CALIFORNIA Water Boards

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State Water Resources Control Board

MITIGATION MONITORING AND REPORTING PLAN

Water Right Application A032881

Pajaro Valley Water Management Agency

The State Water Resources Control Board (State Water Board or Board) has prepared this Mitigation Monitoring and Reporting Plan (MMRP) in conformance with the California Environmental Quality Act (Public Resources Code § 21081.6). The Board developed the MMRP based on the information and mitigation measures contained in the Final Environmental Impact Report (Final EIR) for Water Right Application A032881. The MMRP lists mitigation measures identified in the Final EIR and specifies implementation and monitoring responsibilities. Pursuant to Public Resources Code section 21081.6, subdivision (b), each of the mitigation measures identified in the MMRP are enforceable terms of the permit which authorizes construction, diversion, and use of water pursuant to Water Right Application A032881. Implementation of mitigation measures is the sole responsibility of the right holder, though other agencies involved in the implementation process are also listed in this MMRP. Interim compliance with mitigation measures will be assessed through the State Water Resources Control Board, Division of Water Rights' (Division's) routine compliance monitoring activities. Long-term compliance will be assessed when the permit is subject to licensing, at which time the Division will require the right holder to demonstrate compliance with permit terms. Non-compliance with mitigation measures may be addressed through the Division's ongoing enforcement program on an as needed basis.

Mitigation Measure	Implementation	Timing
Biological Resources		
BIO-1a: Wetlands and riparian habitat will be avoided by project construction activities. All facilities and construction activities will be maintained outside the jurisdictional area defined by riparian or emergent wetland vegetation and applicable setbacks and buffers where feasible. Within the Coastal Zone, project improvements will be located 100 feet from coastal review wetlands. Within the City of Watsonville, development will be located 100 feet from riparian areas. Within the unincorporated areas of the County, yet outside the Coastal Zone, a setback of 30 feet and 50 feet will be established adjacent to intermittent and perennial streams, respectively. If complete avoidance of wetlands and riparian areas is infeasible and/or development occurs within a regulated buffer/setback area, impacts would be minimized through implementation of Mitigation Measures BIO-1b, BIO- 1c BIO-1d, and BIO-1e.	Right holder	Ongoing
BIO-1b: Standard measures to maintain water quality and to control erosion and sedimentation will be implemented. These measures include: • Restrict trenching across all waterways to low-flow periods. • Exclude water from around the section of trench that is within the actively flowing channels. This will further reduce the potential for sediment or other pollutants to enter the waterways and impact downstream resources. The diversion will consist of water pillows, rock, sandbags, or other structural methods deemed most effective by the project engineer. • Place sediment curtains downstream of the construction zone to prevent sediment disturbed during trenching activities from being transported and deposited outside of the construction zone. • Locate spoil sites so they do not drain directly into the waterways. If a spoil site drains into a channel, catch basins will be constructed to	Right holder	Ongoing

Mitigation Measure	Implementation	Timing
intercept sediment before it reaches the channels. Spoil sites will be graded to reduce the potential for erosion. • Prepare and implement a spill prevention plan for potentially hazardous materials. The plan will include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting of any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching the creek channels. • Store equipment and materials away from the waterways, outside existing levees or at least 50 feet from waterways, but within the pipeline right-of-way. No equipment or materials will be deposited within 100 feet of wetlands. • Provide proper and timely maintenance for vehicles and equipment used during construction to reduce the potential for mechanical breakdowns leading to a spill of materials into or around the creeks. Maintenance and fueling will be conducted in an area that meets the criteria set forth in the spill prevention plan (i.e., away from the creeks). • Prior to construction, install temporary construction fencing at the perimeter of the construction zone to prevent inadvertent equipment access or construction staging within adjacent riparian forest and/or coastal marsh habitats. This fencing will be signed in the field as “SENSITIVE HABITAT AREA — NO CONSTRUCTION ACCESS”. Monitor construction activities to verify compliance with the perimeter fencing and limits of construction access and staging and implement remedial action if non-compliance is noted.		

Mitigation Measure	Implementation	Timing
• Restrict limbing of riparian forest trees; if trees are limbed for construction access, document the impact and provide compensation as per Mitigation Measure BIO-1c.		
BIO-1c: Where construction impacts on mixed riparian or willow riparian forest occur, revegetation and restoration measures will be developed as part of a revegetation plan approved by California Department of Fish and Wildlife (CDFW), Central Coast Regional Water Quality Control Board (RWQCB), and if applicable, U.S. Army Core of Engineers (USACE) and/or California Coastal Commission, pursuant to regulatory agency permitting. The revegetation plan will include specific plans for the revegetation of impacted riparian forest, and for restoration of nearby creek riparian habitat, as appropriate. Upon approval by applicable agencies, PV Water may choose to coordinate with the Natural Resources Conservation Service and the Santa Cruz County Resource Conservation District (RCD) to develop and implement the required riparian revegetation, including providing funds to the RCD for their implementation of the revegetation. Revegetation measures will include the use of locally obtained plant materials, detailed descriptions of installation methods, after-installation care, weed control measures, success criteria, and corrective measures if the success criteria are not met. Temporarily impacted areas will be restored to pre-construction conditions with equivalent or greater habitat quality. Revegetation will include a 3:1 replacement ratio of the acreage of riparian habitat lost and for all trees lost as result of the Project to account for the reduced habitat values of smaller trees compared with mature vegetation. Success criteria for replanting will be less than 20 percent mortality of individual species annually for 5 years. Replanting will be conducted each year that plantings exceed 20 percent mortality, such that 80 percent plant survival is maintained each year of the 5-year monitoring period. Cover provided by invasive, non-native plant species shall not exceed 5 percent during each year of the 5-year monitoring period.	Right holder, CDFW, RWQCB, USACE and/or California Coastal Commission	Ongoing

Mitigation Measure	Implementation	Timing
BIO-1d: Where construction impacts on open water (creeks, streams, jurisdictional ditches), seasonal wetlands, or coastal freshwater marsh occurs, revegetation and restoration measures will be developed as part of a revegetation plan approved by CDFW, RWQCB, USACE, California Coastal Commission, and/or Santa Cruz County, pursuant to regulatory agency permitting. Upon approval by applicable agencies, PV Water may choose to coordinate with the Natural Resources Conservation Service and the Santa Cruz County RCD to develop and implement the required wetland revegetation and restoration, including providing funds to the RCD for their implementation of the revegetation and restoration. The revegetation plan will include specific plans for the revegetation of impacted wetlands, and for restoration of nearby wetland habitat, as appropriate. Revegetation measures will include the use of locally obtained plant materials, detailed descriptions of installation methods, after-installation care, weed control measures, success criteria, and corrective measures if the success criteria are not met. Temporarily impacted areas will be restored to pre-construction conditions with equivalent or greater habitat quality. Revegetation will include a 3:1 replacement ratio (or an equivalent habitat replacement strategy as agreed upon by PV Water and regulatory agencies) for impacted wetlands. If natural recovery is a viable strategy, then a wetland plant cover exceeding 50 percent should be attained after two growing seasons. Mitigation may occur via restoration, creation, or preservation of wetlands or waters. Mitigation will occur at a site acceptable to permitting agencies and pursuant to the Project's permit requirements. If the compensatory mitigation includes restoration, enhancement, or creation of wetlands or waters, a qualified biologist will monitor the designated wetland mitigation area for a minimum of five years to ascertain if the wetland mitigation is successful. Annual reports will be submitted to permitting agencies by December 31 of each monitoring year, describing the results of the monitoring and any remedial actions	Right holder, CDFW, RWQCB, USACE, California Coastal Commission and/or Santa Cruz County	Ongoing

Mitigation Measure	Implementation	Timing
needed to achieve a minimum 3:1 habitat replacement ratio or equivalent for permanent impacts on wetlands.		
BIO-2: During the development of College Lake components, PVWMA[1] will implement conservation measures during construction activities to avoid and minimize incidental take and significant impacts on individuals, populations, or habitat of special-status wildlife species to the maximum extent practicable. The following general measures will be incorporated into the planning and construction of Basin Management Plan Update (BMP Update) components, as appropriate, to ensure that the effects of the BMP Update are avoided, minimized, and mitigated. Suggested species-specific measures for CA red-legged frog, WPT, and steelhead are included, as well, although BMP Update components that proposed to divert surface waters beyond existing entitlements would require future additional project-level California Environmental Quality Act (CEQA) analyses of specific diversion and operation plans to support water rights application and environmental permits. It is assumed that project-level biological studies and analysis for these BMP Update components will be required to support those future permits and biological opinions.	Right holder	Ongoing
BIO-2a: During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.	Right holder	Construction
BIO-2b: All refueling, maintenance, and staging of equipment and vehicles will occur at least 65 feet from any riparian habitat or water body. PV Water will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, PV Water will ensure that the contractor has	Right holder	Construction

[1] PVWMA is refers to Pajaro Valley Water Management Agency.

Mitigation Measure	Implementation	Timing
prepared a plan to allow a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.		
BIO-2c: The spread or introduction of invasive exotic plant species will be avoided to the extent practicable. When practicable, invasive exotic plants in the project areas will be removed.	Right holder	Ongoing
BIO-2d: Prior to any on-site work in areas where special-status species may occur, a qualified biologist will conduct a tailgate training session in which all construction personnel will receive training regarding measures (below) that are to be implemented to avoid environmental impacts. This training will include a presentation of the potential for sensitive species to occur at the site and measures to protect habitat including aquatic habitat and avoid impacts to the species. All personnel working on the site will receive this training, and will sign a sign-in sheet showing they received the training.	Right holder	Construction
BIO-2e: Prior to the commencement of work, the limits of the work area (including haul routes, access ramps, storage areas and material stockpiles) will be clearly marked with orange construction fencing to prevent workers from impacting habitat outside the work area. No work will occur outside the designated marked work areas.	Right holder	Pre-construction
BIO-2f: Each morning before work begins on any components in or within 100 feet of a suitable habitat area (defined as: riparian habitat, USACE jurisdictional wetlands or "other waters" of the U.S., or sensitive habitats identified in subsequent U.S. Fish and Wildlife Service (USFWS) Biological Opinions and CDFW 1600 Lake and Streambed Alteration Agreements), a qualified monitor will survey the work site and habitat immediately surrounding the active work site for conditions that could impact special-status species, and will remain on-site whenever work is occurring that may	Right holder	Construction

Mitigation Measure	Implementation	Timing
adversely impact special-status species and their habitats. No work will be allowed to begin each morning until the monitor has inspected the work site.		
BIO-2g: A USFWS-approved biologist or biological monitor will permanently remove from within the project area(s), any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes to the extent practicable.	Right holder	Ongoing
BIO-2h: Upon locating individuals of special-status species that are dead or injured as a direct result of activities conducted by PVWMA, initial notification will be made to the USFWS's Division of Law Enforcement at (916) 978-4861 (Sacramento) within three working days of its finding. The USFWS Field Office within whose area of responsibility the specimen is recovered will also be notified. Written notification will be made within five calendar days and include the date, time, and location of the carcass, a photograph, cause of death, if known, and any other pertinent information.	Right holder	Ongoing
BIO-2i.1: Develop Adaptive Management Plan for College Lake Waterfowl Management and Multi-Species Mitigation. To mitigate impacts to existing waterfowl or waterfowl habitat at College Lake, an Adaptive Management Plan for waterfowl management and multi-species mitigation will be developed with the consultation of the state and federal resource agencies and College Lake stakeholders. The Adaptive Management Plan for waterfowl management and multi-species mitigation at College Lake will develop multi-year baseline waterfowl population and habitat use data for future project design, environmental permitting and CEQA impact analysis of project-level alternatives. To the extent practical, it will integrate the results of ongoing College Lake hydrology and hydraulic analyses, as well as future consultations with state and federal agencies on fish flows and fish bypass criteria. The Management Plan will be specific to the level of impact and mitigations under site-specific and project implementation conditions. However, the	Right Holder, USFWS, USACE, and CDFW	Ongoing

Mitigation Measure	Implementation	Timing
following standards will apply as defined during project-level design, regulatory review and CEQA analysis: The Management Plan should include terms and conditions from applicable permits and agreements as appropriate and define provisions for monitoring assignments, scheduling, and responsibility. The Management Plan should also include habitat replacement and revegetation, protection during ground-disturbing activities, performance standards, maintenance criteria, and monitoring requirements for temporary and permanent impacts consistent with mitigation in the FEIR and regulatory requirements during project-specific review. The Management Plan will be in conformance with the biology mitigation measures from the FEIR, and will also include terms and conditions consistent regulatory requirements as applicable from the USFWS, USACE, SWRCB, and CDFW permits during project design and permitting as applicable. The Management Plan will be prepared for project level project implementation as determined needed through future CEQA review and consultation with agencies as required under the California Endangered Species Act and federal Endangered Species Act.		
BIO-2l: The following measures are required to reduce impacts to special status fisheries, including steelhead and resident rainbow trout, to a less-than-significant level: FISH-1. A NOAA Fisheries-approved, qualified fisheries biologist would be onsite to provide preconstruction training on steelhead life-history to construction crews and to provide daily monitoring during construction activities. FISH-2. If the preliminary construction concept proposes the use of temporary coffer dams for isolating the work areas at the upstream and downstream extent of the project, installation and removal of the temporary coffer dams would be monitored by the qualified fisheries biologist.	Right Holder, USFWS	Ongoing

Mitigation Measure	Implementation	Timing
FISH-3. Following initial construction of the coffer dam bypass system, isolated standing water would be pumped from the work area to adjacent vegetated terraces, settling tanks or back into the river, if turbidity is not elevated more than 10% of background turbidity levels. FISH-4. If a work site is to be temporarily de-watered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent steelhead or other native fish from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. FISH-5. The installation and removal of the coffer dam structures would be controlled to minimize turbidity in the water. FISH-6. The use of best management practices would be implemented to reduce the probability of sediment and/or contaminated material from entering the creek.		
BIO-2m: No water shall be diverted from College Lake from the time the lake begins filling in late fall/early winter through the end of the smolt outmigration period (approximately May 31 or June 15) unless sufficient bypass flows are provided at the dam for unimpeded adult upstream migration through March 31, and sufficient bypass flows are provided at the dam for unimpeded smolt outmigration through May 31.	Right holder	Ongoing
BIO-2n: Protection of Steelhead Migratory Habitat - HWQ-Impacts to steelhead migration passage shall be minimized by carrying out construction in College Lake/Casserly Creek/Salsipuedes Creek after June 1 and prior to November 1, during which time adults and smolts do not migrate through the area.	Right holder	Construction

Mitigation Measure	Implementation	Timing
BIO-2o: Protection of Steelhead Migratory Habitat - The proposed College Lake with Inland Pipeline to Coastal Distribution System component shall be operated such that it complies with all minimum required bypass flow requirements during the steelhead migration period.	Right holder	Ongoing
BIO-2p: The PVWMA shall install and operate surface-water streamflow gaging stations on Casserly Creek upstream and on Salsipuedes Creek downstream of the proposed College Lake diversion structure to monitor available diversion inflows and to provide required fish bypass flows.	Right holder	Ongoing
BIO-3a: Occurrences of special status plant species shall be avoided by project construction activities to the extent feasible. All facilities and construction activities will be maintained outside habitats supporting special status plant species where feasible. Prior to construction, a qualified biologist will conduct a survey of the project area to ascertain the presence or absence of special status plant species. If no species are encountered, no mitigation is required. If a special status species is found within a BMP Update component project area, a setback of 50 feet will be established between the occurrence and the BMP Update construction activities. Prior to construction, PVWMA will install temporary construction fencing at the 50-foot setback line to prevent inadvertent equipment access or construction staging within the special status plant habitat. This fencing will be signed in the field as “SENSITIVE HABITAT AREA - NO CONSTRUCTION ACCESS”. A qualified biologist will inspect the temporary construction barrier fence and monitor the contractor’s compliance with this avoidance measure. If complete avoidance of special status plant species is infeasible, impacts would be minimized through implementation of Mitigation Measure BIO-3b.	Right holder	Pre-Construction and Construction
BIO-3b: Prior to clearing and grubbing in areas where impacts to special status plant species cannot be avoided, PVWMA will consult with applicable resource agencies (i.e., CDFW and/or USFWS) prior to implementing	Right holder, CDFW, USFWS	Ongoing

Mitigation Measure	Implementation	Timing
salvage and revegetation actions. A qualified biologist will collect any available above- ground seed pods/seed heads for their use in future revegetation efforts. During construction, the upper 6 inches of topsoil from areas supporting the plant species will be stripped from the construction area and stored for later use. The topsoil will be used in future revegetation efforts which may be on-site (if feasible) or at an off-site location approved by permitting agencies (i.e., USFWS, CDFW). At the designated revegetation area, all stockpiled topsoil will be placed on site and finish graded to blend with surrounding topography. Under direction of a qualified biologist, the areas will be revegetated with locally native herbaceous plant species compatible with natural regeneration of the special status plant species. The qualified biologist will hand broadcast any seeds collected from the special status plant species into the appropriate habitat areas. The revegetation will achieve a minimum of 2:1 plant replacement (i.e., re-establish two plants for every plant impacted). The qualified biologist will monitor the revegetation areas for two years after construction to ascertain if the special status plant species re-established within the revegetation area. Annual reports will be submitted to permitting agencies by December 31 of each monitoring year, describing the results of the revegetation measures, for a period of 5 years.		

BR-1a: Fish Relocations Prior to, or concurrent with, draining of College Lake and/or dewatering of the construction site, special-status and other native fish species shall be captured and relocated by a qualified fisheries biologist. The following measures shall be taken to minimize harm and mortality to steelhead and other native fish resulting from fish relocation and dewatering activities: 1. Fish relocation shall be performed by a qualified fisheries biologist, with all necessary state and federal authorizations. Captured fish shall be moved to the nearest appropriate site outside of the work area. A record of relocation activities shall be maintained and include the date of capture and relocation, the method of capture, the location of the relocation site in relation to the Project site, and the number and species of fish captured and relocated; 2. Electrofishing shall be conducted by properly trained personnel following NOAA Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 2000. 3. Prior to capturing fish, the most appropriate release location(s) shall be determined. 4. The most efficient method for capturing fish shall be determined by the biologist. Complex stream habitat generally requires the use of electrofishing equipment, whereas in outlet pools, fish may be concentrated by pumping-down the pool and then seining or dip-netting fish. 5. Handling of salmonids shall be minimized. However, when handling is necessary, hands or nets shall be wetted prior to touching fish. 6. Captured fish shall be held in cool, shaded, aerated water in a container with a lid. Aeration shall be provided with a battery-powered external bubbler. Fish shall be protected from jostling and noise, and shall not be removed from this container until time of release.	Right holder	Pre-Construction and Construction

Mitigation Measure	Implementation	Timing
7. Air and water temperatures shall be measured periodically. A thermometer shall be placed in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. If water temperature reaches or exceeds 18 degrees Celsius, fish shall be released and rescue operations ceased, if feasible. 8. Overcrowding in containers shall be avoided by having at least two containers and segregating young-of-year fish from larger age-classes to avoid predation. If fish are abundant, the capturing of fish and amphibians shall cease periodically and shall be released at the predetermined locations. 9. Species and year-class of fish shall be visually estimated at time of release. The number of fish captured shall be counted and recorded. Anesthetization or measuring fish shall be avoided unless requested by appropriate resource agencies (National Marine Fisheries Service (NMFS), CDFW). 10. Fish relocation activities are typically restricted to the period of June 15 through November 1. However, draining of College Lake may have to commence prior to June 1 to ensure the lake is fully drained prior to the start of construction. If lake draining commences prior to June 1 (as it regularly does under existing conditions), fish relocations would be timed accordingly. Given that steelhead present at the time of draining are likely to be smolts attempting to reach the ocean, pre-June 1 relocations concurrent with lake draining would ensure suitable downstream passage conditions and timing for relocated smolts.		

BR-1b: Frac-out Contingency Plan If horizontal directional drilling (HDD) installation is implemented, PV Water shall require the contractor to retain a licensed geotechnical engineer to develop a Frac-out Contingency Plan. PV Water would submit the Frac-out Contingency Plan to the appropriate resource agencies (CDFW, RWQCB, USACE, USFWS, and NMFS) for review prior to the start of construction of any pipeline that would use HDD installation to avoid surface waters. The Frac-out Contingency Plan shall be implemented where HDD installation under a waterway will occur to avoid, minimize, or mitigate for potential Project impacts during HDD installation, as specified in the Frac-out Contingency Plan. The Frac-out Contingency Plan shall include, at a minimum: 1. Measures describing training of construction personnel about monitoring procedures, equipment, materials and procedures in place for the prevention, containment, clean-up (such as creating a containment area and using a pump, using a vacuum truck, etc.), and disposal of released bentonite slurry, and agency notification protocols; 2. Methods for preventing frac-out including maintaining pressure in the borehole to avoid exceeding the strength of the overlying soil. 3. Methods for detecting an accidental release of bentonite slurry that include: (a) monitoring by a minimum of one biological monitor throughout drilling operations to ensure swift response if a frac-out occurs; (b) continuous monitoring of drilling pressures to ensure they do not exceed those needed to penetrate the formation; (c) continuous monitoring of slurry returns at the exit and entry pits to determine if slurry circulation has been lost; and (d) continuous monitoring by spotters to follow the progress of the drill bit during the pilot hole operation, and reaming and pull back operations.	Right holder, CDFW, RWQCB, USACE, USFWS, and NMFS	Pre-construction

Mitigation Measure	Implementation	Timing
4. Protocols that the contractor would follow if there is a loss of circulation or other indicator of a release of slurry. 5. Cleanup and disposal procedures and equipment the contractor would use if a frac-out occurs. 6. If a frac-out occurs, the contractor shall immediately halt work, implement the measures outlined in Item 5 of the Frac-out Contingency Plan to contain, clean-up, and dispose of the bentonite slurry, and, if the frac-out occurs in the water channel, notify and consult with the staffs of the agencies listed above before HDD activities can begin again. PV Water shall require the contractor to implement Frac-out Contingency Plan to ensure that measures are implemented to prevent frac-out and if a frac-out occurs, implement measures to contain, clean-up, and dispose of the bentonite slurry.		
BR-1c: Avoid and Minimize Impacts on Special-status Bat Species A qualified biologist who is experienced with bat surveying techniques, behavior, roosting habitat, and identification of local bat species shall be consulted prior to initiation of construction activities to conduct a preconstruction habitat assessment to characterize potential bat habitat and identify active roost sites. The preconstruction habitat assessment shall be conducted within 100 feet of construction activities conducted in and around riparian habitat. Should potential roosting habitat or potentially active bat roosts be identified during the habitat assessment in trees and/or structures to be disturbed under the Project, the following measures shall be implemented: 1. Removal or disturbance of trees or structures (e.g. the existing weir and intake pump station) identified as potential bat roosting habitat or	Right holder	Pre-construction and construction

Mitigation Measure	Implementation	Timing
active roosts shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid bat maternity roosting season (approximately April 15 to August 31) and periods of winter torpor (approximately October 15 to February 28). 2. If removal or disturbance of trees and structures identified as potential bat roosting habitat or active roosts during the periods when bats are active is not feasible, a qualified biologist would conduct pre-construction surveys within 14 days prior to disturbance to further evaluate bat activity within the potential habitat or roost site. a. If active bat roosts are not identified in potential habitat during preconstruction surveys, no further action is required prior to removal of- or disturbance to trees and structures within the preconstruction survey area. b. If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species. i. If special-status bat species or maternity or hibernation roosts are detected during these surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist in coordination with CDFW. Such measures may include postponing the removal of structures or trees, or establishing exclusionary work buffers while the roost is active. A minimum 100-foot no disturbance buffer shall be established around special-status species, maternity, or hibernation roosts until the qualified biologist		

Mitigation Measure	Implementation	Timing
determines they are no longer active. The size of the no-disturbance buffer may be adjusted by the qualified biologist, in coordination with CDFW, depending on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site, and if construction would not alter the behavior of the adult or young in a way that would cause injury or death to those individuals. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist. ii. If a non-maternity or hibernation roost (e.g., bachelor daytime roost) is identified, disturbance to- or removal of trees or structures may occur under the supervision of a qualified biologist as described under measure 3). 3. The qualified biologist shall be present during tree and structure disturbance or removal if active non-maternity or hibernation bat roosts or potential roosting habitat are present. Trees and structures with active non- maternity or hibernation roosts or potential habitat shall be disturbed or removed only under clear weather conditions when precipitation is not forecast for three days and when nighttime temperatures are at least 50 degrees Fahrenheit, and when wind speeds are less than 15 mph.		

Mitigation Measure	Implementation	Timing
a. Trimming or removal of trees with active (non-maternity or hibernation) or potentially active roost sites shall follow a two-step removal process: i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using hand tools (e.g., chainsaws). ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using hand tools or other equipment (e.g. excavator or backhoe). iii. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches. b. Disturbance to or removal of structures containing or suspected to contain active bat (non-maternity or hibernation) or potentially active bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal would be completed the subsequent day. 4. Bat roosts that begin during construction are presumed to be unaffected as long as a similar type of construction continues, and no buffer would be necessary. Direct impacts on bat roosts or take of individual bats would be avoided.		

Mitigation Measure	Implementation	Timing
BR-1d: Avoidance and Minimization Measures for San Francisco Dusky-Footed Woodrat 1. A qualified wildlife biologist shall conduct preconstruction surveys for San Francisco dusky-footed woodrat in the Salsipuedes Creek riparian corridor within the existing and proposed weir structure and intake pump station work area. The surveys shall be conducted within 14 days prior to the start of construction in suitable habitat and shall identify any woodrat nests located within 50 feet of anticipated construction disturbance areas. 2. If woodrat nests are found during the preconstruction surveys, the wildlife biologist shall conduct additional surveys throughout the duration of construction activities at the Project site to identify any newly constructed woodrat nests. 3. If nests are observed outside of the construction area, the qualified biologist shall demarcate a minimum 50-foot buffer area with orange construction fencing and require that all construction activities and disturbance remain outside of the fencing. 4. Active woodrat nests located within the anticipated construction disturbance areas shall be relocated. Nests shall be relocated outside of the peak breeding season as feasible to minimize disturbance to young woodrats. Woodrat breeding season is December to September with peak breeding in mid-spring. Relocation of woodrats and/or their nests shall be conducted by the qualified wildlife biologist as follows: a. Clear understory vegetation from around the nest using hand tools. b. After all vegetative cover has been cleared around the nest, the biologist shall gently disturb the nest to encourage the	Right holder	Pre-construction and Construction

Mitigation Measure	Implementation	Timing
woodrat(s) to abandon the nest and seek cover in adjacent habitat. c. Once the woodrats have left the nest, the biologist shall carefully relocate the nest sticks within 50 feet of the original nest location and map the location of the original nest location and relocated nest location on an aerial image of the Project site. The location of the relocated nest will offer a mix of sun and shade and be no closer than 20 feet from an existing for San Francisco Dusky Footed Woodrat nest. Relocation areas will be as close as possible to the original locations in similar habitat and contain biologically-suitable habitat features (e.g., stands of poison oak, coast live oaks, and dense native brush). If multiple nests are relocated, the stick piles shall be placed at least 20 feet from one another. d. The qualified biologist supervising woodrat nest relocation shall ensure potential health hazards to the biologists moving nests are addressed to minimize the risk of contracting diseases associated with woodrats and woodrat nests. These include hantavirus, Lyme disease, and plague. The biologists that relocate nests shall take the following precautionary safety measures: i. Wear a Cal/OSHA-certified facial respirator to reduce inhalation of potential disease causing organisms. ii. Wear a white Tyvec protective suit to provide a barrier for ticks and fleas and facilitate their detection and removal and use gloves.		

Mitigation Measure	Implementation	Timing
e. If young woodrats are encountered during dismantling of the nest, nest material shall be replaced and a 50- foot no-disturbance buffer shall be established around the active nest. The buffer shall remain in place until the young woodrats have matured enough to disperse on their own accord and the nest is no longer active. Nesting substrate shall then be collected and relocated to suitable habitat outside of the Project area.		
BIO-1e: Where construction and/or facilities are placed within a riparian or wetland development setback area (as defined in the Santa Cruz County Municipal Code), indirect impacts on adjacent riparian and wetland vegetation will be minimized. Where feasible, buffer plantings of native trees and shrubs will be installed between the facility and the adjacent wetland or riparian resource to provide a vegetated buffer. A buffer planting plan will be prepared as part of a revegetation plan approved by CDFW, RWQCB, USACE, and/or California Coastal Commission, pursuant to regulatory agency permitting. The buffer planting plan will include specific revegetation measures, including the use of locally obtained plant materials, detailed descriptions of installation methods, after-installation care, weed control measures, success criteria, and corrective measures if the success criteria are not met.	Right holder, CDFW, RWQCB, USACE and/or California Coastal Commission	Pre-construction and Construction
BIO-2i: Nesting Bird Surveys Prior to any project construction or maintenance activities, the project proponent will take the following steps to avoid direct losses of nests, eggs, and nestlings and indirect impacts on avian breeding success: • If construction or maintenance activities occur only during the non-breeding season, between August 31 and February 1, no surveys will be required.	Right holder	Pre-construction and Construction

Mitigation Measure	Implementation	Timing
• During the breeding bird season (February 1 through August 31), a qualified biologist will survey construction or maintenance areas in the vicinity of the Project site for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. • Surveys will include all potential habitats within 500 feet (for raptors) of activities and all onsite vegetation including bare ground within 250 feet of activities (for all other species). • If results are positive for nesting birds, avoidance procedures will be adopted, if necessary, on a case-by-case basis. These may include implementation of buffer areas (minimum 50-foot buffer for passerines and 250-foot minimum buffer for raptors) or seasonal avoidance.		
BIO-2j: CRF The following measures for avoidance and minimization of adverse impacts on California Red-Legged Frog (Rana draytonii) (CRF) during construction and maintenance of the Project are those typically employed for construction activities that may result in short-term impacts on individuals and their habitat. The focus of these measures is on scheduling activities at certain times of year, keeping the disturbance footprint to a minimum, and monitoring. Consultation with the USFWS will be conducted and a Biological Opinion developed for each BMP Update component that requires a USACE Section 404 Wetland Permit. Ongoing and future CRF studies in the Project area may result in site-specific conditions that would be integrated into the future project-level BMP Update component designs, permitting and operations. CRF-1 through CRF-9 would apply only to Project locations identified as CRF habitat.	Right holder, USFWS, and USACE	Ongoing

Mitigation Measure	Implementation	Timing
CRF-1. PV Water will annually submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities would begin until PV Water receives approval from the Service that the biologist(s) is qualified to conduct the work. CRF-2. A USFWS-approved biologist will survey the construction or maintenance site 48 hours prior to the onset of activities. If CRF, tadpoles, or eggs are found, the approved biologist will determine the closest appropriate relocation site. The approved biologist will be allowed sufficient time to move them from the work site before work activities begin. Only USFWS-approved biologists will participate in activities associated with the capture, handling, and moving of CRF. CRF-3. Before any construction or maintenance activities begin on a project, a USFWS -approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the CRF and its habitat, the importance of the CRF and its habitat, general measures that are being implemented to conserve the CRF as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions. CRF-4. A USFWS-approved biologist will be present at the construction or maintenance site until such time as all removal of CRF, instruction of workers, and disturbance of habitat have been completed. After this time, the biologist will designate a person to monitor on-site compliance with all minimization measures and any future staff training. The USFWS-approved biologist will ensure that this individual receives training outlined in measure WPT- 2 and in the identification of CRF. The monitor and the USFWS-approved biologist will have the authority to stop work if CRF are in harm's way.		

Mitigation Measure	Implementation	Timing
CRF-5. The number of access routes, number and size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Routes and boundaries will be clearly demarcated, and these areas will be outside of riparian and wetland areas to the extent practicable. CRF-6. Construction and maintenance activities will be completed between April 1 and November 1 to the extent practicable. Should PV Water demonstrate a need to conduct activities outside this period, PV Water may conduct such activities after obtaining USFWS approval. CRF-7. If a construction or maintenance site is to be temporarily dewatered by pumping, and would take place within or adjacent to suitable CRF habitat, intakes will be completely screened with wire mesh not larger than five millimeters to prevent CRF from entering the pump system where applicable. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction or maintenance activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. CRF-8. The Declining Amphibian Populations Task Force's Fieldwork Code of Practice will be followed to minimize the possible spread of chytrid fungus or other amphibian pathogens and parasites. CRF-9: Implement Mitigation Measure HWQ-1 through HWQ-4.		
BIO-2k: WPT The following measures for avoidance and minimization of adverse impacts on western pond turtle (Actinemys marmorata) (WPT) during construction and maintenance of the Project are those typically employed for construction activities that may result in short-term impacts on individuals and their habitat. The focus of these measures is on keeping the disturbance footprint	Right holder and CDFW	Ongoing

Mitigation Measure	Implementation	Timing
to a minimum and aggressive monitoring of WPTs before vegetation removal and during the construction and revegetation phase. WPT-1. PV Water will annually submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities will begin until proponents have received approval from CDFW that the biologist(s) is qualified to conduct the work. WPT-2. A CDFW-approved biologist will survey the work site 48 hours prior to the onset of construction or maintenance activities. If WPT adults or juveniles are found, the approved biologist will determine the closest appropriate relocation site. The approved biologist will be allowed sufficient time to move them from the work site before work activities begin. Only CDFW-approved biologists will participate in activities associated with the capture, handling, and moving of WPT. If WPT eggs or nests are found, no work will be conducted within a 50-foot radius of the nest. Work can resume within the 50-foot radius once the eggs hatch and the juveniles have left the area. WPT-3. Before any construction or maintenance activities begin on a project, a CDFW-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the WPT and its habitat, the importance of the WPT and its habitat, general measures that are being implemented to conserve the WPT as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions. WPT-4. A CDFW-approved biologist will be present at the construction or maintenance site until such time as all removal of WPT, instruction of workers, and disturbance of habitat have been completed.		

Mitigation Measure	Implementation	Timing
WPT-5. The number of access routes, number and size of staging areas, and the total area of the activity will be limited to the project plans. Routes and boundaries will be clearly demarcated. Where impacts occur in these staging areas and access routes, restoration will occur as identified in the general best management practices measures above.		
BR-2: Invasive Fish Species Control Plan PV Water shall develop an Invasive Fish Species Control Plan. PV Water shall submit the plan to the appropriate resource agencies (CDFW, USFWS, and NMFS) for approval within one year of Project implementation. The Fish Species Control Plan shall be implemented at College Lake within two years of Project implementation. The Fish Species Control Plan shall include, at a minimum: 1. Measures describing PV Water's methods of draining College Lake to the greatest extent feasible; 2. Measures describing PV Water's methods, equipment, and timing of invasive species eradication efforts to be conducted in association with lake drawdown efforts; 3. Measures describing the frequency at which invasive species control efforts are to be implemented.	Right holder, CDFW, USFWS, and NMFS	Ongoing
Geology and Soils		
GS-1: Future construction of proposed BMP Update facilities shall be designed in accordance with design recommendations of geotechnical reports and in compliance with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of ground shaking and liquefaction. Construction shall be	Right holder	Pre-construction

Mitigation Measure	Implementation	Timing
in accordance with applicable requirements regarding mitigation of seismic and geologic hazards, and appropriate geotechnical studies shall be conducted.		
GS-2: Construction of future BMP Update facilities shall include preparation and implementation of erosion control plans to minimize erosion and inadvertent transport of sediments into water bodies during installation of facilities. Measures shall include, but not be limited to: limiting the area of ground disturbance and vegetation removal at any one time during construction; conducting work prior to the rainy season if possible and protecting disturbed areas during the rainy season; installing bales or other appropriate barriers adjacent to water bodies to prevent transport of sediments into sloughs and water courses; immediately revegetating disturbed areas; and other Best Management Practices during construction to protect water quality. All grading and construction shall conform to applicable requirements.	Right holder	Pre-construction and Construction
GS-3: All diversion and pipeline facilities shall be designed and engineered in accordance with recommendations of a geotechnical report and appropriate engineering designs to reduce the potential detrimental effects of expansive soils, corrosivity, and/or other identified soils constraints. A licensed geotechnical engineer shall prepare recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations will address mitigation of site-specific, adverse soil and bedrock conditions that could hinder development. Project engineers shall implement the recommendations. Geotechnical design and design criteria will comply with applicable codes and requirements of the California Building Code (CCR Title 24).	Right holder	Pre-construction
Hazards and Hazardous Materials		

Mitigation Measure	Implementation	Timing
HM-1: Prior to initiation of earthwork activities, PVWMA shall perform soil testing on agricultural sites proposed for development and analytically test for pesticide residuals and pesticide-related metals arsenic, lead, and mercury. If contamination is identified in the soil samples above applicable levels, PVWMA shall prepare a Site Management Plan (SMP) to establish protocols/guidelines for the contractor including: identification of appropriate health and safety measures while working in contaminated areas; soil reuse; handling, and disposal of any contaminated soils; and agency notification requirements. The SMP shall be subject to the review and approval of the appropriate regulatory agency.	Right holder	Pre-construction
HM-2: Prior to initiation of earthwork activities on properties along the College Lake pipeline alignment not sampled as part of adopted Mitigation Measure HM-1, PV Water shall perform a Phase I Environmental Site Assessment for the alignment to determine the potential for encountering hazardous materials contamination in soils to be excavated and identify appropriate recommendations. Appropriate health and safety measures shall be identified as needed for worker safety, soil handling, and disposal of contaminated soils.	Right holder	Pre-construction and construction
HAZ-1a: Health and Safety Plan (HASP) Using information from the soil testing performed as part of adopted Mitigation Measure HM-1 and from the Phase I Environmental Site Assessment performed as part of adopted Mitigation Measure HM-2, PV Water shall require the construction contractor(s) to prepare and implement a site-specific HASP in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation and grading activities. The HASP shall include, but is not limited to, the following elements:	Right holder	Pre-construction and Construction

Mitigation Measure	Implementation	Timing
1. Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site HASP; 2. A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals based on the most recent data collection and reporting; 3. Specified personal protective equipment and decontamination procedures, if needed; 4. Emergency procedures, including route to the nearest hospital; and 5. Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered.		
HAZ-1b: Soil Management Plan (SMP) Using information from the soil testing performed as part of adopted Mitigation Measure HM-1 and from the Phase I Environmental Site Assessment performed as part of adopted Mitigation Measure HM-2, PV Water or its contractor shall develop and implement an SMP that includes a materials disposal plan specifying how the construction contractor shall remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner. The plan shall identify protocols for training workers to recognize potential soil contamination (such as soil staining, noxious odors, debris or buried storage containers), soil testing and disposal by a qualified contractor in the event that contamination is identified, and identification of approved disposal sites (e.g., approved landfill or reuse site). Contract specifications shall mandate approval of the SMP by PV Water as well as full compliance with all applicable local, state, and federal regulations related to the identification, transportation, and disposal of hazardous materials.	Right holder	Pre-construction and Construction

Mitigation Measure	Implementation	Timing
Surface Water, Groundwater, and Water Quality		
HWQ-1: PVWMA shall require contractors to apply for all applicable NPDES permits, including dewatering permits, develop a Stormwater Pollution Prevention Plan (SWPPP) for construction of proposed facilities, and comply with conditions of the permit(s), as required by the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement Best Management Practices to reduce pollutants in stormwater discharges. The SWPPP for this proposed action would include the implementation, at a minimum, of the following elements: • Source identification • Preparation of a site map • Description of construction materials, practices, and equipment storage and maintenance • List of pollutants likely to contact stormwater • Estimate of the construction site area and percent impervious area • Erosion and sedimentation control practices, including soils stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, such as detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sandbag dikes • Proposed construction dewatering plans • Provisions to eliminate or reduce discharge of materials to stormwater • Description of waste management practices • Maintenance and training practices	Right holder, RWQCB	Pre-construction

Mitigation Measure	Implementation	Timing
HWQ-2: Rapid, imposed water-level fluctuations shall be avoided within the sloughs, Salsipuedes Creek, and the Pajaro River to minimize erosion and failure of exposed (or unvegetated), susceptible banks. This can be accomplished by operating the pumps at an appropriate flow rate, in conjunction with commencing operation of the pumps only when suitable water levels or flow rates are measured in the water body. Criteria for minimizing fluctuations and/or protecting banks from related erosion will need to be developed, as some banks presently are stable and others are not. Control is important, as the mobilized sediment also impairs in-slough habitat values, and potentially exacerbates bacterial levels in the slough system. It may be that water-level fluctuations may be controlled as well to minimize other impacts, such as desiccation of amphibian eggs or waterlogging of agricultural soils adjacent to the sloughs.	Right holder	Ongoing
HWQ-3: If pumping rates in existing wells fall below levels that can support existing or planned land uses, and the reduction in pumping can be attributed to one or many of the project components, then one of several measures may be undertaken to mitigate the loss of pumping. These mitigation measures may include: 1. Improving irrigation efficiency 2. Modifying irrigation and agricultural operations 3. Lowering the pump in the irrigation well 4. Lowering and changing the pump in the irrigation well 5. Adding storage capacity for irrigation supply 6. Replacing the irrigation well 7. Replacing the irrigation water source To determine if well production loss can be attributed to one of the project components, the PVWMA will allow well owners to enroll in a monitoring and mitigation program (MMP). PVMWA will collect baseline data necessary for	Right holder	Ongoing

Mitigation Measure	Implementation	Timing
establishing significant impacts only from wells that are enrolled in the MMP. If a well is not enrolled in the MMP, to claim a significant impact the well owner will need to provide adequate and reliable baseline data. To claim a significant impact for each well enrolled in the MMP, PVWMA will first establish baseline irrigation well extraction rates, drawdowns, and water quality near planned components. Pumping rate reductions and changes in water quality from these baseline values will be analyzed to assess whether or not they are caused by the project. A pumping rate reduction or adverse change in water quality is assumed to be caused by the Project if: 1) it occurs at the same time as the onset of operations of BMP Update component(s); 2) it occurs in an area reasonably predicted to be affected by the BMP Update component(s); 3) static groundwater levels have dropped; 4) pumping groundwater levels have not dropped more than static groundwater levels; and 5) no other obvious reason exists for the drop in production capacity. For PVWMA or others to identify another reason for loss of production it must be based on the written professional opinion of a qualified hydrogeologist that will be submitted to the PVWMA staff or their designee, for review and concurrence.		
HWQ-4: Facilities shall be designated to comply with Federal Emergency Management Agency (FEMA) and County of Santa Cruz requirements to floodproof the facilities and shall not exacerbate upstream or downstream flood hazards on other properties. The FEMA process will require identification of the FEMA floodway zone and may require no increase water elevations for a one percent chance annual flood. The FEMA process will require identification of the FEMA zone type and may require no increase water elevations for a one percent chance annual flood. To meet the specific FEMA requirements for the component, substantial modifications to the facility design and additional mitigation may be required.	Right holder	Pre-construction

Mitigation Measure	Implementation	Timing
HYD-1: Implement Dewatering Best Management Practices for In-Water Construction. For in-water construction during pipeline installation activities, PV Water shall require its contractor(s) to prepare a Dewatering Plan. The Dewatering Plan shall identify best management practices that ensure construction activities at Salsipuedes and Pinto Creeks meet water quality objectives. This work shall be timed to take place as flows are receding and only after instream measures to reduce downstream turbidity are in place. In addition, PV Water shall require its contractors to implement the measures below, and water quality protection measures required by the RWQCB. 1. All work performed in-water shall be completed in a manner that meets the water quality objectives to ensure the protection of beneficial uses as specified in the 2017 Basin Plan. 2. All dewatering and diversion methods shall be installed such that natural flow is maintained upstream and downstream of the Project area. 3. Any temporary dams or diversion shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the Project area. 4. Screened pumps shall be used in accordance with CDFW's fish screening criteria and in accordance with the NMFS Fish Screening Criteria for Anadromous Salmonids and the Addendum for Juvenile Fish Screen Criteria for Pump Intakes. 5. Cofferdams shall remain in place and functional throughout the in-stream construction. 6. Disturbance of protected riparian vegetation shall be limited or avoided entirely.	Right holder	Pre-Construction and Construction

Mitigation Measure	Implementation	Timing
HYD-2a: Water Quality Adaptive Management for College Lake To learn about potential impacts of the Project on College Lake water quality and the quality of downstream water bodies, PV Water shall monitor College Lake water for indications of Cyanobacteria blooms. When the proposed weir crest is elevated to 62.5 feet NAVD88, PV Water shall monitor College Lake water temperature within the water column to establish whether a thermocline develops. PV Water shall use results of this monitoring to support the development of the Adaptive Management Plan that establishes management actions to minimize the conditions that can contribute to algal blooms, including cyanobacteria blooms, such that this impact is mitigated.	Right holder	Ongoing
HYD-2b: Scour Analysis for Pinto Creek Crossing To reduce Project impacts on erosion and sedimentation, PV Water shall evaluate the potential for scour and channel bank erosion due to the Pinto Creek pipeline crossing. The analysis shall recommend a design depth for the pipeline crossing that avoids scour, estimated using standard engineering methods. PV Water shall implement the pipeline depth that avoids scour in final project design.	Right holder	Pre-construction
HYD-3: Avoid Flooding at Pajaro Dunes During Pumped Flow PV Water shall not pump flow exceeding fish passage requirements into Salsipuedes Creek until receiving approval from the Santa Cruz County Flood Control District indicating that pumped flow can occur without lagoon breaching, based on current water surface elevation conditions in Pajaro Lagoon. Existing hypsometric curves will be used to develop a lookup table to relate capacity of College Lake and Pajaro Lagoon that will assess whether pumped flows would require lagoon breaching. PV Water pumped flows shall not result in lagoon water surface elevations exceeding the threshold elevation identified based on the lookup table. The College Lake operations	Right holder, Santa Cruz County Flood Control District	Ongoing

Mitigation Measure	Implementation	Timing
plan will discuss scenarios where lake draining activities may supersede lagoon flooding and breaching activities.		