DOCKETED	
Docket Number:	24-OPT-04
Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	262202
Document Title:	DR Response 3 - Compared LSAA Application
Description:	Per the CEC's request, this document provides an underline strikeout version comparing the July 2024 submitted version of the LSAA to the most recent submitted version.
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Submission Date:	3/15/2025 12:12:35 AM
Docketed Date:	3/17/2025

California Department of Fish and Wildlife Region 1

1602 Lake and Streambed Alteration Agreement Application

Potentia-Viridi Battery Energy Storage System Project

January 22, 2025

Amended March 10, 2025

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1.1 PROJECT OR ACTIVITY INFORMATION

1.1.1 Box 10A – Project Description

1.1.2 Project Components

The Project would include the installation of riprap at a stormwater outfall into Patterson Run and the installation of a ford (i.e., low-water crossing) within Patterson Run. Project components are described in the following subsections and shown in Appendix A Figures. Table 1 summarizes the preliminary dimensions of major BESS facility components, and Table 2 summarizes the preliminary footprint/disturbance acreage associated with the stormwater facilities and outfall.

Table 1. Preliminary Dimensions of Patterson Run Components

Component	Quantity	Approximate Dimensions
Stormwater Outfall	1	500 ft x 5 ft x 10 ft (L x W x D)
Low-water Crossing	1	1,600 sqft and 30 lf

Table 2. Acreage of Permanent Disturbance

Component	Permanent Disturbance
Stormwater Outfall	0.6 acre
Low-water Crossing	0.04 acre

1.1.3 Description of Activities within Patterson Run

A stormwater drainage outfall utilizing a new 36-inch corrugated metal pipe would be constructed from a detention basin located in the southwest portion of the site to the inlet of an existing culvert on the north side of Patterson Pass Road. Approximately 10 cubic yards of clean rip-rap would be placed as an energy dissipator at the outfall to discharge clean stormwater at or below current rates into the existing drainage on the south side of Patterson Pass Road.

The low-water crossing will be designed for the use of a transmission structure access path crossing Patterson Run that will be used for gen-tie construction and O&M access activities.

1.1.4 Construction

The following sections detail the approximate construction schedule and workforce, construction activities, estimated water use, and materials handling proposed by the Project.

1.1.4.1 Schedule and Workforce

The Project is anticipated to be built during the typical California dry season (June 15th through October 15th). ~~Construction is anticipated to take no more than 30 days to complete.~~

1.1.4.2 Sequencing

During construction activities, multiple crews would be working on the site with various equipment and vehicles. The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) would range from approximately 5 to 200 workers, depending on the phase of construction. It is estimated that construction would require approximately ~~1,106~~150 days to complete the outfall installation.

1.1.5 Box 11 – Project Impacts

A formal aquatic delineation was conducted on January 18, 2024. There is one ephemeral channel (EPH-01; 0.37 acre, 846.07 linear feet), Patterson Run, within the Project where the BESS facility site connects to the gen-tie alignment, paralleling Patterson Pass Road. This ephemeral channel flows southwest to northeast. The channel had moderate flow during the March 2023 and February 2024 surveys and was dry during the May and August 2023 surveys. One swale-like area was surveyed along the gen-tie alignment at the southwest corner of the PG&E substation. This feature exhibited cracked clay and sandy wash type soils during the August 2023 survey, with patchy grassland habitat along the margins and herbaceous plants such as dove weed (*Croton setiger*), curly dock (*Rumex crispus*), and big tarplant (*Blepharizonia plumosa*). However, the survey determined that this feature did not contain hydric soils, vegetation, or hydrology and, thus, is not a jurisdictional aquatic resource.

The project includes two features that will require placement of fill materials within regulated Waters of the United States, including improvements to an existing culvert under Patterson Road, and the construction of a new low-water crossing within the corridor of the proposed overhead gen-tie line. The discharge point of the culvert will require placement of rip-rap to provide energy dissipation and prevent bed or bank erosion at the point of discharge. The proposed crossing includes minor grading to the bed and banks of the feature, and placement of rip-rap to create a stable point of crossing for maintenance vehicles. Impacts to EPH-01 (Patterson Run) are associated with a stormwater outfall as shown in Appendix B. The civil plans are provided in Appendix C. Table 8 provides a summary of impacts to waters of the State.

Table 3. Impacts to Waters of the State.

Feature Type	Crossing ID	Permanent Impacts		Temporary Impacts	
		Acreage (square feet)	Linear Feet	Acreage (square feet)	Linear Feet
Other Waters					
Ephemeral Stream	EPH-01	0.64 (27,878)	38	0	0

1.1.6 Box 11C - Special Status Species

Three listed wildlife species were identified as having potential to occur within the Project Site: California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*) and San Joaquin kit fox (*Vulpes macrotis mutica*). Federally designated critical habitat for California red-legged frog also occurs within the Project Site.

Eleven special-status plants have a moderate or high potential to occur onsite; however, one plant was observed onsite, Big tarplant (*Blepharizonia plumosa*). Big tarplant has a CRPR rank of 1B.1 (rare, threatened or endangered in California and elsewhere), and is a covered species under the EACCS. For additional information and potential impacts to this species.

For additional information and potential impacts to these species, see Appendix D for the Biological Resources.

1.1.7 Box 12 – Measures to Protect Fish, Wildlife, and Plant Resources

California tiger salamander and California red-legged frog

The following avoidance and minimization measures will be implemented following EACCS.

General

GEN - 01 Employees and contractors performing construction activities will receive environmental sensitivity training. Training will include review of environmental laws and Avoidance and Minimization Measures (AMMs) that must be followed by all personnel to reduce or avoid effects on covered species during construction activities.

GEN - 02 Environmental tailboard trainings will take place on an as needed basis in the field. The environmental tailboard trainings will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects to these species during construction activities. Directors, Managers, Superintendents, and the crew foremen and forewomen will be responsible for ensuring that crewmembers comply with the guidelines.

GEN - 03 Contracts with contractors, construction management firms, and subcontractors will obligate all contractors to comply with these requirements, AMMs.

GEN - 04 The following will not be allowed at or near work sites for covered activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets (except for safety in remote locations).

GEN - 05 Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.

GEN - 06 Off - road vehicle travel will be minimized.

GEN - 07 Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during off road travel.

GEN - 08 Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area is constructed.

GEN - 09 Vehicles shall be washed only at approved areas. No washing of vehicles shall occur at job sites.

GEN - 10 To discourage the introduction and establishment of invasive plant species, seed mixtures/straw used within natural vegetation will be either rice straw or weed free straw.

GEN - 11 Pipes, culverts, and similar materials greater than four inches in diameter, will be stored so as to prevent covered wildlife species from using these as temporary refuges, and these materials will be inspected each morning for the presence of animals prior to being moved.

GEN - 12 Erosion control measures will be implemented to reduce sedimentation in wetland habitat occupied by covered animal and plant species when activities are the source of potential erosion problems. Plastic monofilament netting (erosion control matting) or similar material containing netting shall not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

GEN - 13 Stockpiling of material will occur such that direct effects to covered species are avoided. Stockpiling of material in riparian areas will occur outside of the top of bank, and preferably outside of the outer riparian dripline and will not exceed 30 days.

GEN - 14 Grading will be restricted to the minimum area necessary.

GEN - 15 Prior to ground disturbing activities in sensitive habitats, project construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.

GEN - 16 Significant earth moving - activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1 - inch of rain or more).

GEN - 17 Trenches will be backfilled as soon as possible. Open trenches will be searched each day prior to construction to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist.

Amphibians: CTS, CRLF

AMPH-2. Habitat: Riparian habitat and grasslands within 2-miles of aquatic habitat

- If aquatic habitat is present, a qualified biologist will stake and flag an exclusion zone prior to activities. The exclusion zone will be fenced with orange construction zone and erosion control fencing (to be installed by construction crew). The exclusion zone will encompass the maximum

practicable distance from the work site and at least 500 feet from the aquatic feature wet or dry (EACCS AMPH-1).

- A qualified biologist will conduct preconstruction surveys prior to activities define a time for the surveys (before groundbreaking). If individuals are found, work will not begin until they are moved out of the construction zone to a USFWS/CDFW approved relocation site.
- A Service-approved biologist should be present for initial ground disturbing activities.
- Barrier fencing will be constructed around the worksite to prevent amphibians from entering the work area. Barrier fencing will be removed within 72 hours of completion of work.
- No monofilament plastic will be used for erosion control.
- Construction personnel will inspect open trenches in the morning and evening for trapped amphibians.
- A qualified biologist possessing a valid ESA Section 10(a)(1)(A) permit or USFWS approved under an active biological opinion, will be contracted to trap and to move amphibians to nearby suitable habitat if amphibians are found inside fenced area.
- Work will be avoided within suitable habitat from October 15 (or the first measurable fall rain of 1" or greater) to May 1.

San Joaquin kit fox

Potential direct and indirect effects could occur during construction activities as result from noise and vibration. In addition to the general measures listed above, the following species avoidance and minimization measures will be implemented during construction:

MAMM-1. Habitat: Grassland, generally with ground squirrel burrows.

- If potential dens are present, their disturbance and destruction will be avoided.
- If potential dens are located within the proposed work area and cannot be avoided during construction, qualified biologist will determine if the dens are occupied or were recently occupied using methodology coordinated with the USFWS and CDFW. If unoccupied, the qualified biologist will collapse these dens by hand in accordance with USFWS procedures (USFWS 2011).
- Exclusion zones will be implemented following USFWS procedures (USFWS 1999) or the latest USFWS procedures available at the time. The radius of these zones will follow current standards or will be as follows: Potential Den 50 feet; Known Den 100 feet; Natal or Pupping Den – to be determined on a case by case basis in coordination with USFWS and CDFW.
- Pipes will be capped, and trenches will contain exit ramps to avoid direct mortality while construction area is active.

1.1.8 Box 12C – Mitigation

For impacts to waters of the state, the Applicant will purchase a turnkey mitigation property within the same Conservation Zone as the Project site (Conservation Zone 10) at a 1:1 (one acre preserved for each acre of impact).

With the implementation of the above avoidance and minimization measures, compensatory mitigation proposed is associated with the preservation of upland and dispersal habitat for these species. To compensate for direct impacts on upland habitat for CTS and CRLF, the Applicant will purchase a turnkey mitigation property within the same Conservation Zone as the Project site (Conservation Zone 10). The Applicant will ensure a long-term conservation plan is implemented with the turnkey mitigation property which will consist of a conservation easement, an endowment and a long term management plan along with a mitigation agreement that will be submitted for approval during coordination with CDFW and USFWS. Prior to the purchase of this mitigation property, the Applicant would obtain approval from CEC staff, in coordination with CDFW, to ensure the mitigation lands are appropriate to compensate for the impacts of the Project. All necessary requirements to acquire the proposed mitigation property will be completed prior to ground disturbance and this process has already been initiated. Prior to the purchase of this mitigation property, the Applicant would obtain approval from CEC staff, in coordination with CDFW, to ensure the mitigation lands are appropriate to compensate for the impacts of the Project. The EACCS standardized mitigation ratios for CTS and CRLF are 3:1 (three acres preserved for each acre removed).

Appendix A FIGURES

Appendix B IMPACTS TO WATERS OF THE STATE

Appendix C PROJECT DESIGN PLANS

Appendix D BIOLOGICAL RESOURCES TECHNICAL REPORT