STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the

SANTA CLARA VALLEY WATER DISTRICT
FEDERAL ENERGY REGULATORY COMMISSION ORDER COMPLIANCE PROJECT FOR ANDERSON RESERVOIR AND DAM

SOURCE: Coyote Creek

COUNTY: Santa Clara

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

1.0 Background and Project Description

Santa Clara Valley Water District (Valley Water or Applicant) requests water quality certification (certification) for the Federal Energy Regulatory Commission (FERC) Order Compliance Project for Anderson Reservoir and Dam (Project) pursuant to section 401 of the federal Clean Water Act (Clean Water Act). The Project is part of the Anderson Dam Hydroelectric Project (FERC Project No. 5737). In 2012, Valley Water initiated the Anderson Dam Seismic Retrofit Project (ADSRP) to meet modern seismic safety standards for Anderson Dam. In February 2020, FERC ordered Valley Water to begin lowering the reservoir level to a water surface elevation of 488 feet by October 1, 2020, and to expedite several elements of the ADSRP to immediately address the safety risk associated with an earthquake and to reduce potential impacts[1] from reservoir drawdown. These expeditated elements comprise the Project. Project elements include:

- Construction of a new larger capacity outlet tunnel (Project feature No. 2 in Figure 1);
- Reopening of the historic Coyote Creek northern channel, just below Anderson Dam (Project feature No. 6 in Figure 1), which will allow for the increased water volume that will be released from the new outlet;

[1] Potential adverse impacts include degradation of habitat for cold water aquatic species, reduced ability for the Project to recharge groundwater, and the potential for flooding.

- Replacement of the existing flashboard dam at the Coyote Percolation Pond, 11 miles downstream of Anderson Dam, with an inflatable bladder dam (Project feature No. 8 in Figure 1);
- Extending the Cross Valley Pipeline and importing additional water for municipal needs and groundwater recharge (Project feature No. 7 in Figure 1);
- Installation of chillers just downstream of Anderson Dam to maintain suitable temperatures for sensitive aquatic species (near Project feature No. 2 in Figure 1);
- Flood protection measures including flood walls, a levee, and raising or acquiring low lying residences (Project feature No. 9 in Figure 1);
- Reservoir bank and rim stability improvements at Anderson Reservoir and Dam (Project feature No. 4 in Figure 1); and
- Reinforcement of the existing intake below the boat ramp at Anderson Lake Park (Project feature No. 5 in Figure 1).

A more detailed description of the Project can be found in Attachment A.

Valley Water is also seeking a section 404 permit from the United States Army Corps of Engineers (USACOE) for the Project. The need for a section 404 permit from USACOE triggers the requirement for a section 401 certification action. On October 1, 2020 FERC issued an Environmental Assessment for the Project for public comment.

This Project and the broader ADSRP are two separate efforts that will have separate certifications. It is anticipated that Valley Water will submit an application for certification of the broader ADSRP at a later date.

1.1 Project Location

The Project is located in Santa Clara County, approximately 42 miles upstream of the San Francisco Bay and approximately 2.5 miles northeast of the city of Morgan Hill. Anderson Reservoir, which impounds Coyote Creek, is approximately 89,073 acre-feet at an elevation of approximately 627 feet. Access to Anderson Dam and Reservoir is provided via the Cochrane Road exit off Highway 101, 18 miles south of the city of San Jose. See Figure 1 for a map of the Project features.

2.0 Regulatory Authority and Permits

2.1 Water Quality Certification and Related Authorities

The Clean Water Act (33 U.S.C. §§ 1251-1387) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. § 1251(a).) Section 101 of the Clean Water Act (33 U.S.C. § 1251 (g)) requires federal agencies to “co-operate with the State and local agencies to develop comprehensive

solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources."

Section 401 of the Clean Water Act (33 U.S.C. §1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that a project will be in compliance with specified provisions of the Clean Water Act, including water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Clean Water Act section 401 directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the Project. The State Water Resources Control Board (State Water Board) is designated as the state water pollution control agency for all purposes stated in the Clean Water Act and any other federal act. (Wat. Code, § 13160.) The State Water Board's Executive Director is authorized to issue a decision on a certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 provides the State Water Board with the authority to "establish monitoring, inspection, entry, reporting and recordkeeping requirements and [require] other information as may reasonably be required" for activities subject to certification under section 401 of the Clean Water Act that involve the diversion of water for beneficial use. The State Water Board delegated this authority to the Deputy Director, as provided for in State Water Board Resolution No. 2012-0029. In the memo *Redelegation of Authorities Pursuant to Resolution No. 2012-0029*, issued by the Deputy Director on October 19, 2017, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights.

Project Water Quality Certification Background

The application for certification was received on August 14, 2020. The submission of the application predates the effective date of the new Clean Water Act Section 401 Certification Rule (40 C.F.R. part 121), which took effect on September 11, 2020. Thus, this certification is not subject to the requirements of the new regulations. The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858, by posting information describing the Project on the State Water Board's website on October 8, 2020 and notified e-mail list subscribers on October 12, 2020. The State Water Board provided notice of receipt of a complete application for the Project to applicable parties pursuant to California Code of Regulations, title 23, section 3835, subdivision (c) on September 11, 2020. No comments were received.

On October 15, 2020, State Water Board staff requested comments on the draft certification from the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Regional Water Board). (See Cal. Code Regs., tit. 23, § 3855, subd. (b)(2)(B).) State Water Board staff received comments on the certification from the San

Francisco Bay Regional Water Board on October 22, 2020, which have been considered and incorporated in the final certification, as appropriate.

2.2 Water Quality Control Plans and Related Authorities

The State Water Board's certification for the Project must ensure compliance with the water quality standards in the San Francisco Bay Regional Water Board's ***Water Quality Control Plan for the San Francisco Bay Basin***[2] (Basin Plan). Water quality control plans designate the beneficial uses of waters to be protected, water quality objectives established for the reasonable protection of those beneficial uses or the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Wat. Code, §§ 13241, 13050, subd. (h), (j).) The beneficial uses together with the water quality objectives that are contained in the water quality control plans, and state and federal anti-degradation requirements constitute California water quality standards for the purposes of the Clean Water Act.

The nine California Regional Water Quality Control Boards have primary responsibility for the formulation and adoption of water quality control plans (basin plans) for their respective regions. The basin plans are subject to approval by the State Water Board and United States Environmental Protection Agency (USEPA), as appropriate. (Wat. Code, § 13240 et seq.; 33 U.S.C. § 1313(c).) The State Water Board may also adopt water quality control plans, which supersede regional water quality control plans for the same waters to the extent of any conflict. (Wat. Code, § 13170.).

The San Francisco Bay Regional Water Board adopted, and the State Water Board and the USEPA approved, the Basin Plan. The Basin Plan identifies existing beneficial uses for Coyote Creek as: municipal and domestic supply; cold freshwater habitat; fish spawning habitat; fish migration; commercial and sport fishing; groundwater recharge; non-contact recreation; preservation of rare and endangered species; water contact recreation; non-contact water recreation; and warm freshwater habitat. The Basin Plan also identifies existing beneficial uses for Anderson Reservoir and its tributaries[3] as: cold freshwater habitat; commercial and sport fishing; groundwater recharge; municipal and domestic supply; water contact recreation; non-contact recreation; fish spawning; warm freshwater habitat; and wildlife habitat.

[2] The Basin Plan can be found online at: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html. Last accessed on November 3, 2020.
[3] The Basin Plan states: "The beneficial uses of any specifically identified waterbody generally apply to all its tributaries."

2.3 Clean Water Act Section 303(d) Listing

The State Water Board listed waterbodies associated with the Project in California's 2014 and 2016 California Integrated Report[4] (Clean Water Act Section 303(d) List / 305(b) Report) Resolution No 2017-0059 as follows:

- Anderson Reservoir is listed for mercury and polychlorinated biphenyls.
- Coyote Creek is listed for diazinon, toxicity, and trash.

Section 303(d) of the Clean Water Act requires total maximum daily loads (TMDLs) to be developed for impaired waterbodies. TMDLs are written plans that define the maximum amount of a pollutant that a waterbody can receive without exceeding water quality standards and establish load allocations for point and nonpoint sources of pollution.

2.4 Statewide Mercury Provisions

On May 2, 2017, the State Water Board adopted Resolution No. 2017-0027, which approved Part 2 of the ***Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California — Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions***[5]. Resolution No. 2017-0027 provides a consistent regulatory approach throughout the state by setting mercury limits to protect the beneficial uses associated with the consumption of fish by both people and wildlife. The State Water Board also established definitions for three new beneficial use definitions (tribal traditional culture, tribal subsistence fishing, and subsistence fishing) for use by the State Water Board and Regional Water Boards. The State Water Board also approved one narrative and four numeric mercury objectives to apply to inland surface waters, enclosed bays, and estuaries of the state that have any of the following beneficial use definitions: commercial and sport fishing, tribal traditional culture, tribal subsistence fishing, wildlife habitat, marine habitat, preservation of rare and endangered species, warm freshwater habitat, cold freshwater habitat, estuarine habitat, or inland saline water habitat, with the exception of waterbodies or waterbody segments with site-specific mercury objectives. These provisions will be implemented through National Pollution Discharge Elimination System permits, water quality certifications, waste discharge requirements, and waivers of waste discharge requirements.

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[4] The **303(d) listings** can be found online at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category5_report.shtml. Last accessed on November 3, 2020.

[5] The Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California — Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions can be found online at: https://www.waterboards.ca.gov/water_issues/programs/mercury/. Last accessed November 5, 2020.

2.5 Construction General Permit

The State Water Board adopted a ***Construction General Permit***[6], which is required for activities that disturb one or more acres of soil or projects that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.

2.6 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

On April 2, 2019, the State Water Board adopted the ***State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State***[7] (Procedures), which became effective on May 28, 2020. The Procedures provide California's definition of wetland, wetland delineation procedures, and procedures for submitting applications for activities that could result in discharges of dredged or fill material to waters of the state. The Procedures ensure that State Water Board regulatory activities will result in no net loss of wetland quantity, quality, or permanence, compliant with the California Wetlands Conservation Policy, Executive Order W-59-93. Valley Water must comply with the Procedures when conducting dredge or fill activities that may impact waters of the state, including wetlands.

2.7 California Environmental Quality Act

Issuance of a certification is a discretionary action under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). Valley Water filed for an emergency project statutory exemption (Pub. Res. Code § 21080, subd. (b)(4); Cal. Code Regs., tit. 14, § 15269, subd. (c)) on June 29,2020. The State Water Board has reviewed Valley Water's request for certification and has determined that the Project is exempt from the requirements to prepare environmental documents under the statutory exemption. The State Water Board will file a Notice of Exemption with the Office of Planning and Research within five days of issuance of this certification amendment. (Cal. Code Regs., tit. 14, § 15062.)

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[6] Water Quality Order 2009-0009-DWQ and National Pollutant Discharge Elimination System No. CAS000002, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, and any amendments thereto. Information on the Construction General Permit is available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Last accessed on November 6, 2020.

[7] The Procedures can be found online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf. Last accessed on November 2, 2020.

2.8 Santa Clara Valley Habitat Plan

Santa Clara County and Valley Water, in association with the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS), and in consultation with the public, developed the ***Santa Clara Valley Habitat Plan*** (VHP)[8]. The VHP provides a framework for promoting the protection and recovery of natural resources, including endangered species, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The VHP requires Valley Water to implement avoidance, minimization, and mitigation measures to address impacts to covered species and habitats protected by the VHP. Covered plant and animal species and their habitats in the Project areas include: California tiger salamander (*Ambystoma californiense*); California red-legged frog (*Rana draytonii*); coyote ceanothus (*Ceanothus ferrisiae*); and the western pond turtle (*Actinemys marmorata*). VHP implementation is led by the Santa Clara Valley Habitat Agency.

3.0 Discussion and Findings

When considering the application and developing this certification and its conditions, State Water Board staff reviewed and considered a wide range of information including the: certification application and subsequent submissions; Basin Plan; Clean Water Act Section 303(d) List/305(b) Report; existing water quality conditions; Project-related controllable factors; and other information in the record. Valley Water representatives conveyed in a September 30, 2020, meeting with State Water Board staff that its preference was to submit plans for each Project activity in phases, as opposed to submitting all plans at once. This phased approach is implemented in the certification conditions. Project activities with similar timelines are grouped together and require submittal to the Deputy Director for the Division of Water Rights at least 90 days prior to the start of construction activities. This approach provides Valley Water flexibility if the construction timelines shift.

In order to ensure that the Project operates to meet water quality standards as anticipated, and to ensure that the Project will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, this water quality certification imposes conditions regarding monitoring, enforcement, and potential future revisions. Additionally, California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all water quality certifications, which are included in this water quality certification. The State Water Board has found that, with the conditions and limitations imposed under this water quality certification, the Project will be protective of state water quality standards and other appropriate requirements of state law.

[8] Details of the VHP can be found online at: https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan. Last Accessed on October 15, 2020.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE FEDERAL ENERGY REGULATORY COMMISSION ORDER COMPLIANCE PROJECT FOR ANDERSON RESERVOIR AND DAM (Project) will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law under the following terms and conditions.

CONDITION 1. Notwithstanding any more specific conditions in this certification, the Santa Clara Valley Water District (Applicant) shall comply with all proposed conditions, mitigation measures, water quality protection measures, and monitoring described in the water quality certification (certification) application and any modifications and supplements thereto.

CONDITION 2. No later than 90 days prior to the start of construction, the Applicant shall submit an Anderson Dam Tunnel and Northern Channel Reopening Plan (Anderson Dam Tunnel Plan) to the Deputy Director for the Division of Water Rights (Deputy Director) for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Anderson Dam Tunnel Plan shall be developed and implemented to protect water quality and beneficial uses. The Anderson Dam Tunnel Plan shall be developed in consultation with National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Regional Water Board), and State Water Resources Control Board (State Water Board) staff. The Anderson Dam Tunnel Plan incorporates Project features Nos. 2, 3, and 6 as identified in Figure 1.[9] The Anderson Dam Tunnel Plan shall include separate discussions and sections for the Anderson Dam Tunnel and reopening of the northern channel work, respectively. At a minimum, the Anderson Dam Tunnel Plan shall include:

- The purpose of the plan;
- Schedule for and description of construction (including site mobilization, creek channel and bank modification, recontouring, and preparation and ancillary activities such as revegetation) and operation and maintenance of the Anderson Dam Tunnel and reopening of the northern channel. Operation of the northern channel includes how flows will be allocated between the northern and southern channel to ensure no increase in the potential for fish stranding;

[9] Identification and implementation of applicable fish management measures (identified as Project feature No. 10 in Figure 1) are incorporated in Conditions 2, 3, 6, and 7. The Applicant shall also identify and implement applicable fish management measures for other applicable Project components.

- A description of dredging activities, including the estimated amount of material to be dredged and any measures that will be implemented to protect water quality and beneficial uses (e.g., turbidity curtains);

- Water quality monitoring and actions that will be performed if monitoring indicates the potential for impairments:

    - Comprehensive list of the parameters that will be monitored in Coyote Creek. At a minimum, the Applicant shall monitor for temperature, dissolved oxygen, turbidity, and total dissolved solids;

    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and a Quality Assurance Project Plan (QAPP);

    - A list of applicable numeric and narrative water quality objectives; and

    - Identification of potential actions that will be implemented if monitoring results indicate that the Project may impair water quality;

- Fish protection measures and monitoring (identified as Project feature No. 10 in Figure 1) that will be implemented as part of plan implementation. The Applicant shall also identify actions that will be performed if monitoring indicates impacts to fish as a result of plan implementation. Additionally, the Applicant shall monitor for fish stranding in the northern and southern channel under implementation of the new flow regime that allocates water to the southern and northern channels. The Applicant shall implement actions to address fish stranding if related to implementation of the Project;

- Ramping rates and flows that will be implemented during construction and operation of the tunnel to protect aquatic life, including flow distribution to the northern and southern channels once operational. The Applicant shall also provide the methods and/or information used to determine ramping rates and flows (e.g., studies, tests, monitoring, etc.);

- Format, schedule, and reporting to document, summarize, and analyze water quality and fish monitoring results. The Applicant shall propose any updates to the plan based on the monitoring results or new information related to water quality or fish conditions that may be impacted by plan implementation. Reports shall include identification of any potential water quality for fish concerns, as well as actions to address any impacts related to plan implementation;

- List of special status species[10] in the area. Details of how fish and wildlife, including all special status species, will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as appropriate, or a description of why Biological Monitor provisions are not appropriate;

- Details of fish relocation, including how effects on fish will be minimized and actions that will be implemented if fish densities[11] are exceeded after relocation. The "natural" fish densities that will be used to trigger further actions shall be identified in the plan;

- Procedure for dewatering and diversion, including measures that will implemented to protect water quality and beneficial uses, and maintain instream flows. This includes a description of the installation, operation, and maintenance (e.g., inspection and follow up actions) of dewatering systems, as well as the locations, quantity of water, and timing of dewatering and diversion activities;

- Details regarding management and treatment of groundwater seepage in dewatered areas;

- Revegetation plan for the channel banks and riparian zone of the northern channel, as well as a list and description of habitat improvement features that will be implemented;

- Description of potential impacts to downstream water users. If downstream users may be impacted, include details of who may be impacted, how they may be impacted, and the method and timing of notifications to potentially impacted water users and any other proposed actions;

- Information on disposal site(s) for excavated materials (e.g., for the tunnel boring and grading) including the proposed long-term and temporary disposal location(s), type and quantity of materials anticipated, and management protocols;

[10] For this certification, special status species are defined as: those species listed, proposed, or under review as threatened or endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA); those listed in the Santa Clara Valley Habitat Plan; those designated as *Species of Special Concern* by CDFW; those designated as Fully Protected under the California Fish and Game Code (sections 3511, 4700, 5050, and 5515); and those protected under the federal Bald and Golden Eagle Protection Act.

[11] Fish densities refers to natural densities that have previously been recorded in the relocation areas.

- Identification of activities that will occur during construction, operation, and maintenance of the Anderson Dam tunnel and reopening of the northern channel with the potential to impact water quality or beneficial uses and identification of measures that will be implemented to protect water quality and beneficial uses. This includes best management practices (BMPs), avoidance and minimization measures (AMMs), and mitigation measures that will be implemented in accordance with the Santa Clara Valley Habitat Plan (VHP), and to ensure compliance with the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) water quality standards. Such measures include but are not limited to measures for sediment and erosion control, protection of endangered and threatened species, invasive species management, vegetation management, and the protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the United States Army Corps of Engineers (USACOE) and Federal Energy Regulatory Commission (FERC) the Deputy Director-approved Anderson Dam Tunnel Plan, and any amendments thereto. The Applicant shall implement the Anderson Dam Tunnel Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 3. No later than 90 days prior to the start of construction, the Applicant shall submit the Cross Valley Pipeline (CV Pipeline) and Chillers Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The CV Pipeline and Chillers Plan shall be developed in consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The CV Pipeline and Chillers Plan shall cover the construction and operation of the CV Pipeline and chillers and be developed and implemented to protect water quality and beneficial uses. The CV Pipeline is identified as Project feature No. 7 in Figure 1. The CV Pipeline and Chillers Plan shall include separate discussions and sections for the CV Pipeline and chillers work, respectively. At a minimum, the CV Pipeline and Chillers Plan shall include:

- The purpose of the plan;

- Description and schedule for construction, installation, and operation of the new CV Pipeline extension segment, cofferdam, dissipation structure, chillers, concrete pad, electrical equipment, and any related items;

- Description of the timing of and extent to which the CV Pipeline releases will support groundwater recharge and beneficial uses, and prevent subsidence;

- Procedure for dewatering and diversion, including measures that will be implemented to protect water quality and beneficial uses, and maintain instream flows. This includes a description of the installation, operation, and maintenance (e.g., inspection and follow up actions) of dewatering systems, as well as the locations, quantity, and timing of dewatering and diversion activities;

- Describe the quantity and timing of imported water releases to Coyote Creek via the Coyote Discharge Line immediately downstream of Anderson Dam at the top of Coyote Creek Cold Water Management Zone (CWMZ), and to Coyote Creek just downstream of Ogier Ponds via the pipeline extension, to protect groundwater recharge, water supply reliability, and the CWMZ. This includes identification of the flows the Applicant will implement in Coyote Creek in comparison to historical flows, as well as the schedule and quantities of water to be released from each pipeline outlet;

- Water quality monitoring and actions that will be performed if monitoring indicates the potential for impairments:

    - Comprehensive list of the parameters that will be monitored in Coyote Creek. At a minimum, parameters shall include temperature, dissolved oxygen, turbidity, and total dissolved solids;

    - Description of the CWMZ requirements of the ***Settlement Agreement Regarding Water Rights of the Santa Clara Valley Water District on Coyote, Guadalupe, and Stevens Creek***[12] and how the Coyote Creek requirements will be met;

    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and a QAPP;

    - A list of applicable numeric and narrative water quality objectives; and

    - Identification of actions that will be implemented if monitoring results indicate that the Project may impair water quality;

- Format, schedule, and reporting to document, summarize, and analyze monitoring results. The Applicant shall propose any updates to the plan based on the monitoring results or new information related to water quality conditions

[12] The agreement, dated January 6, 2003, is between: Santa Clara Valley Water District; the United States Department of the Interior, USFWS; the United States Department of Commerce, NMFS; CDFW, the Guadalupe Coyote Resource Conservation District; Trout Unlimited; the Pacific Coast Federation of Fishermen's Associations; and California Trout, Inc. The agreement can be found online at: https://www.fs.fed.us/emc/nepa/ecr2008/sessions/materials/13/FAHCE%20Settlement%20Agreement%20(2003-01-06).pdf. Last accessed on November 3, 2020.

that may be impacted by plan implementation. Reports shall include identification of any potential water quality concerns, as well as actions to address any impacts related to plan implementation;

- Fish protection measures and monitoring (identified as Project feature No. 10 in Figure 1) that will be implemented as part of plan implementation. The Applicant shall also identify actions that will be performed if monitoring indicates impacts to fish as a result of plan implementation;

- List of special status species in the area. Details of how fish and wildlife, including all special status species, will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as appropriate, or a description of why Biological Monitor provisions are not appropriate;

- Information on disposal site(s) for excavated materials including the proposed disposal location(s), type and quantity of materials anticipated, and management protocols;

- Description of potential impacts to water users. If users may be impacted, include details of who may be impacted, how they may be impacted, and the method and timing of notification to potentially impacted water users and any other proposed actions;

- The BMPs, AMMs, and mitigation measures that will be implemented in accordance with the VHP and to ensure compliance with Basin Plan water quality standards, including but not limited to measures for sediment and erosion control, protection of endangered and threatened species, vegetation management, and the protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved CV Pipeline and Chillers Plan, and any amendments thereto. The Applicant shall implement the CV Pipeline and Chillers Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 4. No later than 90 days prior to the start of construction, the Applicant shall submit a Bank and Rim Stability Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Bank and Rim Stability Plan shall be developed in consultation with

NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The Bank and Rim Stability Plan shall be developed and implemented to protect water quality and beneficial uses. The Bank and Rim Stability activities are identified as Project feature No. 4 in Figure 1. At a minimum, the Bank and Rim Stability Plan shall include:

- The purpose of the plan;
- Schedule for investigations, construction, and maintenance related to bank and rim stability activities;
- Description of geotechnical investigations that will be performed, including a discussion of how locations for investigation will be selected. The results of such investigations shall be reported to the San Francisco Bay Regional Water Board and State Water Board staff;
- Information on the location and frequency of monitoring that will be performed of known or potential landslide locations;
- Description of the locations and structural improvements that will be implemented to prevent potential landslides and erosion on the Anderson Reservoir banks, including any ongoing maintenance necessary to protect water quality and beneficial uses;
- Evaluation of the need for water quality monitoring and actions if monitoring indicates the potential for impairments. If water quality monitoring is appropriate, the plan shall include:
    - Comprehensive list of the parameters that will be monitored in Anderson Dam and Coyote Creek. At a minimum, the plan shall include evaluation of the need to monitor for turbidity and total dissolved solids;
    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and the QAPP;
    - A list of applicable numeric and narrative water quality objectives; and
    - Identification of actions that will be implemented if monitoring results indicate that implementation of the plan may impair water quality;
- Format, schedule, and reporting to document, summarize, and analyze results of the geotechnical investigations and any monitoring conducted as part of plan implementation. The Applicant shall propose any updates to the plan based on the results or new information related to water quality that may be impacted by implementation of the plan. Reports shall include identification of any potential

water quality concerns, as well as actions to address any impacts related to plan implementation;

- List of special status species in the area. Details of how fish and wildlife, including all special status species, will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as appropriate, or a description of why Biological Monitor provisions are not appropriate;

- Information on disposal site(s) for excavated materials including the proposed disposal location(s), type and quantity of materials anticipated, and management protocols;

- The BMPs, AMMs, and mitigation measures that will be implemented in accordance with the VHP and to ensure compliance with Basin Plan standards, including but not limited to measures for sediment and erosion control, protection of endangered and threatened species, vegetation management, and the protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved Bank and Rim Stability Plan, and any amendments thereto. The Applicant shall implement the Bank and Rim Stability Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 5. No later than 90 days prior to the start of construction, the Applicant shall submit an Existing Intake Reinforcement Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Existing Intake Reinforcement Plan shall describe how the Applicant will reinforce the existing intake below the boat ramp at Anderson Lake Park. The Existing Intake Reinforcement Plan shall be developed in consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The Existing Intake Reinforcement Plan shall be developed and implemented to protect water quality and beneficial uses. The Existing Intake Reinforcement activities are identified as Project feature No. 5 in Figure 1. At a minimum, the Existing Intake Reinforcement Plan shall include:

- The purpose of the plan;

- Detailed description of the work to be completed, including a schedule for construction related to reinforcement of the existing intake below the boat ramp at Anderson Lake Park and related activities, including any changes to operation of the intake during construction;

- Description of geotechnical investigations that will be performed, including a discussion of how locations for investigation will be selected. The results of such investigations shall be reported to the San Francisco Bay Regional Water Board and State Water Board staff;

- Information on the location and frequency of monitoring that will be performed of known or potential unstable soil locations;

- Description of the locations and structural improvements that will be implemented to prevent potential erosion during reinforcement of the existing intake and thereafter, including any ongoing maintenance necessary to protect water quality and beneficial uses;

- Evaluation of the need for water quality monitoring and actions if monitoring indicates the potential for impairments. If water quality monitoring is appropriate, the plan shall include:

    - Comprehensive list of the parameters that will be monitored in Coyote Creek. At a minimum, the plan shall include evaluation of the need to monitor for temperature, dissolved oxygen, turbidity, and total dissolved solids;

    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and the QAPP;

    - A list of applicable numeric and narrative water quality objectives; and

    - Identification of actions that will be implemented if monitoring results indicate that plan implementation may impair water quality;

- Format, schedule, and reporting to document, summarize, and analyze results of the geotechnical investigations and any monitoring conducted as part of plan implementation. The Applicant shall propose any updates to the plan based on the results or new information related to water quality impacts that may be related to plan implementation. Reports shall include identification of any potential water quality concerns, as well as actions to address any impacts related to plan implementation;

- List of special status species in the area. Details of how fish and wildlife, including all special status species, will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as

appropriate, or a description of why Biological Monitor provisions are not appropriate;

- Description of potential impacts to water users. If users may be impacted, include details of who may be impacted, how they may be impacted, and the method and timing of notification to potentially impacted water users and any other proposed actions;

- Information on disposal site(s) for excavated materials including the proposed disposal location(s), type and quantity of materials anticipated, and management protocols;

- The BMPs, AMMs, and mitigation measures that will be implemented in accordance with the VHP and to ensure compliance with Basin Plan standards, including but not limited to measures for sediment and erosion control, protection of endangered and threatened species, vegetation management, and protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved Existing Intake Reinforcement Plan, and any amendments thereto. The Applicant shall implement the Existing Intake Reinforcement Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 6. No later than 90 days prior to the start of construction, the Applicant shall submit the Percolation Dam Replacement Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Percolation Dam Replacement Plan shall be developed in consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The Percolation Dam Replacement Plan shall be developed and implemented to protect water quality and beneficial uses. Replacement of the percolation dam is identified as Project feature 8 in Figure 1. At a minimum, the Percolation Dam Replacement Plan shall include:

- The purpose of the plan;

- Schedule and details for removal of the flashboard dam, installation of the new percolation dam (also referred to as the inflatable bladder dam) and related features (e.g., fish passage facilities), and information on how and when these structures will be operated and maintained;

- Procedure for dewatering and diversion, including measures that will be implemented to protect water quality and beneficial uses, and maintain instream flows. This includes a description of the installation, operation, and maintenance (e.g., inspection and follow up actions) of dewatering systems, as well as the locations, quantity, and timing of dewatering and diversion activities;

- Water quality monitoring and actions that will be performed if monitoring indicates the potential for impairments:

    - Comprehensive list of the parameters that will be monitored in Coyote Creek. At a minimum, parameters shall include temperature, dissolved oxygen, turbidity, and total dissolved solids;

    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and the QAPP;

    - A list of applicable numeric and narrative water quality objectives; and

    - Identification of actions that will be implemented if monitoring results indicate that implementation of the plan may be impair water quality;

- Format, schedule, and reporting to document, summarize, and analyze monitoring results. The Applicant shall propose any updates to the plan based on the monitoring results or new information related to water quality that may be impacted by plan implementation. Reports shall include identification of any potential water quality concerns, as well as actions to address any impacts related to plan implementation;

- Fish protection measures and monitoring (identified as Project feature No. 10 in Figure 1) that will be implemented as part of plan implementation. The Applicant shall also identify actions that will be performed if monitoring indicates impacts to fish as a result of plan implementation;

- Details of fish relocation, including how effects on fish will be minimized and actions that will be implemented if fish densities are exceeded after relocation. The “natural” fish densities that will be used to trigger further actions shall be identified in the plan;

- List of special status species in the area. Details of how fish and wildlife, including all special status species, will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as appropriate, or a description of why Biological Monitor provisions are not appropriate;

- Description of habitat protection measures that will be implemented in conjunction with the plan;

- Procedure for dewatering and diversion, including measures that will be implemented to protect water quality and beneficial uses, and maintain instream flows. This includes a description of the installation, operation, and maintenance (e.g., inspection and follow up actions) of dewatering systems, as well as the locations, quantity, and timing of dewatering and diversion activities;

- Description of potential impacts to water users. If users may be impacted, include details of who may be impacted, how they may be impacted, and the method and timing of notification to potentially impacted water users and any other proposed actions;

- Information on disposal site(s) for excavated materials including the proposed disposal location(s), type and quantity of materials anticipated, and management protocols;

- The BMPs, AMMs, and mitigation measures that will be implemented in accordance with the VHP and to ensure compliance with Basin Plan water quality standards, including but not limited to measures for sediment and erosion control, protection of endangered and threatened species, vegetation management, and protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved Percolation Dam Replacement Plan, and any amendments thereto. The Applicant shall implement the Percolation Dam Replacement Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 7. No later than 90 days prior to the start of construction, the Applicant shall submit a Flood Management Measures Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Flood Management Measures Plan shall be developed in consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The Flood Management Measures Plan shall cover the construction and maintenance of flood management measures and shall be developed and implemented to protect water quality and beneficial uses. The flood management measures are identified as Project feature No. 9 in Figure 1. At a minimum, the Flood Management Measures Plan shall include:

- The purpose of the plan;
- Description of and schedule for construction of the flood management measures (e.g., floodwalls, levee, and potential elevation of structures);
- How the flood management measures will be maintained;
- Water quality monitoring and actions that will be performed if monitoring indicates the potential for impairments:
    - Comprehensive list of the parameters that will be monitored in Coyote Creek. At a minimum, parameters shall include temperature, dissolved oxygen, turbidity, and total dissolved solids;
    - A description of proposed monitoring and associated protocols, including monitoring locations, frequency, equipment to be used, and the QAPP;
    - A list of applicable numeric and narrative water quality objectives; and
    - Identification of actions that will be implemented if monitoring results indicate that implementation of the plan may be impair water quality;
- Format, schedule, and reporting to document, summarize, and analyze monitoring results. The Applicant shall propose any updates to the plan based on the monitoring results or new information related to water quality that may be impacted by plan implementation. Reports shall include identification of any potential water quality concerns, as well as actions to address any impacts related to plan implementation;
- Fish protection measures and monitoring (identified as Project feature No. 10 in Figure 1) that will be implemented as part of plan implementation. The Applicant shall also identify actions that will be performed if monitoring indicates impacts to fish as a result of plan implementation;
- List of special status species in the area. Details of how fish and wildlife, including all special status species will be monitored and excluded from Project activity areas and material disposal sites associated with implementation of the plan. Incorporation of Biological Monitor provisions outlined in Condition 11, as appropriate, or a description of why Biological Monitor provisions are not appropriate;
- Description of potential impacts to water users. If users may be impacted, include details of who may be impacted, how they may be impacted, and the method and timing of the notification to potentially impacted water users and any other proposed actions;

- Information on disposal site(s) for excavated materials including the proposed disposal location(s), type and quantity of materials anticipated, and management protocols;

- The BMPs, AMMs, and mitigation measures that will be implemented in accordance with the VHP and to ensure compliance with Basin Plan water quality standards, including but not limited to measures for sediment and erosion control, protection of endangered and threatened species, vegetation management, and protection of water quality and beneficial uses; and

- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved Flood Management Measures Plan, and any amendments thereto. The Applicant shall implement the Flood Management Measures Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 8. No later than 90 days prior to the start of construction, the Applicant shall submit a Mercury, Diazinon, and Polychlorinated Biphenyls (PCBs) Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require modifications as part of any approval. The Mercury, Diazinon, and PCBs Plan shall be developed in consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff. The Mercury, Diazinon, and PCBs Plan shall cover mercury, diazinon, and PCBs and shall be developed and implemented to protect water quality and beneficial uses. The Mercury, Diazinon, and PCBs Plan shall comply with the ***Tribal Subsistence Beneficial Uses and Mercury Provisions of the Inland Surface Waters, Enclosed Bays, and Estuaries Plan***[13]. At a minimum, the Mercury, Diazinon, and PCBs Plan shall include:

- The purpose of the plan;

- Evaluation and discussion of the potential for mobilization or methylation of mercury associated with Project implementation;

- Evaluation and discussion of the potential for mobilization of diazinon and PCBs associated with Project implementation;

[13] The Tribal Subsistence Beneficial Uses and Mercury Provisions of the Inland Surface Waters, Enclosed Bays and Estuaries can be found online at: https://www.waterboards.ca.gov/water_issues/programs/mercury/. Last Accessed on November 5, 2020.

- If there is potential for mobilization or methylation of the above-referenced pollutants, the plan shall include:
    - Measures to reduce the amount of methylmercury or rate of mercury methylation, as well as the release and transport of diazinons and PCBs in the watershed as effected by the Project. In addition, describe any necessary measures to protect human health from exposure through fish consumption (e.g., posting health warnings, operate recreational fishing as catch-and-release only); and
    - Monitoring that will be performed, including the parameters, protocols, monitoring locations, frequency, equipment to be used, and QAPP, and
    - Applicable numeric and narrative water quality objectives; and
- Documentation of consultation with NMFS, USFWS, CDFW, San Francisco Bay Regional Water Board, and State Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

The Applicant shall file with the USACOE and FERC the Deputy Director-approved Mercury, Diazinon, and PCBs Plan, and any amendments thereto. The Applicant shall implement the Mercury, Diazinon, and PCBs Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

CONDITION 9. The Applicant shall ensure that Project activities comply with applicable Basin Plan water quality objectives, including but not limited to the following parameters: turbidity, dissolved oxygen, total dissolved solids, and temperature. Meters used for monitoring shall be calibrated and maintained in accordance with the manufacturer's instructions. For each meter used for monitoring, a calibration and maintenance log shall be maintained onsite and provided to State Water Board staff upon request.

Turbidity. Project activities shall not cause an increase in turbidity greater than what is identified in the Basin Plan. The Basin Plan states that: "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU."[14]. The Applicant shall identify the locations and method for establishing

[14] Requirements for turbidity management can be found in section 3.3.19 of the **Basin Plan**, which is available at: https://www.waterboards.ca.gov/~rwqcb2/basin_planning.html. Last Accessed on October 15, 2020.

background turbidity as part of the monitoring required for the plans associated with the Project.

Dissolved Oxygen. Project activities shall comply with dissolved oxygen requirements in the Basin Plan. The Basin Plan states that: "oxygen levels in spawning areas should approach saturation levels and shall be maintained a 7.0 mg/l or above for areas that are designated as cold water habitat and 5.0 mg/l or above for areas that are designated as warm water habitat. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation."

Dissolved Solids.[15] Project activities shall comply with salinity requirements in the Basin Plan for dissolved solids. The Basin Plan states that: "Controllable water quality factors shall not increase the total dissolved solids or salinity of waters of the state so as to adversely affect beneficial uses, particularly fish migration and estuarine habitat."

Temperature. Project activities shall comply with the temperature requirements in the Basin Plan. The natural receiving water temperature of inland surface waters shall not be altered unless it can be demonstrated that such alteration in temperature does not adversely affect beneficial uses. The temperature of any cold or warm freshwater habitat shall not be increased by more than 5°F (2.8°C) above natural receiving water temperature.

CONDITION 10. The Applicant shall use analytical methods that comply with 40 Code of Federal Regulations part 136, or methods approved by California's Environmental Laboratory Accreditation Program (ELAP), where such methods are available. Samples that require laboratory analysis shall be analyzed by ELAP-certified laboratories.

CONDITION 11. Unless otherwise approved by the Deputy Director as part of plan approval, the Applicant shall have a qualified biologist on site prior to and periodically throughout Project activities to act as a Biological Monitor. The Biological Monitor shall perform the following tasks outlined below unless otherwise approved by the Deputy Director as part of plan approval.

Training. The Biological Monitor shall conduct training for employees working in the Project area. The training shall include but not be limited to: a description of special status species with potential to be present in the Project area; actions to take to prevent or reduce impacts to the species; and protocols to follow if the species are encountered.

Inspection. The Applicant shall ensure that the Biological Monitor inspects the associated area of work prior to all dredging-related work to identify if the activity will increase the spread of invasive aquatic species into, or out of, the work area, or if there

[15] The Basin Plan includes dissolved solids in the salinity standard.

will be any impacts from the activity to sensitive species in the work area, within 300 feet of each Project area.

Flagging Sensitive Resources. Prior to commencing Project activities, any known sensitive resources (which include, but are not limited to: special-status species, sensitive habitats, invasive plants, and other predetermined areas with significant sensitive resources) within or near the proposed work area will be flagged to ensure that no activities are conducted in those areas.

Notifications. If any significant issues are identified by the Biological Monitor (e.g., identification of special status species in the work area or immediately downstream, or evidence of invasive aquatic species entering or leaving the work area), the Applicant shall notify the Deputy Director and any other pertinent state or federal resource agencies as soon as possible to determine what steps shall be taken to protect water quality and the beneficial uses of the water.

CONDITION 12. Unless otherwise specified in this water quality certification or at the request of the Deputy Director, data and/or reports must be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with California Water Code section 13167.

CONDITION 13. Unless otherwise specified in this certification, any plan developed as a condition of this certification requires review and approval by the Deputy Director. The State Water Board's approval authority, including authority delegated to the Deputy Director or others, includes the authority to withhold approval or to require modification of a proposal, plan, or report prior to approval. The State Water Board may take enforcement action if the Applicant fails to provide or implement a required item in a timely manner. If a time extension is needed to submit an item for Deputy Director approval, the Applicant shall submit a written request for the extension, with justification, to the Deputy Director no later than 30 days prior to the deadline. The Applicant shall not implement any plans or reports until after receiving Deputy Director approval and any other necessary regulatory approvals.

CONDITION 14. Appropriate spill containment, absorbent spill clean-up materials, and spill kits shall be available on-site. All spills shall be cleaned up immediately and shall not be buried or washed with water. Initial containment shall be with absorbent material or, if necessary, construction of berms. Used clean-up materials, contaminated materials, and recovered spilled materials that are no longer useable shall be stored and disposed of properly. Hazardous and non-hazardous material shall be disposed of in the manner specified by the manufacturer. Contaminated soil shall be excavated, contained, and transported to an approved disposal site.

CONDITION 15. The Applicant and its contractors shall notify all applicable agencies as soon as feasible, but no later than three business days after an incident, as to the type, date, time, and actions taken in response to all spills within their jurisdiction. In the

event of a major spill affecting plant, wildlife, or aquatic resources or creating public health concerns, notification shall be according to all applicable requirements.

CONDITION 16. Control measures for erosion, excessive sedimentation, and turbidity shall be implemented and in place prior to the commencement of, during, and after any ground clearing activities, excavation, or any other Project activities that could result in erosion or sediment discharges to surface waters. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic wildlife is prohibited.

CONDITION 17. All construction debris and trash shall be contained and regularly removed from the work area to the staging area during construction activities. Upon completion of construction, all Project-generated debris, building materials, excess material, waste, and trash shall be disposed of at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations.

CONDITION 18. All equipment shall be washed prior to transport to the Project site and be free of sediment, debris, and foreign matter. All wash water generated from pre-washing shall be contained and disposed of off-site in compliance with federal, state, and local laws, ordinances, and regulations.

CONDITION 19. Use of vehicles and equipment shall be limited to the designated work areas approved in the plans submitted in compliance with this certification. Project-related vehicle traffic shall be confined to established roads, staging areas, and parking areas.

Any maintenance or refueling of equipment occurring on-site shall be done in a designated area with secondary containment, located away from the riparian area and stream corridor. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generators, etc.) not in use shall be positioned over drip pans or other types of containment. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be maintained onsite at all locations where such equipment and vehicles are used or staged.

CONDITION 20. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Deputy Director within 24-hours of the discharge. Activities shall not cause visible oil, grease, or foam in the receiving water.

CONDITION 21. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.

CONDITION 22. If the Project will involve land disturbance activities of one or more acres, or the Project disturbs less than one acre but is part of a larger common plan of development that in total disturbs one or more acres, the Applicant shall obtain coverage under the Construction General Permit (*National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ*, and any amendments thereto) for discharges to surface waters comprised of stormwater associated with construction activities.

CONDITION 23. The Applicant shall ensure no net loss of wetland or riparian habitat functions and shall comply with the **State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State**[16] and the California Wetlands Conservation Policy (**Governor's Executive Order W-59-93**)[17], and any amendments thereto.

CONDITION 24. The Applicant shall comply with all applicable requirements of the Basin Plan. If at any time an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project has or could soon be in violation of water quality objectives, the associated Project activities shall cease immediately and the Deputy Director and the Executive Officer of the San Francisco Bay Regional Water Board (Executive Officer) shall be notified. Associated activities may not resume without approval from the Deputy Director.

CONDITION 25. This certification covers only the events for the Project described in the certification application. To the extent that certification requirements for the pending Anderson Dam Seismic Retrofit Project conflict with the requirements in this certification, the terms in the subsequent water quality certification shall supersede those in this certification.

CONDITION 26. The Applicant shall comply with the terms of the existing FERC exemption for the Anderson Dam Hydroelectric Project (FERC Project No. 5737) unless it receives the necessary approvals.

CONDITION 27. Notwithstanding any more specific conditions in this certification, the Project shall be conducted in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act. The Applicant shall take all

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[16] The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State can be found online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf. Last accessed on November 3, 2020.

[17] Governor's Executive Order W-59-93 can be found online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/wrapp2008/executive_order_w59_93.pdf. Last accessed on November 3, 2020.

reasonable measures to protect the beneficial uses of waters identified in the Basin Plan.

CONDITION 28. A copy of this certification shall be provided to all contractors and subcontractors conducting Project work, and at least one copy shall be available at the Project site for reference. The Applicant shall be responsible for work conducted by its contractors and subcontractors. The Applicant, including its contractors and subcontractors, shall report any noncompliance with the conditions of this certification to the Deputy Director within 24 hours of the time when the Applicant, its contractors, or subcontractors become aware of noncompliance with this certification.

CONDITION 29. This certification does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the CESA (Fish & G. Code §§ 2050-2097) or the federal ESA (16 U.S.C. §§ 1531 - 1544). If a "take" will result from any act authorized under this certification or water rights held by the Applicant, the Applicant must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Applicant is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this water quality certification.

CONDITION 30. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to all remedies, penalties, processes, or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

CONDITION 31. In response to a suspected violation of any condition of this certification, the San Francisco Bay Regional Water Board and State Water Board staff may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs of the reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Wat. Code §§ 1051, 13165, 13267 and 13383). In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate.

CONDITION 32. No Project activities shall commence until all necessary federal, state, and local approvals have been obtained. The Applicant is responsible for compliance with all applicable federal, state, and local laws and ordinances.

CONDITION 33. Any requirement in this certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

CONDITION 34. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

CONDITION 35. Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action if necessary, to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 36. The State Water Board will provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification.

CONDITION 37. Activities associated with construction and maintenance of the Project that threaten or potentially threaten water quality may be subject to further review by the Deputy Director and Executive Officer.

CONDITION 38. The Applicant must submit any changes to the Project which would have a significant or material effect on the findings, conclusions, or conditions of this water quality certification, to the State Water Board for review and written approval prior to implementation. If the State Water Board is not notified of a significant change to the Project, it will be considered a violation of this certification.

CONDITION 39. This certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

CONDITION 40. This water quality certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28 and owed by the Applicant.

Eileen Sobeck
Executive Director

November 9, 2020
Date

Enclosures: Figure 1: FERC Order Compliance Project for Anderson Reservoir and Dam Activities Map, and Attachment A

Attachment A: Project Description for Federal Energy Regulatory Commission Order Compliance Project for Anderson Reservoir and Dam

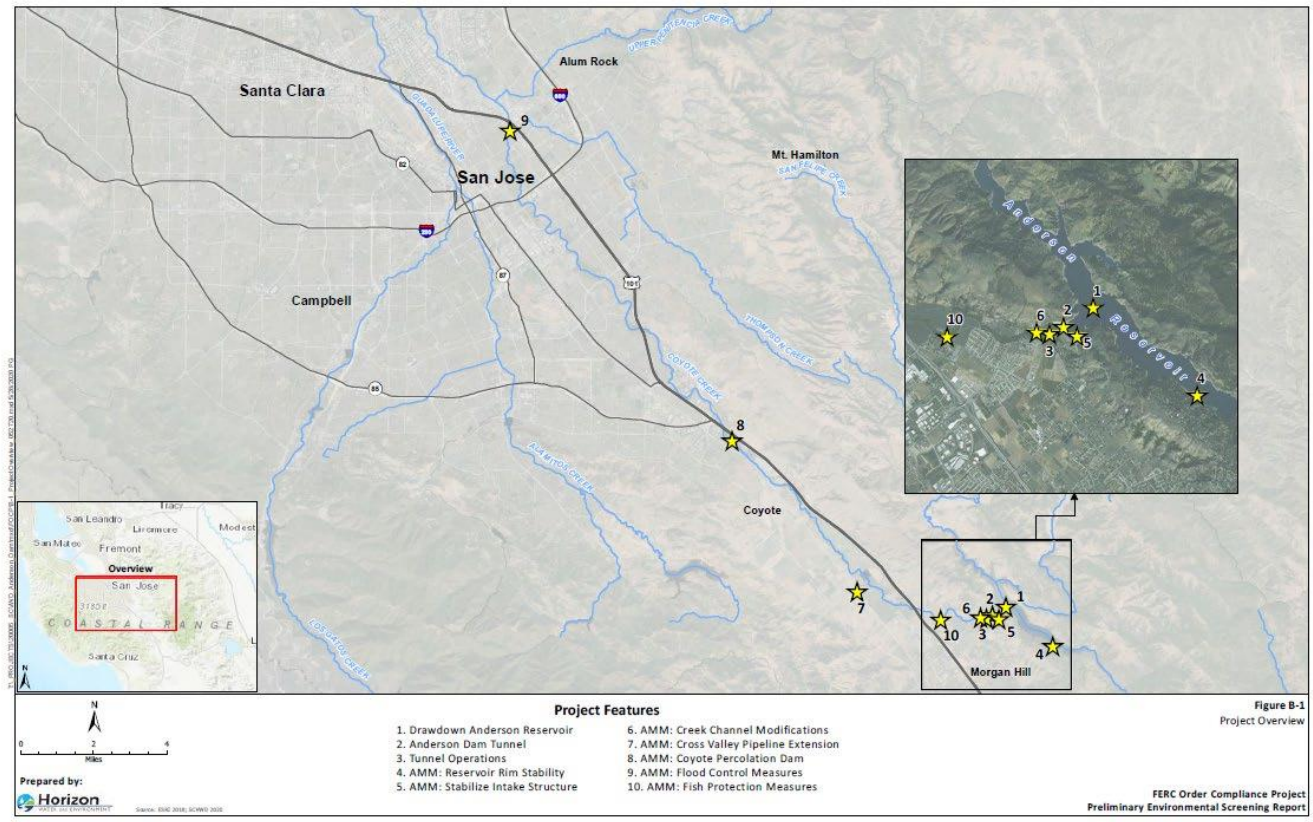

Figure 1: FERC Order Compliance Project for Anderson Reservoir and Dam Activities Map [18].

[18] The Environmental Assessment for the Project can be found in FERC eLibrary online at: www.ferc.gov. Last accessed on November 3, 2020.

ATTACHMENT A:

PROJECT DESCRIPTION FOR FEDERAL ENERGY REGULATORY COMMISSION ORDER COMPLIANCE PROJECT FOR ANDERSON RESERVOIR AND DAM

NOVEMBER 2020

1.0 Project Description

The Federal Energy Regulatory Commission (FERC) Order Compliance Project for Anderson Reservoir and Dam (Project) is located in the Coyote Creek watershed in Santa Clara County, California (see Water Quality Certification Figure 1). The Project is owned and operated by Santa Clara Valley Water District (Valley Water) and is part of the Anderson Dam Hydroelectric Project (FERC Project No. 5737).

Anderson Dam, which impounds Coyote Creek, is approximately 89,073 acre-feet at an elevation of approximately 627 feet. In 2012, the Anderson Dam Seismic Retrofit Project (ADSRP) was initiated to address seismic deficiencies at Anderson Dam. Studies and investigations identified that the spillway at Anderson Dam lacks the capacity to safely pass flood flows associated with the probable maximum flood (PMF) established by FERC. The dam outlet does not have the capacity to efficiently draw down the reservoir during an emergency and is vulnerable to seismic events. FERC issued an order on February 20, 2020, requiring Valley Water to reduce the reservoir level to a surface water elevation of 488 feet and expedite some aspects of the retrofit ahead of the broader ADSRP. In response, Valley Water created the Project, which includes measures to reduce the risk of dam failure in the event of a seismic event and reduce potential impacts on beneficial uses from the Project and the ADSRP. These Project components include[1]:

1. Anderson Dam Tunnel construction;
2. Coyote Percolation Dam replacement;
3. Cross Valley Pipeline and Chillers installation;
4. Existing Intake reinforcement;
5. Bank and Rim stability;
6. Northern channel reopening in Coyote Creek;
7. Flood management measures; and
8. Fish protection and monitoring.

1.1 Project Components

1.1.1 Anderson Dam Tunnel

Valley Water proposes to construct a new outlet tunnel (Anderson Dam Tunnel) to allow increased water releases into Coyote Creek below Anderson Dam. The Anderson Dam Tunnel consists of a new reservoir inlet with a 400-foot-long, eight-foot-diameter reservoir inlet, a new diversion tunnel, outlet structure, discharge channel, and reopening of the original Coyote Creek northern channel downstream of the dam (discussed in the Section 1.2.5). The new tunnel will be constructed just south of the spillway, on the north side of Anderson Dam. The outlet structure will include flow

[1] Project components 2 through 7 are avoidance and minimization measures.

control valves and energy dissipation chambers and will flow into a rip rap lined discharge channel that will flow into Coyote Creek. It is expected that the construction of the outlet structure and discharge channel will require deepening of approximately 500 feet of the Anderson Force Main pipeline. Additional features include a trash rack located at the upstream end of the tunnel and a floating log boom to prevent woody material and debris from clogging the tunnel.

Upon completion of the Anderson Dam Tunnel, the tunnel and existing outlet works will be operated to allow flows of up to 2,500 cubic feet per second (cfs) (2,000 cfs through the Anderson Dam Tunnel and 500 cfs through the existing outlet works structure). Outflows will be split, with most of the flow passing through the reopened, original Coyote Creek channel (northern channel), and the remainder passing through the current existing southern channel of Coyote Creek. The distribution of flows between the two channels will be achieved by construction of weirs at the head of the northern and southern channels as described in the northern channel reopening in Coyote Creek section.

Construction

Primary construction activities include site mobilization (i.e., closing recreational areas and minor grading), site preparation (i.e., clearing and preparing staging and stockpile areas), and Anderson Dam Tunnel construction (i.e., tunnel excavation and installation of the outlet structure). Tunnel excavation will be conducted by using road headers, a micro-tunnel boring machine (MTBM), and controlled detonations. During excavation, spoils will be transported in trucks to the appropriate disposal area. Waste material excavated during construction will be temporarily stockpiled in a designated disposal area in the main Anderson Lake County Park boat ramp parking area. By the time the low-level outlet system is completed, it is estimated the disposal area will contain up to 130,000 cubic yards of material. Additionally, approximately 15,000 cubic yards of dredged lake sediment from the reservoir inlet will be moved approximately 800 to 1,000 feet upstream of the Anderson Dam Tunnel where the boring ends. Silk turbidity curtains will be used to mitigate temporary impacts to water quality during dredging operations. Three designated staging areas will be used for office and equipment trailers, equipment and materials storage, equipment maintenance facilities, fuel pumps and fuel storage tanks, concrete batching, construction vehicle parking, and materials laydown.

1.2 Avoidance and Minimization Measures

1.2.1 Percolation Dam Replacement

Coyote Percolation Dam on Coyote Creek is a flashboard dam used to impound water in the Coyote Percolation Pond for the purpose of groundwater recharge and water supply. The percolation dam is located approximately 11 miles downstream of

Anderson Dam. Valley Water is proposing to replace the flashboard dam with an inflatable bladder dam that would enable more flexibility in raising and lowering the dam as necessary in response to changing creek flows. The bladder dam will be 112-foot-long by 10-foot-high. Replacement of the existing fish ladder stationary panels with adjustable panels for enhanced fish passage is also proposed.

Construction

Construction activities for the proposed bladder dam installation include removal of the existing metal flashboard dam, demolition of existing concrete foundation and sill, removal of existing fish ladder stationary panels, extension and modification of existing abutment wall and fish ladder channel wall, construction of new concrete foundation/sill, installation of the new inflatable bladder dam, and installation of new adjustable panels in the existing fish ladder channel. The existing flashboard dam concrete foundation and sill will be demolished and rebuilt as required by the new bladder dam system. The existing fish ladder channel wall adjacent to the new bladder dam will be modified and extended laterally to accommodate the new anchoring system. The existing abutment wall on the east bank may also need to be extended laterally in the pond to accommodate the new anchoring system. Additionally, an equipment control building will be constructed at the west bank downstream of the new bladder dam. Construction of the retaining wall and building slab foundation will require moderate excavation and removal or trimming of existing bushes and tree branches along the slope. Disturbed areas will be landscaped to replace the removed bushes and vegetation.

Proposed work areas will be isolated and dewatered by installation of temporary upstream and downstream cofferdams made of sheet-piles or impermeable, earthen material and dewatering pumps. A pipeline will convey up to 20 cfs around the work area. Following installation of the cofferdams and pipeline system, and prior to any pumping within the work area, a qualified fisheries biologist will collect and relocate any fish to a suitable area downstream from the work area. A pump will be installed to divert flows upstream from the work area during construction into Pond 10A (Coyote Parkway Freshwater Wetland) to maintain habitat requirements. The dewatering system will be inspected daily during the construction period and surplus materials will be stored on site for repairs, as determined necessary.

1.2.2 Cross Valley Pipeline and Chillers

Valley Water is proposing to increase the release of imported water from San Luis Reservoir into Coyote Creek in order to minimize impacts to groundwater and aquatic resources. To accomplish this, Valley Water proposes to release 5-30 cfs of imported water into Coyote Creek via the Coyote Discharge Line depending on water availability and season. Additionally, Valley Water is proposing to extend the Cross Valley Pipeline

(CVP) to release downstream of Ogier Ponds[2] for the purpose of groundwater recharge and to support instream flows. The pipeline is proposed to have a capacity of 50 cfs but on average is expected to deliver 30 cfs during the dry season and 20 cfs during the wet season. The CVP extension will run along existing streets primarily before discharging into Coyote Creek, disturbing approximately 1.2 acres of land. The extension will discharge just below Ogier Ponds at a new energy dissipation structure intended to reduce velocities coming out of the CVP extension.

Energy dissipation structure

The construction of the energy dissipation structure will include a bank rehabilitation zone downstream of the dissipation structure. The proposed bank rehabilitation zone is approximately 130-linear-feet-long and 0.07 acres and is intended to restore the over-steepened bank, prevent bank erosion, and to provide habitat enhancements (potentially including large wood and/or appropriate revegetation). The bank rehabilitation zone proposal involves rebuilding the banks using willow planting, select boulders, log structures, root wads, willow mattresses, and other woody vegetation.

Construction

Construction of the proposed CVP extension will require trenching and excavation work for pipeline construction and an instream steel sheet-pile cofferdam to isolate and dewater a portion of the adjacent creek banks. The cofferdam will be constructed parallel to the bank (as far out into the channel as needed) and tied back into the riverbanks at the limits of the work area. Water will be released onto adjacent upland areas to remove any sediment and reduce turbidity (e.g., filter bags, infiltration basins, or use of vegetative buffers) for percolation into the ground. Should groundwater seep into the dewatered segment, this water will also be pumped to these same adjacent upland areas. The cofferdam will be removed after completion of the CVP extension. Valley Water will monitor water quality below the dewatering release point for turbidity and adjust dewatering rates and/or treatment methods if turbidity thresholds are approached or exceeded.

[2] Ogier Ponds is located approximately four miles downstream from Anderson Dam on Coyote Creek.

Water Chillers

Valley Water is proposing to install four chillers at the Anderson Dam Hydroelectric Project facility to cool the imported water that is to be released into the Cold Water Management Zone[3] (CWMZ). The chillers measure approximately 12-feet-wide by 32-feet-long by 13-feet-high and weigh 55,000 pounds each. They will require the construction of a concrete pad at the Anderson Dam Hydroelectric Project facility. The imported water being released into the CWMZ is expected to be about 10 cfs and chilled to as cool as 16 degrees Celsius, once the pipeline extension is up and operational.

1.2.3 Existing Intake Reinforcement

To reduce slope instability and potential for landslides Valley Water will mitigate the risk of landslides near the existing intake. Improvements and modifications may include earthquake damage repairs, installation of rock anchors on the slopes of the intake structure to stabilize slopes, drilled piers around the foundations of the two upper ports of the intake structure, reinforcement of intake ports (including thickening of structural sections), and re-grading of landslides above the boat ramp. Specific improvements will be determined through monitoring and geotechnical borings. Existing access roads may require maintenance, such as minor grading and shaping, prior to use. Staging and disposal for any potential stabilization actions will occur within designated areas.

1.2.4 Bank and Rim Stability

Valley Water will mitigate risks of landslides along the banks of the reservoir. Specific reservoir bank and rim stabilization improvements will be determined through landslide monitoring. Potential direct repairs at individual slides may include filling of cracks, concrete slabs, etc.; buttressing of slides (i.e., placing material at the toe of the slides); installing retaining walls (i.e., soldier pile, mechanically stabilized earth, gravity, and cantilever); and installing rock/soil nails throughout the slope.

1.2.5 Northern Channel Reopening in Coyote Creek

Modifications will be made to accommodate the increased flow rates through the existing outlet tunnel and the new Anderson Dam Tunnel. The historical northern channel of Coyote Creek that was decommissioned during the original construction of Anderson Dam will be reopened. The alignment of the reopened northern channel will be approximately the same as the historical channel. The northern channel will be designed to accommodate peak flow releases from the new Anderson Dam Tunnel and erosion control measures will be incorporated into the design. The northern channel bed will be lined with an engineered fill. The banks will be lined with a biotechnical

[3] The CWMZ runs approximately 5 miles, from the base of Anderson Dam to Golf Course Drive.

lining that will allow for the growth of vegetation. A revegetation plan will be prepared that will detail the planting in the channel banks and riparian zone. Habitat improvement features will be included in the plan as well.

Distribution of flow between the southern and northern channels (Table 1) will be achieved by construction of a 72-foot-wide sharp-crested weir at the head of the northern channel, and a 5-foot-wide U-shaped channel invert weir at the head of the southern channel. The weirs will be designed so that low flows will be split between the channels in a manner that provides environmental benefits to each channel and does not increase the existing potential for fish stranding. High flows will be split in a manner that minimizes the potential for erosion of the southern channel. As discussed in Section 1.1.1 (Anderson Dam Tunnel), flows of up to 2,000 cfs can flow through the Anderson Dam Tunnel and up to 500 cfs can flow through the existing outlet works structure. However, Valley Water's proposal targets a maximum flow of 2,000 cfs as shown in Table 1 below.

Construction

During construction within the creek channel, Coyote Creek flows will be diverted around the work area. At the start of construction, a dike will be installed to separate the existing Coyote Creek flows from the backwater area. The backwater area will then be temporarily dewatered to allow for construction within the creek. Groundwater seepage into the dewatered pond will be pumped to the on-site water treatment system, treated, and released back into Coyote Creek. The dike will be removed after completion of the modifications. Construction of the weir in the southern channel will require temporary bypassing of flows released from Anderson Reservoir by pumping around the location of the weir. Water releases from dewatering the northern channel and the weir bypass flows will be monitored for turbidity. Following dewatering of the backwater area, the Anderson Force Main pipeline and a return pipeline from Valley Water's hydroelectric plant will be relocated by deepening the channel by up to 10 feet. Relocation will require trenching to expose the existing pipe, demolition of the existing pipe, deepening of the trench, installation of new pipe, and backfilling of the trench with the same material that was previously excavated. An excavator will be used to recontour the Anderson Dam Tunnel outlet channel and reopened northern channel. Riprap bedding and riprap will be imported to the site for placement in the Anderson Dam Tunnel outlet channel to minimize erosion.

Table 1: Proposed Releases from the Outlet Works Structure between Northern and Southern Channels

Outlet Releases (cfs)	Northern Channel (cfs)	Southern Channel (cfs)
6	0	6
100	0	100
1,000	830	170
2,000	1,728	272

1.2.6 Flood Management Measures

To reduce the risk of flooding while Anderson Reservoir is maintained at a surface elevation of 488 feet and to accommodate the greater flow releases made available by the new outlet tunnel, Valley Water will implement several flood measures along Coyote Creek along several urbanized areas of San Jose. These measures will be implemented along Coyote Creek between Highway 280 and Old Oakland Road. The measures will include approximately 7,700-linear-feet of floodwalls, a single 350-foot-long levee, and acquiring or elevating low lying residences. The floodwalls, ranging from two to nine feet in height, are to be constructed of either sheet piles or reinforced concrete. The 350-foot-long levee will be 12-feet-wide at the top with a slope of 2:1 and four-feet-tall. Below the levee, the existing grade will be excavated and backfilled with fill material similar to the levee material. For the low-lying properties that cannot be protected by the levee and floodwalls, Valley Water may purchase or raise the homes located on parcels to safe levels.

Construction

Flood protection measures will be constructed along three reaches: Reach 5, extending from Old Oakland Road to Mabury Road; Reach 6 extending from Mabury Road to Santa Clara Street; and Reach 7, extending from Santa Clara Street to Highway 280. Three staging areas will be used for construction of the flood management measures: 3.5-acre staging area located east of Corie Court; 0.6-acre staging area north of 17th Street (adjacent to Coyote Creek); and 1.3 acre staging area northwest of East William Drive (adjacent to Coyote Outdoor Classroom and north of 16th Street).

Sheet piles will be installed using silent piling technology that press in the sheets without hammering or vibrations. A crane will be used to lift the machine into place and to move steel sheet piles. Some earthwork activities may be necessary for final grading. The levee will be approximately 350-feet-long and will begin at the upstream end of an existing levee and continue further upstream along Coyote Creek. The levee will be trapezoidal shaped, 12-foot-wide at the top, with sides sloping down at 2:1, and will be 4-feet-tall. Below the 280-foot-wide base of the levee, the existing grade will be excavated to a depth of five feet below grade and backfilled with fill material similar to the levee material.

Elevation of homes in low-lying areas will involve construction methods to raise the house above the specified flood water surface elevation. This involves trenching and I-beam installation into the trenches. The foundation, including the slab and walls, will be extended or raised to the new floor framing elevation.

1.2.7 Fish Protection and Monitoring

Coyote Creek from the San Francisco Bay to Anderson Dam is designated critical habitat for the federally threatened Central California Coast steelhead, *Oncorhynchus mykiss (O. mykiss)*. Reduction of flows into Coyote Creek and a reduced cold water pool in Anderson Reservoir will result in increased water temperatures in Coyote Creek during the summer. In order to augment flows during summer and fall and reduce effects to fish, imported water will be released to the creek from the Coyote Discharge Line through chillers, and when the CVP Extension is complete, into the creek downstream from the Ogier Ponds.

Fish rescue and relocation efforts will be conducted in Coyote Creek CWMZ (from Anderson Dam to Ogier Ponds). Fish relocation efforts will be initiated concurrent with dropping stream flows in Coyote Creek. Capture methods include backpack electrofishing and seine nets. All *O. mykiss* captured during the Coyote Creek rescue and relocation effort will be relocated to Upper Penitencia Creek; Sacramento blackfish (*Orthodon microlepidotus*) and Pacific lamprey (*Entosphenus tridentatus*) will be relocated to wetted areas of Coyote Creek downstream of the confluence with Upper Penitencia Creek. All other fish species captured will be released into the nearest pool habitat location within Coyote Creek. Adverse effects of fish relocation will be minimized for species covered in the Santa Clara Valley Habitat Plan (VHP). Densities of fish in relocation areas will not exceed natural densities that have previously been recorded in the relocation areas. Measures to minimize the potential for spreading invasive species or pathogens will be implemented.

Fyke traps will be installed in Coyote Creek downstream of the Anderson Reservoir outlet to capture fish passing through the existing reservoir outlet and reduce the risk of resident *O. mykiss* trout in the reservoir entering the Coyote Creek CWMZ during the Anderson Dam Tunnel construction. All captured fish will be held in aerated containers or the trap prior to being identified and enumerated, then released within Anderson Reservoir.

Water quality conditions (e.g., water temperature and dissolved oxygen) within the CWMZ and the remaining pool in Anderson Reservoir will be monitored by Valley Water to determine if conditions are suitable for *O. mykiss* juvenile rearing. CWMZ monitoring will include monitoring migration flows, *O. mykiss* presence and abundance, water temperatures, and dissolved oxygen levels through the construction of the Project. Additionally, impacts of sediment on designated *O. mykiss* critical habitat will be monitored prior to Project implementation, and during Project construction within the CWMZ, including spawning gravel quality, pool depth, benthic macroinvertebrates (BMI) habitat quality, and suitable juvenile rearing.