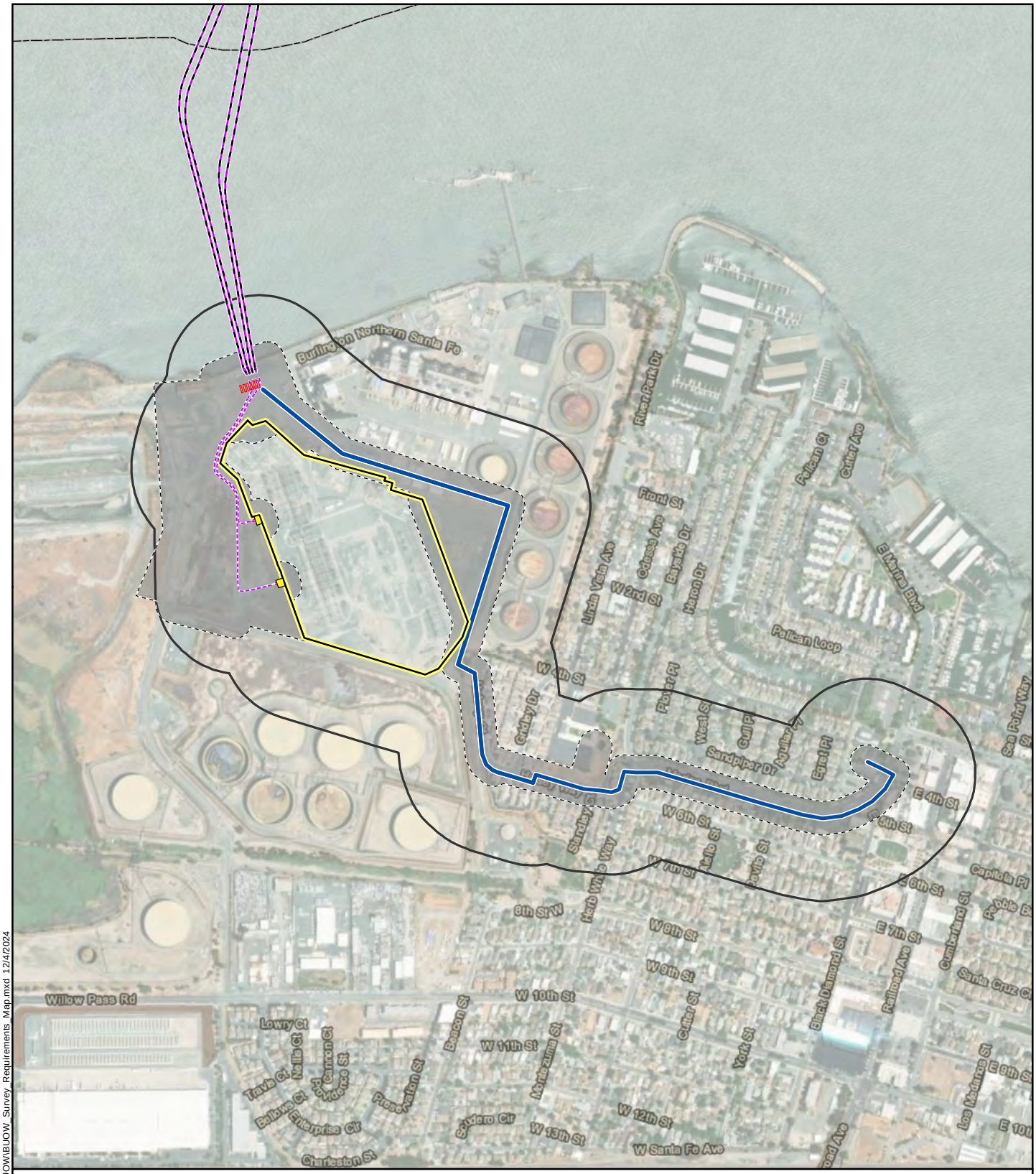

Attachment E: Habitat Assessment Area Comparison

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed LSPGC Telecommunications Line
- County Boundary
- Existing PG&E Pittsburg Substation
- Proposed Riser
- Proposed Utility Vault
- 500-Foot Buffer
- Completed BUOW Habitat Assessment Area

1:10,000

0 800 1,600 Feet

LS POWER GRID CALIFORNIA

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ATTACHMENT B: BURROWING OWL SURVEY RESULTS AND VEGETATION COMMUNITIES MAP

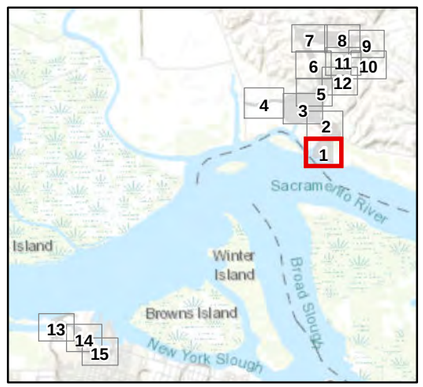
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 1 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed LSPGC 230 kV Submarine Segment
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Juncus arcticus (var. balticus, mexicanus)* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Rosa californica* Shrubland Alliance
- *Salix exigua* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Schoenoplectus acutus/rosa californica* Association
- Road/Bare Ground
- Open Water



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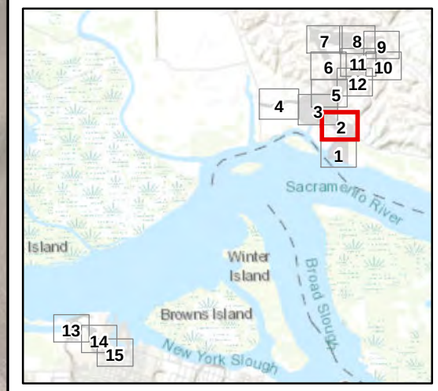
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 2 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed PG&E 12 kV Distribution Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Polygonum lapathifolium - Xanthium strumarium* Herbaceous Alliance
- *Rosa californica* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- Road/Bare Ground
- Open Water



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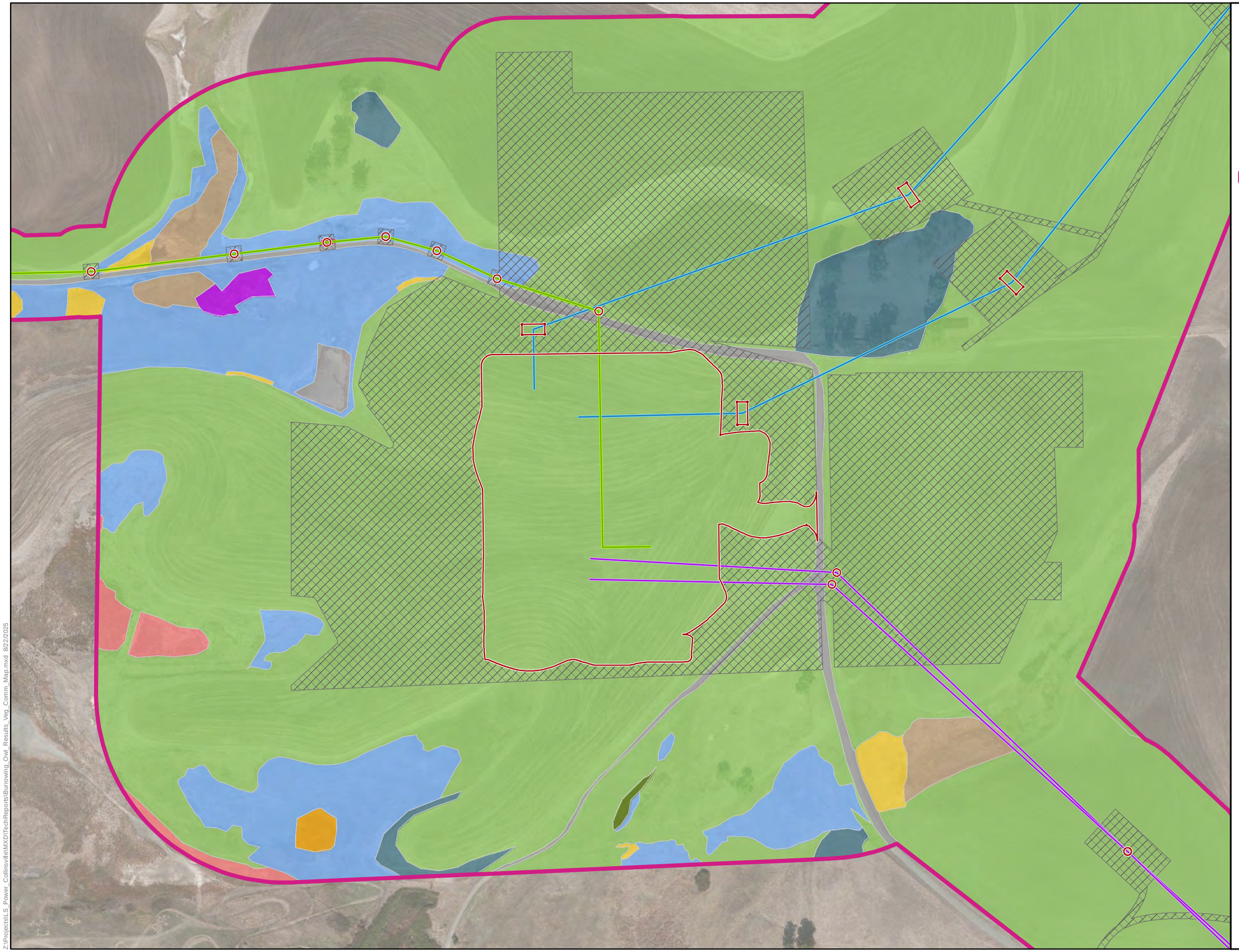


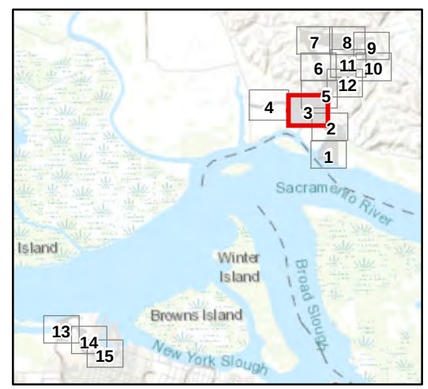
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 3 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Overhead Segment
- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 500 kV Overhead Interconnection
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Polygonum lapathifolium - Xanthium strumarium* Herbaceous Alliance
- *Sarcocornia pacifica* Herbaceous Alliance
- *Rosa californica* Shrubland Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Schoenoplectus americanus* Herbaceous Alliance
- *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance
- Road/Bare Ground



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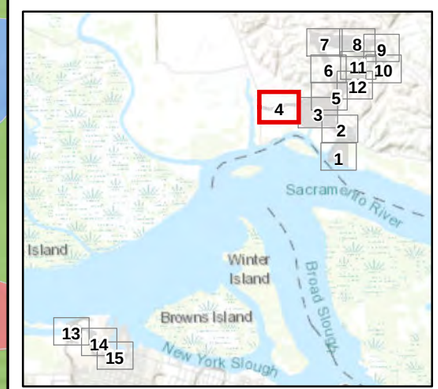
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 4 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 12 kV Distribution Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Sarcocornia pacifica* Herbaceous Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- Road/Bare Ground
- Developed



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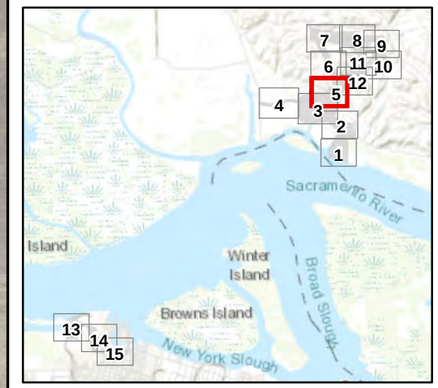
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 5 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 12 kV Distribution Line
- Proposed PG&E 500 kV Overhead Interconnection
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Distichlis spicata* Herbaceous Alliance
- *Frankenia salina* Herbaceous Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance
- Road/Bare Ground



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0 125 250 500 Feet

LS Power

INSIGNIA ENVIRONMENTAL

Z:\Projects\LS_Power_Collinsville\MXD\TechReports\Burrowing_Owl_Results_Veg_Comm_Map.mxd 8/22/2025

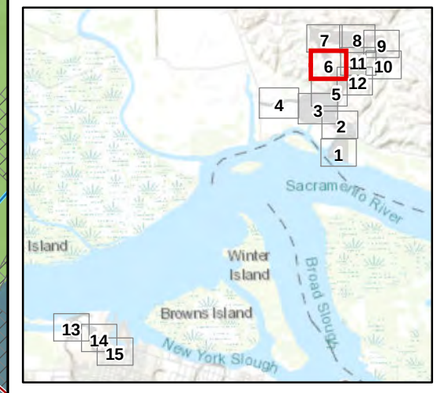
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 6 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Overhead Interconnection
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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0 125 250 500 Feet

LS Power

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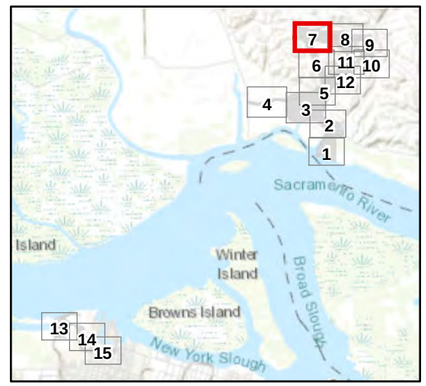
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 7 of 15

Collinsville 500/230 Kilovolt Substation Project

- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Habitat Assessment
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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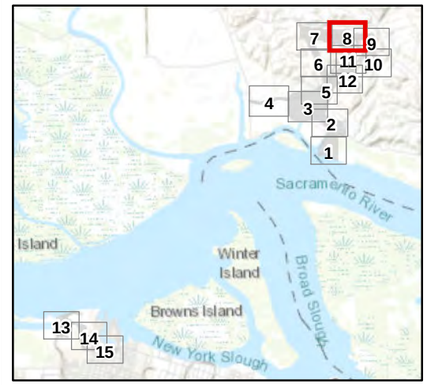
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities Map
Map 8 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Overhead Interconnection
- Existing PG&E 500 kV Overhead Transmission Line to be Removed
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Suitable burrowing owl habitat
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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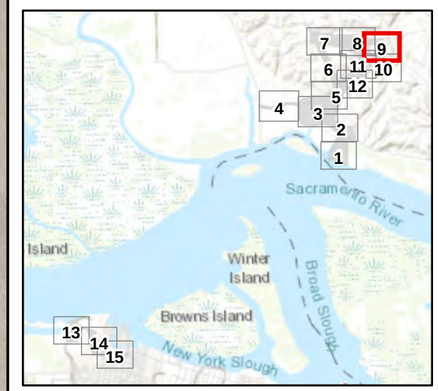
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 9 of 15

Collinsville 500/230 Kilovolt Substation Project

- Suitable burrowing owl habitat
- Proposed PG&E 500 kV Overhead Interconnection
- Existing PG&E 500 kV Overhead Transmission Line to be Removed
- Existing PG&E Vaca Dixon-Tesla Transmission Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 10 of 15

Collinsville 500/230 Kilovolt Substation Project

Habitat Assessment

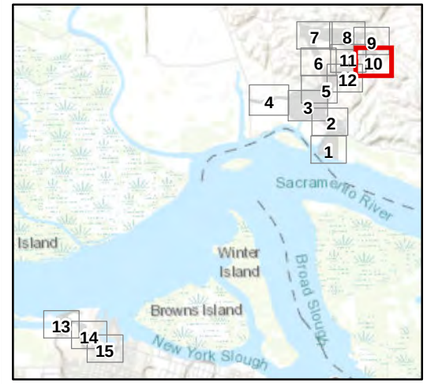
Temporary Impact

Vegetation Community

Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

Lolium perenne Herbaceous Semi-Natural Alliance

Road/Bare Ground



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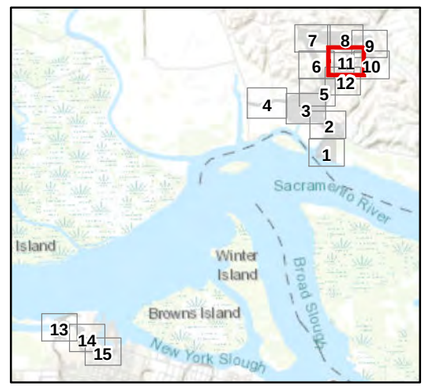
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 11 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Overhead Interconnection
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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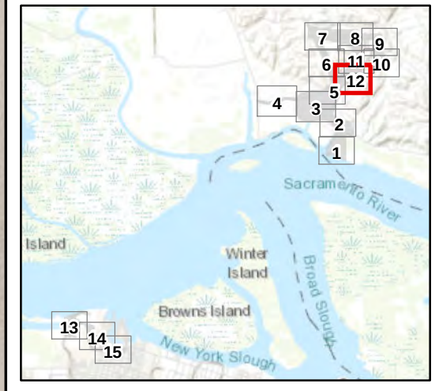
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 12 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed PG&E 500 kV Overhead Interconnection
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Brassica nigra - Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance
- *Lolium perenne* Herbaceous Semi-Natural Alliance
- Road/Bare Ground



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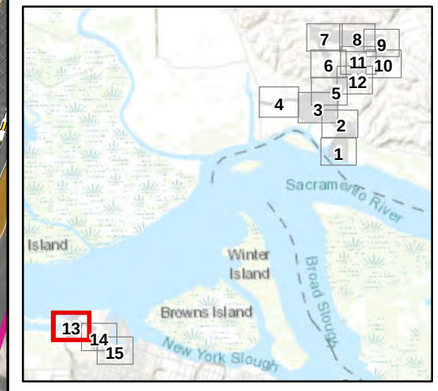
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 13 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC 230 kV Submarine Segment
- Proposed LSPGC 230 kV Underground Segment
- Proposed LSPGC Telecommunications Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Lepidium latifolium – Lactuca serriola* Herbaceous Alliance
- Ornamental Vegetation
- *Juncus arcticus (var. balticus, mexicanus)* Herbaceous Alliance
- *Schoenoplectus (acutus, californicus)* Herbaceous Alliance
- *Baccharis pilularis* Shrubland Alliance
- Disturbed
- Road/Bare Ground
- Rip Rap
- Open Water
- Developed
- Not Surveyed



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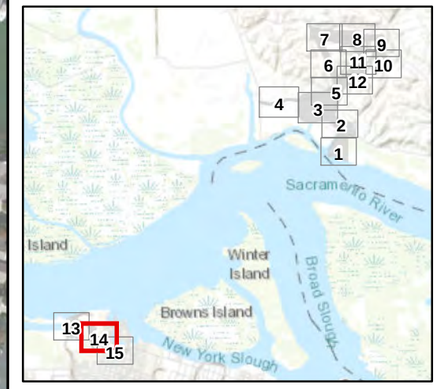
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 14 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC Telecommunications Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- *Lepidium latifolium – Lactuca serriola* Herbaceous Alliance
- Ornamental Vegetation
- *Baccharis pilularis* Shrubland Alliance
- Disturbed
- Developed
- Not Surveyed



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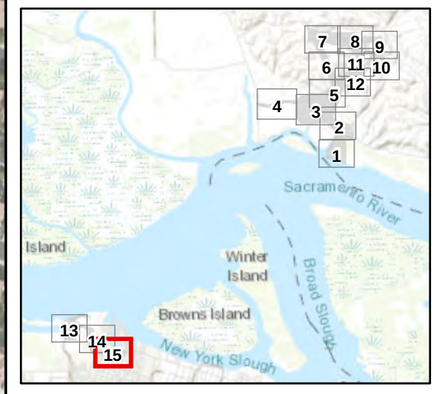
Attachment B:
Burrowing Owl Survey Results and Vegetation Communities
Map 15 of 15

Collinsville 500/230 Kilovolt Substation Project

- Proposed LSPGC Telecommunications Line
- Habitat Assessment
- Permanent Impact
- Temporary Impact

Vegetation Community

- Ornamental Vegetation
- Disturbed
- Developed
- Not Surveyed



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ATTACHMENT C: PHOTOGRAPH

ATTACHMENT C: PHOTOGRAPH

Photograph 1: Northwest-facing view of suitable western burrowing owl (*Athene cunicularia hypogea*) burrows located within the Habitat Assessment Area on June 16, 2025.