5.10. Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

5.10.1. Setting

5.10.1.1. Surface Waters and Drainage

The City of Goleta is located in the South Coast watershed, in the coastal plain south of the Santa Ynez Mountains in southern Santa Barbara County. The South Coast Watershed drainage area is approximately 416 square miles; the drainages are characterized by high intensity, short duration runoff events due to the relatively short distance from the top of the Santa Ynez Mountains to the Pacific Ocean (GWD, 2021, p. 4-3). Due to the Mediterranean climate of Santa Barbara County and the variability of rainfall, stream flow throughout the County is highly variable and directly impacted from rainfall with little snowmelt or base, with many ephemeral streams that are dry during summer months (GWD, 2021, p. 4-2).

Surface water drainage in the City of Goleta includes twelve creek reaches, six of which discharge into the Goleta Slough (Maria Ygnacio, San Jose, Las Vegas, San Pedro, Los Carneros, and Glen Annie Creeks), two that discharge into the Devereux Slough (Devereux and El Encanto Creeks), and Tecolote, Bell Canyon, Winchester and Ellwood Canyons Creeks. The proposed Project is located approximately 0.25 miles east of Devereux Creek and 0.25 miles west of the Devereux Creek east branch tributary. The creek and tributary drain to the Devereux Slough within the Dos Pueblos Canyon-Frontal Santa Barbara Channel watershed.

Carneros Creek, Glen Annie Creek, Bell Canyon Creek, and Goleta Slough are listed as impaired water bodies by the State Water Resource Control Board under section 303 (d) of the Clean Water Act for either ammonia, nitrates, pathogens, and priority organics (City of Goleta, 2010, p. 8).

Within the City, these regionally important streams have been channelized and modified to reduce flood hazards. The City's storm water drainage system collects and channels surface water into catch basins, storm drains, sewers, and streams, which then flow into the Pacific Ocean (City of Goleta, 2010, p. 56).

5.10.1.2. Groundwater Resources

The Goleta Coastal Plain is underlain by the Goleta Groundwater Basin (14.4 square miles), which is divided into three subbasins: North, Central, and West. The Central subbasin has the most usable groundwater in storage, and the Goleta Water District (GWD) does not pump from the West subbasin (GWD, 2021, p. 5-3). The proposed Project is within the West subbasin.

Water-bearing deposits of the Central subbasin consist of young alluvium of Quaternary and Holocene age, terrace deposits, older alluvium, and the Santa Barbara Formation of Pleistocene age. The Santa Barbara Formation is the primary water-bearing unit and is composed of sand, silt, and clay. GWD has increased groundwater production to offset the loss of surface and imported water since 2012. However, groundwater modeling and monitoring indicate that the basin is not approaching historic lows (GWD, 2021, p. 5-3). GWD currently has nine permitted groundwater production wells located in the Central subbasin, and total well extraction and treatment capacity is approximately 596 acre-feet per month (GWD, 2024, p. 18). The depth to the groundwater table in a nearby monitoring well at the north of the proposed Project site is estimated at 63.3 feet (ERM, 2025 – Appendix K [Construction SWPPP], p. 15).

Water quality data for 2016 to 2021 show that none of the groundwater basin wells sampled had chlorine concentrations above the secondary maximum contaminant level or nitrate concentrations above the primary maximum level. However, sulfate concentrations and total dissolved solids (TDS) exceeded the secondary maximum contaminant level in several sampled wells. Elevated sulfate levels may cause a bitter or astringent taste in the water and can have laxative effects; high levels of TDS produce "hard water," which can leave deposits and films on plumbing fixtures but are not considered a health hazard (GWD, 2023, p. 41).

Iron and manganese in groundwater have historically been elevated in the basin, with most wells in all subbasins having recorded maximum concentrations above the secondary drinking water standards (GWD, 2023, p. 34). GWD treats groundwater for iron and manganese with oxidation via chlorination filtration. Chlorination also provides a disinfectant residual that is required by federal and state regulations and helps maintain a safe drinking water supply throughout the distribution system. Treatment has proven sufficient to meet federal and state primary drinking water regulations (GWD, 2021, p. 7-2).

Historically, there have been several reported spills and leaks of contaminants at the ground surface overlying the Basin. The spilled or leaked contaminants range from gasoline (the most common) to volatile organic compounds. Most active well sites in the Central subbasin are located near a source of potential groundwater contamination; however, the extent of the contamination is generally confined to the shallow water-bearing zones above the primary producing zones in part because of clay layers that impede downward migration of contaminants into the deeper producing zones (GWD, 2023, p. 52).

5.10.1.3. Flood Hazard Areas

Runoff from high intensity, short duration storm events can cause: inundation of over bank areas; debris including sediment, rock, downed trees in the water that can plug culverts and bridges; erosion and sloughing of banks; and loss of channel capacity due to sedimentation. Additionally, portions of the County are subject to flooding due to coastal storm surge events, flash flooding, urban flooding, river channel overflow, and downstream flooding (GWD, 2021, p. 5-24).

On Federal Emergency Management (FEMA) flood maps (FEMA, 2018), the Project site does not fall in an identified flood zone. The proposed Project is located at approximately 0.25 miles east of Devereux Creek

and 0.25 miles west of the Devereux Creek east branch tributary. These creeks are mapped as Special Hazard Flood Zone AE, which are high-risk areas with a 1 percent annual chance of flooding. According to the City's General Plan, Figure 5-2, the proposed Project is not in a tsunami inundation area (City of Goleta, 2006).

5.10.1.4. Water Supply

The Goleta Water District (GWD) provides water to the City of Goleta, the University of California Santa Barbara, the Santa Barbara Airport, and an unincorporated portion of Santa Barbara County (GWD, 2021, p. 2-1). GWD's current water supplies include local surface water from the Cachuma Project, imported water from the State Water Project, local groundwater from the Goleta Groundwater Basin, and non-potable recycled water produced by the Goleta Sanitary District at the Goleta Wastewater Treatment Plant (GWD, 2021, p. ES-3).

5.10.2. Regulatory Background

Federal

The Clean Water Act (CWA; 33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is delegated to, and administered by, California's nine Regional Water Quality Control Boards (RWQCB). In addition, the State Water Resources Control Board (SWRCB) regulates the NPDES stormwater program. The proposed Project is under the jurisdiction of the Central Coast Regional Water Quality Control Board and the SWRCB.

Projects that disturb one or more acres are required to obtain NPDES coverage under the California General Permit for Discharges of Storm Water Associated with Construction Activity. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP describes Best Management Practices (BMPs) the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

State

Porter-Cologne Water Quality Control Act. The Porter Cologne Water Quality Control Act of 1967, Water Code Section 13000 et seq., requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for the Project site are contained in the Water Quality Control Plan (also referred to as a Basin Plan) for the Central Coast RWQCB. Constraints in the water quality control plans relative to the proposed Project relate primarily to the avoidance of altering the sediment discharge rate of surface waters, and the avoidance of introducing toxic pollutants to the water resource. A primary focus of water quality control plans is to protect designated beneficial uses of waters. In addition, anyone proposing to discharge waste that could affect the quality of the waters of the state must make a report of the waste discharge to the Regional Water Board or State Water Board as appropriate, in compliance with Porter-Cologne.

California Water Code Section 13260. California Water Code Section 13260 requires that any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the State, other than into a community sewer system, must submit a report of waste discharge

to the applicable RWQCB. Any actions related to the proposed Project that would be applicable to Section 13260 would be reported to the Central Coast RWQCB, as applicable.

Local

City of Goleta General Plan. The objectives of the City's General Plan conservation policies in regard to hydrology and water quality are to protect wetlands; manage groundwater and surface water resources to promote water quality, support biodiversity, protect marine aquatic habitats, and support natural ecosystem processes and functions; and to conserve water and manage water use efficiently. The objectives of the City's General Plan public safety policies in regard to hydrology and water quality are to ensure that new development is sized, sited, and designed to avoid or minimize exposure to known physical or other hazards, and ensure that new critical facilities are located and designed to continue functioning after natural disasters. The following policies in the General Plan relate to the proposed Project (City of Goleta, 2006):

- **Policy CE 1.9(d) Standards Applicable to Development Projects.** For new developments within or adjacent to environmentally sensitive habitat areas (ESHAs), all new development shall be sited and designed so as to minimize grading, alteration of natural landforms and physical features, and vegetation clearance in order to reduce or avoid soil erosion, creek siltation, increased runoff, and reduced infiltration of stormwater and to prevent net increases in baseline flows for any receiving water body. (Conservation Element, p. 4-11):
- **Policy CE 10.1 New Development and Water Quality.** New development shall not result in the degradation of the water quality of groundwater basins or surface waters; surface waters include the ocean, lagoons, creeks, ponds, and wetlands. Urban runoff pollutants shall not be discharged or deposited such that they adversely affect these resources (Conservation Element, p. 4-27).
- **Policy CE 10.2 Siting and Design of New Development.** New development shall be sited and designed to protect water quality and minimize impacts to coastal waters by incorporating measures designed to ensure the following (Conservation Element, p. 4-27):
  a. Protection of areas that provide important water quality benefits, areas necessary to maintain riparian and aquatic biota, and areas susceptible to erosion and sediment loss.
  b. Limiting increases in areas covered by impervious surfaces.
  c. Limiting the area where land disturbances occur, such as clearing of vegetation, cut-and-fill, and grading, to reduce erosion and sediment loss.
  d. Limiting disturbance of natural drainage features and vegetation.
- **Policy CE 10.3 Incorporation of Best Management Practices for Stormwater Management.** New development shall be designed to minimize impacts to water quality from increased runoff volumes and discharges of pollutants from nonpoint sources to the maximum extent feasible, consistent with the City's Storm Water Management Plan or a subsequent Storm Water Management Plan approved by the City and the Central Coast Regional Water Quality Control Board. Post construction structural BMPs shall be designed to treat, infiltrate, or filter stormwater runoff in accordance with applicable standards as required by law. (Conservation Element, p. 4-27).
- **Policy CE 10.7 Drainage and Stormwater Management Plans.** New development shall protect the absorption, purifying, and retentive functions of natural systems that exist on the site. Drainage Plans shall be designed to complement and use existing drainage patterns and systems, where feasible, conveying drainage from the site in a nonerosive manner. Disturbed or degraded natural drainage systems shall be restored where feasible, except where there are geologic or public safety concerns. Proposals for new development shall include a Construction-Phase Erosion Control and Stormwater

Management Plan and a Post-Development-Phase Drainage and Stormwater Management Plan that specify the BMPs that will be implemented (Conservation Element, p. 4-28).

- **Policy SE 6.4 Avoidance of Flood Hazard Areas.** The City shall discourage any new intensive development in any flood hazard area. Similarly, the City shall require appropriate flood mitigation for intensification of existing development in any flood-prone area. The City shall not approve development within areas designated as the 100-year floodplain that would obstruct flood flow (such as construction in the designated floodway), displace floodwaters onto other property, or be subject to flood damage. The City shall not allow development that will create or worsen drainage problems (Safety Element, p. 5-21).
- **Policy SE 6.5 Siting of Critical Facilities.** The City shall discourage the construction of critical facilities within the 100-year floodplain. In cases where construction of such facilities cannot avoid flood hazard areas, the City shall require implementation of appropriate mitigation as recommended in site-specific hydrology/hydraulic and/or engineering studies (Safety Element, p. 5-21).

5.10.3. Environmental Impacts and Mitigation Measures

Thresholds of Significance

A significant impact on Hydrology & Water Quality would be expected to occur if the proposed 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) assume that a significant impact on hydrology and water resources would occur if a project would:

Threshold HYD-1: Result in a substantial alteration of existing drainage patterns.

Threshold HYD-2: Alter the course of a stream or river.

Threshold HYD-3: Increase the rate of surface runoff to the extent that flooding, including increased erosion or sedimentation, occurs.

Threshold HYD-4: Create or contribute to runoff volumes exceed existing or planned stormwater runoff facilities, or substantially degrade water quality.

Impact Analysis

Thresholds HYD-1, HYD-2, HYD-3, and HYD-4 are addressed in Checklist Item (c). Additionally, Threshold HYD-3 is addressed in Checklist Item (a) and Threshold HYD-4 is addressed in Checklist Items (a) and (e).

(a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Disturbance of soil during construction could result in soil erosion and lowered water quality through increased turbidity and sediment transport into the storm drain system. The receiving waters for the Project include an isolated seasonal wetland at the south of the site, Devereux Creek east branch tributary at the east of the project site and Devereaux Creek at the west and south of the project site. None of the receiving waters are listed on the 303(d) list as impaired for Sedimentation/Siltation or have sediment-related Total Maximum Daily Load (TMDL).

Based on the hydrological analysis performed by ERM in the site-specific Drainage Analysis (see Appendix IX), a retention basin has been designed to capture excess stormwater runoff during long-term operations. An approximately 2,610 square foot bioretention basin is proposed for stormwater retention on the southwest edge (downslope portion) of the BESS facility. Basin design would meet applicable City design standards and the specific design parameters including the location, depth, width, and materials, as

determined by the Project-specific Drainage Analysis (see Appendix I) and Stormwater Control Plan (see Appendix J). Stormwater would be further controlled onsite through the incorporation of self-retaining permeable areas, such as permeable gravel groundcover surrounding each battery storage unit and a permeable gravel base access road. Stormwater would be collected and infiltrated into the ground via the 2,610 square foot bioretention basin at the southwest edge of the Project site, or via an infiltration underdrain at the southeast portion of the site (at the Viajero Drive entrance) (ERM, 2024 - Appendix J [Stormwater Control Plan], p. 4).

During construction and decommissioning, there is potential for violations of water quality standards or waste discharge requirements to occur from accidental leaks, spills, or releases of hazardous or potentially hazardous materials. There is also a potential for violations if existing contamination is encountered during construction. The 2022 Construction General Permit (CGP) requires that best management practices (BMPs) be implemented. The following BMPs would be implemented: bioretention basin, permeable pavement with underdrain, stabilized construction entrance, and silt fences (ERM, 2025 - Appendix K [Construction SWPPP], p. 17). Additionally, proper measures would be taken so that trench spoils or any other soils disturbed during construction activities that are contaminated are not discharged with stormwater or non-stormwater discharges into storm drains or water bodies (ERM, 2025 - Appendix K [Construction SWPPP], p. 20).

The proposed Project parcel is 2.1 acres and would require minor grading on 1.9 acres. Over 1 acre of disturbance would occur during the construction of the BESS and the 200-foot-long gen-tie line, triggering the need for a SWPPP. As discussed in Section 5.7.2(b) Geology and Soils, implementation of the construction SWPPP, consistent with condition of approval GEO2, would ensure that erosion control BMPs would be in place to reduce potential water quality impacts to a less than significant level. Furthermore, complying with applicable water quality standards, including obtaining and adhering to any required water quality permits, would offer sufficient protection to avoid significant adverse impacts to water quality from erosion and sedimentation. Applicable water quality standards and regulations are described above, in Section 5.10.1.

In the event of an accidental spill, adherence to regulatory standards and regulations, as well as implementation of mitigation measure MM HM-1 (Hazardous Substance Control and Emergency Response) (see Section 5.9), would collectively ensure that a suite of BMPs would be applied to minimize the potential for an accidental release of hazardous materials to occur, to quickly and effectively address any such leak, and to quickly and effectively respond to any existing contamination produced or encountered during construction. The intent of regulatory standards is to prevent degradation of water quality to the point where beneficial uses would be impaired. Therefore, potential impacts to water quality standards or waste discharge requirements or other substantial degradation of surface or groundwater quality during construction would be less than significant with implementation of condition of approval GEO2, mitigation measure HM-1 and compliance with regulatory standards. Therefore, no violations would be expected from construction and operation of the proposed Project.

MM HM-1 **Hazardous Substance Control and Emergency Response** (see full text in Section 5.9, Hazards and Hazardous Materials)

(b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

LESS THAN SIGNIFICANT. Groundwater supplies could be adversely affected through direct consumption of groundwater resources or indirect depletion of groundwater supplies such as through conducting dewatering activities where the water is not returned to the subsurface. In the case of the proposed Project there would be minimal demand for water. Water would be provided by the Goleta Water District and would be delivered to the site via truck. A water truck would be used on-site to support dust

suppression during ground disturbing work and to supply water for construction and decommissioning activities. This would not result in a significant demand for water resources from the City of Goleta, where the City's water supply comes from Lake Cachuma (46 percent), SWP (27 percent), groundwater (13 percent), other surface water (9 percent) and recycled water (5 percent) (GWD, 2024 – Figure 2-2). The existing supply is adequate for use during the 8-month duration of construction activities.

The depth to the groundwater table in a nearby monitoring well at the north of the proposed Project site is estimated at 63.3 feet (ERM, 2025 - Appendix K [Construction SWPPP], p. 15). Given the depth to the groundwater table, any water encountered during Project excavation would be shallow and local and dewatering would be for a limited time. The small amount of dewatering would therefore not result in a substantial decrease of the groundwater supply or interfere substantially with groundwater recharge or sustainable groundwater management. Placement of the BESS components and access improvements would result in a minor increase of impervious surfaces within the Project site parcel. The remaining area within the Project site parcel would continue to allow onsite infiltration of rainwater. The Project would have minimal effect on groundwater recharge. Overall, any impacts to groundwater would be less than significant.

(c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in a substantial erosion or siltation on- or off-site;

LESS THAN SIGNIFICANT. The proposed Project has no potential to alter the course of a stream or river, nor to substantially alter the existing drainage pattern of the site or area. The total area of ground disturbance for the 2.1-acre site is 1.9 acres, including 0.4 acre of new impervious surface. The remaining approximately 1.7 acres would remain pervious, including approximately 0.3 acre of perimeter road, approximately 0.7 acre within the perimeter road (i.e., the areas between the individual BESS units), and approximately 0.7 acre of buffer setback between the BESS perimeter road and the parcel boundaries. Placement of the BESS components and access improvements would result in a minor increase of impervious surfaces within the Project site parcel. The remaining area within the Project site parcel would continue to allow onsite infiltration of rainwater.

As stated in (a), runoff from the site at the existing condition flows toward the south and drains to the seasonal wetland at the south of the property. A site-specific retention basin has been designed to capture excess stormwater runoff during long-term operations. An approximately 2,610 square foot bioretention basin is proposed for stormwater retention on the southwest edge (downslope portion) of the BESS facility. Stormwater would be collected and infiltrated into the ground via a 2,610 square foot bioretention basin at the southwest edge of the site, or via an infiltration underdrain at the southeast portion of the site (ERM, 2025 - Appendix J [Stormwater Control Plan], p. 4).

Based on the hydrological analysis, the watershed erosion estimate (which is calculated as a product of the site's sedimentation R Factor, erodibility K Factor, and slope length LS factor) for the site is 8.8 tons per acre, which indicates a "Low" sediment risk (under 15 tons per acre) (ERM, 2025 - Appendix K [Construction SWPPP], "Sediment Risk Factor Worksheet"). The proposed Project would therefore have a less than significant impact on drainage patterns or runoff generation and would not create on- or off-site erosion or siltation during construction, operations, or decommissioning.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

LESS THAN SIGNIFICANT. As described under Item (c)(i) above, placement of the BESS components and access improvements would result in a minor increase (0.4 acre) of impervious surfaces within the Project site, while the remaining area would continue to allow onsite infiltration of rainwater. An approximately 2,610

square foot bioretention basin for stormwater retention is proposed on the southwest edge of the project site, adjacent to the isolated seasonal wetland. Stormwater would be collected and infiltrated into the ground via a 2,610 square foot bioretention basin at the southwest edge of the site, or via an infiltration underdrain at the southeast portion of the site (ERM, 2025 - Appendix J[Stormwater Control Plan], p. 4). The Drainage Analysis and Stormwater Control Plan prepared for the Project site found that the proposed development will result in stormwater peak flow discharging from the Project site at less than pre-project levels during 2-, 5-, 10-, 25-, 50-, and 100-year storm events (ERM, 2024 - Appendix I [Drainage Analysis], p. 4; ERM, 2024 – Appendix J [Stormwater Control Plan], p. 4). Thus, the site would drain similar to the existing condition, and result in less peak stormwater flow discharge, which would be a less than significant impact on drainage patterns or runoff generation. Impacts on flooding during construction, operation, or decommissioning would therefore be less than significant.

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

LESS THAN SIGNIFICANT. As discussed above, the Project would not substantially increase the rate or amount of runoff. Existing or planned stormwater drainage systems would therefore not be adversely affected. Except as described under Item (a) above, the Project has no features that would generate substantial polluted runoff during construction, operation, or decommissioning. This impact would be less than significant.

iv. impede or redirect flood flows?

NO IMPACT. The proposed Project is not located in a FEMA-designated flood zone and would not pose a substantial obstruction to flood flows such that flood flows would be impeded or redirected in any substantial way. Therefore, no impacts would occur as a result of Project construction, operation, or decommissioning.

(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

NO IMPACT. The proposed Project site is not in a tsunami inundation zone (City of Goleta, 2006 – Figure 5-2) and is not in a flood zone identified by FEMA (FEMA, 2018). Therefore, no impacts would occur as a result of Project construction, operation, or decommissioning.

(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

LESS THAN SIGNIFICANT. As described in Item (a) above, the Project effect on water quality would be less than significant with mitigation. The Devereux Creek and its east branch tributary are east and west of the proposed Project site and are not listed as impaired water bodies. There are no features of the Project that would otherwise generate water quality impairments, nor are there any components of the Project construction, operation, or decommissioning that could otherwise conflict with the implementation of a water quality control plan. The Project would have minimal water use, mainly during construction, which would be obtained from local water purveyors. There are no features of the Project that would otherwise have any effect on groundwater management. Therefore, this impact is less than significant.

5.10.3.1. Impact Conclusions and Mitigation Measures

The proposed Project would result in potentially significant impacts to hydrology and water quality. However, with implementation of MM HM-1 (see full text in Section 5.9, Hazards and Hazardous Materials) and the condition of approval GEO2, below, impacts would be reduced to a less than significant level.

GEO2. Recommended Condition of Approval: Stormwater Pollution Prevention Plan (SWPPP) Development and Implementation. Following Project approval, the applicant will prepare and implement a

SWPPP to minimize construction impacts on surface water and groundwater quality. Implementation of the SWPPP will help stabilize graded or disturbed areas and reduce erosion and sedimentation. The plan will designate BMPs that will be adhered to during construction activities. Erosion and sediment control measures, such as straw wattles, covers, and silt fences, may be installed before the onset of winter rains or any anticipated storm events if soils are not stabilized. Suitable stabilization measures will be used to protect exposed areas during construction activities, as necessary. During construction activities measures will be in place to prevent contaminant discharge.

The Project SWPPP will include erosion control and sediment transport BMPs to be used during construction. BMPs, where applicable, will be designed by using specific criteria from recognized BMP design guidance manuals. Erosion-minimizing efforts may include measures such as properly containing stockpiled soils.

Erosion control measures identified will be installed in an area before construction begins during the wet season and before the onset of winter rains or any anticipated storm events. Temporary measures such as silt fences or wattles, intended to minimize sediment transport from temporarily disturbed areas, will remain in place until disturbed areas have stabilized. The plan will be updated during construction as required by the SWRCB.

A worker education program shall be established for all field personnel prior to initiating fieldwork to provide training in the appropriate application and construction of erosion and sediment control measures contained in the SWPPP. This education program will also discuss appropriate hazardous materials management and spill response. Compliance with these requirements will be ensured by the on-site construction contractor.