

**BOARD OF DIRECTORS
SANTA CLARA VALLEY WATER DISTRICT**

RESOLUTION NO. 23-

**CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE FISH AND
AQUATIC HABITAT COLLABORATIVE EFFORT PROJECT AND ADOPTING CEQA
FINDINGS OF FACT, STATEMENT OF OVERRIDING CONSIDERATIONS, AND
MITIGATION MONITORING AND REPORTING PROGRAM**

WHEREAS, the Santa Clara Valley Water District (“Valley Water”) proposes to implement the Fish and Habitat Collaborative Effort (“FAHCE”) Project (“Project”); and

WHEREAS, pursuant to the California Environmental Quality Act (“CEQA”) (Public Resources Code §§ 21000 et seq.), Valley Water as lead agency has prepared a Final Environmental Impact Report (“EIR”) for the Project (State Clearinghouse Number #2015022008); and

WHEREAS, prior to approving a project for which an EIR was prepared, Valley Water as the lead agency is required to certify a Final EIR, adopt written findings of fact for each significant environmental effect of the Project, adopt a statement of overriding considerations if needed, and adopt a mitigation monitoring and reporting program, in accordance with CEQA Guidelines §§ 15090, 15091, 15093, and 15097; and

WHEREAS, Valley Water properly prepared and circulated a Notice of Preparation for the EIR between February 2 through March 3, 2015, as required by CEQA Guidelines § 15082; and

WHEREAS, pursuant to CEQA Guidelines § 15082(c), Valley Water held an EIR scoping meeting on June 19, 2017, at the Valley Water Boardroom at 5700 Almaden Expressway in San José; and

WHEREAS, following filing a Notice of Completion and Notice of Availability (“NOA”) with the State Office of Planning and Research and making the NOA publicly available, a Draft EIR was published on June 30, 2021, and was circulated for public review for a 45-day public review period, which was subsequently extended to October 15, 2021; and

WHEREAS, Valley Water received 25 written comment letters on the Draft EIR; and

WHEREAS, Valley Water evaluated and prepared written responses to these comments as required by CEQA Guidelines § 15088; and

WHEREAS, Valley Water prepared the Final EIR as required by CEQA Guidelines § 15132, consisting of a comprehensive revision to the Draft EIR (including appendices), public comments on the Draft EIR received during the Draft EIR public review period, a list of commenters, responses to these public comments, and an errata sheet; and

WHEREAS, Valley Water made the Final EIR publicly available on its website on June 30, 2023; and

WHEREAS, pursuant to CEQA Guidelines § 15088(b), Valley Water provided proposed written response to all public agencies that submitted timely comments on the Draft EIR at least 10 days prior to EIR certification; and

WHEREAS, the Final EIR satisfies all requirements of CEQA and the CEQA Guidelines; and

WHEREAS, following publication of the Final EIR, Valley Water staff recommended that the Valley Water Board of Directors approve the FAHCE-plus Alternative, which is the environmentally superior alternative in the Final EIR, and this Resolution and its Exhibits refer to the FAHCE-plus Alternative as the Project; and

WHEREAS, the Valley Water Board of Directors, at its regular session on August 8, 2023, reviewed and considered information on the significant environmental impacts of the Project, including information in the Final EIR, comments on the Draft EIR received during and after the close of the EIR public review period, and written and oral testimony at EIR and Project meetings and hearings; and

WHEREAS, no information added to the Draft EIR, no comments made in the public meetings conducted by Valley Water, or any additional information submitted to Valley Water have produced significant new information requiring Draft EIR recirculation under CEQA Guidelines § 15088.5; and

WHEREAS, Valley Water has prepared CEQA Findings of Fact, in compliance with Public Resources Code §§ 21081 and 21081.5 and CEQA Guidelines § 15091, for every significant impact of the Project identified in the EIR and for each alternative evaluated in the EIR, including an explanation of the rationale for each finding (attached as Exhibit A); and

WHEREAS, the Project will have significant impacts that cannot be mitigated to less than significant levels, and Valley Water has prepared a Statement of Overriding Considerations in compliance with Public Resources Code § 21081(b) and CEQA Guidelines § 15093 (also included in Exhibit A), which concludes that specific economic, legal, social, technological, and other benefits of the Project outweigh the significant and unavoidable impacts identified in the EIR; and

WHEREAS, Valley Water has prepared a Mitigation Monitoring and Reporting Program in compliance with Public Resources Code § 21081.6(a) and CEQA Guidelines § 15097 (Exhibit B) to monitor implementation of the mitigation measures identified in the Final EIR during project implementation; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Santa Clara Valley Water District that:

1. Pursuant to CEQA Guidelines § 15090, the Board of Directors certifies the Final EIR, certifying that:
 - a. The Final EIR has been completed in compliance with CEQA.
 - b. Prior to making a decision on the Project, the Board of Directors has reviewed and considered the information contained in the Final EIR and the record including, but not limited to, technical reports, oral and written comments provided by the public and state and local agencies, and responses to said comments contained in the Final EIR.
 - c. The Final EIR reflects the independent judgement and analysis of Valley Water.

2. The Board of Directors makes and adopts the Findings of Fact, as required by Public Resources Code §§ 21081 and 21081.5 and CEQA Guidelines § 15091, which are attached as Exhibit A and incorporated fully by this reference; and
3. The Board of Directors adopts the Statement of Overriding Considerations, as required by Public Resources Code § 21081(b) and CEQA Guidelines § 15093, which is also included in Exhibit A and incorporated fully by this reference; and
4. The Board of Directors adopts the Mitigation Monitoring and Reporting Program, as required by Public Resources Code § 21081.6(a) and CEQA Guidelines § 15097, which is attached as Exhibit B and incorporated fully by this reference.
5. The documents and materials which constitute the record of proceedings upon which this decision is based are available from the Clerk of the Board of Valley Water, 5750 Almaden Expressway, San Jose, CA 95118-3614.
6. The Chief Executive Officer is hereby authorized and directed, on behalf of Valley Water's Board of Directors, to execute any such documents and to perform any such acts as may be deemed necessary or appropriate to accomplish the intent of this resolution.

PASSED AND ADOPTED by the Board of Directors of the Santa Clara Valley Water District by the following vote on August 8, 2023:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

JOHN L. VARELA
Chair, Board of Directors

ATTEST: MICHELE L. KING, CMC

Clerk, Board of Directors

EXHIBIT A COVERSHEET

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE FISH AND AQUATIC HABITAT COLLABORATIVE EFFORT PROJECT: FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

No. of Pages: 54

Exhibit Attachments: None

EXHIBIT A

**FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE FISH AND AQUATIC HABITAT
COLLABORATIVE EFFORT PROJECT:
FINDINGS OF FACT AND STATEMENT
OF OVERRIDING CONSIDERATIONS**

I. INTRODUCTION

This document presents Findings of Fact (Findings) by the Board of Directors (Board) of the Santa Clara Valley Water District (Valley Water) regarding the Final Environmental Impact Report (Final EIR) for the Fish and Aquatic Habitat Collaborative Effort Project (Project), for which Valley Water is acting as the California Environmental Quality Act (CEQA) lead agency. (State Clearinghouse No. 2015022008.) The Findings presented herein were prepared in compliance with CEQA and the State's CEQA Guidelines. Additional substantial evidence supporting all Findings made herein is contained in the Final EIR and/or the record of proceedings.

The Findings are organized as follows:

- Section I provides an introduction and describes the need for these Findings.
- Section II provides the background and context for the Project.
- Section III describes the Final EIR Proposed Project, including the Project objectives, and describes the FAHCE-plus Alternative.
- Section IV describes the alternatives analyzed in the EIR.
- Section V describes the best management practices (BMPs) that would be implemented during Project implementation to avoid or minimize adverse effects on the environment.
- Section VI describes the EIR process and lists the comments received on the Draft EIR.
- Section VII describes the Final EIR and the Final EIR certification process.
- Section VIII summarizes the administrative record upon which the Board based its Findings.
- Section IX presents Findings for the FAHCE-plus Alternative regarding environmental impacts found to be less than significant, environmental impacts that can be mitigated to less than significant, significant environmental impacts that cannot be mitigated to less than significant), and the FAHCE-plus Alternative's contributions to cumulative impacts.
- Section X presents Findings regarding alternatives analyzed in the EIR, alternatives considered but rejected from further analysis, and comments on the Draft EIR and further consideration of an additional alternative.
- Section XI presents Findings that no significant new information has been added to the EIR in Draft EIR comments, responses to Draft EIR comments, and Draft EIR revisions made in the Final EIR that would trigger Draft EIR recirculation.

- Section XII describes the Mitigation Monitoring and Reporting Program (MMRP) for the Project.
- Section XIII presents a Statement of Overriding Considerations for impacts that cannot be mitigated to a less than significant level.
- Section XIV contains references cited in these Findings.

The following paragraphs summarize CEQA's requirements for Findings and a Statement of Overriding Considerations. If a proposed project would have significant adverse effects on the environment, CEQA requires the lead agency to prepare findings describing how those effects would be reduced or avoided. Under Public Resources Code Section 21081[a], several findings are possible:

- (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.
- (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

Public Resources Code Section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors." CEQA Guidelines Section 15364 adds another factor: "legal" considerations. [See also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 565.] The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project [*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417]. "[F]easibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." [*Id.*; see also *Sequoia Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.] Alternatives and mitigation measures may also be determined to be infeasible if they do not "fully satisfy the objectives associated with a proposed project" or are "undesirable from a policy standpoint." [*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998, 1000.]

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project (CEQA Guidelines Section 15093). For a project that has significant impacts that cannot feasibly be avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a Statement of Overriding Considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects" [CEQA Guidelines Sections 15093, 15043(b); see also Public Resources Code Section 21081(b)].

II. BACKGROUND

Valley Water has jurisdiction throughout Santa Clara County (County) and began managing water resources in the County in 1929, largely in response to over-pumping of Santa Clara Valley groundwater. Valley Water constructed conservation reservoirs to capture rainfall and replenish the underground aquifer through managed groundwater recharge.

In 1996, the Guadalupe-Coyote Resource Conservation District (GCRCD) filed a complaint with the State Water Resources Control Board (SWRCB). The complaint alleged that Valley Water operations affected fish and wildlife, in conflict with requirements of the Water Code, Fish and Game Code, and other State of California laws.

In response to the 1996 complaint, Valley Water convened local environmental organizations and state and federal resource agencies in settlement negotiations and developed what is known as the Fish and Aquatic Habitat Collaborative Effort (FAHCE). As of the time of Final EIR publication, FAHCE participants included Valley Water; Trout Unlimited; California Trout, Inc.; the Northern California Council of Federation of Fly Fishers (now known as the Northern California Council of Fly Fishers International); the Pacific Coast Federation of Fishermen's Associations; the National Marine Fisheries Service (NMFS); the U.S. Fish and Wildlife Service (USFWS); and the California Department of Fish and Wildlife (CDFW, formerly known as the California Department of Fish and Game), collectively referred to hereafter as the Initialing Parties. Measures developed through FAHCE are intended to modify instream flows and improve habitat conditions, as appropriate, to meet the management objectives specified in the *Settlement Agreement Regarding Water Rights of the Santa Clara Valley Water District on Coyote, Guadalupe and Stevens Creeks*, initialed by the Initialing Parties on May 27, 2003 (Settlement Agreement; Appendix B of Final EIR; Valley Water et al. 2003).

It should be noted that Valley Water has implemented many changes to reservoir operations, monitoring and permit compliance, geomorphic functions, and fish passage impediments since the FAHCE process was initiated in 1996. These changes align with the objectives of the Settlement Agreement and, in some cases, resulted in early implementation of elements identified in the Settlement Agreement and improved baseline conditions for fisheries.

III. DESCRIPTION OF THE FINAL EIR PROPOSED PROJECT AND FAHCE-PLUS ALTERNATIVE

Valley Water is proposing to implement the FAHCE Settlement Agreement through a Fish Habitat Restoration Plan (FHRP; Appendix A of Final EIR). The FHRP has been designed as a restoration project to implement measures to improve fish passage and enhance fish habitat within the Stevens Creek and Guadalupe River watersheds while maintaining a reliable current and future water supply and water deliveries where Valley Water holds water rights licenses in northern Santa Clara County.

The FAHCE Settlement Agreement management objectives (Section 6.2.2; Appendix B of Final EIR) provided guidance to Valley Water for framing the Project objectives. The fundamental objectives of the Project are as follows; they are intended to be implemented together in a balanced manner:

Objective 1: Restore and maintain a healthy steelhead population in the Stevens Creek watershed by providing suitable spawning and rearing habitat, adequate passage for upmigrating adults and outmigrating juvenile steelhead, and extended distribution of suitable habitat in Phases 2 and 3 as determined through the adaptive management program (AMP).

Objective 2: Restore and maintain healthy steelhead and Chinook salmon populations in the Guadalupe River watershed by providing suitable spawning and rearing habitat, adequate passage for upmigrating adults and outmigrating juvenile fish, and extended distribution of suitable habitat in Phases 2 and 3 as determined through the AMP.

Objective 3: Maintain flexible and reliable groundwater recharge to support current and future water supply and water deliveries in a practical, cost-effective, and environmentally sensitive manner so that sufficient water is available for any present or future beneficial use.

Objective 4: To help attain the Settlement Agreement's overall management objective to restore and maintain healthy steelhead trout and salmon populations in the Guadalupe River, Stevens Creek, and Coyote Creek watersheds, adaptively manage all specific FAHCE Settlement Agreement flow and non-flow measures in all three watersheds, to effectively mitigate adverse fisheries and habitat impacts that may result from Valley Water's ongoing water supply facilities and operations.

Valley Water developed the FHRP to detail the implementation plan for certain provisions outlined in the Settlement Agreement. As defined in the Settlement Agreement, FHRP implementation includes up to four phases, with restoration measures to be adaptively managed through an AMP.

Phase 1 consists of implementing measures included in the FHRP specific to reservoir re-operation rule curves and facility improvements necessary to support fish passage, spawning and rearing habitat, and hydrologic enhancements. Phase 1 would be implemented over a 10-year term. Upon the expiration of the 10-year period, Valley Water would evaluate monitoring data to determine whether objectives are being met. If program objectives are not being met, Valley Water would implement Phase 2 for a 10-year period, potentially followed by Phase 3. If during the 10-year program evaluation Valley Water determines that program objectives are being met, they would transition to Phase 4. Phase 4 would be a continued implementation of the preceding phase where program objectives are being met. No new actions would be implemented under Phase 4 not contemplated in Phases 1, 2, and 3. Phase 4 would include monitoring Valley Water facilities and the continuation of the AMP. Maintenance of all facilities with measures defined in the FHRP would also be included in Phase 4.

This EIR evaluates the environmental impacts of implementation of the Phase 1 measures. Phase 1 includes maintenance of existing facilities and monitoring. Phases 2 through 3 would be considered based on the results of monitoring during Phase 1. These subsequent phases, and measures that might be undertaken during these phases, are speculative at this time and were, therefore, not evaluated in the EIR.

Phase 1 of the Settlement Agreement describes those measures included in the FHRP that, together with the AMP and water rights amendments, would be implemented as part of the Project. The Project includes a series of reservoir re-operation rule curves ("flow measures"), which are assessed in the Final EIR at a project-level review, and "non-flow measures" proposed to support fish passage, spawning and rearing habitat, and hydrologic function, which are assessed at a programmatic level of review in the Final EIR.

III.A PROPOSED PROJECT DESCRIBED IN FINAL EIR

The Proposed Project described in the Final EIR (hereinafter “Proposed Project”) includes implementation of the FAHCE FHRP Phase 1 measures in the Stevens Creek and Guadalupe River watersheds, adaptive management of these Phase 1 restoration measures through the AMP), and amendments to Valley Water water rights. Detailed descriptions for each Proposed Project component are provided in the Final EIR Chapter 2, *Project Description*.

The Proposed Project includes implementation of the following flow measures:

- **Proposed Winter Base Flow Releases:** Winter base flows are reservoir releases made between November 1 and April 30 to improve winter and springtime habitat for salmonids. Winter base flows combined with flood releases and stormwater spill events provide flow cues to immigrating salmonids. Valley Water also maintains minimum bypass flow releases required by CDFW Lake and Streambed Alteration Agreements.
- **Proposed Spring Pulse Flow Releases:** Spring pulse flows would improve passage conditions for migrating steelhead, Chinook salmon, or both, depending on the watershed. Pulse flows are reservoir releases of 50 cubic feet per second for a period of 5 consecutive days made between February 1 and April 30. These releases would be at the same locations as those described above for winter base flow releases, except no spring pulse flows would occur at Lexington Reservoir because the pulse flows would be muted prior to reaching areas where anadromous fish occur due to flow control at Vasona Reservoir. Upstream passage for adults would be enhanced by providing a greater volume of water over potential impediments and critical riffles. These short-term pulse events would also benefit outmigrating juveniles by providing them cues for migration, encouraging them to swim downstream from the upper watershed, aiding them in their downstream migration to the San Francisco Bay and ultimately to the ocean.
- **Proposed Summer Base Flow Releases:** Summer base flows would be made between May 1 and October 31, based on each reservoir’s re-operation rule curve, to enhance summer rearing conditions for steelhead. Between April 15 and April 30 of each year, Valley Water would survey the Guadalupe and Stevens Creek Reservoirs to determine the volume of the hypolimnion that is at or below 14 degrees Celsius (°C) at Guadalupe Reservoir and 15°C at Stevens Creek Reservoir (57.2 and 59 degrees Fahrenheit, respectively). Based on this information, Valley Water would determine the appropriate reservoir release rates to maximize the extent of the cold water management zones (CWMZs) from April 30 (when spring pulse flows end) through October 31. Proposed reservoir re-operation rule curves for applicable reservoirs are designed to maintain cold water storage availability for summer flow releases.
- **Proposed Flow Ramping:** Flow ramping is used to manage changes in reservoir release flow volumes to minimize impacts on aquatic species. Flow ramping manages changes in the rate of water flow in a slow, stepwise fashion, helping fish and other aquatic life to avoid stranding. Ramping would occur whenever Valley Water-controlled flows from reservoirs would be decreased by 50 percent or more from the existing flow condition.

The non-flow measures that would be implemented as part of the Proposed Project include:

- Proposed Fish Passage Barrier Remediation and Maintenance
- Proposed Spawning and Rearing Habitat Improvements

- Bank Stabilization Guidelines
- Completion of an Advanced Recycled and Other Urban Water Plan in Coordination with City of San José

III.B FAHCE-PLUS ALTERNATIVE (STAFF-RECOMMENDED ALTERNATIVE)

Following publication of the Final EIR, Valley Water staff has recommended that the Board of Directors approve the FAHCE-plus Alternative, which is the environmentally superior alternative in the Final EIR. The Findings and Statement of Overriding Considerations herein address the FAHCE-plus Alternative. The environmental advantages of the FAHCE-plus Alternative are summarized in Section X.A of these Findings.

The FAHCE-plus Alternative is intended to increase the benefit of reservoir releases during key salmonid lifestages. Based on hydrologic modeling outputs, an update of the FAHCE rule curves was developed that combined concepts of the Final EIR Proposed Project flow measures with an additional set of rules designed to maximize fish migration (as recommended by the Technical Work Group [TWG]). This revised scenario is known as the FAHCE-plus Alternative. This alternative was developed to determine the extent to which the fisheries benefits of the Proposed Project's rule curves could be further enhanced.

This alternative includes the following elements:

- **Pulse Flow Revisions**, which include both adjustment of the FAHCE-plus flows in magnitude, duration, and frequency based on model outputs and prioritization of multipurpose pulse flows to aid in both up- and outmigration of steelhead. Refer to Table 4.3-2 in the Final EIR for a summary of the FAHCE-plus Alternative pulse flows.
- **Winter Base Flow Adjustments**, which include conservation of reservoir storage in the winter for pulse flows; this would make summer rearing flows more reliable by reducing winter base flows.
- **Summer Base Flow Adjustments**, which include an increase in the water temperature limit in the reservoir used to calculate the reservoir cold pool volume available for summer cold water releases in the CWMZ, allowing a greater portion of the reservoir volume to be used for summer flows and to enhance summer rearing habitat while still meeting the water temperature targets in the CWMZs.

FAHCE-plus Alternative flow measure changes relative to the Proposed Project are as follows:

- **Pulse Flow Revisions:** New safeguard pulse flows were developed for the FAHCE-plus Alternative specific to each watershed. In addition to changes in magnitude and duration, the timing of pulse flows was expanded to include pulse checks throughout the adult salmonid upstream migration period. A safeguard pulse flow was added in March with a lower threshold than standard pulse flows to produce connection flows in the maximum years possible. The safeguard pulse flow would be activated if upstream steelhead migration flows are not available by March 1 of any given water year. In addition, a regular outmigration pulse flow was added in mid-April of each year. Safeguard and outmigration pulse releases would occur in years when storage is available to support summer rearing and still enable a minimum reservoir carryover.

- **Winter Base Flow Adjustments:** The Proposed Project rule curves include multiple flow levels for winter base flows based on a tiered system of reservoir storage. The FAHCE-plus scenario retained tiers that supported incubation in the critical spawning areas, for example, FAHCE CWMZs, while removing tiers that did not provide additional benefit to the spawning reaches downstream. The reserved water in the FAHCE-plus scenario enables additional pulse flows.
- **Summer Base Flow Adjustments:** Summer base flows under the Proposed Project generally would be similar or lower than under the FAHCE-plus Alternative with water temperatures that are similar or slightly more consistently cooler, especially in the Stevens Creek and Guadalupe Creek CWMZs. Under the FAHCE-plus Alternative, water temperature limits in the reservoirs used to calculate the volumes of water available for summer cold water releases were raised. As a result, a greater portion of the reservoir volume could be used under the FAHCE-plus Alternative to enhance summer flows and to provide additional rearing habitat downstream while still meeting water temperature targets in the CWMZs.

A detailed description of the FAHCE-plus Alternative is provided in the Final EIR Chapter 4, *Alternatives*, in Section 4.3, *Alternatives Evaluated in the Draft EIR*. As described in Section X of these Findings, the Board of Directors will consider the FAHCE-plus Alternative, the environmentally superior alternative, for approval.

IV. ALTERNATIVES ANALYZED IN EIR

CEQA Guidelines Section 15126.6(a) requires EIRs to evaluate a reasonable range of alternatives to the proposed project, focusing on alternatives that appear to be feasible, would meet the project objectives, and would avoid or substantially lessen at least one of the proposed project's significant environmental effects. EIRs must also analyze the No Project Alternative pursuant to CEQA Guidelines Section 15126.6 to provide decision-makers the information necessary to compare the relative impacts of approving the Project and not approving the Project.

The Draft EIR analyzed two alternatives in addition to the No Project Alternative in Chapter 4, *Alternatives*, which sets forth the objectives of the Project, summarizes the Project's significant environmental impacts, discusses the alternatives considered but eliminated from further analysis, describes the alternatives evaluated in detail, and compares the impacts of the alternatives evaluated to the impacts of the Project. The alternatives are described in Chapter 4, in Section 4.3, *Alternatives Evaluated in the Draft EIR*, of the Final EIR. Table 1 summarizes the elements in the Proposed Project and alternatives for comparison.

**TABLE 1
SUMMARY OF ELEMENTS IN PROPOSED PROJECT AND ALTERNATIVES**

Project or Alternative	FAHCE Non-flow Measures	Water Rights Petitions Granted	Operations Rule Curves: FAHCE	Operations Rule Curves: FAHCE-plus
Proposed Project	Yes	Yes	Yes	No
No Project Alternative	No	No	No	No
Non-flow Measures Only Alternative	Yes	No	No	No
FAHCE-plus Alternative	Yes	Yes	No	Yes

IV.A NO PROJECT ALTERNATIVE

Under the No Project Alternative, there would be no implementation of the FHRP Phase 1 flow and non-flow measures in the Stevens Creek and Guadalupe River watersheds, no adaptive management of these Phase 1 restoration measures through the FHRP AMP, and no amendments to associated Valley Water water rights. Existing environmental conditions and Valley Water operations would be maintained.

Under the No Project Alternative, assumptions include the following:

- The completion of safety upgrades at Almaden, Calero, and Guadalupe Reservoirs would occur as separate Valley Water projects (that is, not as part of the Proposed Project).
- There would be no changes to drainage patterns or runoff during high-flow events other than what would otherwise have occurred under the current baseline conditions.
- The stream habitat restoration measures included in this Project would not be implemented.
- The average monthly water supply delivery would remain similar. Accordingly, reductions or increases in service area deliveries would not occur other than what would otherwise have occurred without the Proposed Project.
- Water demand would increase by 2035 as projected in Valley Water’s *Urban Water Management Plan*.
- Water rights petitions for change would not be granted.

IV.B NON-FLOW MEASURES ONLY ALTERNATIVE

Under the Non-flow Measures Only Alternative, the flow measures and related monitoring proposed as part of the FHRP would not be implemented, and only the non-flow measures and related maintenance and monitoring included in the Proposed Project would be implemented. This alternative was included to determine the extent to which certain adverse impacts of the Proposed Project’s flow measures could be reduced. The non-flow measures that would be implemented under this alternative are the same as for the Proposed Project and include:

- fish passage barrier remediation
- spawning and rearing habitat improvements
- bank stabilization guidelines
- completion of the Advanced Recycled and Other Urban Water Plan
- other non-flow measures specific to both the Stevens Creek and Guadalupe River watersheds

IV.C FAHCE-PLUS ALTERNATIVE

As described in Section III.B above, the FAHCE-plus Alternative is intended to increase the benefit of reservoir releases during key salmonid lifestages. An update of the FAHCE rule curves, known as the FAHCE-plus Alternative, was developed that combined concepts of the Proposed Project flow measures with an additional set of rules designed to maximize fish migration. This alternative was developed to determine the extent to which the fisheries-related benefits of the Proposed Project's rule curves could be further enhanced.

V. BEST MANAGEMENT PRACTICES

During Project implementation, Valley Water would implement a range of BMPs and *Santa Clara Valley Habitat Plan* (VHP) conditions to avoid or minimize adverse effects on the environment. These measures are presented in Final EIR Chapter 2, *Project Description*, in Section 2.7, *Best Management Practices*. The measures include Valley Water BMPs generally used by Valley Water for construction projects from the 2014 *Best Management Practices Handbook* (Valley Water 2014a), avoidance and minimization measures from the VHP conditions (ICF International 2012) to reduce specific biological impacts, BMPs included in the 2014–2023 *Stream Maintenance Program Manual* (Valley Water 2014b) to reduce impacts on specific resources not covered in Valley Water's general BMPs or in the VHP, and best management guidelines established by the Lamprey Technical Workgroup for native lamprey during in-water work (Lamprey Technical Workgroup 2020).

Relevant BMPs and VHP conditions have been incorporated into the Project (see Final EIR Chapter 2, *Alternatives*) and are discussed within the context of each resource topic evaluation in the EIR impact analyses. Although Valley Water BMPs do not apply to barrier-removal projects located on property owned by others, Valley Water would include measures similar to Valley Water BMPs as conditions of funding these projects. VHP conditions apply only within the VHP boundaries.

Table 2 summarizes the relevant BMPs and VHP conditions. Full definitions and details for these BMPs and VHP Conditions are provided in Final EIR Appendices D and E, respectively.

**TABLE 2
RELEVANT BMPs AND VHP CONDITIONS**

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
Hydrology	
Handbook BMPs	
WQ-8: Minimize Hardscape in Bank Protection Design	Would reduce downstream or adjacent bank scour and erosion
WQ-10: Prevent Scour Downstream of Sediment Removal	Would decrease scour downstream of sediment removal by grading the channel transitions and ensuring that there are no rapid changes in the slope
WQ-15: Prevent Water Pollution	Would reduce impact to aquatic species and reduce transport of pollution in the channel network
WQ-16: Prevent Stormwater Pollution	Would reduce impact to aquatic species and reduce transport of pollution in the channel network
Stream Maintenance Program (SMP) Manual BMPs	
GEN-1: In-channel Work Window	Would reduce impacts on special-status species and reduce scour or erosion from channel confinement during higher flows
SED-2: Prevent Scour Downstream of Sediment Removal	Would reduce the potential for scour by enforcing grading zones
SED-3: Restore Channel Features	Would effectively restore channel features by installing contouring within low-flow channels in non-tidal streams
VEG-1: Minimize Local Erosion Increase from In-channel Vegetation Removal	Would minimize the potential for localized erosion by protecting the toe of bank
VHP Condition	
Condition 3: Maintain Hydrologic Conditions and Protect Water Quality	Would improve conditions for aquatic species
Groundwater Resources	
SMP Manual BMP	
SED-1: Groundwater Management	Would reduce mismanagement of groundwater supplies
Water Supply	
Handbook BMP	
WQ-15: Prevent Water Pollution	Would protect water supply through long-term protections of water for beneficial use
SMP Manual BMPs	
GEN-1: In-channel Work Window	Would add protection from short-term disruptions for in-channel maintenance or disturbance
GEN-16: In-channel Minor Activities	Would add protection from short-term disruptions for in-channel maintenance or disturbance
SED-3: Restore Channel Features	Would protect water supply through long-term protections of water for beneficial use

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
VHP Conditions	
Description	
Condition 3: Maintain Hydrologic Conditions and Protect Water Quality	Would affect water supply through long-term protections of sources of water for beneficial use and add protection from short-term disruptions for in-channel maintenance or disturbance.
Condition 5: Avoidance and Minimization Measures for Instream Operations and Maintenance	Would add protection from short-term disruptions for in-channel maintenance or disturbance
Water Quality	
Handbook BMPs	
Description	
WQ-6: Limit Impact of Concrete Near Waterways	Would reduce impacts to stream pH levels by isolating fresh concrete
WQ-15: Prevent Water Pollution	Would reduce impacts to water quality from pollution
WQ-16: Prevent Stormwater Pollution	Would reduce impacts to water quality from stormwater pollution
SMP Manual BMPs	
Description	
GEN-3: Avoid Exposing Soils with High Mercury Levels	Would reduce impacts to water quality from mercury
GEN-21: Staging and Stockpiling of Materials	Would reduce impacts to water quality by preventing sediment-laden water from being released back into waterways
GEN-22: Sediment Transport	Would reduce impacts to water quality by preventing increased sediment levels in the waterways
GEN-27: Existing Hazardous Sites	Would minimize impacts to water quality from hazardous materials at a site
VEG-1: Minimize Local Erosion Increase from In-channel Vegetation Removal	Would minimize the potential for localized erosion by protecting the toe of bank
VHP Conditions	
Description	
Condition 3: Maintain Hydrologic Conditions and Protect Water Quality	Would maintain hydrologic condition in an effort to protect water quality
Condition 4: Avoidance and Minimization for In-stream Projects	Would reduce impacts to water quality from construction-related pollution
Condition 5: Avoidance and Minimization Measures for In-stream Operations and Maintenance	Would reduce impacts to water quality from construction-related pollution
Recreation	
SMP Manual BMPs	
Description	
GEN-36: Public Outreach	Would specify measures to notify the public of Proposed Project measures and allow for public to adjust recreational use to other area facilities
GEN-37: Implement Public Safety Measures	Would specify public safety measures to notify and warn the recreating public of Proposed Project measures and mitigate public safety at recreational facilities and trails
GEN-39: Planning for Pedestrians, Traffic Flow, and Safety Measures	Would schedule bicycle and pedestrian facility closures outside the peak morning and afternoon periods in order to minimize the impact of Proposed Project measures on recreational access and use

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
Aquatic Biological Resources	
Handbook BMPs	Description
WQ-1: Conduct Work from Top of Bank	Would reduce the effect of machinery on streambed and water quality
WQ-3: Limit Impact of Pump and Generator Operations and Maintenance	Would reduce impacts to water quality and aquatic species
WQ-4: Limit Impacts from Staging and Stockpiling Materials	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-5: Stabilize Construction Entrances and Exits	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-6: Limit Impact of Concrete near Waterways	Would reduce runoff from increasing impervious surfaces and eliminate contact with uncured concrete
WQ-8: Minimize Hardscape in Bank Protection Design	Would reduce downstream or adjacent bank scour and erosion
WQ-10: Prevent Scour Downstream of Sediment Removal	Would decrease scour downstream of sediment removal by grading the channel transitions and ensuring that there are no rapid changes in the slope
WQ-15: Prevent Water Pollution	Would reduce impact to aquatic species and reduce transport of pollution in the channel network
WQ-16: Prevent Stormwater Pollution	Would reduce impact to aquatic species and reduce transport of pollution in the channel network
BI-3: Remove Temporary Fills	Would remove temporary fill material upon finishing work to reduce impacts to water quality
BI-9: Restore Riffle/Pool Configuration of Channel Bottom	Would enhance aquatic habitat and restore its functions to native biota
BI-11: Minimize Predator Attraction	Would reduce the likelihood of predation on native species
SMP Manual BMPs	Description
ANI-5: Slurry Mixture near Waterways	Would reduce impacts on terrestrial resources by ensuring that slurry does not enter waterways
GEN-1: In-Channel Work Window	Would reduce water quality impacts and impacts on anadromous special-status fish and other aquatic species
GEN-2: Instream Herbicide Application Work Window	Would reduce herbicide impacts on aquatic species
GEN-3: Avoid Exposing Soils with High Mercury Levels	Would reduce impacts to water quality from mercury
GEN-4: Minimize the Area of Disturbing	Would reduce impacts on terrestrial and aquatic habitats and species
GEN-15: Salvage Native Aquatic Vertebrates from Dewatered Channels	Would reduce the impacts on native aquatic vertebrates
GEN-17: Employee/Contractor Training	Would reduce impacts on biological resources because all appropriate Valley Water staff and contractors would receive annual training on SMP BMPs

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
GEN-20: Erosion and Sediment Control Measures	Would reduce impacts on aquatic resources by ensuring that erosion and sediment discharge into waterways and riparian vegetation is minimized
GEN-21: Staging and Stockpiling of Materials	Would reduce impacts to water quality by preventing sediment-laden water from being released back into waterways
GEN-22: Sediment Transport	Would reduce impacts on aquatic resources by preventing sediment-laden water from being released back into waterways
GEN-23: Stream Access	Would reduce impacts on aquatic resources by using existing access to streams where possible
GEN-27: Existing Hazardous Sites	Would minimize impacts to water quality from hazardous materials at a site
GEN-30: Vehicle and Equipment Maintenance	Would reduce impacts on aquatic resources by maintaining vehicles in authorized areas
GEN-31: Vehicle Cleaning	Would reduce impacts on aquatic resources by maintaining vehicles in authorized areas
GEN-32: Vehicle and Equipment Fueling	Would reduce impacts on aquatic resources by preventing accidental spills
GEN-33: Dewatering for Non-tidal Sites	Would reduce impacts on water quality and aquatic resources by diverting water around the work area and incorporating recommendations by a qualified fisheries biologist (for example, relocating aquatic resources, screening pumps, installing energy dissipators, maintaining flow downstream of the work site, avoiding stranding of aquatic resources, reducing turbidity downstream of the work site, restoring work area to pre-project conditions)
GEN-35: Pump/Generator Operations and Maintenance	Would reduce water quality impacts by maintaining pumps and generators
SED-2: Prevent Scour Downstream of Sediment Removal	Would reduce the potential for scour by enforcing grading zones
SED-3: Restore Channel Features	Would effectively restore channel features by installing contouring within low-flow channels within non-tidal streams
VEG-1: Minimize Local Erosion Increase from In channel Vegetation Removal	Would minimize the potential effect of localized erosion and degradation of water quality
VEG-3: Use Appropriate Equipment for Instream Removal	Would reduce the effect of machinery on streambeds and riparian vegetation
REVEG-1: Seeding	Would reduce erosion and water quality impacts and promote native species
VHP Conditions	Description
Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	Would reduce the impacts on protected species
Condition 3: Maintain Hydrologic Conditions and Protect Water Quality	Would maintain hydrologic condition in an effort to protect water quality
Condition 4: Avoidance and Minimization for In-stream Projects	Would avoid and reduce impacts on instream biota and water quality
Condition 5: Avoidance and Minimization Measures for In-stream Operations and Maintenance	Would avoid and reduce impacts on instream biota and water quality
Condition 8: Avoidance and Minimization Measures for Rural Road Maintenance	Would minimize potential impacts on covered species and sensitive land cover types

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
Condition 10: Fuel Buffer	Would reduce the potential for fire damage to covered biota
Condition 11: Stream and Riparian Setbacks	Would minimize and avoid impacts on aquatic and riparian land cover types, covered species, and wildlife corridors
Condition 12: Wetland and Pond Avoidance and Minimization	Would minimize potential impacts on these habitats and associated species
Lamprey Technical Workgroup BMP	Description
Best management guidelines for native lampreys during in-water work	As an avoidance and minimization measure, would reduce impacts to native lampreys during dewatering activities by relocating them to other areas
Terrestrial Biological Resources	
Handbook BMPs	Description
WQ-1: Conduct Work from Top of Bank	Would reduce the effect of machinery on streambed and water quality
WQ-4: Limit Impacts from Staging and Stockpiling Materials	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-5: Stabilize Construction Entrances and Exits	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-6: Limit Impact of Concrete near Waterways	Would reduce water quality impacts from concrete chemistry
WQ-10: Prevent Scour Downstream of Sediment Removal	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-12: Manage Well or Exploratory Boring Materials	Would reduce runoff and erosion and reduce impacts on instream biota and water quality
WQ-15: Prevent Water Pollution	Would reduce impacts on instream biota and water quality
BI-3: Remove Temporary Fills	Would remove temporary fill materials, such as for diversion structures or cofferdams upon finishing the work or as appropriate
BI-5: Avoid Impacts to Nesting Migratory Birds	Would protect nesting birds and their nests from abandonment, loss, damage, or destruction
BI-6: Avoid Impacts to Nesting Migratory Birds from Pending Construction	Would require nesting exclusion devices be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur
BI-7: Minimize Impacts to Vegetation from Survey Work	Would move survey cross-sections to avoid cutting dense riparian vegetation and minimize cutting of woody vegetation
BI-8: Choose Local Ecotypes of Native Plants and Appropriate Erosion-Control Seed Mixes	Would evaluate native plant species planting and seed options ecologically appropriate for erosion control
SMP Manual BMPs	Description
GEN-1: In-channel Work Window	Would reduce water quality impacts and impacts on anadromous special-status fish
GEN-2: Instream Herbicide Application Work Window	Would reduce herbicide impacts on aquatic species

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
GEN-3: Avoid Exposing Soils with High Mercury Levels	Would reduce water quality impacts and mercury impacts on biota
GEN-4: Minimize the Area of Disturbance	Would reduce impacts on terrestrial and aquatic habitats and species
GEN-6: Minimize Impacts to Nesting Birds via Site Assessments and Avoidance Measures	Would reduce impacts on nesting birds
GEN-6.5: Protection of Nesting Least Bell's Vireos (LBV)	Would reduce impacts on nesting LBV
GEN-7: Protection of Burrowing Owls	Would establish a 250-foot work buffer around active burrows
GEN-8: Protection of Sensitive Fauna Species from Herbicide Use	Would reduce impacts on special-status wildlife
GEN-9: Avoid Impacts to Special-status Plant Species and Sensitive Natural Vegetation Communities	Would reduce impacts on special-status plant species and sensitive natural vegetation communities
GEN-10: Avoid Impacts to Bay Checkerspot Butterfly (<i>Euphydryas editha bayensis</i>) and Associated Critical Habitat	Would reduce impacts on Bay checkerspot butterfly and its designated critical habitat
GEN-12: Protection of Special-status Amphibian and Reptile Species	Would reduce impacts on special-status amphibians and reptiles
GEN-13: Protection of Bat Colonies	Would reduce impacts on maternity and roosting bat colonies
GEN-14: Protection of San Francisco Dusky-footed Woodrat	Would reduce impacts on this species
GEN-15: Salvage Native Aquatic Vertebrates from Dewatered Channels	Would reduce the impacts on native aquatic vertebrates
GEN-19: Work Site Housekeeping	Would reduce impacts on terrestrial resources by ensuring that work sites are clean and maintained
GEN-20: Erosion and Sediment Control Measures	Would reduce impacts on terrestrial resources by ensuring that erosion and sediment discharge into waterways and riparian vegetation is minimized
GEN-21: Staging and Stockpiling of Materials	Would reduce impacts on terrestrial resources by ensuring that construction material is properly stored
GEN-22: Sediment Transport	Would reduce impacts on terrestrial resources by preventing sediment-laden water from being released back into waterways
GEN-23: Stream Access	Would reduce impacts on terrestrial resources by using existing access to streams where possible
GEN-30: Vehicle and Equipment Maintenance	Would reduce impacts on terrestrial resources by maintaining vehicles in authorized areas
GEN-31: Vehicle Cleaning	Would reduce impacts on terrestrial resources by maintaining vehicles in authorized areas
GEN-32: Vehicle and Equipment Fueling	Would reduce impacts on terrestrial resources by preventing accidental spills
GEN-33: Dewatering for Non-tidal Sites	Would reduce impacts on terrestrial resources by implementing multiple actions to limit the effects of dewatering on native plants and wildlife
SED-2: Prevent Scour Downstream of Sediment Removal	Would reduce potential erosion and water quality impacts

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
VEG-1: Minimize Local Erosion Increase from In-channel Vegetation Removal	Would minimize the potential effect of localized erosion and degradation of water quality
VEG-2: Nonnative Invasive Plant Removal	Would reduce occurrences of invasive plant species
VEG-3: Use Appropriate Equipment for Instream Removal	Would reduce the effect of machinery on streambeds and riparian vegetation
REVEG-1: Seeding	Would reduce erosion and water quality impacts and promote native species
REVEG-2: Planting Material	Would reduce the potential for nonnative vegetation species to occur and reduce impacts on native vegetation
VHP Conditions	Description
Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	Would reduce the impacts on protected species
Condition 2: Incorporate Urban-reserve System Interface Design Requirements	Would reduce the effects of urbanization on biota
Condition 3: Maintain Hydrologic Conditions and Protect Water Quality	Would reduce impacts on water quality
Condition 4: Avoidance and Minimization for Instream Projects	Would avoid and reduce impacts on instream biota and water quality
Condition 5: Avoidance and Minimization Measures for Instream Operations and Maintenance	Would avoid and reduce impacts on instream biota and water quality
Condition 7: Rural Development Design and Construction Requirements	Would minimize construction-related impacts of VHP-covered projects
Condition 8: Avoidance and Minimization Measures for Rural Road Maintenance	Would minimize potential impacts on covered species and sensitive land cover types
Condition 10: Fuel Buffer	Would reduce the potential for fire damage to covered biota
Condition 11: Stream and Riparian Setbacks	Would minimize and avoid impacts on aquatic and riparian land cover types, covered species, and wildlife corridors
Condition 12: Wetland and Pond Avoidance and Minimization	Would minimize potential impacts on these habitats and associated species
Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization	Would minimize potential impacts on serpentine habitats and associated species
Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization	Would minimize potential impacts on oak woodlands
Condition 15: Western Burrowing Owl	Would minimize potential impacts on this species
Condition 16: Least Bell's Vireo	Would minimize potential impacts on this species
Condition 17: Tricolored Blackbird	Would minimize potential impacts on this species
Condition 19: Plant Salvage When Impacts Are Unavoidable	Requires take notification to the Valley Habitat Agency with a salvage option
Condition 20: Avoid and Minimize Impacts on Covered Plant Occurrences	Would minimize potential impacts on covered plant species

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
<i>Cultural Resources</i>	
Handbook BMP	Description
CU-1: Accidental Discovery of Archaeological Artifacts or Burial Finds	Would formalize response and handling of accidental discovery so as to minimize the potential for disturbing previously recorded or newly discovered prehistoric or historic archaeological resources
SMP Manual BMPs	Description
GEN-40: Discovery of Cultural Remains or Historic or Paleontological Artifacts	Would formalize response and handling of accidental discovery so as to minimize the potential for disturbing previously recorded or newly discovered prehistoric or historic archaeological resources
GEN-41: Review of Projects with Native Soil	Would require the review and evaluation of those sites that would involve disturbance/excavation of native soil to determine their potential for affecting significant cultural resources
<i>Tribal Cultural Resources</i>	
Handbook BMP	Description
CU-1: Accidental Discovery of Archaeological Artifacts or Burial Finds	Would formalize response and handling of accidental discovery so as to minimize the potential for disturbing previously recorded or newly discovered prehistoric or historic archaeological resources
SMP Manual BMPs	Description
GEN-40: Discovery of Cultural Remains or Historic or Paleontological Artifacts	Would formalize response and handling of accidental discovery so as to minimize the potential for disturbing previously recorded or newly discovered prehistoric or historic archaeological resources
GEN-41: Review of Projects with Native Soil	Would require the review and evaluation of those sites that would involve disturbance/excavation of native soil to determine their potential for affecting significant cultural resources
<i>Geology and Soils</i>	
SMP Manual BMPs	Description
GEN-20: Erosion and Sediment Control Measures	Would minimize and/or control erosion and sedimentation
GEN-21: Staging and Stockpiling of Materials	Would specify appropriate placement and management of staging and stockpile areas to protect on-site vegetation and water quality
GEN-22: Sediment Transport	Would prevent sediment-laden water from being released back into waterways
GEN-23: Stream Access	Would restrict development of new access routes or when necessary specify placement and management to minimize impacts and disturbance to streams
SED-1: Groundwater Management	Would specify appropriate groundwater management during pumping and water quality testing

SMP/BMP/VHP Condition No.	SMP/BMP/VHP Condition Description
SED-2: Prevent Scour Downstream of Sediment Removal	Would reduce the potential for scour by enforcing grading zones
SED-3: Restore Channel Features	Would effectively restore channel features by installing contouring within low-flow channels within nontidal streams
VEG-1: Minimize Local Erosion Increase from In-channel Vegetation Removal	Would minimize the potential for localized erosion by protecting the toe of bank
Air Quality	
Handbook BMPs	Description
AQ-1: Use Dust Control Measures	Would install the BAAQMD-prescribed dust control measures for all construction projects
AQ-2: Avoid Stockpiling Odorous Materials	Would restrict the handling, storage, and disposal of odorous materials within 1,000 feet of sensitive land uses
SMP Manual BMP	Description
GEN-29: Dust Management	Would implement the BAAQMD-required dust control measures
Greenhouse Gas Emissions and Energy	
SMP Manual BMP	Description
GEN-30: Vehicle and Equipment Maintenance	Would ensure that on-site equipment is operating properly through vehicle maintenance
Noise	
SMP Manual BMP	Description
GEN-38: Minimize Noise Disturbances to Residential Areas	Would restrict construction and maintenance equipment to daytime hours and ensure that adequate mufflers are equipped
Utilities	
Not applicable	There are no applicable BMPs in reference to solid waste

VI. EIR PROCESS

In accordance with Section 15082 of the CEQA Guidelines, Valley Water, as the CEQA lead agency, prepared a Notice of Preparation (NOP). On February 2, 2015, the NOP was circulated to the public; the Governor’s Office of Planning and Research; responsible, trustee, and other relevant local, state, and federal agencies; and other interested parties of the public. The 30-day review period for the NOP remained open through March 3, 2015. Valley Water received six comment letters in response to the NOP from the following organizations: CDFW, Santa Clara County Parks and Recreation Department, NMFS, Sierra Club Loma Prieta Chapter, and Water and Power Law Group PC. On June 19, 2017, Valley Water held a Project scoping meeting at

the Valley Water office in San José. During the scoping meeting, 17 comments were received related to clarifications pertaining to the Project definition, agency coordination, suggested areas for inclusion within the scope of analysis, and technical areas to consider in the impact analysis. The scoping report, which summarizes comments received in response to the 2015 NOP and at the 2017 scoping meeting, is included in the EIR as Appendix C.

The Draft EIR was published on June 30, 2021, and was circulated for review and comment by the public and other interested parties, agencies, and organizations for an initial 45-day public review period. A Notice of Completion and a Notice of Availability for the Draft EIR were filed with Governor’s Office of Planning and Research. In response to a request by CDFW, the public review period was extended until October 15, 2021. The Draft EIR was available for public review during the comment period at the following locations:

- online at FAHCE Project website: www.valleywater.org/FAHCE
- Valley Water Headquarters, located at 5750 Almaden Expressway, San José
- public libraries:
 - Evergreen Branch Library, 2635 Aborn Road, San José
 - Los Gatos Library, 100 Villa Avenue, Los Gatos
 - Cupertino Library, 10800 Torre Avenue, Cupertino
 - Milpitas Library, 60 North Main Street, Milpitas
 - Morgan Hill Library, 660 West Main Avenue, San José

Valley Water encouraged public agencies, organizations, community groups, and all other interested persons to provide written comments on the Draft EIR prior to the end of the public review period. Valley Water conducted an online public meeting on July 21, 2021, to provide information on the Proposed Project and how to submit written comments on the Draft EIR.

A total of 25 comment letters or other written documents such as emails were received. Table 3 lists all agencies, organizations, and individuals that submitted written comments on the Draft EIR during the comment period, and the date of each written comment.

**TABLE 3
LIST OF COMMENTERS**

Agency/Organization/Individual	Letter/Email Dated
USFWS	July 28, 2021
NMFS	October 15, 2021
California Department of Transportation	August 13, 2021
CDFW	October 15, 2021
San Francisco Bay Regional Water Quality Control Board (RWQCB)	October 15, 2021
County of Santa Cruz Parks and Recreation Department	October 13, 2021
South Bay Clean Creeks Coalition	October 14, 2021
San Francisco Baykeeper	October 15, 2021
Northern California Council of Fly Fishers International	June 14, 2021
California Trout, Inc., Pacific Coast Federation of Fishermen’s Associations, Northern California Council of Fly Fishers International, and GCRCD, presented by Water and Power Law Group PC	October 15, 2021
Denise Louie, Member, Center for Biological Diversity	October 2, 2021

Agency/Organization/Individual	Letter/Email Dated
Mark Baginski	August 10, 2021
Craig M. Bianchi	August 10, 2021
Bill Collins	September 29, 2021
Michelle Gunther	September 24, 2021
Libby Lucas	October 13, 2021
Roger Mascio	September 29, 2021
Joseph E. Mertz	October 15, 2021
Charlie Mintz	September 28, 2021
Richard Orlando and Kathryn Hughes	September 30, 2021
Rich Otto	September 28, 2021
Alice Polesky	September 29, 2021
Matt Richardson	August 4, 2021
Jerry J. Smith	October 14, 2021
Lesley Stansfield	October 5, 2021

The Final EIR includes these comments and Valley Water's responses to these comments. A number of the comments received raised similar environmental points or concerns. Responses to these recurring themes were consolidated into Master Responses and are provided in Chapter 6, *Draft EIR Comments and Responses*, in Section 6.2, *Master Responses*. The 10 Master Responses are:

- Master Response 1 – Improved Conditions in Three Creeks since 1996
- Master Response 2 – Definition of Project Area
- Master Response 3 – Schedule for Implementation of Phase 1 Measures
- Master Response 4 – Adaptive Management Program
- Master Response 5 – Validity of WEAP Model Results
- Master Response 6 – Fish in Good Condition and Public Trust
- Master Response 7 – Range of Alternatives
- Master Response 8 – Environmentally Superior Alternative
- Master Response 9 – Cumulative Impacts
- Master Response 10 – Draft EIR Recirculation

Comments on the Draft EIR and responses to these comments are provided in Final EIR Chapter 6, *Draft EIR Comments and Responses*.

VII. FINAL EIR AND CERTIFICATION PROCESS

Valley Water released the Final EIR on June 30, 2023, and posted the Final EIR on its website. A Notice of Availability for the Final EIR was filed with the Governor's Office of Planning and Research.

Prior to considering adoption of these Findings, pursuant to CEQA Guidelines Section 15090, on August 8, 2023, the Board certified that

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the decision-making body of the lead agency—the Board—and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and,
- The Final EIR reflects the lead agency’s independent judgment and analysis.

Following publication of the Final EIR, Valley Water staff has recommended that the Board of Directors approve the FAHCE-plus Alternative, which is the environmentally superior alternative identified in the Final EIR. The Findings and Statement of Overriding Considerations herein address the FAHCE-plus Alternative.

VIII. ADMINISTRATIVE RECORD

The administrative record upon which the Board’s Findings are based includes, but is not limited to, the following:

- The Final EIR;
- The reports and other documents referenced in the Final EIR;
- The draft Mitigation Monitoring and Reporting Program;
- All reports, studies, memoranda, maps, staff reports, or other planning documents related to the Project prepared by Valley Water or consultants to Valley Water with respect to Valley Water’s compliance with the requirements of CEQA and with respect to Valley Water’s action on the Project;
- All oral, written, and electronic evidence submitted to the Valley Water prior to the close of Valley Water’s hearings on the Project;
- Any documents expressly cited in these Findings, in addition to those cited above; and
- All documents constituting the record pursuant to Public Resources Code Section 21167.6(e).

The administrative record is located at Valley Water Headquarters, 5750 Almaden Expressway, San José, California. The custodian of the administrative record is the Clerk of the Board for Valley Water.

IX. FINDINGS OF FACT ON IMPACTS OF FAHCE-PLUS ALTERNATIVE

Regarding the impacts of the FAHCE-plus Alternative disclosed in the Final EIR, the Board finds as follows.

IX.A EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

The EIR concludes that the Proposed Project and, therefore, the FAHCE-plus Alternative, will result in either no impact or a less than significant impact for the following resource areas. Although findings on less-than-significant impacts are not required by CEQA, the Board nevertheless finds, based on the EIR and the entire record, that the EIR's conclusions regarding these specific impacts are correct and supported by substantial evidence.

- Aesthetics (Final EIR Section 3.1.5.1, page 3-16): Impacts on scenic vistas, scenic resources, visual character or quality of the site, or light and glare. A detailed description of the Proposed Project's impacts on aesthetics is provided in Final EIR Appendix F, *Initial Study*.
- Agriculture (Final EIR Section 3.1.5.2, page 3-17): Conversion of farmland, forest land, or timberland; conflict with existing zoning for agriculture or forest land or with a Williamson Act contract; or other changes in the existing environment that could result in conversion of farmland to a nonagricultural use or conversion of forest land to a non-forest use. A detailed description of the Proposed Project's impacts on agriculture is provided in Final EIR Appendix F, *Initial Study*.
- Hazardous materials (Final EIR Section 3.1.5.3, page 3-17): Located on a hazardous materials site; transport, use, storage, or disposal of hazardous materials; hazardous emissions or handling of hazardous materials within ¼ mile of an existing or proposed school; located within 2 miles of a public or private airport; impairment of implementation of an adopted emergency response plan or emergency evacuation plan; or exposure of people or structures to increased risk of loss, injury, or death involving wildland fires. A detailed description of the Proposed Project's impacts on hazardous materials is provided in Final EIR Appendix F, *Initial Study*.
- Land use (Final EIR Section 3.1.5.4, page 3-17): Physically divide an established community or conflict with any existing land use plans, policies, or agency regulations. A detailed description of the Proposed Project's impacts on land use is provided in Final EIR Appendix F, *Initial Study*.
- Minerals (Final EIR Section 3.1.5.5, page 3-18): Result in the loss of availability of known mineral resources or result in the loss of any designated, locally important mineral resource recovery sites. A detailed description of the Proposed Project's impacts on minerals is provided in Final EIR Appendix F, *Initial Study*.
- Population and housing (Final EIR Section 3.1.5.6, page 3-18): Induce substantial population growth or displace housing or people. A detailed description of the Proposed Project's impacts on population and housing is provided in Final EIR Appendix F, *Initial Study*.
- Public services (Final EIR Section 3.1.5.7, page 3-18): Require construction of new or expanded fire protection facilities, police protection facilities, schools, parks, or other public facilities. A detailed description of the Proposed Project's impacts on public services is provided in Final EIR Appendix F, *Initial Study*.
- Transportation and traffic (Final EIR Section 3.1.5.8, page 3-18): Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities; generate substantial amounts of traffic; result in an increase in the number of vehicle miles traveled; substantially increase safety hazards; or result in inadequate emergency access. A detailed description of the Proposed Project's impacts on transportation and traffic is provided in Final EIR Appendix F, *Initial Study*.

- Wildfire (Final EIR Section 3.1.5.9, page 3-18): Impair any emergency response plans or emergency evaluation plans; exacerbate wildfire risk; require the installation or maintenance of associated infrastructure; or expose people or structures to significant wildfire risks. A detailed description of the Proposed Project's impacts on wildfire is provided in Final EIR Appendix F, *Initial Study*.
- Hydrology (Final EIR Section 4.5.3, page 4-23): Result in substantial erosion or siltation on or off site (Impact HYD-1), result in flooding on or off-site (Impact HYD-2), or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems (Impact HYD-3).
- Groundwater resources (Final EIR Section 4.6.3, page 4-33): Decrease groundwater supplies or interfere with groundwater recharge (Impact GW-1) or violate any groundwater quality standards (Impact GW-2).
- Water supply (Final EIR Section 4.7.3, page 4-40): Alter or reduce Valley Water's ability to have sufficient water supplies (Impact WS-1) or require or result in the relocation or construction of new or expanded facilities whose construction could cause significant environmental effects (Impact WS-2).
- Water quality (Final EIR Section 4.8.3, page 4-55): Impair beneficial uses of surface waters (Impact WQ-1) or violate any applicable surface water quality standards or degrade water quality (Impact WQ-2).
- Recreation (Final EIR Section 4.9.3, page 4-80): Increased use of existing neighborhood and regional parks such that substantial physical deterioration of the facility would be accelerated (Impact REC-1).
- Aquatic biological resources (Final EIR Section 4.10.3, page 4-105): Have a substantial adverse effect on Central California Coast steelhead and their habitat in the Stevens Creek watershed (Impact AQUA-1a), have a substantial adverse effect on Pacific lamprey and their habitat in the Stevens Creek watershed (Impact AQUA-1a), have a substantial adverse effect on Central California Coast steelhead and their habitat in the Guadalupe River watershed (Impact AQUA-1b), have a substantial adverse effect on Central California Coast steelhead and their habitat in the Guadalupe River watershed (Impact AQUA-1b), have a substantial adverse effect on Central Valley fall-run Chinook salmon and their habitat in the Guadalupe River watershed (Impact AQUA-1b), have a substantial adverse effect on Pacific lamprey and their habitat in the Guadalupe River watershed (Impact AQUA-1b), have a substantial adverse effect on Sacramento hitch and their habitat in the Guadalupe River watershed (Impact AQUA-1b), or have a substantial adverse effect on riffle sculpin and their habitat in the Guadalupe River watershed (Impact AQUA-1b).
- Terrestrial biological resources (Final EIR Section 4.11.3, page 4-168): Interfere with the movement or impede breeding sites of any native resident or migratory species (Impact TERR-4) or conflict with an adopted habitat conservation plan/natural community conservation plan or other approved habitat conservation plan (Impact TERR-6).
- Cultural resources (Final EIR Section 4.12.3, page 4-196): Disturb any human remains (Impact CUL-3).
- Geology and soils (Final EIR Section 4.14.3, page 4-208): Result in soil erosion or loss of topsoil (Impact GEO-1).
- Air Quality (Final EIR Section 4.15.3, page 4-216): Conflict with the implementation of the clean air plan (Impact AIR-1), cumulatively considerable net increase of any criteria air pollutant (Impact AIR-2), expose sensitive receptors to substantial pollutant concentrations (Impact AIR-3), or result in odor emissions (Impact AIR-4).

- Greenhouse gas (GHG) emissions and energy (Final EIR Section 4.16.3, page 4-226): Generate GHG emissions that may have a significant impact on the environment (Impact GHG-1); conflict with an applicable GHG reduction plan, policy, or regulation (Impact GHG-2); result in wasteful, inefficient, or unnecessary consumption of energy resources (Impact GHG-3); or conflict with a state or local plan for renewable energy or energy efficiency (Impact GHG-4).
- Noise (Final EIR Section 4.17.3, page 4-233): Generate ground-borne vibration or ground-borne noise (Impact NOISE-2).
- Utilities (Final EIR Section 4.18.3, page 4-238): Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure (Impact UTIL-1).

IX.B SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

IX.B.1 Terrestrial Biological Resources

Impact TERR-1: Have a substantial adverse effect, either directly or through habitat modifications, on an identified candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS

Impact (Final EIR Section 4.11.3.1, page 4-168)

Special-status species, if present, could be adversely affected by the implementation of non-flow measures identified in the FAHCE-plus Alternative. Valley Water would apply BMPs and VHP conditions, as appropriate, to minimize impacts. However, there is a potential for disturbance and other adverse impacts that could substantially affect special-status species. This would be a **significant** impact.

Mitigation (Final EIR Section 3.8.4.1, page 3-306)

To reduce impacts of the non-flow measures under the FAHCE-plus Alternative on an identified candidate, sensitive, listed, or special-status species, Valley Water will implement MM TERR-1a through MM TERR-1e.

Mitigation Measure TERR-1a: Biological Resources Screening and Assessment

On a project-by-project basis for each non-flow measure, Valley Water will perform a preliminary biological resource screening as part of the environmental review process to determine whether the project has any potential to affect biological resources, including special-status species. If Valley Water determines that the project has no potential to affect biological resources, no further action is required. If the project would have the potential to affect biological resources, prior to construction, a qualified biologist will conduct a biological resources assessment to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. The biological resources assessment will evaluate the potential for impacts to biological resources including, but not limited to, special-status species, nesting birds, wildlife movement, sensitive plant communities, critical habitat, essential fish habitat (EFH), and other resources judged to be sensitive by local, state, and/or federal agencies. Pending the results of the biological resources assessment, design alterations, further technical studies (that is, protocol surveys), and/or consultations with USFWS, CDFW, and/or other local, state, and federal agencies may be required.

If the project cannot be designed without complete avoidance, Valley Water will coordinate with the appropriate regulatory agency (that is, USFWS, NMFS, CDFW, or U.S. Army Corps of Engineers [USACE]) to obtain regulatory permits and implement project-specific mitigation that could be refined during the permitting process prior to any construction activities. The following mitigation measures (MM TERR-1b through TERR-1e) would be incorporated only as applicable into the biological resources assessment for non-flow measures projects where specific resources are present or may be present and affected by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the biological resources assessment.

Mitigation Measure TERR-1b: Endangered/Threatened Species Habitat Assessment and Protocol Surveys

Specific habitat assessment and survey protocol surveys are established for several federal and/or state endangered or threatened species (for example, California red-legged frog). If the results of the biological resources assessment determine that suitable habitat may be present for any such species in an area that could be affected by construction of a non-flow measure, Valley Water will complete protocol habitat assessments/surveys in areas with suitable habitat for such species that could be affected by construction of the non-flow measures in accordance with CDFW or USFWS, and/or VHP established protocols prior to issuance of any construction permits and/or project approvals.

Alternatively, in lieu of conducting protocol surveys, Valley Water may choose to assume the presence of a special-status species within the project footprint and proceed with development of appropriate avoidance measures, consultation, and payment of VHP fees or permitting, as applicable.

If the special-status species are detected during protocol surveys, or protocol surveys are not conducted and presence assumed based on suitable habitat, MM TERR-1d or MM TERR-1e would apply.

Mitigation Measure TERR-1c: Nesting Avian Species Avoidance and Minimization

Valley Water will retain a qualified biologist to conduct preconstruction surveys for nesting birds. Surveys will be conducted no more than 7 days prior to the initiation of construction activities during the nesting bird season (February 1 through August 15) in any given area. The survey will cover the portions of the Project work area where construction activities will occur as well as a 250-foot buffer for raptors and a 50-foot buffer for non-raptors. During each survey, the biologist will inspect all trees and other potential nesting habitats (for example, shrubs, ruderal grasslands, wetlands, and buildings) in and immediately adjacent to the impact areas for nests. If a lapse in Project-related work of 1 week or longer occurs, another focused survey will be conducted before Project work can be reinitiated.

If an active nest is found sufficiently close to the Project work area (that is, within 250 feet for raptors or 50 feet for non-raptors), a qualified biologist will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 50 feet for non-raptors and 250 feet for raptors). No construction activities will be performed within the buffer until the young have fledged or the nest has been determined to be inactive by a qualified biologist.

If the qualified biologist determines that a reduced buffer size is appropriate given conditions in the vicinity of the nest, the type of construction activity that would occur near the nest, and the species of the nesting bird, the biologist will monitor bird behavior in relation to work activities. If the birds do not indicate that they are habituated to Project activities during the initial 2 days of attempting work within a reduced buffer, the standard buffer will be implemented. Project activities within the reduced buffers will not resume until Valley Water has consulted with CDFW

and both the qualified biologist and CDFW confirm that the birds' behavior has normalized, or until the nest is no longer active.

Mitigation Measure TERR-1d: Payment of VHP Impact Fees

Valley Water and other co-permittees that may be identified in the future to implement non-flow measures will mitigate temporary and permanent impacts to VHP-covered species and sensitive habitats in the geographic area defined by the VHP through payment of VHP impact fees to the Santa Clara Valley Habitat Agency. For each applicable non-flow measure, this fee to the VHP conservation program will pay for the cost of mitigating Project effects on covered species and their habitats, including mitigation for impacts to sensitive habitats such as wetlands and aquatic habitats.

The VHP's conservation program includes conserving existing populations of covered species, where possible; increasing the number of individuals; and expanding the distribution of the species within the VHP Reserve System through the acquisition, restoration, and creation of habitat. Furthermore, the VHP Reserve System would be designed to maintain and improve connectivity between these habitats, to reduce habitat fragmentation, and to link species' habitat within the VHP Reserve System to important habitat outside the VHP Reserve System. The objective of the VHP's conservation strategy is not only the conservation of the species but contribution to the species' recovery as well. As a result, the payment of fees in compliance with the VHP would contribute to this important conservation and recovery program.

VHP impact fees will be based on the estimated temporary impacts to VHP land cover types, as well as fees specific to impacts to wetlands habitats, resulting from the Proposed Project. As defined by the VHP, temporary impacts are "direct impacts that alter land cover for less than one year and that allow the disturbed area to recover to preproject or ecologically improved conditions within one year of completing construction" (ICF International 2012).

Valley Water will coordinate with the Santa Clara Valley Habitat Agency to track and report the location and amount of waters and wetlands created or restored using the VHP fees paid by Valley Water to demonstrate compliance with state policies.

Mitigation Measure TERR-1e: Implement Compensatory Mitigation for Special-status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP

For areas outside the VHP or activities not covered by the VHP, Valley Water will implement project-specific mitigation to avoid or minimize impacts during construction activities.

Compensation for unavoidable impacts to populations of special-status plants will be provided by a combination of preservation and enhancement of those species' populations outside potential impact areas. For impacts to populations (including partial populations) of a specific plant species, compensatory mitigation would include the preparation of a Habitat Mitigation and Monitoring Plan (HMMP) that would describe the preservation, enhancement, and management of lands that (1) already support equal or greater numbers (and health) of individuals of that species and (2) contain sufficient unoccupied suitable habitat to allow for an increase in populations, the increase being at least equivalent to the number affected. For determining the number of individuals affected (if applicable), the greatest number of individuals known to be present within the impact area (if the impact area has undergone multiple surveys) would be used to determine the magnitude of the impact.

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1a through

TERR-1e described above are feasible and hereby adopts them. By conducting biological resources screening and assessment, conducting protocol habitat assessments/surveys for endangered or threatened species, conducting preconstruction surveys for nesting birds, paying VHP impact fees for VHP-covered species, and implementing compensatory mitigation for special-status plant and wildlife species not covered by the VHP, the significant impacts on special-status species during implementation of non-flow measures would not be substantial and therefore, would be reduced to **less than significant with mitigation**.

Impact TERR-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS

Impact (Final EIR Section 4.11.3.2, page 4-175)

Non-flow measures identified in the FAHCE-plus Alternative could result in limited temporary impacts to riparian and other sensitive natural communities, where complete avoidance could not be accomplished, as well as temporal loss of riparian functions and values in the areas disturbed. However, after construction is completed, the areas would be replanted and restored. Implementation of Valley Water's BMPs and VHP conditions would further reduce these impacts. However, there is a potential for disturbance and other substantial adverse impacts to riparian and other sensitive natural communities where impacts cannot be fully avoided. This would be a **significant impact**.

Mitigation (Final EIR Section 3.8.4.2, page 3-314)

Valley Water will implement MM TERR-1a, MM TERR-1b, MM TERR-1d, and MM TERR-1e to reduce construction impacts from non-flow measures under the FAHCE-plus Alternative on sensitive natural communities.

Mitigation Measure TERR-1a: Biological Resources Screening and Assessment (see Impact TERR-1 for description)

Mitigation Measure TERR-1b: Endangered/Threatened Species Habitat Assessment and Protocol Surveys (see Impact TERR-1 for description)

Mitigation Measure TERR-1d: Payment of VHP Impact Fees (see Impact TERR-1 for description)

Mitigation Measure TERR-1e: Implement Compensatory Mitigation for Special status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP (see Impact TERR-1 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1a, TERR-1b, TERR-1d, and TERR-1e described above are feasible and hereby adopts them. By conducting biological resources screening and assessment, conducting protocol habitat assessments/surveys for endangered or threatened species, paying VHP impact fees for VHP-covered species, and implementing compensatory mitigation for special-status plant and wildlife species not covered by the VHP, the significant impacts on riparian and other sensitive natural communities during construction would not be substantial and therefore, would be reduced to **less than significant with mitigation**.

Impact TERR-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means

Impact (Final EIR Section 4.11.3.3, page 4-180)

The FAHCE-plus Alternative's non-flow measures could result in temporary impacts to wetland functions and values. Winter and summer base flows would provide additional water to the stream and adjacent wetlands, providing additional water during drier periods and helping to sustain wetland functions seasonally, a beneficial impact. Even with the implementation of Valley Water BMPs and VHP conditions, it may not be possible to completely avoid impacts from non-flow measures to jurisdictional waters and wetlands. Therefore, there is a potential for disturbance and other substantial adverse impacts to wetlands where impacts cannot be fully avoided. This would be a **significant** impact.

Mitigation (Final EIR Section 3.8.4.3, page 3-319)

Valley Water will implement MM TERR-1d and MM TERR-2 to reduce impacts to wetlands and other waters of the U.S. from implementation of non-flow measures under the FAHCE-plus Alternative.

Mitigation Measure TERR-1d: Payment of VHP Impact Fees (see Impact TERR-1 for description)

Mitigation Measure TERR-2: Mitigation for Wetlands and Other Waters of the United States and State outside of VHP-covered Areas

Areas temporarily affected by individual projects will be analyzed for the presence of jurisdictional wetlands and waters, and project-specific impacts will be documented. To the extent impacts cannot be avoided or minimized, affected wetlands and waters will be restored to pre-project functions and values at a minimum mitigation ratio (performance objective) of 1:1. Additional compensatory mitigation may be considered to fully address wetlands impacts that would be identified during the state and/or federal permitting process. However, compensatory mitigation will be tailored to the specific non-flow measure project. Valley Water will monitor restoration to track mitigation success. This process will be documented in a project-specific mitigation plan that will be refined during the federal or state permitting processes.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1d and TERR-2 described above are feasible and hereby adopts them. With the payment of VHP impact fees for VHP-covered wetlands and implementation of compensatory mitigation for wetlands and waters outside of VHP-covered areas, the impacts on jurisdictional wetlands and other waters of the U.S. would not be substantial and, therefore, would be reduced to **less than significant with mitigation**.

Impact TERR-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Impact (Final EIR Section 4.11.3.5, page 4-187)

To limit impacts from non-flow measures under the FAHCE-plus Alternative, implementation of BMP GEN-4 would minimize the loss of ordinance trees where tree ordinances apply to Valley Water. However, complete avoidance of these trees may not be practicable for individual projects. Because there could be conflicts with applicable provisions of local policies or ordinances protecting trees, this would be a **significant impact**.

Mitigation (Final EIR Section 3.8.4.5, page 3-325)

Valley Water will implement MM TERR-3 to reduce impacts to ordinance trees from implementation of non-flow measures under the FAHCE-plus Alternative.

Mitigation Measure TERR-3: Tree Replacement

Valley Water will replace ordinance trees if required by applicable ordinances in accordance with Section 5.5 in Appendix C of the SMP (Valley Water 2011) (*Mitigation for Tree and Shrub Removals 6–12 Inches dbh*). This section provides a specific tree appraisal and evaluation protocol to determine how replacement planting should occur. It is possible that this mitigation measure may be refined during the permitting process by USACE, the San Francisco Bay RWQCB, or CDFW, in which case the refinements required by these agencies will be implemented. Special attention will be given to the size of tree replacement if using container material; larger container sizes and held over plant stock in a nursery setting may contain *Phytophthora* spp., a water mold plant pathogen. Appropriate nursery BMPs should be employed for all container stock.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. The Board finds that MM TERR-3 is feasible and hereby adopts it. With this mitigation in place, trees protected by applicable local ordinances that cannot be avoided will be replaced, and conflicts with the provisions of applicable local tree protection policies or ordinances would not occur. Therefore, this impact would be reduced to **less than significant with mitigation**.

IX.B.2 Geology and Soils**Impact GEO-2: Directly or indirectly destroy a unique paleontological resource or site.**

Impact (Final EIR Section 4.14.3.2, page 4-209)

Construction activities associated with non-flow measures under the FAHCE-plus Alternative, including demolition and removal of structures, excavations, installations, and other ground-disturbing activities, as well as maintenance activities for non-flow measures, could directly or indirectly destroy a unique paleontological resource or site. Because a unique paleontological resource or site could be damaged or destroyed, this would be **significant impact**.

Mitigation (Final EIR Section 3.11.4.2, page 3-373)

Valley Water will implement MM GEO-1 to reduce impacts to paleontological resources from non-flow measures under the FAHCE-plus Alternative.

Mitigation Measure GEO-1: Follow the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts on Paleontological Resources

Valley Water will mitigate temporary and permanent impacts to a unique paleontological resource or site during construction and ground disturbance by implementing the following measures:

- Conduct an intensive field survey and surface salvage prior to earth moving, if applicable;
- Hire a qualified paleontological resource monitor to monitor excavations in previously disturbed rock units;
- Salvage unearthed fossil remains and/or traces (for example, tracks, trails, burrows, etc.);
- Wash screens to recover small specimens, if applicable;
- Prepare salvaged fossils to a point of being ready for curation (that is, removal of the enclosing matrix, stabilization and repair of specimens, and construction of reinforced support cradles where appropriate);
- Identify, catalog, curate, and provide for repository storage of prepared fossil specimens; and
- Prepare a final report of the finds and their significance.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. The Board finds that MM GEO-1 is feasible and hereby adopts it. With the implementation of the Society of Vertebrate Paleontology's procedures and protocols in the event of discovery of paleontological resources, impacts on unique paleontological resources or sites would not be substantial and, therefore, would be reduced to **less than significant with mitigation**.

IX.C SIGNIFICANT IMPACTS THAT CANNOT BE MITIGATED TO LESS THAN SIGNIFICANT LEVELS**IX.C.1 Cultural Resources****Impact CUL-1: Result in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines: Historical Built Environment Resources**

Impact (Final EIR Section 4.12.3.1, page 4-196)

Construction and maintenance of non-flow measures implemented under the FAHCE-plus Alternative could cause significant impacts on California Register of Historic Resources (CRHR)-eligible resources that are part of the built environment, possibly through removal,

construction, or barrier maintenance activities that could either destroy or modify elements that contribute to the eligibility of a particular resource. Because substantial adverse changes to significant historical built-environment resources could occur, this would be a **significant impact**.

Mitigation (Final EIR Section 3.9.4.1, page 3-346)

To reduce impacts from implementation of non-flow measures and/or maintenance activities under the FAHCE-plus Alternative on historical built-environment resources, Valley Water will implement MMs CUL-1a, CUL-1b, and CUL-1c.

Mitigation Measure CUL-1a: Conduct Cultural Resources Studies and Avoid Impacts on Built Environment Resources

In areas potentially containing built-environment historical resources, when specific non-flow measure projects are proposed for implementation, Valley Water will ensure that architectural history studies and surveys will be conducted by professionals who meet the Secretary of the Interior's Professional Qualifications Standards to identify the presence of built-environment resources within a particular project location. These studies can be combined with the archaeological studies conducted under BMP GEN-41 but must include a historic buildings survey. If buildings or structures that are eligible for listing in the National Register of Historic Places (NRHP) or CRHR are identified within the study area, impacts to those resources resulting from the non-flow measure will be avoided, if feasible. Project relocation and redesign are appropriate avoidance measures. If avoidance is not feasible, MM CUL-1b will be implemented (see below).

Mitigation Measure CUL-1b: Follow the Secretary of the Interior's Standards for the Treatment of Historic Properties

In some cases, completely avoiding an element of the built environment that qualifies as a historical resource or historic property may not be feasible, and the feature must be altered as part of Project implementation.

In this situation, any Project-related alterations of eligible historic era buildings or structures, including relocations, would conform to the *Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995). Valley Water will develop and implement any plans necessary to mitigate alterations in accordance with these standards. If necessary (that is, if the Proposed Project requires compliance with Section 106 and concurrence from the State Historic Preservation Office [SHPO] because of federal involvement), the plans will be submitted to the SHPO for approval before Project implementation. If these standards cannot be met, MM CUL-1c will be implemented (see below).

Mitigation Measure CUL-1c: Record Built Environment Resources to Historic American Buildings Survey and Historic American Engineering Record Standards

In some cases, avoiding or relocating a building or structure considered eligible for the NRHP or CRHR may not be feasible, and that resource must be demolished. In this situation, Valley Water will retain a qualified architectural historian to document the affected historical built environment resource according to Historic American Buildings Survey (HABS) or Historic

American Engineering Record (HAER) standards, as appropriate. HABS and HAER documentation packages will be entered into the Library of Congress and the appropriate Information Center of the California Historical Resources Information System.

Findings

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs CUL-1a through CUL-1c described above are feasible and hereby adopts them. Where a built-environment resource can be modified or relocated consistent with the Secretary of the Interior's standards and no further mitigation is required, implementing MM CUL-1c will reduce Impact CUL-1 to a less-than-significant level. Recording a building or structure to HABS/HAER standards as described for MM CUL-1c may not reduce the impact to significant historic buildings and structures to a less-than-significant level; although information regarding the building or structure would be recorded, the building or structure would still be removed. Where MM CUL-1c must be implemented, Impact CUL-1 would be significant and unavoidable. However, HABS/HAER is the current professional standard for mitigating impacts on significant historic structures

The Board, therefore, finds that even with the implementation of MMs CUL-1a through CUL-1c, demolition of a significant historical building or structure may occur and would be irreversible and represent a substantial adverse change in the significance of an historical built environment resource. Therefore, this impact would be **significant and unavoidable**.

Impact CUL-2: Result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines: Archaeological Resources

Impact (Final EIR Section 4.12.3.2, page 4-197)

Construction and maintenance of non-flow measures implemented under the FAHCE-plus Alternative could cause significant impacts on CRHR-eligible archaeological resources during ground-disturbing activities. When Project activity requires modifying or removing a significant (that is, NRHP- or CRHR-eligible, or "unique") archaeological resource, significant impacts would likely occur. Impacts could result from ground disturbance associated with Project-related earth-moving activity in previously undisturbed soils. If significant archaeological resources cannot be completely avoided by project design, ground-disturbing and other activities associated with the Proposed Project may damage or destroy significant archaeological resources, causing a substantial adverse change in the significance of significant archaeological resources. This would, therefore, be a **significant impact**.

Mitigation (Final EIR Section 3.9.4.2, page 3-349)

To reduce impacts from implementation of non-flow measures and/or maintenance activities under the FAHCE-plus Alternative on archaeological resources, Valley Water will implement MMs CUL-2a and CUL-2b.

Mitigation Measure CUL 2a: Conduct Cultural Resources Studies and Avoid Impacts on Archaeological Resources

- During environmental review of projects, and consistent with the BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds), GEN-40 (Discovery of Cultural

Remains or Historic Paleontological Artifacts), and GEN-41 (Review of Projects with Native Soil) (described in Section 3.9.3.5, Valley Water will conduct a records search at the Northwest Information Center (Sonoma State University) to determine whether the study area has been previously surveyed and whether resources were identified.

- If the records indicate that no previous survey has been conducted, the Northwest Information Center will make a recommendation regarding whether a survey is warranted based on the archaeological sensitivity of the study area. If a survey is recommended, a qualified archaeologist will be retained to conduct archaeological surveys.
- Although avoidance is always the preferred alternative, the significance of any resources that are determined to be in the study area and unavoidable will be assessed according to the applicable local, state, and federal significance criteria.
- Valley Water will devise treatment measures to ameliorate “substantial adverse changes” to significant archaeological resources. Such treatment measures may include avoidance through project redesign, data recovery excavation, and public interpretation of the resource.

Valley Water will adhere to the following requirements:

- If a project is located in an area rich with cultural materials, Valley Water will retain a qualified archaeologist to monitor subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property, which may extend beyond existing disturbances into undisturbed sediments.
- Consistent with BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds) and GEN-40 (Discovery of Cultural Remains or Historic Paleontological Artifacts), if, during the course of construction, cultural resources (that is, prehistoric sites, historic sites, and isolated artifacts and features) are discovered, work will be halted immediately within 50 meters (165 feet) of the discovery and a qualified archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology will be retained to determine the significance of the discovery (see MM CUL-2b below).
- Valley Water will consider mitigation recommendations, consistent with the CEQA Guidelines Section 15126.4(b)(3) mitigation hierarchy, presented by a professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology for any unanticipated discoveries and will carry out the measures deemed feasible and appropriate. Such measures may include avoidance or preservation in place as preferred options, followed by excavation, documentation, curation, data recovery, or other appropriate measures.

Mitigation Measure CUL-2b: If Cultural Resources Are Discovered, Immediately Halt Construction and Implement an Accidental Discovery Plan

In accordance with BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds) and GEN-40 (Discovery of Cultural Remains or Historic Paleontological Artifacts), if cultural resources such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during construction activities, Valley Water will suspend work immediately at the location of the find and within a 50-meter (165-foot) radius. A qualified archaeologist will conduct a field investigation of the specific site and recommend mitigation that Valley Water will implement necessary to protect or recover any cultural resource determined by the archaeologist to represent a historical resource or unique

archaeological resource. Mitigation will be consistent with the CEQA Guidelines Section 15126.4(b)(3) mitigation hierarchy, with preservation in place as the preferred option.

Findings

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs CUL-2a and CUL-2b described above are feasible and hereby adopts them. The Board finds that the EIR evaluates impacts at the programmatic level and all Project circumstances are not foreseeable. MMs CUL-2a and CUL-2b may not be feasible or effective for every non-flow project. The Board, therefore, finds that even with the implementation of MMs CUL-2a and CUL-2b, substantial adverse changes to the significance of known and unknown significant archaeological resources may still occur because mitigation may not be feasible or effective for every non-flow project. Therefore, this impact would be **significant and unavoidable**.

IX.C.2 Tribal Cultural Resources

Impact TRI-1: Cause a substantial adverse change in the significance of a tribal cultural resource (as defined by the PRC) that is (1) listed or eligible for listing in the CRHR, or in a local register of historical resources; or (2) a resource determined by the lead agency to be significant

Impact (Final EIR Section 4.13.3.1, page 4-203)

Construction and maintenance of non-flow measures implemented under the FAHCE-plus Alternative could result in significant impacts on CRHR-eligible archaeological resources, which may also be considered tribal cultural resources, during ground-disturbing activities. Construction activities associated with the non-flow measures under the FAHCE-plus Alternative could affect native soils, traditional gathering areas, and/or ceremonial locations and, by extension, affect prehistoric or historical resources that are listed in, or eligible for listing in, the NRHP and/or the CRHR. These resources may also be further considered as tribal cultural resources. Significant impacts on tribal cultural resources could result from such actions as disturbances to channel beds and banks; weir installation; channel modification; the removal of culverts, riprap, or other structures; and other Valley Water actions not yet determined. Because there could be a substantial adverse changes in the significance of a tribal cultural resource, this would be a **significant impact**.

Mitigation (Final EIR Section 3.10.4.1, page 3-361)

To reduce impacts from implementation of non-flow measures and/or maintenance activities under the FAHCE-plus Alternative on tribal cultural resources, Valley Water will implement MMs TRI-1a and TRI-1b.

Mitigation Measure TRI-1a: Conduct Cultural Resources Studies and Avoid Effects on TCRs

In areas potentially containing tribal cultural resources, Valley Water would retain an ethnographer or archaeologist who meets the Secretary of the Interior's standards to consult with appropriate tribes before approval of any project during Assembly Bill 52 consultation (if

applicable) and identify the presence of any traditional cultural resources (TCRs) at the project location. Native American TCRs may be identified by an ethnographer who has worked extensively with community members (often, but not always, elders) who have considerable knowledge about places important to the community. If TCRs are identified in the study area, they will be avoided by project redesign or relocation, if feasible.

Where avoidance is implemented and no further mitigation is required, implementing this mitigation measure would reduce Impact TRI-1 to a less-than-significant level. However, if avoidance is not feasible, see MM TRI-1b below.

Mitigation Measure TRI-1b: Consult with Native American Communities and Implement Appropriate Measures to Mitigate Effects on TCRs

Effects on tribal cultural resources would be rare occurrences. However, where an identified TCR cannot be fully avoided by a proposed Valley Water action, Valley Water will engage in consultation with affected Native American communities (including formal Assembly Bill 52 consultation, if applicable) to identify other ways to effectively mitigate impacts to tribal cultural resources. These may include:

- Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to (A) Protecting the cultural character and integrity of the resource; (B) Protecting the traditional use of the resource; or (C) Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Protecting the resource.

Findings

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs TRI-1a and TRI-1b described above are feasible and hereby adopts them. The Board finds that implementation of MMs TRI-1a and TRI-1b would not necessarily reduce impacts to some categories of TCRs such as sacred sites. MMs TRI-1a and TRI-1b may not be feasible or effective for every non-flow project. Therefore, this impact would be **significant and unavoidable**.

IX.C.3 Noise

Impact NOISE-1: Cause a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies, or cause a substantial incremental increase in noise levels

Impact (Final EIR Section 4.17.3.1, page 4-234)

Construction and maintenance activities associated with non-flow measures under the FAHCE-plus Alternative would generate noise from the use of heavy equipment. Construction noise, although temporary, could affect nearby sensitive receptors. Sensitive land uses are located

within 100 feet of the barrier remediation and CWMZ sites. Compliance with the local noise ordinances and implementation of BMP GEN-38 (Minimize Noise Disturbances to Residential Areas) would reduce construction noise impacts. However, the construction noise levels associated with the non-flow measures would exceed the noise standards within certain jurisdictions. This would, therefore, be a **significant impact**.

Mitigation (Final EIR Section 3.14.4.1, page 3-421)

To reduce noise impacts from implementation of non-flow measures and/or maintenance activities under the FAHCE-plus Alternative, Valley Water will implement MM NOISE-1.

Mitigation Measure NOISE-1: Implement Construction Noise Mitigation Measures

Valley Water will implement the following measures to reduce potential construction and maintenance noise impacts to nearby sensitive receptors:

- During all site excavation and grading, the Project contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The Project contractor will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- During all Project construction, the construction contractor will locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site.
- The Project contractors will prohibit all unnecessary idling of internal combustion engines.

Findings

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MM NOISE-1 described above is feasible and hereby adopts it. The Board finds that the EIR evaluates impacts at the programmatic level and all project circumstances are not foreseeable; MM NOISE-1 may not be feasible or effective for every non-flow project. Even with the implementation of MM NOISE-1, noise levels may exceed the local noise standards or otherwise represent a substantial adverse change in the significance of noise resources. Therefore, this impact would be **significant and unavoidable**.

IX.D NOT CUMULATIVELY CONSIDERABLE CONTRIBUTIONS TO CUMULATIVE IMPACTS

The EIR found that, for the following significant cumulative impacts, the FAHCE-plus Alternative would not add cumulatively considerable contributions, without the need for mitigation measures. Although findings on impacts that are less-than-cumulatively considerable without mitigation are not required by CEQA, the Board nevertheless finds, based on the EIR and the entire record, that the EIR's conclusions regarding these specific impacts are correct and supported by substantial evidence.

- Hydrology (Final EIR Section 5.6.1.3, page 5-20): Result in substantial erosion or siltation on or off site (Cumulative Impact HYD-1), result in flooding on or off site (Cumulative Impact HYD-2), or create or contribute runoff water that would exceed the

capacity of existing or planned stormwater drainage systems (Cumulative Impact HYD-3).

- Groundwater resources (Final EIR Section 5.6.2.3, page 5-26): Decrease groundwater supplies or interfere with groundwater recharge (Cumulative Impact GW-1) or violate any groundwater quality standards (Cumulative Impact GW-2).
- Terrestrial biological resources (Final EIR Section 5.6.7.3, page 5-66): Interfere with the movement or impede breeding sites of any native resident or migratory species (Cumulative Impact TERR-4) or conflict with an adopted habitat conservation plan/natural community conservation plan or other approved habitat conservation plan (Cumulative Impact TERR-6).
- Cultural resources (Final EIR Section 5.6.8.3, page 5-74): Disturb any human remains (Cumulative Impact CUL-3).
- Geology and soils (Final EIR Section 5.6.10.3, page 5-84): Result in soil erosion or loss of topsoil (Cumulative Impact GEO-1).
- Air quality (Final EIR Section 5.6.11.3, page 5-90): Conflict with the implementation of the clean air plan (Cumulative Impact AIR-1), cause a cumulatively considerable net increase of any criteria air pollutant (Cumulative Impact AIR-2), expose sensitive receptors to substantial pollutant concentrations (Cumulative Impact AIR-3), or result in odor emissions (Cumulative Impact AIR-4).
- Greenhouse gas emissions and energy (Final EIR Section 5.6.12.3, page 5-96): Generate GHG emissions that may have a significant impact on the environment (Cumulative Impact GHG-1); conflict with an applicable GHG reduction plan, policy, or regulation (Cumulative Impact GHG-2); result in wasteful, inefficient, or unnecessary consumption of energy resources (Cumulative Impact GHG-3); or conflict with a state or local plan for renewable energy or energy efficiency (Cumulative Impact GHG-4).
- Noise (Final EIR Section 5.6.13.3, page 5-101): Generate ground-borne vibration or ground-borne noise (Cumulative Impact NOISE-2).
- Utilities (Final EIR Section 5.6.14.3, page 5-104): Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure (Cumulative Impact UTIL-1).

IX.E CUMULATIVELY CONSIDERABLE CONTRIBUTIONS TO CUMULATIVE IMPACTS

IX.E.1 Terrestrial Biological Resources

Cumulative Impact TERR-1: Have a substantial adverse effect, either directly or through habitat modification, on an identified candidate, sensitive, listed, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS

Impact and Project Contribution (Final EIR Section 5.6.7.3, page 5-67)

As concluded under Impact TERR-1, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to substantially affect special-status plant and wildlife species, which would be a significant impact. Cumulative projects, projects, plans, and programs (such as Valley Water's watershed improvements, Almaden Lake Improvement Project, dam safety,

and seismic retrofit projects as well as the Pacheco Reservoir Expansion Project, among others, when combined with impacts of the FAHCE-plus Alternative's flow and non-flow measures, could affect terrestrial biological resources, including identified candidate, sensitive, listed, or special-status species. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.8.4.1, page 3-306)

Valley Water will implement MMs TERR-1a through TERR-1e to reduce the FAHCE-plus Alternative's contribution to cumulative impacts on special-status terrestrial species.

Mitigation Measure TERR-1a: Biological Resources Screening Assessment (see Impact TERR-1 for description)

Mitigation Measure TERR-1b: Endangered/Threatened Species Habitat Assessment and Protocol Surveys (see Impact TERR-1 for description)

Mitigation Measure TERR-1c: Nesting Avian Species Avoidance and Minimization (see Impact TERR-1 for description)

Mitigation Measure TERR-1d: Payment of VHP Impact Fees (see Impact TERR-1 for description)

Mitigation Measure TERR-1e: Implement Compensatory Mitigation for Special-status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP (see Impact TERR-1 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1a through TERR-1e described above are feasible and has adopted them. These measures would reduce the FAHCE-plus Alternative's contribution to cumulative impacts on special-status terrestrial species by avoiding or minimizing the impact in areas where these species occur and compensating for direct or indirect impacts to species or their habitat. These mitigation measures would reduce the FAHCE-plus Alternative's incremental impact to less-than-significant levels. Therefore, the FAHCE-plus Alternative's incremental contribution to this cumulative impact would be **not cumulatively considerable with mitigation**.

Cumulative Impact TERR-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS

Impact and Project Contribution (Final EIR Section 5.6.7.3, page 5-67)

As concluded under Impact TERR-2, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to affect riparian and other sensitive natural communities, which would be a significant impact. Cumulative projects, plans, and programs such as Valley Water's watershed improvements, Almaden Lake Improvement Project, dam safety, and seismic retrofit projects, among others, in the cumulative impact area could cause significant cumulative impacts to sensitive natural communities when combined with impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.8.4.2, page 3-314)

Valley Water will implement MMs TERR-1a, TERR-1b, TERR-1d, and TERR-1e to reduce the FACHE-plus Alternative's contribution to cumulative impacts on riparian habitat or other sensitive natural communities.

Mitigation Measure TERR-1a: Biological Resources Screening Assessment (see Impact TERR-1 for description)

Mitigation Measure TERR-1b: Endangered/Threatened Species Habitat Assessment and Protocol Surveys (see Impact TERR-1 for description)

Mitigation Measure TERR-1d: Payment of VHP Impact Fees (see Impact TERR-1 for description)

Mitigation Measure TERR-1e: Implement Compensatory Mitigation for Special status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP (see Impact TERR-1 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1a, TERR-1b, TERR-1d, and TERR-1e are feasible and has adopted them. These measures would reduce the FAHCE-plus Alternative's contribution to cumulative impacts on riparian habitat or other sensitive natural communities by avoiding or minimizing the impact in areas where these communities occur and by compensating for direct or indirect impacts to these communities through restoration and/or enhancement. These mitigation measures would reduce the FAHCE-plus Alternative's incremental impact to less-than-significant levels. Therefore, the FAHCE-plus Alternative's incremental contribution to this cumulative impact would be **not cumulatively considerable with mitigation**.

Cumulative Impact TERR-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means

Impact and Project Contribution (Final EIR Section 5.6.7.3, page 5-68)

As concluded under Impact TERR-3, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to affect jurisdictional waters and wetlands, which would be a significant impact. Cumulative projects, plans, and programs such as Valley Water's watershed improvements, Almaden Lake Improvement Project, dam safety, and seismic retrofit projects, among others, in the cumulative impact area, could cause significant cumulative impacts to jurisdictional waters and wetlands when combined with impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.8.4.3, page 3-319)

Valley Water will implement MMs TERR-1d and TERR-2 to reduce the FACHE-plus Alternative's contribution to cumulative impacts on wetlands and other waters of the U.S. and state.

Mitigation Measure TERR-1d: Payment of VHP Impact Fees (see Impact TERR-1 for description)

Mitigation Measure TERR-2: Mitigation for Wetlands and Other Waters of the United States and State outside of VHP-covered Areas (see Impact TERR-3 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MMs TERR-1d and TERR-2 are feasible and has adopted them. These measures would reduce the FAHCE-plus Alternative's contribution to cumulative impacts on wetlands and jurisdictional waters by compensating for direct or indirect impacts to these communities through restoration and/or enhancement. These mitigation measures would reduce the FAHCE-plus Alternative's incremental impact to less-than-significant levels. Therefore, the FAHCE-plus Alternative's incremental contribution to this cumulative impact would be **not cumulatively considerable with mitigation**.

Cumulative Impact TERR-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree-preservation policy or ordinance

Impact and Project Contribution (Final EIR Section 5.6.7.3, page 5-69)

As concluded under Impact TERR-5, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to conflict with applicable provisions of local policies or ordinances protecting trees, which would be a significant impact. Cumulative projects, plans, and programs such as Valley Water's watershed improvements, Almaden Lake Improvement Project, dam safety, and seismic retrofit projects, among others, in the cumulative impact area could cause significant adverse impacts to locally protected trees when combined with the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.8.4.5, page 3-325)

Valley Water will implement MM TERR-3 to reduce the FACHE-plus Alternative's contribution to cumulative impacts on ordinance trees.

Mitigation Measure TERR-3: Tree Replacement (see Impact TERR-5 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MM TERR-3 is feasible and has adopted it. This measure would reduce the FAHCE-plus Alternative's contribution to cumulative impacts to ordinance trees that cannot be avoided by replacing such trees. This mitigation measure would reduce the FAHCE-plus Alternative's incremental impact to less-than-significant levels. Therefore, the FAHCE-plus Alternative's incremental contribution to this cumulative impact would be **not cumulatively considerable with mitigation**.

IX.E.2 Cultural Resources

Cumulative Impact CUL-1: Result in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines: Historical Built Environment Resources

Impact and Project Contribution (Final EIR Section 5.6.8.3, page 5-75)

As concluded under Impact CUL-1, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to destroy or modify built environment historical resources, which would be a significant impact. Cumulative projects, plans, and programs (such as Valley Water's watershed improvements, Almaden Lake Improvement Project, Pacheco Reservoir Expansion Project, dam safety, and seismic retrofit projects, as well as non-Valley Water projects, when combined with impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management, could cause significant impacts on historic resources. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.9.4.1, page 3-346)

Valley Water will implement MMs CUL-1a through CUL-1c to reduce the FAHCE-plus Alternative's contribution to cumulative impacts on historical built-environment resources.

Mitigation Measure CUL-1a: Conduct Cultural Resources Studies and Avoid Impacts on Built Environment Resources (see Impact CUL-1 for description)

Mitigation Measure CUL-1b: Follow the Secretary of the Interior's Standards for the Treatment of Historic Properties (see Impact CUL-1 for description)

Mitigation Measure CUL-1c: Record Built Environment Resources to Historic American Buildings Survey and Historic American Engineering Record (see Impact CUL-1 for description)

Finding

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs CUL-1a through CUL-1c are feasible and has adopted them. The Board finds that even with the implementation of MMs CUL-1a through CUL-1c as part of the FAHCE-plus Alternative, demolition of significant historical resources may occur and would be irreversible. Therefore, considering similar impacts from other cumulative projects, plans, and programs, this impact would remain **cumulatively considerable**.

Cumulative Impact CUL-2: Result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines: Archaeological Resources

Impact and Project Contribution (Final EIR Section 5.6.8.3, page 5-75)

As concluded under Impact CUL-2, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to damage or destroy significant archaeological resources, which would be a significant impact. Any of the cumulative projects, plans, and programs that

involve disturbance of intact soils or sediments could cause significant impacts on archeological resources, when combined with the impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.9.4.2, page 3-349)

Valley Water will implement MMs CUL-2a and CUL-2b to reduce the FACHE-plus Alternative's contribution to cumulative impacts on archaeological resources.

Mitigation Measure CUL-2a: Conduct Cultural Resources Studies and Avoid Impacts on Archaeological Resources (see Impact CUL-2 for description)

Mitigation Measure CUL-2b: If Cultural Resources Are Discovered, Immediately Halt Construction and Implement an Accidental Discovery Plan (see Impact CUL-2 for description)

Finding

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs CUL-2a and CUL-2b are feasible and has adopted them. The Board finds that even with the implementation of MMs CUL-2a and CUL-2b, substantial adverse changes to the significance of known and unknown significant archaeological resources may still occur because mitigation may not be feasible or effective for every non-flow project. Therefore, considering similar impacts from other cumulative projects, plans, and programs, this impact would remain **cumulatively considerable**.

IX.E.3 Tribal Cultural Resources

Cumulative Impact TRI-1: Cause a substantial adverse change in the significance of a tribal cultural resource (as defined by the PRC) that is (1) listed or eligible for listing in the CRHR, or in a local register of historical resources; or (2) a resource determined by the lead agency to be significant

Impact and Project Contribution (Final EIR Section 5.6.9.3, page 5-80)

As concluded under Impact TRI-1, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to alter or destroy tribal cultural resources, which would be a significant impact. Cumulative projects, plans, and programs (such as Valley Water's watershed improvements, Almaden Lake Improvement Project, Pacheco Reservoir Expansion Project, dam safety, and seismic retrofit projects as well as non-Valley Water projects) could cause significant impacts on tribal cultural resources, when combined with the impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.10.4.1, page 3-361)

Valley Water will implement MMs TRI-1a and TRI-1b to reduce the FACHE-plus Alternative's contribution to cumulative impacts on tribal cultural resources.

Mitigation Measure TRI-1a: Conduct Cultural Resources Studies and Avoid Effects on TCRs (see Impact TRI-1 for description)

Mitigation Measure TRI-1b: Consult with Native American Communities and Implement Appropriate Measures to Mitigate Effects on TCRs (see Impact TRI-1 for description)

Finding

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MMs TR-1a and TRI-1b are feasible and has adopted them. The Board finds that implementation of MMs TRI-1a and TRI-1b would not necessarily reduce impacts to some categories of TCRs such as sacred sites, and these mitigation measures may not be feasible or effective for every non-flow project. Therefore, considering similar impacts from other cumulative projects, plans, and programs, this impact would remain **cumulatively considerable**.

IX.E.4 Geology and Soils

Cumulative Impact GEO-2: Directly or indirectly destroy a unique paleontological resource or site

Impact and Project Contribution (Final EIR Section 5.6.10.3, page 5-85)

As concluded under Impact GEO-2, implementation of non-flow measures under the FAHCE-plus Alternative has the potential to result in the inadvertent disturbance of paleontological resources, which would be a significant impact. Cumulative projects such as the 10-year Pipeline Rehabilitation Project, planned improvements within Valley Water watersheds, and residential, commercial, industrial, and recreation-area developments could cause significant impacts on paleontological resources, when combined with the impacts of the flow and non-flow measures of the FAHCE-plus Alternative, including associated maintenance, monitoring, and adaptive management. Therefore, the Proposed Project FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.11.4.2, page 3-373)

Valley Water will implement MM GEO-1 to reduce the FAHCE-plus Alternative's contribution to cumulative impacts on paleontological resources.

Mitigation Measure GEO-1: Follow the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts on Paleontological Resources (see Impact GEO-2 for description)

Finding

Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant effects on the environment. The Board finds that MM GEO-1 is feasible and has adopted it. This measure would reduce the FAHCE-plus Alternative's contribution to cumulative impacts on paleontological resources by implementing the Society of Vertebrate Paleontology's procedures and protocols in the event of discovery of paleontological resources. This mitigation measure would reduce the FAHCE-plus Alternative's incremental impact to less-

than-significant levels. Therefore, the FAHCE-plus Alternative's incremental contribution to this cumulative impact would be **not cumulatively considerable with mitigation**.

IX.E.5 Noise

Cumulative Impact NOISE-1: Cause a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, or cause a substantial incremental increase in noise levels

Impact and Project Contribution (Final EIR Section 5.6.13.3, page 5-101)

As concluded under Impact NOISE-1, noise generated from implementation of non-flow measures under the FAHCE-plus Alternative would exceed local noise standards, which would be a significant impact. Cumulative projects, plans, and programs, such as Valley Water's watershed improvements, Almaden Lake Improvement Project, Pacheco Reservoir Expansion Project, dam safety, and seismic retrofit projects as well as the non-Valley Water projects could cause significant impacts on noise if their construction or operational timeframe coincides with the FAHCE-plus Alternative's flow and non-flow measures, including associated maintenance, monitoring, and adaptive management. Therefore, the FAHCE-plus Alternative's incremental contribution to this significant cumulative impact would be **cumulatively considerable**.

Mitigation (Final EIR Section 3.14.4.1, page 3-421)

Valley Water will implement MM NOISE-1 to reduce the FAHCE-plus Alternative's contribution to cumulative noise impacts.

Mitigation Measure NOISE-1: Implement Construction Noise Mitigation Measures (see Impact NOISE-1 for description)

Finding

Specific economic, legal, social, technological, or other considerations make infeasible the provision of mitigation measure or project alternatives identified in the Final EIR. The Board finds that MM NOISE-1 is feasible and has adopted it. The Board finds that even with the implementation of MM NOISE-1 as part of the FAHCE-plus Alternative, noise levels may exceed the local noise standards, and MM NOISE-1 may not be feasible or effective for every project. Therefore, with the consideration of similar impacts from other cumulative projects, plans, and programs, this impact would remain **cumulatively considerable**.

X. FINDINGS ON ALTERNATIVES

X.A FINDINGS REGARDING THE ALTERNATIVES ANALYZED IN EIR

The EIR alternatives are described in Section IV of these Findings. The No Project Alternative would eliminate the significant impacts of non-flow measures on terrestrial biological resources, cultural resources, tribal cultural resources, paleontological resources, and noise relative to the

Proposed Project (FAHCE). However, under the No Project Alternative, impacts on hydrology and aquatic biological resources would be greater than those from the Proposed Project (FAHCE). The No Project Alternative was rejected because it would not meet the first two Project (FAHCE) objectives, which emphasize taking actions to restore and maintain healthy steelhead and Chinook salmon populations, and the fourth Project objective, which pertains to adaptive management of FAHCE measures.

The Non-flow Measures Only Alternative would eliminate the effects from implementation of flow measures relative to the Proposed Project (FAHCE). Under the Non-flow Measures Only Alternative, less than significant or beneficial impacts caused by the Proposed Project (FAHCE) flow measures would be avoided because there would be no change to flow resulting from implementation of the Proposed Project rule curves. However, significant impacts of the Non-flow Measures Only Alternative on terrestrial biological resources, cultural resources, tribal cultural resources, paleontological resources, and noise would be the same as from the Proposed Project, since they correspond to ground disturbance that would result from the non-flow measures.

The FAHCE-plus Alternative would result in similar adverse impacts from implementation of flow and non-flow measures relative to the Proposed Project (FAHCE). Key differences in impacts from the Proposed Project (FAHCE) and the FAHCE-plus Alternative are summarized in Table 4. (See Final EIR Section 4.20, page 4-250.)

**TABLE 4
DETAILED COMPARISON OF SELECTED PROPOSED PROJECT AND FAHCE-PLUS ALTERNATIVE IMPACTS**

Alternative Impact	Proposed Project (FAHCE)	FAHCE-plus Alternative	FAHCE and FAHCE-plus Comparison (Flow Measures Only)
<p>Impact HYD-2: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream runoff in a manner that would result in flooding on or off site</p>	<p>LTS</p>	<p>LTS (+) <i>Change:</i> <i>Potential 2-day increase in peak flow capacity</i></p>	<p>The modeled 2015 and 2035 FAHCE and FAHCE-plus Alternative scenarios would both increase daily peak flows in all channels in the study area (except for Calero Creek for both the modeled 2035 FAHCE and FAHCE-plus Alternative scenarios) relative to the current and future baseline conditions.</p> <p>While peak flows on Calero Creek under both current baseline conditions and modeled 2015 FAHCE and FAHCE-plus Alternative would exceed the channel capacity, the FAHCE-plus Alternative would exceed peak flow capacity by 2 additional days.</p> <p>The changes in peak flows would not be at a magnitude or frequency to result in flooding that could cause a change in channel course.</p>

Alternative Impact	Proposed Project (FAHCE)	FAHCE-plus Alternative	FAHCE and FAHCE-plus Comparison (Flow Measures Only)
<p>Impact WQ-2: Violate any applicable surface water quality standards or waste discharge requirements, or otherwise substantially degrade surface water quality</p>	<p>LTS</p>	<p>LTS (=) <i>Change: Variance in impact is based on the seasonal flow opportunities</i></p>	<p>Implementation of both the FAHCE and FAHCE-plus Alternative flow measures would modify temperatures in portions of the Stevens Creek and Guadalupe River watersheds. Guadalupe Creek impacts to water temperature under either alternative would be less than significant, although the CWMZ could experience limited times when the Settlement Agreement temperatures are unable to be met. For both CWMZs, the FAHCE-plus Alternative results in negligibly lower temperatures than the Proposed Project.</p> <p>There is a negligible difference in magnitude and duration for both alternatives, but the timing is different (summer versus winter). Summer base flows would be more reliable and cooler with both the Proposed Project and FAHCE-plus Alternative. The reserved water in the FAHCE-plus Alternative scenario enables additional pulse flows, which could result in negligibly lower temperatures than the Proposed Project in the winter. The FAHCE-plus Alternative would raise the temperature (limits) of reservoir releases in the summer to 16°C without changing any habitat suitability temperature thresholds, compared to FAHCE, allowing for enhanced summer flows while still meeting water temperature targets in the CWMZ. Neither alternative would rise to a level of significance for WQ-2.</p>
<p>Impact REC-1: Increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated</p>	<p>LTS</p>	<p>LTS (+) <i>Change: Additional 1 day of daily peak flows in Guadalupe Creek</i></p>	<p>The FAHCE-plus Alternative would have a slightly higher impact than the Proposed Project as the FAHCE-plus Alternative instream flows would result in increased average daily peak flows in Guadalupe Creek (that is, 1 day) potentially affecting recreational access that does not occur as part of the Proposed Project.</p>
<p>Impact AQUA-1a: Have a substantial adverse effect, either directly, through habitat modifications, or through substantial interference with movement on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW, NMFS, or USFWS in the Stevens Creek watershed portion of the study area</p>	<p>NI (beneficial)</p>	<p>NI (beneficial) (=)</p>	<p>The FAHCE-plus Alternative performs better for steelhead and specifically as it relates to adult fish passage. This is particularly the case in dry/very dry years when there might be little to no adult passage opportunity under FAHCE. In these years, FAHCE-plus is more likely to provide opportunities for adult passage. FAHCE-plus is the environmentally superior alternative because it is more likely to support the anadromous life history strategy of <i>O. mykiss</i> (steelhead), which is the federally listed population.</p>
<p>Impact AQUA-1b: Have a substantial adverse effect, either directly, through habitat modifications, or through substantial interference with movement on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW, NMFS, or USFWS in the Guadalupe River watershed portion of the study area</p>	<p>NI (beneficial)</p>	<p>NI (beneficial) (=)</p>	<p>The FAHCE-plus alternative performs better for steelhead and specifically as it relates to adult fish passage. This is particularly the case in dry/very dry years when there might be little to no adult passage opportunity under FAHCE. In these years, FAHCE-plus is more likely to provide opportunities for adult passage. FAHCE-plus is the environmentally superior alternative because it is more likely to support the anadromous life history strategy of <i>O. mykiss</i> (steelhead), which is the federally listed population.</p>

Notes: NI = no impact, LTS = less than significant (+) = higher adverse impact than Proposed Project, (-) = lower adverse impact than Proposed Project, (=) = same or similar adverse impact as Proposed Project

As noted in the Project and action alternative descriptions, the non-flow measures in each Project and action alternative description are identical. The variation in the Proposed Project (FAHCE) and FAHCE-plus Alternative focuses primarily on the pulse flows.

Based on the analysis of the proposed flow measures under both the Proposed Project and FAHCE-plus Alternative, the FAHCE-plus Alternative was found to improve habitat conditions and migration potential for steelhead to the largest extent. The FAHCE and FAHCE-plus Alternatives otherwise both improved habitat conditions overall and migration potential for Chinook salmon. Other resources, including hydrology, water quality, and recreation, showed differences between the Proposed Project and FAHCE-plus Alternative, as summarized in Table 4; however, given the importance of steelhead benefits to achieving Project objectives, those differences were not at a level that would outweigh the benefits to the steelhead observed under the FAHCE-plus Alternative or otherwise sway the selection of an environmentally superior alternative.

The proposed non-flow measures, common to the Proposed Project, Non-flow Measures Only Alternative, and FAHCE-plus Alternative, were found to improve habitat conditions overall for both steelhead and Chinook salmon. However, the Non-flow Measures Only Alternative would forego benefits to fisheries habitat and migration potential achieved by the flow measures included in the Proposed Project and the FAHCE-plus Alternative.

Based on this analysis, while the Proposed Project and FAHCE-plus Alternative achieve the Project objectives and requirements of the Settlement Agreement and have similar levels of impact significance after the implementation of mitigation, the FAHCE-plus Alternative is the environmentally superior alternative because it has the greatest benefits to steelhead habitat conditions and migration potential.

The Board finds the following with regard to the alternatives analyzed in the EIR, as discussed in more detail below:

- The EIR describes a reasonable range of alternatives to the Project as proposed.
- The Board has evaluated the comparative merits of the Proposed Project and alternatives and will consider the FAHCE-plus Alternative, the environmentally superior alternative, for approval.
- The Board rejects the No Project Alternative because it fails to meet the first two Project objectives, to restore and maintain healthy steelhead trout and salmon populations, and because it fails to meet the fourth Project objective calling for adaptive management of restoration measures.
- The Board rejects the Non-flow Measures Only Alternative because it is undesirable on policy grounds, because it would forego benefits to fisheries habitat and migration potential achieved by the flow measures included in the Proposed Project and the FAHCE-plus Alternative. The Board further rejects the Non-flow Measures Only Alternative because it would not avoid or substantially lessen any of the Proposed Project or FAHCE-plus Alternative significant impacts, which are caused by non-flow measures.

X.B ADDITIONAL ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

Valley Water initiated the alternatives development process following determination of the Proposed Project, which was originally documented in the Settlement Agreement. Valley Water considered alternatives to the Proposed Project and individual measures based on input from the Initialing Parties, the FAHCE TWG, and public scoping comments. This input included alternative measures that, either alone or grouped with other measures to form a complete alternative to the Proposed Project, could feasibly meet the Project objectives and avoid or substantially lessen one or more of the adverse environmental impacts identified in the analysis of the Proposed Project.

As discussed in Final EIR Chapter 4, *Alternatives*, Section 4.2.1, those alternative measures or projects that were considered and eliminated from further consideration are discussed below.

Participants in the scoping process presented alternative suggestions for Project measures. Table 5 summarizes the alternative concepts raised during the public scoping process and provides the reason for their elimination from detailed consideration or, as appropriate, states how they were integrated into other alternatives.

**TABLE 5
MEASURES PROPOSED DURING SCOPING**

Proposed Alternative Measure	Disposition
<i>Flow Measure Alternatives</i>	
Remove the Permanente-Stevens diversion channel.	Infeasible; alternative to a single component, not Proposed Project as whole.
Assess set of alternative rule curves developed by GCRCD, NMFS, and CDFW ("Scenario 4").	Does not meet Project objectives or provide substantial fisheries benefits compared to Proposed Project; full discussion of eliminated alternative in Section 4.2.3.
Compare "cold-water flow" versus the "extended flow length" strategy for managing water.	Incorporated into FAHCE-plus Alternative, as described in Section 4.3.3.
Evaluate alternative management practices that might enhance temperature refugia for steelhead in the Guadalupe River.	To be considered during adaptive management; measure is also alternative to single component, not Proposed Project as whole.
Releases for summer/fall rearing should optimize balance between providing a fast-water feeding habitat and control of water temperature through mid-September, when reservoirs de-stratify.	Part of the Proposed Project; temperature stratification in the reservoir was considered as part of rule curves development.
<i>Non-flow Measure Alternatives</i>	
Consider Upper Permanente Creek as a potential location for steelhead habitat.	Range expansions at multiple creeks to be considered during adaptive management; measure is also alternative to a single component, not the Proposed Project as whole.
Consider alternative strategies for preserving steelhead during drought in the recovery period, including rescue and relocation of fish.	To be considered during adaptive management; measure is also alternative to a single component, not the Proposed Project as whole.

Proposed Alternative Measure	Disposition
Include an alternative that analyzes fish ladders or equivalent fish passage measures and needed temperature mitigations for all in-stream diversions.	Fish passage improvements (such as fish ladders) are part of the non-flow measures being evaluated in accordance with the Settlement Agreement. Temperature mitigation is contemplated in the proposed and alternative flow-based rule curves
In Stevens Creek, actions should be taken, including potential dredging near the outlet, to reduce turbidity of reservoir releases.	A multiport outlet is part of the Proposed Project, which would reduce turbidity at outlet.

As noted in Table 5, one set of alternative rule curves (also referred to as Scenario 4) was developed by members of the TWG but was eliminated prior to detailed consideration in the EIR. Although Scenario 4 provided improved fisheries conditions for some lifestages in some creeks, it was eliminated for the following reasons:

- This scenario appears to provide little to no habitat during portions of some years, thereby increasing the risk of catastrophic impact to *O. mykiss* populations.
- This scenario appears to run reservoirs to dead pool or emergency levels, particularly during consecutive dry years, thereby failing to address the water supply objective in dry years.
- This scenario appears to increase risk to steelhead extinction (that is, failing at another Project objective).
- This scenario results in less suitable fisheries conditions for some lifestages in some creeks.
- This scenario appears to require Valley Water to determine each water year (WY) type during the fall or early winter of each WY. However, the WY types are not known until late winter or early spring of that WY.

Although Scenario 4 was not carried forward for detailed evaluation in the EIR, evaluation of modeling results for Scenario 4 and the Proposed Project facilitated the creation of a new alternative, the FAHCE-plus Alternative, which was developed to improve on concepts included in the Proposed Project and Scenario 4 and, therefore, was carried forward for detailed review in the EIR.

X.C POTENTIAL ALTERNATIVES SUGGESTED IN PUBLIC COMMENTS ON DRAFT EIR AND AFTER DRAFT EIR RELEASE

As noted in Final EIR Chapter 6, *Draft EIR Comments and Responses*, Section 6.2.7, many Draft EIR commenters requested consideration of additional alternatives. More specifically, commenters requested additional alternatives with AMT input; one requested additional model runs to ameliorate upstream passage; others requested additional non-flow projects or additional designs as alternatives; and, finally, another requested reconsideration of “Scenario 4.”

As noted in Final EIR Section 6.2.7, Valley Water has met CEQA requirements for a reasonable range of alternatives. Regarding the suggestion to develop additional alternatives with the involvement of the AMT, the need for modifications of the selected flow and non-flow measures would be determined after the AMP is implemented, based on monitoring results.

Also, in response to the request to consider additional non-flow projects or additional designs as alternatives, no alternatives to the non-flow measures were considered in the EIR (other than the No Project Alternative) because the proposed non-flow measures were prescribed in the Settlement Agreement, implementation of which is the basic purpose of the Proposed Project, and because sufficient design has not yet been completed to offer an opportunity to develop project-level alternatives for individual non-flow measures.

Scenario 4 was an initial alternative to the FAHCE scenario developed in coordination with the project TWG. Based on the modeling and analysis of Scenario 4, this alternative was eliminated from further consideration early in the planning process because many of its rule curve parameters were incorporated into the FAHCE-plus Alternative. See Final EIR Section 4.2.3, *Scenario 4 Alternative Reservoir Re-operation Rules*. The FAHCE-plus Alternative was based in part on Scenario 4 and incorporated its intended benefits as compared with the Proposed Project. CEQA does not require EIRs to include multiple variations of the alternatives it considers in detail.

The Draft EIR comment period closed on October 15, 2021. In early 2023, NMFS staff presented a new alternative to Valley Water for consideration. The NMFS new alternative combines elements of FAHCE and the FAHCE-plus Alternative flow measures, but also varies from FAHCE and FAHCE-plus in several ways. It takes the original FAHCE rule curves (restoring the four individual curves that were removed in FAHCE-plus for the Stevens, Guadalupe, Calero, and Almaden Reservoirs) and the FAHCE cold water pool temperature criteria (14 degrees versus FAHCE-plus 16 degrees) and adds the FAHCE-plus pulse flows and safeguard pulses with lower storage triggers and different magnitudes and durations based on the specifics of each creek. The EIR was not required to consider the new alternative because it was more than a year after the close of the Draft EIR public comment period and because it does not reduce any significant impacts of the FAHCE or FAHCE-plus flow measures. Instead, it is being offered as a potential way to better achieve Settlement Agreement objectives. Valley Water has committed to considering and fully evaluating the NMFS alternative as part of the AMP as a priority, if the AMT agrees.

XI. EIR RECIRCULATION NOT REQUIRED

XI.A LEGAL REQUIREMENTS FOR EIR RECIRCULATION

A lead agency is required to recirculate a Draft EIR for additional public review when “significant” new information is added to the EIR after the initial public review, according to CEQA Guidelines Section 15088.5(a). New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such effect, including a feasible project alternative that the project proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project but the project's proponents decline to adopt it.
- The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies, amplifies, or makes insignificant modifications to an adequate EIR, according to CEQA Guidelines Section 15088.5(b).

XI.B WHY DRAFT EIR COMMENTS, RESPONSES, AND REVISIONS DO NOT TRIGGER DRAFT EIR RECIRCULATION

No significant new information has been added to the EIR in Draft EIR comments, responses to Draft EIR comments, and Draft EIR revisions made in the Final EIR that would trigger a Draft EIR recirculation under CEQA Guidelines Section 15088.5(a) because:

- They did not disclose a new significant environmental impact that would result from the Project or from a new mitigation measure proposed to be implemented.
- They did not disclose a substantial increase in the severity of an environmental impact that would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- They did not disclose a feasible Project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the adverse environmental impacts of the Project.
- They did not otherwise result in major revisions to the Draft EIR that precluded meaningful public review and comment on a substantial, adverse project impact environment, a feasible mitigation measure, or an alternative not proposed or implemented.

Instead, only minor changes were made to the Draft EIR in response to public comments and to amplify, clarify, and update certain information. The changes and new information provided in the Final EIR include:

- clarifications to the Draft EIR analysis in response to comments received,
- minor revisions to mitigation measures in response to comments received,
- corrections of typographic and editorial errors, and
- other Valley Water-initiated changes to the project description and impact analyses.

This new information does not include identification of new or substantially increased significant impacts associated with the FAHCE-plus Alternative or mitigation measures that are considerably different from those previously analyzed that would clearly lessen the FAHCE-plus Alternative's significant impacts.

The Board finds that the new information added to the Final EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR and is not "significant" within the meaning of CEQA Guidelines Section 15088.5. The Board further finds that incorporating the new information and corrections does not deprive the public of a meaningful opportunity to comment

on the Project or its effects, and that no information has been added to the Final EIR that would warrant recirculation pursuant to Public Resources Code Section 21092.1 or CEQA Guidelines Section 15088.5. This finding is based upon all the information presented in the Final EIR and the record of proceedings.

XII. MITIGATION MONITORING AND REPORTING PLAN

The Board hereby finds that an MMRP has been prepared for the EIR and has been adopted concurrently with these Findings [Public Resources Code Section 21081.6(a)(1)]. Valley Water will use the MMRP to track implementation of EIR mitigation measures adopted in these Findings.

XIII. STATEMENT OF OVERRIDING CONSIDERATIONS

As mentioned in Section I of these Findings, for a project that has significant impacts that cannot feasibly be avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a Statement of Overriding Considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." [CEQA Guidelines Sections 15093, 15043(b); see also Public Resources Code Section 21081(b).]

As described in these Findings, Valley Water has reduced the FAHCE-plus Alternative's significant impacts to the extent feasible. The significant unavoidable impacts of the FAHCE-plus Alternative are as follows:

- **Impact CUL-1:** Result in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines: Historical Built Environment Resources
- **Impact CUL-2:** Result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines: Archaeological Resources
- **Impact TRI-1:** Cause a substantial adverse change in the significance of a tribal cultural resource (as defined by the PRC) that is (1) listed or eligible for listing in the CRHR, or in a local register of historical resources; or (2) a resource determined by the lead agency to be significant
- **Impact NOISE-1:** Cause a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies, or cause a substantial incremental increase in noise levels

The FAHCE-plus Alternative's incremental contributions to significant cumulative impacts for these impact topics are cumulatively considerable after mitigation, and thus also significant and unavoidable.

In determining whether to approve the FAHCE-plus Alternative, the Board has weighed the economic, legal, social, technological, environmental, and other benefits of the FAHCE-plus Alternative against its unavoidable significant environmental impacts. The FAHCE plus

Alternative's benefits, supported by substantial evidence in the EIR and elsewhere in the administrative record, include the following:

- General benefits provided by achieving the Project objectives to restore and maintain healthy fisheries in Stevens Creek and Guadalupe River watersheds (see Final EIR Section 4.10.3, page 4-105), maintain flexible and reliable groundwater recharge to support water supplies and water delivery (see Final EIR Section 4.7.3, page 4-40), and adaptively manage flow and non-flow measures (see Final EIR Section 2.6, page 2-39);
- Specific beneficial impacts on water quality: improved habitat conditions in the Stevens Creek and Guadalupe River watersheds (Impact WQ-1, Final EIR Section 4.8.3.1, page 4-56) and improved population and community ecology water quality standard (Impact WQ-2, Final EIR Section 4.8.3.2, page 4-62);
- Specific beneficial impacts on aquatic biological resources: increased juvenile rearing habitat and the improved migration conditions for steelhead in the Stevens Creek watershed (Impact AQUA-1a, Final EIR Section 4.10.3.1, page 4-106) and increased upstream passage opportunities for adult steelhead, Chinook salmon, and Pacific lamprey in the Guadalupe River watershed (Impact AQUA-1b, Final EIR Section 4.10.3.2, page 4-115); and
- Specific beneficial impacts on certain terrestrial biological resources: help certain plant species that need high water events to germinate or spread seeds (Impact TERR-2, Final EIR Section 4.11.3.2, page 4-175); help keep water in streams during drier periods, thus maintaining associated groundwater (Impact TERR-2, Final EIR Section 4.11.3.2, page 4-175); provide additional water to wetlands during drier periods and help sustain wetland functions seasonally (Impact TERR-3, Final EIR Section 4.11.3.3, page 4-180); provide additional water to wildlife during dry periods (Impact TERR-4, Final EIR Section 4.11.3.4, page 4-184); and improved ability of animals to move through the project site(s) (Impact TERR-4, Final EIR Section 4.11.3.4, page 4-184).

In consideration of the above-listed FAHCE-plus Alternative benefits, the Board hereby finds that the benefits of the FAHCE-plus Alternative outweigh its direct and cumulatively considerable unavoidable significant impacts on cultural resources, tribal cultural resources, and noise, which are considered "acceptable." Each benefit set forth above constitutes an overriding consideration warranting approval of the FAHCE-plus Alternative, independent of the other benefits.

XIV. REFERENCES CITED

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EXHIBIT B COVERSHEET

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE FISH AND AQUATIC HABITAT COLLABORATIVE EFFORT PROJECT: MITIGATION MONITORING AND REPORTING PROGRAM

No. of Pages: 10

Exhibit Attachments: None

EXHIBIT B

**FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE FISH AND AQUATIC HABITAT
COLLABORATIVE EFFORT PROJECT:
MITIGATION MONITORING
AND REPORTING PROGRAM**

I. INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. It provides for the monitoring of mitigation measures required of the Santa Clara Valley Water Valley District (Valley Water) for the Fish and Aquatic Habitat Collaborative Effort Project (Project), as set forth in the Environmental Impact Report (EIR) and Findings of Fact.

Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the State CEQA Guidelines require public agencies “to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.”

An MMRP is required for the Proposed Project because the EIR identified significant impacts and identified mitigation measures to reduce most of those impacts to less than significant levels. The Valley Water Board of Directors adopted these mitigation measures concurrently with the adoption of this MMRP.

I.A PURPOSE

This MMRP has been prepared to facilitate the process to allow for mitigation measures to be implemented and completed according to schedule and maintained in a satisfactory manner throughout implementation of the Proposed Project. The MMRP may be modified by Valley Water in response to changing conditions or circumstances.

Table 1 describes the individual mitigation measures and, for each measure, identifies the timing, responsibility for implementation, and responsibility for oversight. The order in which mitigation measures are presented (by resource category) follows the sequence in the EIR. All the adopted mitigation measures are programmatic mitigation measures to be implemented for second-tier non-flow measure projects.

I.B ROLES AND RESPONSIBILITIES

Valley Water would directly implement mitigation measures for most non-flow measures, including barrier remediation projects in Stevens Creek, since these projects would be directly implemented by Valley Water. For those fish barrier remediation projects proposed in the Guadalupe River watershed to be implemented by others, Valley Water would add similar mitigation measures as conditions of funding agreements with the implementing entities.

Valley Water and/or its contractors or funding recipients (if applicable) are responsible for taking all actions necessary to implement the mitigation measures and to complete monitoring that confirms each mitigation measure has been successfully completed. Valley Water is responsible for oversight and periodic reporting.

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**TABLE 1
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact Number and Specific Environmental Issue	Mitigation Measure (MM) Number	Mitigation Measure Description	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Oversight
Terrestrial Biological Resources					
<p>Impact TERR-1: Construction impacts from non-flow measures on non-serpentine special-status plant and wildlife species</p>	<p>MM TERR-1a</p>	<p>Biological Resources Screening and Assessment. On a project-by-project basis for each non-flow measure, Valley Water will perform a preliminary biological resource screening as part of the environmental review process to determine whether the project has any potential to affect biological resources, including special-status species. If Valley Water determines that the project has no potential to affect biological resources, no further action is required. If the project would have the potential to affect biological resources as determined by Valley Water as part of its project-level environmental review, prior to construction, a qualified biologist will conduct a biological resources assessment to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. The biological resources assessment will evaluate the potential for impacts to biological resources including, but not limited to, special-status species, nesting birds, wildlife movement, sensitive plant communities, critical habitat, essential fish habitat (EFH), and other resources judged to be sensitive by local, state, and/or federal agencies. Pending the results of the biological resources assessment, design alterations, further technical studies (that is, protocol surveys), and/or consultations with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and/or other local, state, and federal agencies may be required.</p> <p>If the project cannot be designed without complete avoidance, Valley Water will coordinate with the appropriate regulatory agency (that is, USFWS, National Marine Fisheries Service [NMFS], CDFW, or U.S. Army Corps of Engineers [USACE]) to obtain regulatory permits and implement project-specific mitigation that could be refined during the permitting process prior to any construction activities. The following mitigation measures (MMs TERR-1b through TERR-1e) would be incorporated only as applicable into the biological resources assessment for non-flow measures projects where specific resources are present or may be present and affected by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the biological resources assessment.</p>	<p>Conduct biological resources screening during project-level environmental review.</p> <p>Conduct biological resources assessment, if necessary, prior to construction.</p> <p>Conduct protocol surveys, if necessary, prior to construction.</p> <p>Obtain regulatory permits prior to construction.</p> <p>Implement project-specific mitigation measures prior to and during construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>
<p>Impact TERR-1: Construction impacts from non-flow measures on non-serpentine special-status plant and wildlife species</p>	<p>MM TERR-1b</p>	<p>Endangered/Threatened Species Habitat Assessment and Protocol Surveys. Specific habitat assessment and survey protocol surveys are established for several federal and/or state endangered or threatened species (for example, California red-legged frog). If the results of the biological resources assessment determine that suitable habitat may be present for any such species in an area that could be affected by construction of a non-flow measure, Valley Water will complete protocol habitat assessments/surveys in areas with suitable habitat for such species that could be affected by construction of the non-flow measures in accordance with CDFW, USFWS, and/or Valley Habitat Plan (VHP) established protocols prior to issuance of any construction permits and/or project approvals.</p> <p>Alternatively, in lieu of conducting protocol surveys, Valley Water may choose to assume the presence of a special-status species within the project footprint and proceed with development of appropriate avoidance measures, consultation, and payment of VHP fees or permitting, as applicable.</p> <p>If the special-status species are detected during protocol surveys, or protocol surveys are not conducted and presence is assumed based on suitable habitat, MM TERR-1d or MM TERR-1e would apply.</p>	<p>Complete protocol habitat assessments/surveys if necessary prior to issuance of any construction permits and/or project approvals.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>

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Environmental Impact Number and Specific Environmental Issue	Mitigation Measure (MM) Number	Mitigation Measure Description	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Oversight
<p>Impact TERR-1: Construction impacts from non-flow measures on non-serpentine special-status plant and wildlife species</p>	<p>MM TERR-1c</p>	<p>Nesting Avian Species Avoidance and Minimization. Valley Water will retain a qualified biologist to conduct preconstruction surveys for nesting birds. Surveys will be conducted no more than 7 days prior to the initiation of construction activities during the nesting bird season (February 1 through August 15) in any given area. The survey will cover the portions of the project work area where construction activities will occur and a 250-foot buffer for raptors and a 50-foot buffer for non-raptors. During each survey, the biologist will inspect all trees and other potential nesting habitats (for example, shrubs, ruderal grasslands, wetlands, and buildings) in and immediately adjacent to the impact areas for nests. If a lapse in project-related work of 1 week or longer occurs, another focused survey will be conducted before project work can be reinitiated.</p> <p>If an active nest is found sufficiently close to the project work area (that is, within 250 feet for raptors or 50 feet for non-raptors), a qualified biologist will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 50 feet for non-raptors and 250 feet for raptors). No construction activities will be performed within the buffer until the young have fledged or the nest has been determined to be inactive by a qualified biologist.</p> <p>If the qualified biologist determines that a reduced buffer size is appropriate given conditions in the vicinity of the nest, the type of construction activity that would occur near the nest, and the species of the nesting bird, the biologist will monitor bird behavior in relation to work activities. If the birds do not indicate that they are habituated to project activities during the initial 2 days of attempting work within a reduced buffer, the standard buffer will be implemented. Project activities within the reduced buffers will not resume until Valley Water has consulted with CDFW and both the qualified biologist and CDFW confirm that the birds' behavior has normalized, or until the nest is no longer active.</p>	<p>Conduct preconstruction surveys for nesting birds no more than 7 days prior to the initiation of construction activities during the nesting bird season (February 1 through August 15).</p> <p>Conduct another focused survey, if necessary, after a lapse in project-related work of 1 week or longer occurs.</p> <p>Implement a disturbance-free buffer zone prior to and during construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>
<p>Impact TERR-1: Construction impacts from non-flow measures on non-serpentine special-status plant and wildlife species</p>	<p>MM TERR-1d</p>	<p>Payment of VHP Impact Fees. Valley Water and other co-permittees that may be identified in the future to implement non-flow measures will mitigate temporary and permanent impacts to VHP-covered species and sensitive habitats in the geographic area defined by the VHP through payment of VHP impact fees to the Santa Clara Valley Habitat Agency. For each applicable non-flow measure, this fee to the VHP conservation program will pay for the cost of mitigating project effects on covered species and their habitats, including impacts to sensitive habitats such as wetlands and aquatic habitats.</p> <p>The VHP's conservation program includes conserving existing populations of covered species, where possible; increasing the number of individuals; and expanding the distribution of the species within the VHP Reserve System through the acquisition, restoration, and creation of habitat. Furthermore, the VHP Reserve System would be designed to maintain and improve connectivity between these habitats, reduce habitat fragmentation, and link species' habitat within the VHP Reserve System with important habitat outside the VHP Reserve System. The objective of the VHP's conservation strategy is not only the conservation of the species but contribution to the species' recovery as well. As a result, the payment of fees in compliance with the VHP would contribute to this important conservation and recovery program.</p> <p>VHP impact fees will be based on the estimated temporary impacts to VHP landcover types, as well as fees specific to impacts to wetlands habitats, resulting from the proposed project. As defined by the VHP, temporary impacts are "direct impacts that alter land cover for less than one year and that allow the disturbed area to recover to pre-project or ecologically improved conditions within one year of completing construction."^a</p> <p>Valley Water will coordinate with the Santa Clara Valley Habitat Agency to track and report the location and amount of waters and wetlands created or restored using the VHP fees paid by Valley Water to demonstrate compliance with state policies.</p>	<p>Payment of VHP impact fees to the Santa Clara Valley Habitat Agency, prior to construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>

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Environmental Impact Number and Specific Environmental Issue	Mitigation Measure (MM) Number	Mitigation Measure Description	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Oversight
Impact TERR-1: Construction impacts from non-flow measures on non-serpentine special-status plant and wildlife species	MM TERR-1e	<p>Implement Compensatory Mitigation for Special-status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP. For areas outside the VHP or activities not covered by the VHP, Valley Water will implement project-specific mitigation to avoid or minimize impacts during construction activities.</p> <p>Compensation for unavoidable impacts to populations of special-status plants will be provided by a combination of preservation and enhancement of those species' populations outside potential impact areas. For impacts to populations (including partial populations) of a specific plant species, compensatory mitigation would include the preparation of a Habitat Mitigation and Monitoring Plan (HMMP) that would describe the preservation, enhancement, and management of lands that (1) already support equal or greater numbers (and health) of individuals of that species and (2) contain sufficient unoccupied suitable habitat to allow for an increase in populations, the increase being at least equivalent to the number affected. For determining the number of individuals affected (if applicable), the greatest number of individuals known to be present within the impact area (if the impact area has undergone multiple surveys) would be used to determine the magnitude of the impact.</p>	Implement project-specific mitigation for areas outside the VHP or activities not covered by the VHP prior to and during construction activities.	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-2: Construction impacts from non-flow measures on sensitive natural communities	MM TERR-1a	Biological Resources Screening and Assessment. <i>See description above.</i>	<i>See above.</i>	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-2: Construction impacts from non-flow measures on sensitive natural communities	MM TERR-1b	Endangered/Threatened Species Habitat Assessment and Protocol Surveys. <i>See description above.</i>	<i>See above.</i>	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-2: Construction impacts from non-flow measures on sensitive natural communities	MM-TERR-1d	Payment of VHP Impact Fees. <i>See description above.</i>	<i>See above.</i>	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-2: Construction impacts from non-flow measures on sensitive natural communities	MM-TERR-1e	Implement Compensatory Mitigation for Special-status Plant and Wildlife Species for Areas Outside or Activities Not Covered by the VHP. <i>See description above.</i>	<i>See above.</i>	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-3: Impacts to wetlands and other waters of the U.S. from non-flow measures	MM TERR-1d	Payment of VHP Impact Fees. <i>See description above.</i>	<i>See above.</i>	Valley Water or funding recipient for certain non-flow measures	Valley Water
Impact TERR-3: Impacts to wetlands and other waters of the U.S. from non-flow measures	MM TERR-2	<p>Mitigation for Wetlands and Other Waters of the United States and State outside of VHP-covered Areas. Areas temporarily affected by individual projects will be analyzed for the presence of jurisdictional wetlands and waters, and project-specific impacts will be documented. To the extent impacts cannot be avoided or minimized, affected wetlands and waters will be restored to pre-project functions and values at a minimum mitigation ratio (performance objective) of 1:1. Additional compensatory mitigation may be considered to fully address wetlands impacts that would be identified during the state and/or federal permitting process. However, compensatory mitigation will be tailored to the specific non-flow measure project. Valley Water will monitor restoration to track mitigation success. This process will be documented in a project-specific mitigation plan that will be refined during the federal or state permitting processes.</p>	Mitigate for impacts on jurisdictional wetlands and waters through restoration or compensation during construction and post construction.	Valley Water or funding recipient for certain non-flow measures	Valley Water

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Environmental Impact Number and Specific Environmental Issue	Mitigation Measure (MM) Number	Mitigation Measure Description	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Oversight
<p>Impact TERR-5: Conflicts with applicable provisions of local policies and ordinances protecting trees from non-flow measures</p>	<p>MM TERR-3</p>	<p>Tree Replacement. Valley Water will replace ordinance trees if required by applicable ordinances in accordance with Section 5.5 in Appendix C of the Stream Maintenance Program^b (<i>Mitigation for Tree and Shrub Removals 6–12 Inches dbh</i>). This section provides a specific tree appraisal and evaluation protocol to determine how replacement planting should occur. It is possible that this mitigation measure may be refined during the permitting process by USACE, the San Francisco Bay Regional Water Quality Control Board (RWQCB), or CDFW, in which case the refinements required by these agencies will be implemented. Special attention will be given to the size of tree replacement if using container material; larger container sizes and held over plant stock in a nursery setting may contain <i>Phytophthora</i> spp., a water mold plant pathogen. Appropriate nursery best management practices (BMPs) should be employed for all container stock.</p>	<p>Replace ordinance trees if required by applicable ordinances post construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>
<p>Cultural Resources</p>					
<p>Impact CUL-1: Impacts on built-environment historical resources from non-flow measures and/or maintenance activities</p>	<p>MM CUL-1a</p>	<p>Conduct Cultural Resources Studies and Avoid Impacts on Built-environment Resources. In areas potentially containing built-environment historical resources, when specific non-flow measure projects are proposed for implementation, Valley Water will ensure that architectural history studies and surveys will be conducted by professionals who meet the Secretary of the Interior’s Professional Qualifications Standards to identify the presence of built environment resources within a particular project location. These studies can be combined with the archaeological studies conducted under BMP GEN-41 but must include a historic buildings survey. If buildings or structures that are eligible for listing in the National Register of Historic Place (NRHP) or California Register of Historic Resources (CRHR) are identified within the study area, impacts to those resources resulting from the non-flow measure will be avoided, if feasible. Project relocation and redesign are appropriate avoidance measures. If avoidance is not feasible, MM CUL-1b will be implemented (see below).</p>	<p>Conduct architectural history studies and surveys during project-level environmental review and construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>
<p>Impact CUL-1: Impacts on built-environment historical resources from non-flow measures and/or maintenance activities</p>	<p>MM CUL-1b</p>	<p>Follow the Secretary of the Interior’s Standards for the Treatment of Historic Properties. In some cases, completely avoiding an element of the built environment that qualifies as a historical resource or historic property may not be feasible, and the feature must be altered as part of project implementation.</p> <p>In this situation, any project-related alterations of eligible historic-era buildings or structures, including relocations, would conform to the <i>Secretary of the Interior’s Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i>.^c Valley Water will develop and implement any plans necessary to mitigate alterations in accordance with these standards. If necessary (that is, if the proposed project requires compliance with Section 106 and concurrence from the State Historic Preservation Office [SHPO] because of federal involvement), the plans will be submitted to the SHPO for approval before project implementation. If these standards cannot be met, MM CUL-1c will be implemented (see below).</p>	<p>Conform to the Secretary of the Interior’s Standards for the Treatment of Historic Properties prior to and during construction.</p> <p>Submit project plans to the SHPO for approval, if necessary, prior to project implementation.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>
<p>Impact CUL-1: Impacts on built-environment historical resources from non-flow measures and/or maintenance activities</p>	<p>MM CUL-1c</p>	<p>Record Built-environment Resources to Historic American Buildings Survey and Historic American Engineering Record Standards. In some cases, avoiding or relocating a building or structure considered eligible for the NRHP or CRHR may not be feasible, and that resource must be demolished. In this situation, Valley Water will retain a qualified architectural historian to document the affected historical built environment resource according to Historic American Buildings Survey (HABS) or Historic American Engineering Record (HAER) standards, as appropriate. HABS and HAER documentation packages will be entered into the Library of Congress as well as the appropriate Information Center of the California Historical Resources Information System.</p>	<p>Document the affected historical built-environment resource according to HABS/HAER standards prior to construction.</p>	<p>Valley Water or funding recipient for certain non-flow measures</p>	<p>Valley Water</p>

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Environmental Impact Number and Specific Environmental Issue	Mitigation Measure (MM) Number	Mitigation Measure Description	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Oversight
<p>Impact CUL-2: Impacts on archaeological resources from non-flow measures and/or maintenance activities</p>	<p>MM CUL-2a</p>	<p>Conduct Cultural Resources Studies and Avoid Impacts on Archaeological Resources.</p> <ul style="list-style-type: none"> ▪ During any project-level environmental review of projects, and consistent with the BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds), GEN-40 (Discovery of Cultural Remains or Historic Paleontological Artifacts), and GEN-41 (Review of Projects with Native Soil (described in Section 3.9.3.5 of the EIR), Valley Water will conduct a records search at the Northwest Information Center (Sonoma State University) to determine whether the study area has been previously surveyed and whether resources were identified. ▪ If the records indicate that no previous survey has been conducted, the Northwest Information Center will make a recommendation regarding whether a survey is warranted based on the archaeological sensitivity of the study area. If a survey is recommended, a qualified archaeologist will be retained to conduct archaeological surveys. ▪ Although avoidance is always the preferred alternative, the significance of any resources that are determined to be in the study area and unavoidable will be assessed according to the applicable local, state, and federal significance criteria. ▪ Valley Water will devise treatment measures to ameliorate “substantial adverse changes” to significant archaeological resources. Such treatment measures may include avoidance through project redesign, data recovery excavation, and public interpretation of the resource. <p>Valley Water will adhere to the following requirements:</p> <ul style="list-style-type: none"> ▪ If a project is located in an area rich with cultural materials, Valley Water will retain a qualified archaeologist to monitor subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property, which may extend beyond existing disturbances into undisturbed sediments. ▪ Consistent with BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds) and GEN-40 (Discovery of Cultural Remains or Historic Paleontological Artifacts), if, during the course of construction, cultural resources (that is, prehistoric sites, historic sites, and isolated artifacts and features) are discovered, work will be halted immediately within 50 meters (165 feet) of the discovery, and a qualified archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology will be retained to determine the significance of the discovery (see MM CUL-2b below). ▪ Valley Water will consider mitigation recommendations, consistent with the CEQA Guidelines Section 15126.4(b)(3) mitigation hierarchy, presented by a professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology for any unanticipated discoveries and will carry out the measures deemed feasible and appropriate. Such measures may include avoidance or preservation in place as preferred options, followed by excavation, documentation, curation, data recovery, or other appropriate measures. 	<p>Conduct a records search during project-level environmental review.</p> <p>Conduct archaeological surveys, if necessary, during project-level environmental review and prior to construction.</p> <p>Implement avoidance and preservation measures, if necessary, during construction.</p>	<p>Valley Water</p>	<p>Valley Water</p>
<p>Impact CUL-2: Impacts on archaeological resources from non-flow measures and/or maintenance activities</p>	<p>MM CUL-2b</p>	<p>If Cultural Resources Are Discovered, Immediately Halt Construction and Implement an Accidental Discovery Plan. In accordance with BMPs CU-1 (Accidental Discovery of Archaeological Artifacts or Burial Finds) and GEN-40 (Discovery of Cultural Remains or Historic Paleontological Artifacts), if cultural resources such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during construction activities, Valley Water will suspend work immediately at the location of the find and within a 50-meter (165-foot) radius. A qualified archaeologist will conduct a field investigation of the specific site and recommend mitigation that Valley Water will implement necessary to protect or recover any cultural resource determined by the archaeologist to represent a historical resource or unique archaeological resource. Mitigation will be consistent with the CEQA Guidelines Section 15126.4(b)(3) mitigation hierarchy, with preservation in place as the preferred option.</p>	<p>Implement accidental discovery plan, if necessary, during construction.</p>	<p>Valley Water</p>	<p>Valley Water</p>

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Tribal Cultural Resources					
Impact TRI-1: Impacts on tribal cultural resources from non-flow measures and/or maintenance activities	MM TRI-1a	Conduct Cultural Resources Studies and Avoid Effects on TCRs. In areas potentially containing tribal cultural resources, Valley Water would retain an ethnographer or archaeologist who meets the Secretary of the Interior’s standards to consult with appropriate tribes before approval of any project during Assembly Bill 52 consultation (if applicable) and identify the presence of any traditional cultural resources (TCRs) at the project location. Native American TCRs may be identified by an ethnographer who has worked extensively with community members (often, but not always, elders) who have considerable knowledge about places important to the community. If TCRs are identified in the study area, they will be avoided by project redesign or relocation, if feasible. Where avoidance is implemented no further mitigation is required, and implementing this mitigation measure would reduce Impact TRI-1 to a less-than-significant level. However, if avoidance is not feasible, see MM TRI-1b below.	Conduct cultural resources studies and consult with appropriate tribes during project-level environmental review and prior to specific non-flow measure project approval.	Valley Water	Valley Water
Impact TRI-1: Impacts on tribal cultural resources from non-flow measures and/or maintenance activities	MM TRI-1b	Consult with Native American Communities and Implement Appropriate Measures to Mitigate Effects on TCRs. Effects on tribal cultural resources would be rare occurrences. However, where an identified TCR cannot be fully avoided by a proposed Valley Water action, Valley Water will engage in consultation with affected Native American communities (including formal Assembly Bill 52 consultation, if applicable) to identify other ways to effectively mitigate impacts to tribal cultural resources. These may include: <ul style="list-style-type: none"> ▪ Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to (A) Protecting the cultural character and integrity of the resource; (B) Protecting the traditional use of the resource; or (C) Protecting the confidentiality of the resource. ▪ Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places. ▪ Protecting the resource. 	Consult with affected tribes and implement protective measures during project-level environmental review and prior to construction.	Valley Water	Valley Water
Geology and Soils					
Impact GEO-2: Impacts to unique paleontological resources or sites from non-flow measures	MM GEO-1	Follow the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts on Paleontological Resources. Valley Water will mitigate temporary and permanent impacts to a unique paleontological resource or site during construction and ground disturbance by implementing the following measures: <ul style="list-style-type: none"> ▪ Conduct an intensive field survey and surface salvage prior to earth moving, if applicable; ▪ Hire a qualified paleontological resource monitor to monitor excavations in previously disturbed rock units; ▪ Salvage unearthed fossil remains and/or traces (for example, tracks, trails, burrows, etc.); ▪ Wash screens to recover small specimens, if applicable; ▪ Prepare salvaged fossils to a point of being ready for curation (that is, removal of the enclosing matrix, stabilization and repair of specimens, and construction of reinforced support cradles where appropriate); ▪ Identify, catalog, curate, and provide for repository storage of prepared fossil specimens; and ▪ Prepare a final report of the finds and their significance. 	Adhere to the Society of Vertebrate Paleontology’s procedures prior to and during construction.	Valley Water	Valley Water

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Noise					
Impact NOISE-1: Noise impacts from construction and maintenance activities	MM NOISE-1	<p>Implement Construction Noise Mitigation Measures. Valley Water will implement the following measures to reduce potential construction and maintenance noise impacts to nearby sensitive receptors:</p> <ul style="list-style-type: none"> ▪ During all site excavation and grading, the project contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. ▪ The project contractor will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. ▪ During all project construction, the construction contractor will locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site. ▪ The project contractors will prohibit all unnecessary idling of internal combustion engines. 	Implement measures to reduce construction noise at sensitive receptor locations during construction.	Valley Water	Valley Water

^a ICF International, 2012, "Final Santa Clara Valley Habitat Plan," Santa Clara County, California, August 2012, prepared for City of Gilroy, City of Morgan Hill, City of San José, County of Santa Clara, Santa Clara Valley Transportation Authority, and Santa Clara Valley Water District, accessed on August 23, 2018, and December 8, 2018, <https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan>

^b Valley Water, 2011, "Stream Maintenance Program Update 2012–2022 Final Subsequent Environmental Impact Report," December 2011, <https://www.valleywater.org/project-updates/stream-maintenance-program/smp-authorization-documents-and-permits>

^c Weeks, Kay D., and Anne Grimmer, 1995, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*, U.S. Department of the Interior, National Park Service, Technical Preservation Services, Washington, D.C.

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