DOCKETED				
Docket Number:	25-OPT-02			
Project Title:	Prairie Song Reliability Project			
TN #:	264473			
Document Title:	App 3-2E Waste Discharge Requirements Application Part 3			
Description:	N/A			
Filer:	Erin Phillips			
Organization:	Dudek			
Submitter Role:	Applicant Consultant			
Submission Date:	6/27/2025 9:18:48 AM			
Docketed Date:	6/27/2025			

Appendix 3.2E

Waste Discharge Requirements Application 3 of 3



Photo 13. NWW-6 at OHWM form point, looking upstream.

Photo 14. NWW-7 at OHWM form point, looking downstream.





Photo 15. Representative photo of Swale-3.

Photo 16. Representative photo of Swale-5.



Photo 17. Representative photo of Swale-6.

Photo 18. Representative photo of Erosional Feature-1.



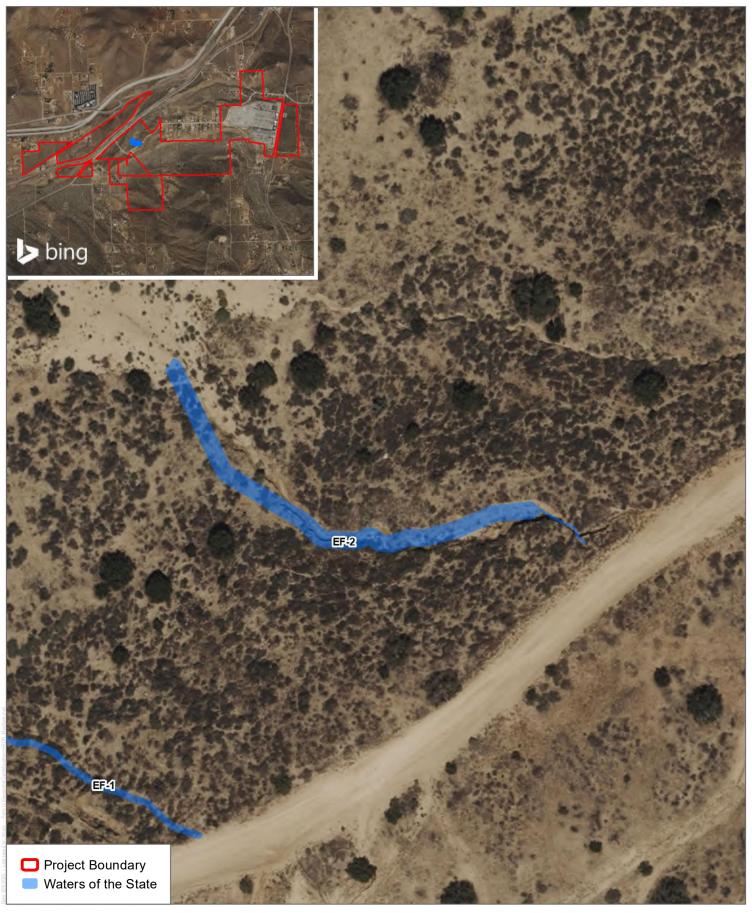


Photo 19. Representative photo of Erosional Feature-2.

Photo 20. Representative photo of Erosional Feature-3.

Appendix DMapbook



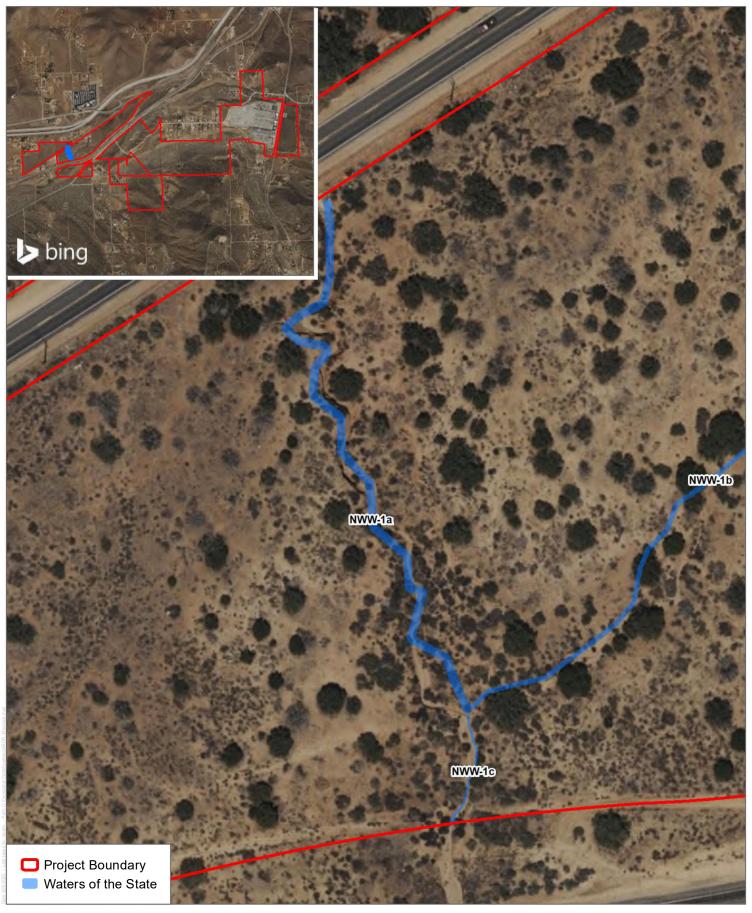


DUDEK &

EF-2 Potential Jurisdictional Waters

Prairie Song Reliability Project







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Potential Jurisdictional Waters

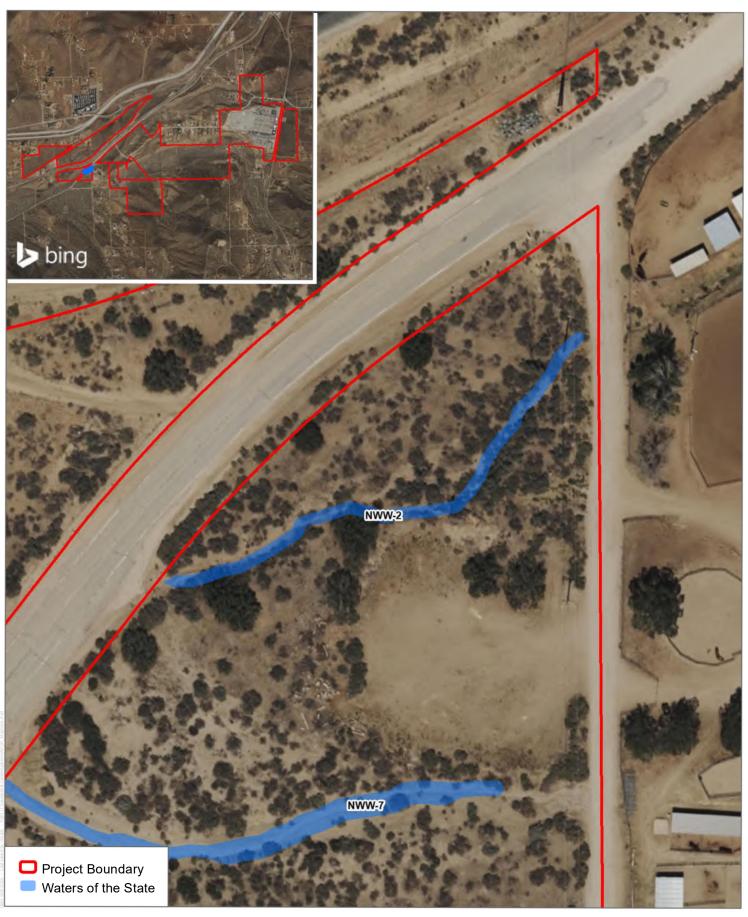


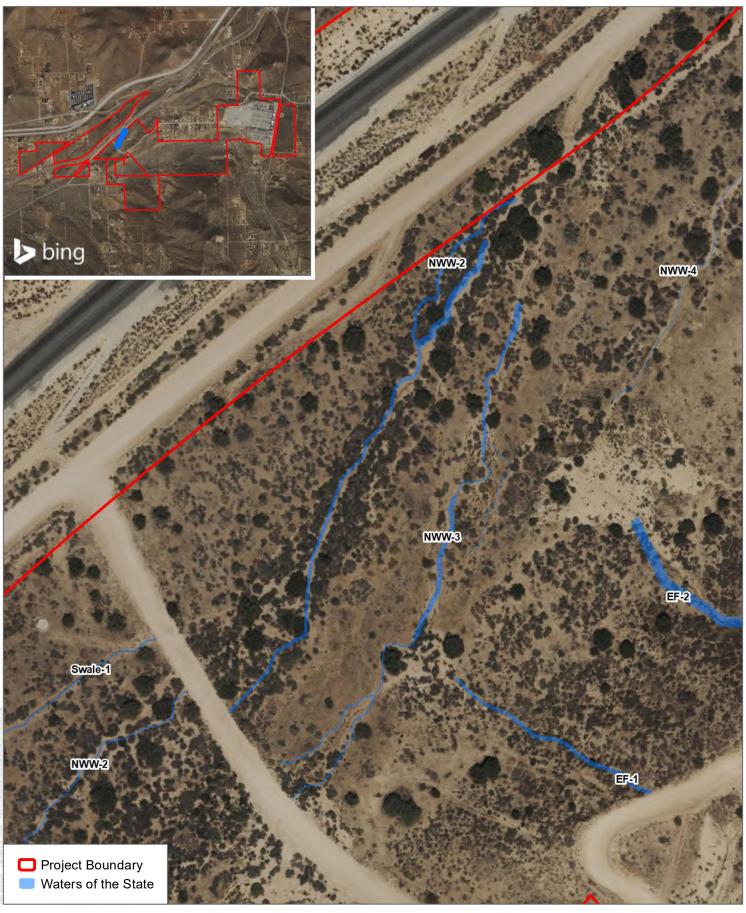


Potential Jurisdictional Waters

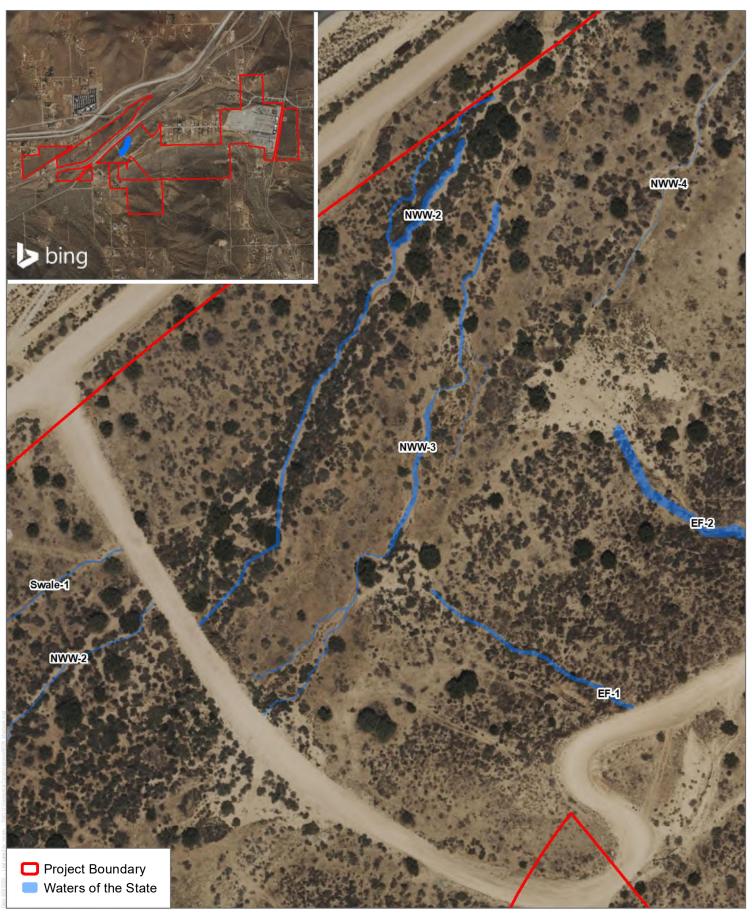
Prairie Song Reliability Project

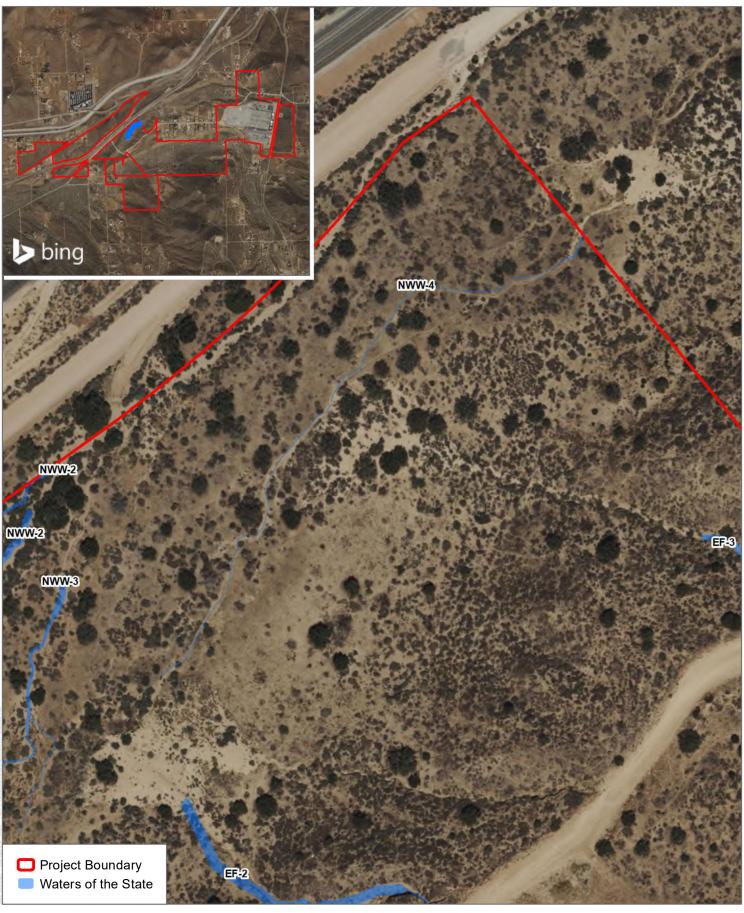


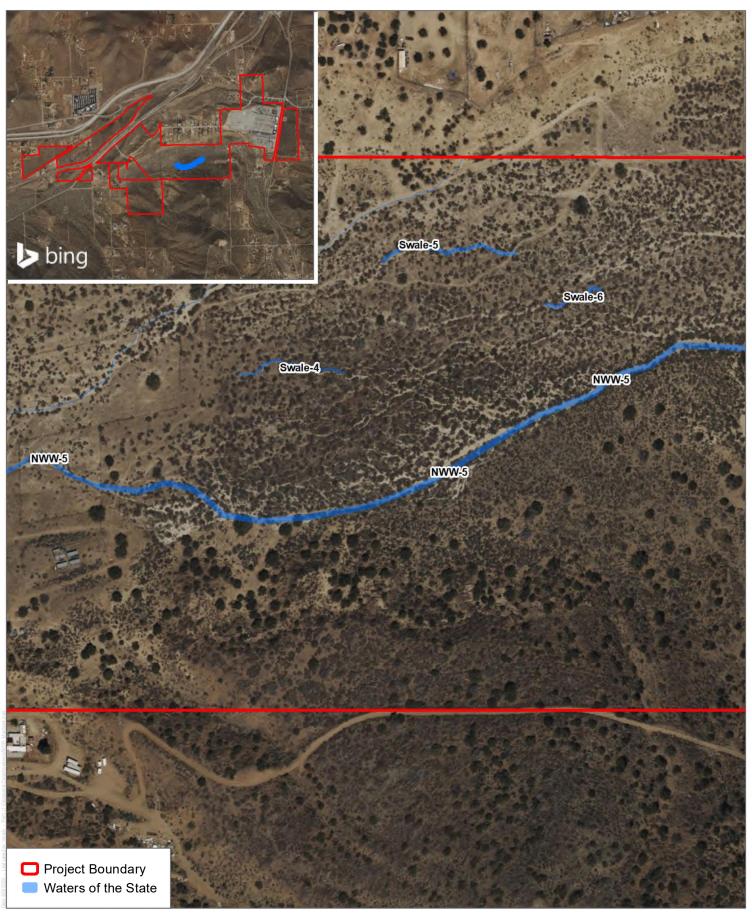












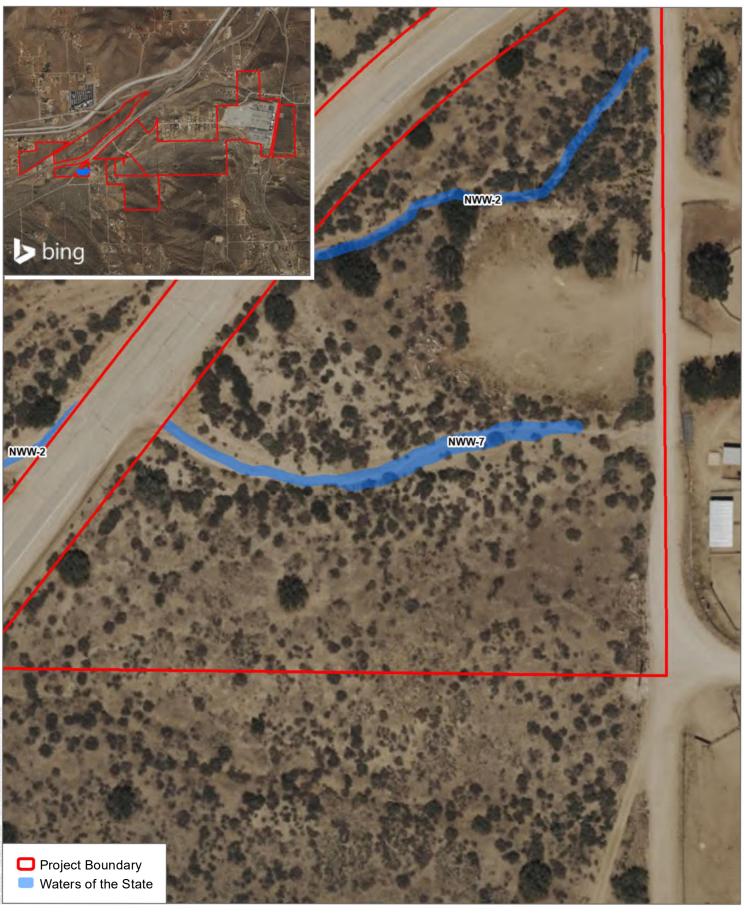








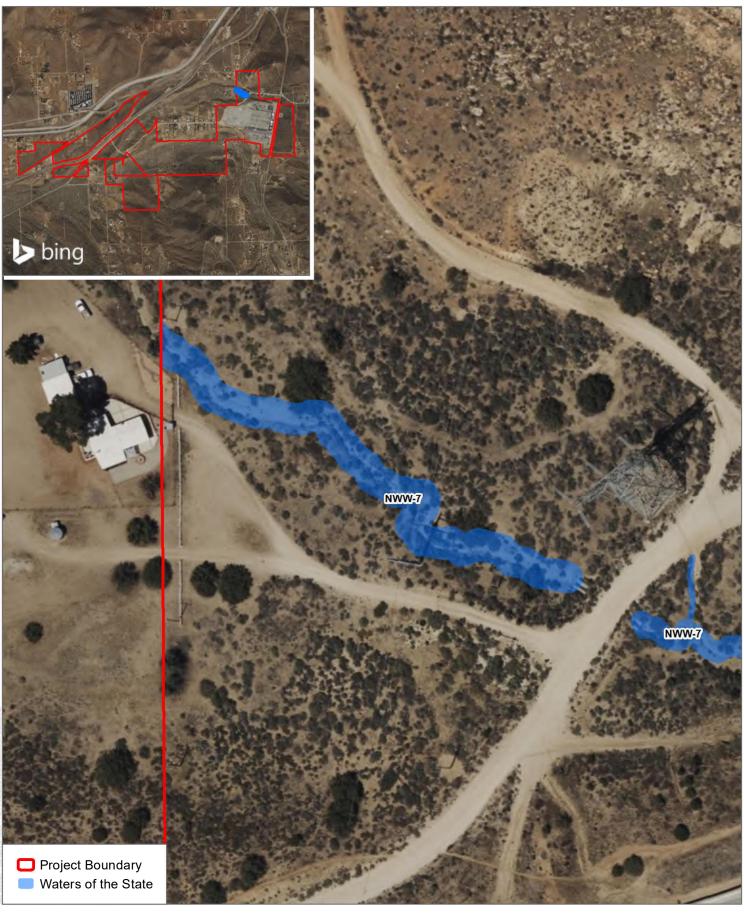


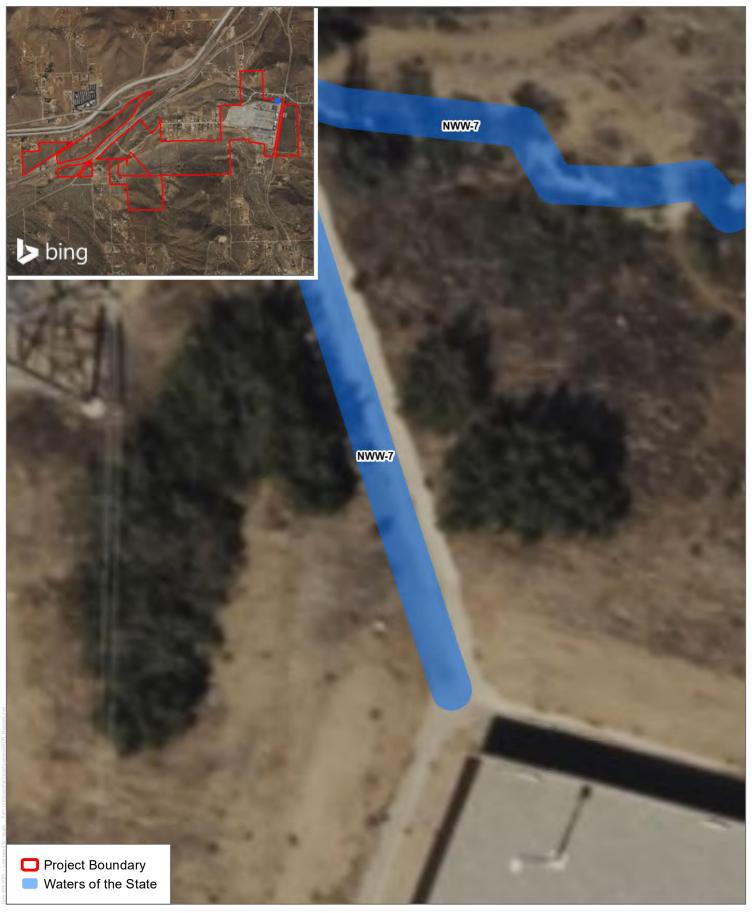




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Potential Jurisdictional Waters





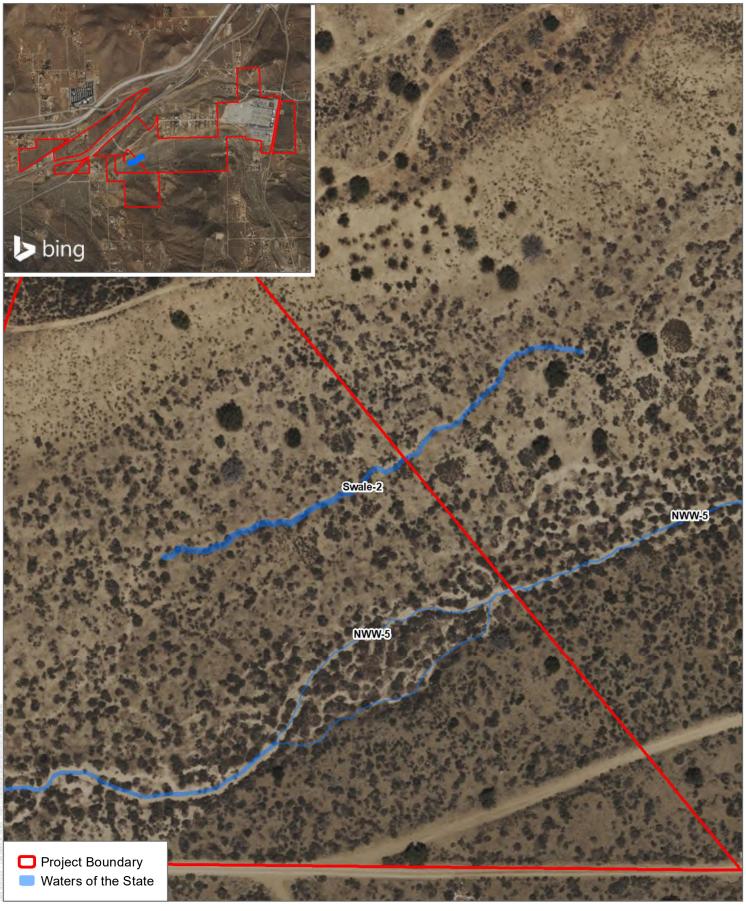




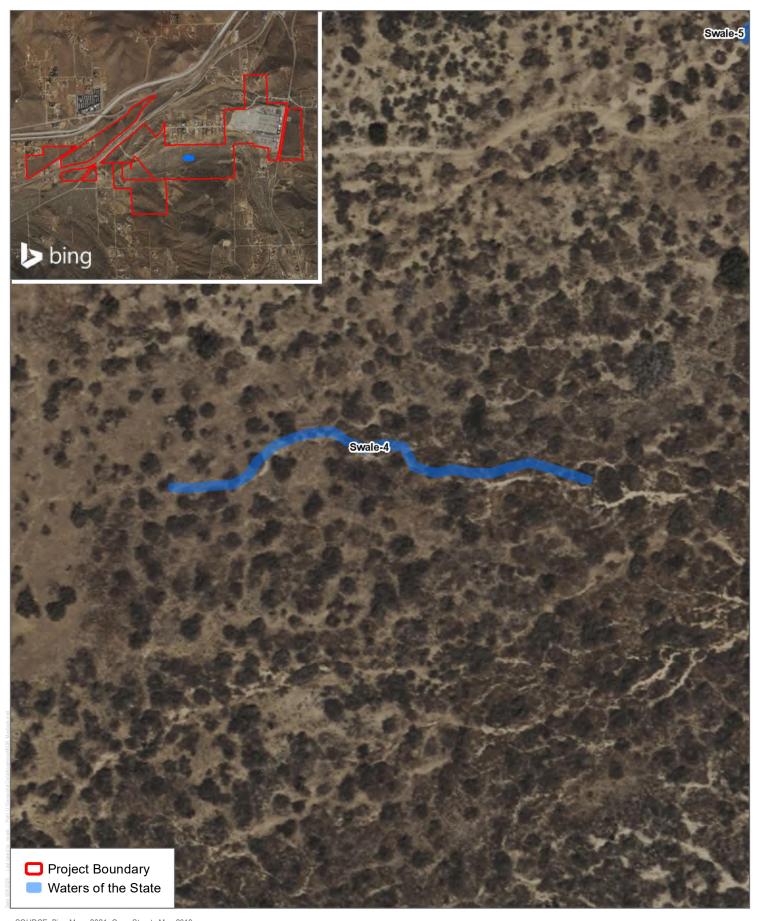




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SOURCE: Bing Maps 2021, Open Streets Map 2019.

Swale-6
Potential Jurisdictional Waters
Prairie Song Reliability Project

Attachment E

California Department of Fish and Wildlife Notification of Lake or Streambed Alteration Agreement

Attribute	Answer
General Information	
Applicant	Garrett Lehman, Director
Additional Contacts	N/A
Project Name	Prairie Song Reliability Project
Organization	Prairie Song Reliability Project LLC
Designated Representative	Michael Cady - Dudek
Project Location and Category	
Project Location	
Project Name	Prairie Song Reliability Project
Does the project site have a physical address? (select one)	☐ Yes │ ☑ No
GPS Coordinates	34.485487°, -118.138757° - BESS portion of the Project
County	Los Angeles
Property APN	3056-017-007, 3056-017-020, 3056-017-021, 3056-019-013, 3056-019-026, 3056-019-037, 3056-019-040, 3056-015-008, 3056-015-023, 3056-017-026, 3056-017-904, 3056-017-905, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, 3056-015-802, 3056-015-008, 3056-015-023, 3056-017-016, 3056-017-022, 3056-017-026, 3056-017-027, 3056-017-028, 3056-027-007, 3056-027-031, 3056-005-816, 3056-005-817, 3056-005-818, 3056-015-801, 3056-015-802
	See Attachment B for figures showing the Project location.
Project Category	
Project Category (select one)	
Work Type (select one)	□ Bank stabilization - bioengineering/recontouring □ Bank stabilization - rip-rap/retaining wall/gabion □ Boat dock/pier □ Boat ramp □ Bridge □ Channel clearing/vegetation management □ Culvert □ Dam □ Debris basin □ Diversion structure: weir or pump intake (obsolete) ☑ Filling of wetland, river, stream, or lake □ Geotechnical survey ☑ Grading □ Habitat enhancement - revegetation/mitigation □ Levee □ Low water crossing ☑ Road/trail □ Sand & gravel operations □ Sediment removal - pond, stream, or marina □ Sediment removal: flood control □ Storm drain outfall structure ☑ Temporary stream crossing □ Utility crossing: horizontal directional drilling □ Utility crossing: jack/bore □ Utility crossing: open trench □ Water diversion with facility □ Water diversion without facility □ Other (Describe other work type)



Attribute	Answer
Does this project address any of the following: hazardous fuels reduction, fuel breaks, wildfire prevention, vegetation treatment or vegetation management for fire management? (select one)	□ Yes ☑ No
Affected Body of Water	
River, Stream, or Lake Affected	Unnamed tributaries and isolated streams
Waterbody tributary	Santa Clara River
Will water be present during the proposed work period in the river, stream, or lake: (select one)	☐ Yes ☑ No
If "Yes", will the proposed project require work in the wetted portion of the channel?	☐ Yes ☐ No If "Yes", attach a plan to divert water around the project site and dewater the work site that specifies the method, volume rate, and timing of the diversion on the Documents and Maps form.
Wild and Scenic Rivers Act (WSRA	
Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
Project Description, Term, and Im	pacts
Project Description and Details	
Is the 'Property Owner' the same person as the 'Applicant Proposing Project?	☑ Yes □ No
If "No", outline the following contact information for the 'Property Owner':	N/A
Name Business Agency	



Attribute	Answer
Mailing Address Phone Number Email	
Describe the Project in Detail	The project proposes to construct, operate, and eventually repower or decommission the up to 1,150-megawatt Prairie Song Reliability Project (Project) located on up to approximately 107 acres in unincorporated Los Angeles County. The primary components of the Project include a containerized battery energy storage system facility utilizing lithium-iron phosphate cells, or similar technology, operations and maintenance buildings, an on-site Project substation, a 500-kilovolt overhead generation interconnection transmission line, and interconnection facilities within the existing Southern California Edison-owned and operated Vincent Substation.
	See Attachment C, Project Description, for full project objectives.
Describe Equipment and Machinery	Tractors, loaders, backhoes, excavator, rubber-tired dozer, rollers, air compressors, cranes, forklift, bore/drill rigs, trenchers, pumps, welders, rough terrain forklifts, skid steer loaders, concrete/industrial saws
Will part or all of this project be funded with one of the following CDFW-managed grants? (select one)	☐ Fish Restoration Grant Program (FRGP) ☐ Cannabis Restoration Grant Program ☐ Prop 1 Grant ☐ Prop 68 Grant ☐ Greenhouse Gas Grant (GHG) ☐ Wildlife Conservation Board (WCB) Grant ☐ N/A
Water Rights(s), Water Diversion(s	s) & Reservoir(s)
Does the project have an associated water right(s)? (select one)	☐ Yes ☑ No
If "Yes", how many project water rights are included in the project?	
Does the project include any water diversion(s)? (select one)	☐ Yes ☑ No
If "Yes", how many water diversions will be included in the project?	
Does the project include a reservoir(s)? (select one)	☐ Yes ☑ No
If "Yes", how many reservoir(s) will be included in the project?	



Attribute	Answer
Commercial Cannabis Cultivation	
Does any part of the project include remediation at a cannabis cultivation site? (select one)	☐ Yes ☑ No
Are you seeking documentation to submit to the Department of Cannabis Control (DCC) for the purpose of commercial cannabis cultivation licensing? (select one)	□ Yes ☑ No
Agreement Term	
Agreement Term Requested	☑ Regular Term (5 years or less) │ ☐ Long Term (Greater than 5 years)
Project Term	
Specify both the year the project activities will begin and the year the project activities will end. Be advised CDFW may restrict work within a stream or lake to the dry season of the year. Consequently, you may want to include more than one season of possible operation in your project proposal.	Beginning Year: 2027 Ending Year: 2069
Seasonal Work Period	
Specify the time period you intend to work on the project (e.g., August 1 to October 15). If the work period will exceed one year, specify the work period for each year of the project (e.g., Work Period 1, February 10 to March 31; Work Period 2, August 1 to October 15; Work Period 3, February 10 to March 31; etc.). CDFW may restrict project work to certain periods	Construction Start Date: 3/2027 Construction End Date: 4/2029



Attribute	Answer
depending on rainfall, fish migration, wildlife breeding or nesting season, or other resource concerns. Specify the estimated number of days of actual work days for each seasonal work period.	
Impacts to River, Stream, or Lake	
Describe Impacts	 0.04-acre of NWW-1a, NWW-1b, and part of NWW-1c would be permanently filled in during grading to create a level area for the construction of the battery energy storage system and substation portions of the Project. 0.19-acre of NWW-5, NWW-2, Swale-1, and Swale-3 could be temporarily impacted during the construction of the gen-tie (due to potential pull areas) and the trenching of the underground optical ground wire use for telecommunication by the project. None of the tower pads of access roads to the pads would impact the features in the area.
	See Attachment B Figure 4 for the Project's impact on jurisdictional waters.
Impacts to Special-Status Species	
Will there be any foreseeable impacts to any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site? (select one)	☐ Yes │ ☑ No
If "Yes", list each species and describe the habitat	
Source(s) Identify the source(s) of information (e.g., biological surveys, environmental documents, etc.) that support a "Yes" or "No" answer for the previous question.	The Biological Resources section of the Project's CEC "Opt-In" application contains the results of the biological studies conducted for the Project.
Impacts to Trees and Vegetation	
Will the project affect any trees or vegetation?	⊠ Yes □ No



Attribute	Answer
Describe Identify the type(s) of tree(s) or vegetation that will be affected by the project.	Atriplex canescens Association and Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum Association, Ephedra viridis Association, Juniperus californica / Adenostoma fasciculatum - Eriogonum fasciculatum Association, Juniperus californica / herbaceous Association, Artemisia tridentata - Ericameria nauseosa Association, Artemisia tridentata Association, Atriplex canescens Association
Environmental Review	
California Environmental Quality A	Act
Has a CEQA lead agency been determined? (select one)	⊠ Yes □ No
CEQA Lead Agency	California Energy Commission (CEC)
Agency Contact Person	Lisa Worrall
Phone Number	916-661-8367
Email	lisa.worrall@energy.ca.gov
Has a draft or final document been prepared for the project pursuant to CEQA? (select one)	☐ Yes ☐ No The project is filing through the CEC "Opt-In" certification process (Assembly Bill 205). CEC will serve as lead agency and initiate CEQA once the application is deemed complete.
If "Yes", outline the type of environmental document. Include a copy of the CEQA document and all notices in the Documents and Map section.	□ Notice of Exemption (NOE) □ Negative Declaration (ND) □ Mitigated Negative Declaration (MND) □ Environmental Impact Report (EIR) □ Timber Harvest Plan (THP)/Non-Industrial Timber Management Plan (NTMP)
State Clearinghouse Number (if applicable)	TBD
Has a CEQA Notice of Determination (NOD) been completed for the project? (select one) If "Yes", attach the NOD in the Documents and Map section. If "No", explain why the NOD has not been completed.	☐ Yes ☐ No The project is filing through the CEC "Opt-In" certification process (Assembly Bill 205). CEC will serve as lead agency and initiate CEQA once the application is deemed complete.
Has a CEQA Mitigation, Monitoring, Reporting Plan (MMRP) been	☐ Yes │ ☑ No



Attribute	Answer
completed for the project? (select one) If "Yes", attach the MMRP in the Documents and Map section. If "No", explain why the MMRP has not been completed.	The project is filing through the CEC "Opt-In" certification process (Assembly Bill 205). CEC will serve as lead agency and initiate CEQA once the application is deemed complete.
Has a CEQA filing fee been paid pursuant to Fish and Game Code section 711.4? (select one)	☐ Yes │ ☑ No The project is filing through the CEC "Opt-In" certification process (Assembly Bill 205). CEC will serve as lead agency and initiate CEQA once the application is deemed complete.
If "Yes", attach a copy of the CEQA filing fee receipt in the Documents and Map section. If "No", explain why the CEQA filing fee hasn't been paid.	
If the project described in this notification is not the "whole project", or action pursuant to CEQA, briefly describe the entire project. If the project described in the notification is the entire project, insert the following statement in this box: "The project described in the notification is the entire project."	The project described in the notification is the entire project.
National Environmental Policy Act	(NEPA)
Has a draft or final document been prepared for the project pursuant to the National Environmental Policy Act (NEPA)? (select one)	☐ Yes ☑ No
If "Yes", outline the type of environmental document. Include a copy of the document in the Documents and Map section.	☐ Categorical Exclusion ☐ Environmental Assessment (EA) ☐ Finding of No Significant Impact (FONSI) ☐ Environmental Impact Statement (EIS)



Attribute	Answer	
Measures to Protect Fish, Wildlife, and Plant Resources		
Sediment/Erosion Control	The Project's grading plans will include details on the location and type of BMPs necessary to reduce the potential for Project-induced erosion and scour, including temporary BMPs to be implemented during construction (per the statewide Construction General Permit), and permanent BMPs to be installed and maintained (per the County BMP Design Manual). The exact location and type of temporary BMPs to be installed during construction depend on site-specific conditions, construction schedule, and proposed activities, all of which are outlined in the construction SWPPP that will be prepared for the Project. Typical temporary BMPs used for similar projects include energy dissipaters, silt fences, fiber rolls, gravel/sand bags, construction road stabilization, and stabilized construction entrances. As the Project-specific SWPPP is prepared, the location, type, and number of specific BMPs may be refined based on the final designs to most effectively achieve the objective of reducing turbidity and other pollutant loads in stormwater runoff. The provisions of the CGP ensure that site-specific conditions are taken into consideration when developing construction SWPPPs, that personnel developing and implementing construction SWPPPs are qualified, and that BMPs are adequately monitored and maintained.	
Avoidance/Minimization Measures	During Construction: Potential temporary indirect impacts to the drainages in the project site and downstream waters could result from construction activities and will include potential impacts from the generation of fugitive dust and the potential introduction of chemical pollutants (including herbicides). Excessive dust can decrease the vigor and productivity of vegetation through effects on light, penetration, photosynthesis, respiration and transpiration, increased penetration of phytotoxic gaseous pollutants, and increased incidence of pests and diseases. Erosion and chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction materials) may affect wetlands/ jurisdictional waters. The release of chemical pollutants can reduce the water quality downstream and degrade adjacent habitats. However, during construction, erosion-control measures will be implemented as part of the storm water pollution prevention plan (SWPPP) for the Project. Because the entirety of the Project development footprint will be graded at one time but construction will occur over time in phases, the erosion measures will be maintained until all graded areas are constructed/landscaped. Prior to the start of construction activities, the Contractor is required to file a Permit Registration Document with the State Water Resources Control Board in order to obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved general permit. This permit is required for earthwork that results in the disturbance of 1 acre or more of total land area. The required SWPPP will mandate the implementation of best management practices to reduce or eliminate construction-related pollutants in the runoff, including sediment, for all exposed soils. During Operation: Once constructed, the proposed BESS facility will result in an increase	



Attribute	Answer
	will drain southwest into catch basins located across the site. A storm sewer network will route water from the catch basins into underground infiltration chambers and infiltration trenches. Infiltration trenches along the southern end of each drainage area connected to the chamber system will aid in meeting the infiltration volume requirement. The infiltration facilities will be sized to store and infiltrate the difference in runoff between existing and proposed conditions up to the 50-year 24-hour storm event for the two (2) drainage areas on site.
<u>-</u>	Each gen-tie pad will manage stormwater runoff using shallow infiltration basins.
Mitigation/Compensation Measures	Temporary Impact Restoration: The temporary impacts to streams would be restored. Prior to ground disturbing activities, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area in the Conservation Area, and short-joint beavertail transplant location, and will outline detailed performance standards and monitoring requirements for each; following the monitoring and reporting methods and performance standards listed below. The HMMP shall be submitted to and approved by the CEC prior to the onset of Project-related ground-disturbing activities. The acreages allotted for on-site establishment apply to approximately 32 acres within the Conservation Area that includes 0.19 acres of ephemeral streams. A minimum of 70 California juniper will be planted. The HMMP shall set out measures for habitat restoration/enhancement implementation, including but not limited to:
	Identification of proposed plant materials
	 Signage in the habitat restoration area
	Schedule for habitat restoration/enhancement work
	Use of pesticides and elimination of non-native vegetation
	Habitat monitoring and reporting
	Performance standards
	Preservation of Streams: Mitigation for the Project requires the establishment of a conservation area that will preserve up to 0.97 acres of unimpacted streams in the parcels associated with the gen-tie routes.
	No Net Loss: Mitigation for up to approximately 1.77 acres of jurisdictional waters shall be implemented through off-site acquisition, such as mitigation bank credits, and/or turnkey projects with mitigation banks (as approved by the CEC) following the issuance of permits from the U.S. Army Corps of Engineers, and Los Angeles Regional Water Quality Control Board, as applicable, and those agencies approval of the mitigation bank, and prior to the issuance of the grading permit.



Attribute	Answer
	A turnkey mitigation project (establishment of the riparian habitat) will be used should credits not be available at the time of the jurisdictional waters permitting.
Prior Notifications, Orders, and Po	ermits
Prior Notifications and/or Agreem	nents
Identify any notification previously submitted to, or Lake or Streambed Alteration Agreement previously issued by, CDFW for the project described in this notification. Include a copy of the previously submitted notification and/or agreement in the Documents and Maps form. If applicable, list the following: Name of Applicant: Notification Number: Date:	Not Applicable
Prior Orders, Notice, and/or Viola	tions
If this notification is being submitted in response to a court or administrative order or notice, or a notice of violation issued by CDFW, complete this section for each order, notice, or violation. Include a copy of each order, notice, or violation in the Document and Maps form. If applicable, list the following: Person who Directed you to Submit: Agency that Directed you to Submit: Describe Circumstances:	Not Applicable



Attribute	Answer	
Local, State, and/or Federal Permits		
List any local, state, and/or federal permits required for the project and mark whether applied or issued. Include a copy of each permit that has been issued in the Documents and Maps form. You are responsible for obtaining all necessary permits and authorizations from CDFW and other agencies before beginning any project described in the notification.	Regional Water Quality Control Board Water Quality Certification / Waste Discharge Requirements	
If applicable, list the following: Permit Name: Permit Type: If the permit was applied for or		
issued:		
Date issued/applied:		
Documents and Maps		
Maps/Photos		
Project Site Map	See Attachment B, Figure 1	
Project Aerial View Map	See Attachment B, Figure 4	
Project Site Photo(s)	See Attachment D, Photo E	
Studies and Mapping		
Has a biological study been completed for the project site? (select one) If "Yes", include a copy of the document in the Documents and		
Map section. Has one or more technical studies (e.g., engineering, hydrologic,	⊠ Yes □ No	



Attribute	Answer
geologic, or geomorphological) been completed for the project for project site? (select one) If "Yes", include a copy of the documents in the Documents and Map section. Have fish or wildlife resources or waters of the state been mapped or delineated on the project site?	The appendices of the Project's CEC "Opt-In" application contains the engineering, hydrologic, geologic, or geomorphological studies for the Project.
(select one) If "Yes", include a copy of the document in the Documents and Map section.	See Attachment D
Additional Documents and Maps	
Upload Attachments, Documents, Maps, etc.	See Attachments B-D
Fees Schedule	
Notification Fees	
Project Name	Prairie Song Reliability Project
Project Cost Range	Regular Term:
Actual Project Cost	TBD
Payment Information	
Payment Method	☐ Check/Money Order ☐ Credit Card If check/money order, outline the following information: Name of the Bank/Institution:



Attribute	Answer
	Check/Money Order #:
	If credit card, CDFW's online internet sales system will provide a document number after completing the transaction. Outline the document number:
Acknowledgment and Signature	
Site Inspection	
First Contact this Person to Schedule Site Visit	Garrett Lehman, Director (888) 287-9058
Outline method of contact, contact name and information	glehman@covalinfra.com
Electronic Signature	

Carret 2h

Application to be electronically signed by the Applicant or Designated Representative.

Attachment F Alternatives Analysis



225 SOUTH LAKE AVENUE SUITE M210 PASADENA, CALIFORNIA 91101 T 626.204.9800

MEMORANDUM

Author: Michael Cady, Senior Biologist

Subject: Prairie Song Reliability Project-Alternatives Analysis for the Water Discharge Requirements

Application

Date: June 26, 2025

Attachment: Project and Alternatives Exhibit

The following describes the off-site and on-site alternatives that were evaluated for the Prairie Song Reliability Project (Project). This alternative analysis was prepared to provide information and background necessary to determine the least environmentally damaging practicable alternative (LEDPA), as required by Section V of the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, adopted April 2, 2019.

1 Project Description

Prairie Song Reliability Project LLC proposes to construct, operate, and eventually repower or decommission up to 1,150-megawatt (MW) Prairie Song Reliability Project (Project) located on up to approximately 107 acres in unincorporated Los Angeles County. The primary components of the Project include a containerized battery energy storage system (BESS) facility utilizing lithium-iron phosphate cells, or similar technology, operations and maintenance (O&M) buildings, an on-site Project substation, a 500-kilovolt (kV) overhead generation interconnection (gen-tie) transmission line, and interconnection facilities within the existing Southern California Edison-owned and operated Vincent Substation.

Electrical energy will be transferred from the existing power grid to the Project for storage and from the Project to the power grid when additional electricity is needed. The Project will provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high. This operating principle increases the integration of additional intermittent renewable energy, such as wind and solar, in California's energy mix and reduces the need to operate natural gas power plants. The Project will also serve as an additional local/regional capacity resource that will enhance grid reliability, particularly to the Los Angeles Basin local reliability area and may allow for the deferral or avoidance of regional transmission facilities.

The Project will be remotely operated and monitored year-round as well as supported by onsite O&M staff seven (7) days a week. The Project will be available to receive or deliver energy 24 hours a day and 365 days a year. During the operational life of the Project, qualified technicians will inspect the Project facilities and conduct necessary maintenance to ensure reliable and safe operational readiness.

2 Project Objectives

The Project's principle Basic Objectives include the following:

- Construct and operate an up to 1,150-MW BESS facility in Los Angeles County with an interconnection
 utilizing available system capacity at the existing SCE Vincent Substation to balance intermittent renewable
 generation and serve as an additional capacity resource that will enhance grid reliability.
- Provide new energy storage capacity to assist California electric utilities in meeting obligations under California's Renewable Portfolio Standard Program and Senate Bills 100 and 1020, which require renewable energy sources and zero-carbon resources to supply 60% of all retail sales of electricity to California end-use customers by December 31, 2030, 90% of all retail sales of electricity to California end-use customers by December 31, 2035, 95% of all retail sales of electricity to California end-use customers by December 31, 2040, and 100% of all retail sales of electricity to California end-use customers by December 31, 2045.
- Provide new energy storage capacity to assist the State of California in meeting its goal of reducing statewide annual greenhouse gas emissions from the electric sector to 25 million metric tons by 2035.
- Provide storage capacity to help balance electricity generation from renewable sources, such as wind and solar, with electricity demand by storing excess generation predominately from emissions free power sources and deliver it back to the grid when demand exceeds real-time generation supply.
- Offer energy storge to curtail dispatch and displace the need for additional fossil fuel based generating stations needed to serve peak demand periods when intermittent renewable sources may be inadequate or unavailable. The additional storage capacity may allow for the deferral or avoidance of regional transmission facilities.
- Provide energy storage of sufficient size, power, capacity, scale, and location to assist California utilities in meeting obligations under the CPUC's Mid-Term Reliability Procurement and upcoming Reliability and Clean Power Procurement Program Requirements.
- Develop an electricity storage facility in close proximity to a utility grid-connected substation with existing capacity available for interconnection for charging and discharging and the ability to deliver capacity to the load to minimize environmental impacts.
- Secure a location to allow the stored energy to relieve grid congestion, and enhance electricity reliability, without requiring the construction of substantial new regional transmission infrastructure or network upgrades.
- Construct and operate a battery energy storage facility in Los Angeles County, resulting in economic benefits
 to the County, creating prevailing wage construction jobs, and facilitating local community benefits.
- Locate and gain site control of site large enough and well-suited to support development of the Project's 1,150-MW and up to 9,200MWh battery energy storage.
- Develop an energy storage project that is in close proximity to existing electrical infrastructure and the Vincent Substation, to avoid and minimize potential impacts from long 500 kV gen-tie lines.
- Locate a site to accommodate a gen-tie line of reasonable length to the POI and the ability to deliver power to the Los Angeles Basin local reliability area during peak demand.



 Locate near existing roadways and related infrastructure where available and feasible for construction and O&M access.

3 Regulatory Setting

Section 401 of the Clean Water Act (CWA) authorizes the Regional Water Quality Control Board (RWQCB) to issue Section 401 Water Quality Certifications for the discharge of dredged or fill materials into waters of the United States, including wetlands (33 USC 1344). Waters of the United States, defined at 33 Code of Federal Regulations (CFR). Part 328, includes coastal and inland waters, lakes, rivers, and streams, including adjacent wetlands and tributaries.

As indicated in the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), adopted April 2, 2019, an alternatives analysis must be submitted to the RWQCB, consistent with the requirements of Section 230.10 of the State Supplemental Dredge or Fill Guidelines, unless the project qualifies for an exemption as outlined on page 6 of the Procedures. The alternatives analysis serves two primary purposes. The first purpose is to document that an appropriate sequence of actions has been taken first to avoid, and second to minimize, adverse impacts to waters of the state. The second purpose is to identify the least environmentally damaging practicable alternative (LEDPA). The analysis must establish that the proposed project alternative is the LEDPA in light of all potential direct, secondary (indirect), and cumulative impacts on the physical, chemical, and biological elements of the aquatic ecosystem.

As discussed in the state's Procedures, alternatives analyses shall be completed in accordance with the following tiers. The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the project.

- 1. Tier 3 projects include any discharge of dredged or fill material that directly impacts more than 0.2 acre or 300 linear feet of waters of the state; rare, threatened or endangered species habitat in waters of the state; wetlands or eel grass beds; or Outstanding National Resource Waters or Areas of Special Biological Significance, and is not a project that inherently cannot be located at an alternate location. Tier 3 projects shall provide an analysis of off-site and on-site alternatives.
- 2. Tier 2 projects include any discharge of dredged or fill material that directly impacts more than 0.1 acre and less than or equal to 0.2 acre or more than 100 linear feet and less than or equal to 300 linear feet of waters of the state unless it meets the criteria for a Tier 3 project, or any project that inherently cannot be located at an alternate location (unless it meets the size requirements set forth in Tier 1). Tier 2 projects shall provide an analysis of only on-site alternatives.
- 3. Tier 1 projects include any discharge of dredged or fill material that directly impacts less than or equal to 0.1 acre or less than or equal to 100 linear feet of waters of the state unless it meets the criteria for a Tier 3 project. Tier 1 projects shall provide a description of any steps that have been or will be taken to avoid and minimize loss of, or significant adverse impacts to, beneficial uses of waters of the state.



4 Practicability Criteria for Analysis of Alternatives

Section IV.A(1)(h) of the Procedures (SWRCB 2021) state that to determine if an alternative is practicable, an applicant should consider: if the alternative is available and capable of being complete after taking into consideration cost, existing technology, and logistics, in light of the overall Project purpose, while not having other significant adverse environmental consequences.

5 Alternatives

The proposed project impacts more than 0.2 acre or 300 linear feet of waters of the state, so it meets the requirements of a Tier III evaluation as defined in the state's Procedures. A discussion of the alternatives evaluated as part of the proposed project is presented below.

Alternative 1-Proposed Project

As currently designed, the proposed Project will result in approximately 0.23 acres (approximately 0.19 acres temporary and approximately 0.04 acre permanent) of direct impacts to potential jurisdictional waters through the removal of vegetation and grading of land to construct the proposed Project. Temporary impacts will occur within areas proposed for construction laydown areas and within the gen-tie work areas that are outside of the transmission pole pads and access roads.

Alternative 2-Peaceful Valley Alternative Site

As shown in Attachment A, the Peaceful Valley Alternative Site is located at the edge of the 2-mile radius, north of the Project site and north of Highway 14 off Peacefull Valley Road. The Peaceful Valley Alternative Site is an approximately 113-acre block of land consisting of 13 parcels. Ten of the 13 parcels contain residential land uses with the other three (3) parcels being undeveloped. The site is generally flat but does contain some topography around two (2) riverine features that cross the site. The gen-tie would need to cross the Sierra Highway as well as the Antelope Valley Freeway. Depending on the specific route, the gen-tie would need to cross between one (1) and five (5) high voltage (>220kV) transmission lines. The topography of Peaceful Valley Alternative Site is predominantly flat, but contains several steep ridges present in areas required for construction. This condition will necessitate more extensive grading and earthwork compared to the Project. As such, it is expected that impacts to waters of the state would be greater than those of the proposed Project.

Alternative 3-Reduced Project Alternative

Under the Reduced Project Alternative, the Project capacity would be reduced from using an 8-hour battery to a 4-hour battery, thereby reducing the total capacity from 9,200MWh to 4,600MWh. Under this alternative, the BESS facility size would be reduced from 70.9 acres to 44.8 acres. The Project site would be reduced in the area south of Soledad Canyon Road (Attachment A). Under the alternative, the 23.1-acre Project substation would remain the same size as the Project. All other Project components (Project substation, access roads, laydown yard, and the gen-tie) would be the same as the Project. The Reduced Project Alternative would result in halving the daily energy storage capacity (4,600MWh) to help balance electricity generation from renewable sources, such as wind and



solar, with electricity demand by storing excess generation predominately from emissions free power sources and deliver it back to the grid when demand exceeds real-time generation supply. This alternative would reduce permanent impacts to non-wetland waters by half.

3 Analysis

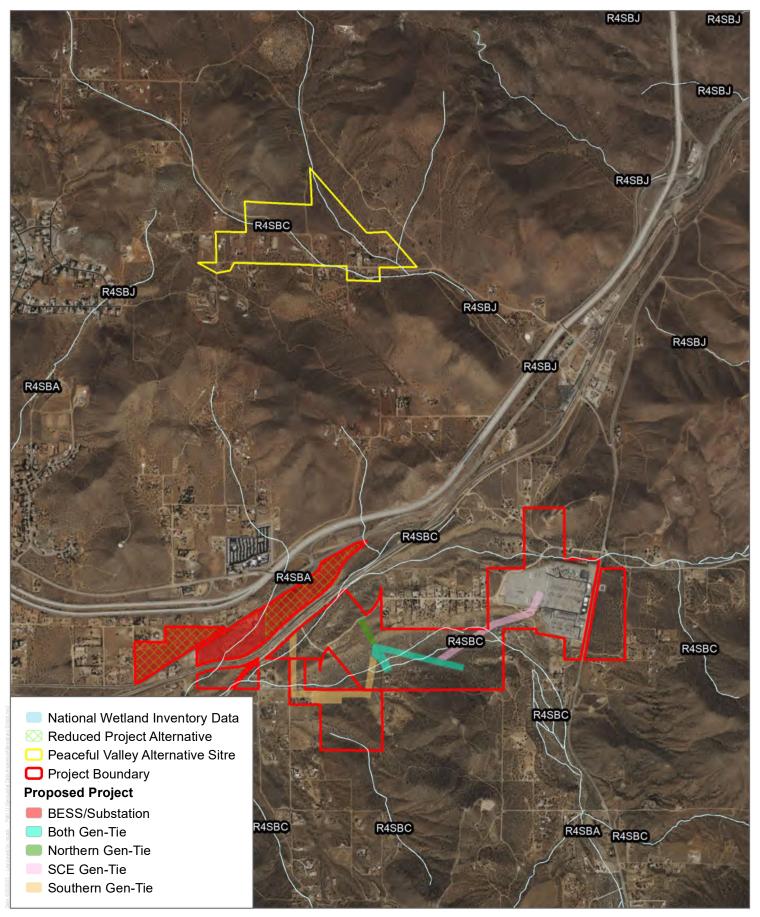
Table 2 includes a summary of the alternatives proposed and their ability to achieve the standards set for each of the criteria established.

Table 2. Alternatives Analysis Summary

Criterion	Alternative 1-Proposed Project	Alternative 2-Peaceful Valley Alternative Site	Alternative 3-Reduced Project Alternative
Project Purpose	Х	X	
Environmental	Х		Х
Cost	Х		Х
Logistics	Х		Х
Technology	Х	X	Х

The proposed Project is the least environmentally damaging, practicable alternative, as it meets all alternative analysis evaluation criteria and achieves the overall project purpose and goals. It is logistically feasible and can be accomplished with current technology at the costs allocated for the Project. While there are proposed direct impacts to 0.36 acres of jurisdictional resources, including 0.22 acres of non-wetland waters and 0.02 acres of swales and those impacts would be significant; however, mitigation proposed by the Project would offset those impacts.





SOURCE: Bing Maps 2021, Open Streets Map 2019.

