

5.4. Biological Resources

BIOLOGICAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

5.4.1. Setting

This section describes the biological resources that occur in the Project site which includes the underground interconnection line. It includes a description of the existing biotic environment, including common plants and wildlife, sensitive habitats, special-status species and their locations in relation to the proposed Project. The following sections present an analysis of potential impacts to biological resources and, where necessary, specify mitigation measures to reduce potential impacts to less-than-significant levels. Information used in preparing this section was derived from:

- A Biological and Aquatic Resources Technical Report for the Greenbark 30 Energy Storage Project (ERM 2024);
- An Addendum to the Biological and Aquatic Resources Technical Report for the Greenbark 30 Energy Storage Project (ERM 2025);
- A Biological Technical Report prepared for the adjacent Goleta Self Storage Project (Rincon 2021);
- A site visit conducted by Aspen biologist Jenny Slaughter on April 16, 2025; and
- Various other resources cited in these documents.

5.4.2. Regulatory Background

The regulatory background is presented in Appendix E.

5.4.3. Environmental Impacts and Mitigation Measures

Thresholds of Significance

A significant impact on Biological Resources would be expected to occur if the Project resulted in any of the impacts noted in the above checklist. In addition, the County of Santa Barbara's Environmental Thresholds and Guidelines Manual (2021), which has been adopted by the City of Goleta (adopted by Resolution 08-40) defines the following thresholds of significance:

Threshold BIO-1. Disturbances to habitats or species may be significant, based on substantial evidence in the record, if they substantially impact significant resources in the following ways:

- Substantially reduce or eliminate species diversity or abundance.
- Substantially reduce or eliminate quantity or quality of nesting areas.
- Substantially limit reproductive capacity through loss of individuals or habitat.
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food resources.
- Substantially limit or fragment range and movement (geographic distribution of animals and/or seed dispersal routes).
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Threshold BIO-2. The *Environmental Thresholds and Guidelines Manual* provides examples of areas in the City of Goleta where impacts to habitat are presumed to be less than significant, including:

- Small acreages of non-native grassland if wildlife values are low.
- Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
- Areas of historical disturbance such as intensive agriculture.
- Small pockets of habitats already significantly fragmented or isolated, and disturbed or degraded.
- Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

Impact Analysis

Threshold BIO-1 is addressed in Checklist Items (a) and (b), and Threshold BIO-2 is addressed in Checklist Item (b).

(a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; and Threshold BIO-1

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As described in the Biological and Aquatic Resources Technical Report (Appendix E), no special-status species were identified within the Project site, but several species have a potential to be present as discussed below.

Special-Status Plants

As described in the Biological and Aquatic Resources Technical Report (Appendix E), no listed plant species were observed within the Project site and none have a potential to be present. One special-status plant with a California Rare Plant Rank (CRPR) of 1B.1, southern tarplant, is known from several locations within roughly 1 mile to the southeast of the Project site. This species has not been detected during multiple biological surveys and is considered unlikely to occur within the Project site. Its absence is attributed to the highly disturbed nature of the area, which includes extensive grading, infrastructure development, and ongoing human activity that has reduced the suitability of the habitat within the Project site. Additionally, the species is conspicuous in appearance, making it relatively easy to detect during appropriately timed surveys. The lack of observations across multiple survey efforts further supports the

conclusion that the species is not present in the Project site. No additional special-status plants are likely to occur.

Special-Status Wildlife

As described in the Biological and Aquatic Resources Technical Report (Appendix E), no listed wildlife species were observed within the Project site. One species proposed for federal listing, monarch butterfly, and one species that is a candidate for state listing, Crotch's bumble bee, and one California Department of Fish and Wildlife (CDFW) species of special concern, western red bat, do have a potential to be present.

Overwintering surveys for monarch butterfly were conducted in December of 2022 and no roosting butterflies were observed. Additionally, it was determined that the micro-habitat (a small area which differs from the surrounding habitat such as soil type, slope, moisture levels, temperature, and light exposure) within the Project site is not suitable for monarch butterflies, although they may occasionally fly through the area.

Crotch's bumble bee has not been observed within the Project site but has been observed multiple times within roughly 2.1 miles of the Project site in recent years. Suitable foraging habitat is present along with multiple floral resources and rodent burrows are present that may be utilized for nesting habitat. Project activities have a potential to impact Crotch's bumble bee if present at the start of the Project.

Western red bat has not been observed within the Project site, but it has potential to roost in eucalyptus trees. It was determined that the habitat within the Project site is not suitable to support a maternity colony for western red bat, although it may occasionally support roosting individuals. Project activities have potential to impact western red bat if present at the start of the Project.

Impacts to special-status plant and wildlife species would be avoided with the implementation of Mitigation Measures (MMs) BIO-1, BIO-2, and BIO-3 by providing environmental training to personnel, controlling invasive species, requiring pre-construction surveys for special-status wildlife prior to initiating work, and monitoring of special-status wildlife to ensure their safety. Impacts to Crotch's bumble bee would be avoided with the implementation of MM BIO-4 by requiring pre-construction surveys, establishing nest buffers, and delaying Project activities in the event that a nest is found. With implementation of MMs BIO-1, BIO-2, BIO-3, and BIO-4, impacts to special-status species would be reduced to a less-than-significant level.

Mitigation Measure for Special-Status Animal Species

MM BIO-1 Worker Environmental Awareness Training. Prior to the initiation of BESS construction, a Worker's Environmental Awareness Program will be prepared and implemented. For this training, a qualified biologist will:

- Provide environmental training materials that include all relevant permit conditions, avoidance and minimization measures, identification of sensitive biological resources, and legal repercussions of environmental damage.
- Conduct a pre-construction meeting with work crews to review environmental training materials. Personnel will review the protective measures from the relevant permits. New crew members brought on during the Project will receive the same level of training.
- Copies of the permits and educational information will be distributed to personnel to be available at the work site.

MM BIO-2 Invasive Species Control. The Environmental Awareness training will include identification of common invasive species known to the local area, inspection procedures, and

removal methodologies. Invasive species inspections and maintenance will be incorporated into Operation and Maintenance documentation for the Project.

MM BIO-3 Special Status Wildlife Avoidance.

- Within 3 days prior to initial clearing and grubbing of vegetation, a qualified biologist will conduct a pre-construction survey for special-status wildlife species, including the Western red bat. Should special-status species be observed, they will be monitored as grading and clearing progresses to confirm that they safely move out of the area.
- To protect potential red bat roosting habitat, pre-construction surveys will be conducted by a qualified biologist to identify suitable roost trees, particularly large mature trees with exfoliating bark or dense foliage. If active roosts are identified, a no-disturbance buffer of at least 100 feet will be established around the roost site, and work within this buffer will be postponed until the bats have naturally vacated the area. Vegetation removal will be scheduled outside of the bat maternity season (typically April 1 to August 31) to avoid disturbing maternal colonies.
- Trenches will be covered overnight, or a ramp will be provided at one end for wildlife to escape.

MM BIO-4 Crotch's Bumble Bee. Consistent with CDFW's 2023 guidance (Survey Considerations for CESA Candidate Bumble Bee Species), three visual survey passes for foraging and nesting Crotch bumble bee will be conducted by a qualified biologist during the Colony Active Period (April to August) preceding the initiation of construction. The survey passes will be separated by no less than 2 weeks and no more than 4 weeks. Survey passes will take place during the day (at least 1 hour after sunrise and 2 hours before sunset) on warm (65-90 degrees Fahrenheit), sunny days with low wind (less than 8 miles per hour). Survey results, including negative findings, will be submitted to the City. If survey results are negative, no further actions are required. Should Crotch bumblebee nests/colonies be detected within the Parcel during surveys, an avoidance plan will be developed, if feasible, in consultation with the City and in coordination with CDFW. No construction permits will be issued until the plan has been approved by the City and no further actions are required. If avoidance is infeasible, the Project proponent will initiate consultation with CDFW. No construction permits will be issued until a 2081 Incidental Take Permit is issued or CDFW provides written concurrence that a 2081 Incidental Take Permit is unnecessary.

(b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; and Thresholds BIO-1 and BIO-2.

NO IMPACTS. As described in the Biological and Aquatic Resources Technical Report (Appendix E), a total of 10 vegetation types or land cover types were present within the Project site. They include arroyo willow thickets, developed, eucalyptus - tree of heaven - black locust groves, hardstem and California bulrush marshes, ice plant mats, ornamental landscaping, pepper tree or myoporum groves, poison hemlock or fennel patches, upland mustards or star-thistle fields, and wild oats and annual brome grasslands. Most of these vegetation and land cover types are not riparian habitats or sensitive natural communities. Arroyo willow thickets are a type of riparian habitat. Up to 0.05 acres of this habitat are present within the wetland area in the southwest portion of the Project site. The vegetation community is located outside of the Project impact area. Therefore, no impacts to arroyo willow thickets are anticipated. An additional 0.02 acres of hardstem and California bulrush marshes, a sensitive natural community, are also present within the Project site. However, the Project has been designed to avoid this vegetation community and

includes a 50-foot buffer to further minimize potential impacts. No impacts to riparian habitat and sensitive natural communities are expected.

(c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As described in the Biological and Aquatic Resources Technical Report (Appendix E), 0.12 acres of Central Coast Regional Water Quality Control Board (CCRWQCB) Wetlands and Waters of the state are present within the southwest portion of the Project site. This is based on an assessment of jurisdictional resources conducted by ERM biologists on December 8, 2022.

The applicant will design the Project to satisfy the City's Development Standards, as well as state and federal regulatory requirements including incorporating design elements necessary to minimize fugitive dust and maintain existing stormwater quality and hydraulic characteristics. Impacts to wetlands and other jurisdictional waters would be less-than-significant level.

Impacts to protected wetlands would be avoided with the implementation of Mitigation Measures (MMs) BIO-1, BIO-2, and BIO-5. By providing environmental training to personnel, controlling invasive species, and implementing fugitive dust control and stormwater protection. With implementation of MMs BIO-1, BIO-2, and BIO-5, impacts to protected wetlands would be reduced to a less-than-significant level.

Mitigation Measure for State or Federally Protected Wetlands

MM BIO-5 Fugitive Dust Control and Stormwater Protection. To minimize fugitive dust emissions and protect stormwater quality during construction, a combination of targeted design elements and operational practices will be implemented. Stabilized construction entrances using gravel pads will be installed at all access points to reduce sediment track-out, which can lower offsite dust transport by up to 80%. A water application system, including water trucks will be used to maintain soil moisture on disturbed surfaces, reducing airborne dust by up to 90% during active grading. Wind breaks such as temporary fencing or vegetative buffers will be placed strategically to reduce wind velocity and dust dispersion by 30–50%. Soil stockpiles will be covered with tarps and surrounded by silt fencing to prevent erosion and reduce dust emissions by over 95%. To maintain stormwater quality and hydraulic function, erosion and sediment control BMPs—including fiber rolls, check dams, and inlet protection—will be installed to prevent sediment-laden runoff while preserving flow conveyance. Daily inspections and adaptive management will ensure the effectiveness of these measures and compliance with regulatory requirements.

(d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As described in the Biological and Aquatic Resources Technical Report (Appendix E), the Project site provides suitable nesting habitat for numerous resident and migratory bird species. Although no bird nests were observed during the surveys conducted in support of the Project, suitable nest sites are expected throughout the Project site and adjacent open space, and many common bird species are expected to nest there. Implementation of MM BIO-6 would reduce or avoid any potential impacts to nesting birds. Given the limited extent of the Project site, the absence of wildlife corridors and the short duration of construction activities, the Project's impacts on the movement of any native resident or migratory fish or wildlife species would be less than significant. Impacts to nesting birds would be less than significant with mitigation incorporated.

Mitigation Measure for Nesting Birds

MM BIO-6 Nesting Bird Avoidance. Removal of vegetation between March 1 and September 15 will be avoided to the extent feasible. Should vegetation removal be required on the Project site between 1 March and 15 September, a qualified biologist will conduct nesting bird surveys no more than 7 days prior to vegetation removal. If pre-construction surveys detect an active nest, no vegetation clearing, grading, construction, or other development activity will be permitted within 100 feet of the nest site (300 feet for raptors) during the nesting and fledging season to the extent feasible.

(e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Conservation Element Policy Conservation Element (CE) 1 of the City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP) requires that all Environmentally Sensitive Habitat Areas (ESHA) identified in the GP/CLUP be protected against significant degradation of habitat value (City of Goleta 2006). According to Conservation Element Figure 4-1 of the GP/CLUP, no special-status species or ESHA are mapped on or near the Project site. However, one sensitive vegetation community, hardstem and California bulrush marsh, is present within the Project site. This community also meets the definition of a City- and state-regulated wetland. Impacts would be less-than-significant. Therefore, the Project would be consistent with Policy CE 1.

Conservation Element Policy CE 9 pertains to the protection of native woodlands. The Project would not result in the removal of any protected trees. Therefore, the Project would be consistent with Policy CE 9.

(f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

NO IMPACT. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other similar plans that overlap with the Project site (CDFW, 2025). The nearest conservation plan area is the Kern Water Bank Natural Community Conservation Plan/Habitat Conservation Plan, which is located approximately 67 miles northeast of the Project site (CDFW, 2025). Therefore, no impacts would occur, and no mitigation is required.

5.4.3.1. Impact Conclusions and Mitigation Measures

The proposed Project would result in potentially significant impacts to special status animal species, state or federally protected wetlands, and nesting birds, therefore, mitigation measures MM BIO-1 through MM BIO-6 are recommended. With implementation of these mitigation measures, impacts would be less than significant.