

**AMENDMENT NO. 2 TO AGREEMENT A4932A
BETWEEN THE SANTA CLARA VALLEY WATER DISTRICT
AND STILLWATER SCIENCES**

This Amendment No. 2 (Amendment), effective as of the date it is fully executed by the Parties, amends the terms and conditions of the Standard Consultant Agreement A4932A (Agreement) dated November 9, 2023, as amended by Amendment No. 1 dated June 24, 2025, between SANTA CLARA VALLEY WATER DISTRICT (Valley Water or District) and STILLWATER SCIENCES, (Consultant), collectively, the Parties.

RECITALS

WHEREAS, Consultant is currently providing professional regulatory permitting services for Valley Water’s Anderson Dam Seismic Retrofit Project (ADSRP or Project);

WHEREAS, Valley Water is proceeding with the development of the Phase 2 Coyote Percolation Dam Conservation Measure, and continuing the Federal Energy Regulatory Commission (FERC) Order Compliance Project (FOCP) monitoring efforts associated with Anderson Dam; and

WHEREAS, the Parties desire to amend the Agreement to increase the total not-to-exceed Fee to provide for additional compensation related to the additional services; modify the Project Schedule for the Consultant’s performance in consideration of the added scope; and incorporate administrative changes.

NOW, THEREFORE, in consideration of the mutual promises and agreements stated herein and notwithstanding anything to the contrary stated in the Agreement, Valley Water and Consultant hereby agree to amend the Agreement as follows:

1. Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 23. Schedule(s) and Attachments, is amended to state as follows:

“23. Schedule(s) and Attachments

Schedule EP, Scope of Services, and the following listed Attachments are incorporated herein by this reference as though set forth in full:

Revised Attachment One - Fees and Payments (REVISED)
Revised Attachment Two - Schedule of Completion (REVISED)
Attachment Three - Consultant’s Key Staff and Subconsultants (UNCHANGED)
Revised Attachment Four - Reference Materials” (REVISED)

2. Schedule EP, Scope of Services, is amended as set forth in Revised Schedule EP, Scope of Services, attached hereto and incorporated herein by this reference.
3. Schedule EP, Attachment One, Fees and Payments, is amended as set forth in Revised Schedule EP, Revised Attachment One, Fees and Payments, attached hereto and incorporated herein by this reference.
4. Schedule EP, Attachment Two, Schedule of Completion, is amended as set forth in Revised Schedule EP, Revised Attachment Two, Schedule of Completion, attached hereto and incorporated herein by this reference.

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- 5. Schedule EP, Attachment Four, Reference Materials, is amended as set forth in Revised Schedule EP, Revised Attachment Four, Reference Materials, attached hereto and incorporated herein by this reference.
- 6. All other terms and conditions of the Agreement A4932A, and Amendment No. 1 not otherwise amended as stated herein remain in full force and effect.

IN WITNESS WHEREOF, THE PARTIES HAVE SET FORTH BELOW THEIR CONSENT TO THE TERMS AND CONDITIONS OF THIS AMENDMENT NO. 2 TO AGREEMENT A4932A THROUGH THE SIGNATURES OF THEIR DULY AUTHORIZED REPRESENTATIVES.

SANTA CLARA VALLEY WATER DISTRICT
Valley Water

STILLWATER SCIENCES
Consultant

By: _____
Tony Estremera
Chair, Board of Directors

Signed by:
By:  _____
D9BF393E40DF468...
Sapna Khandwala
President/CEO

Date: June 23, 2026

Date: 6/9/2026

ATTEST: Candice Kwok-Smith
Clerk, Board of Directors

Firm's Address:
2855 Telegraph Ave., Suite 400
Berkeley, CA 94705

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1. Representatives (REVISED)

- A. Valley Water's representatives are as listed below. Unless otherwise provided in this Agreement, all correspondence to Valley Water shall be addressed to Valley Water Project Manager (VWPM).

Tiffany Chao (VWPM)
Senior Water Resources Specialist
Dam Safety & Capital Delivery Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-3107
Cell: (626) 679-2753
Email: tchao@valleywater.org

Wendy Murphy
Environmental Services Manager
Dam Safety & Capital Delivery Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-2478
Cell: (831) 239-7910
Email: wendymurphy@valleywater.org

Ryan McCarter
Deputy Operating Officer
Dam Safety & Capital Delivery Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3638

Phone: (408) 630-2983
Email: rmccarter@valleywater.org

- B. The Consultant's Project Manager is as listed below. All Valley Water questions pertaining to this Agreement shall be referred to the Consultant's Project Manager.

Katherine Ayres
Senior Director Stillwater Sciences
279 Cousteau Place #400
Davis, CA 95618

Phone: (206) 817-7112
Email: KAyres@stillwatersci.com

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- C. The Consultant's Principal Officer for this Agreement is as listed below. As per the Agreement, Section Twelve, Miscellaneous Provisions, subsection 21. Notices, all notices pertaining to this Agreement must be submitted to the Consultant's Principal Officer.

Ethan Bell
Vice President; Senior Fisheries Biologist
Stillwater Sciences
895 Napa Ave, Suite B-3
Morro Bay, CA 93442

Phone: (805) 570-7499 ext. 501
Email: ethan@stillwatersci.com

2. Scope of Services (UNCHANGED)

- A. This Schedule EP, Scope of Services describes the professional regulatory permitting services to be performed by Consultant for Valley Water's Anderson Dam Seismic Retrofit Project (ADSRP or Project). Upon successful completion of the ADSRP regulatory permitting services, Valley Water may, at its discretion, choose to negotiate an amendment to this Agreement with Consultant to provide construction phase support services. Valley Water may, at its discretion, choose to initiate a new consultant agreement selection process for services for any subsequent phase(s) and/or utilize Valley Water staff to perform such services.

3. Project Objectives (UNCHANGED)

- A. The objectives of the Project, consistent with Federal Energy Regulatory Commission (FERC) and California Department of Water Resources, Division of Safety of Dams (DSOD) dam safety requirements, are to:
- 1) Seismically retrofit and maintain the dam so that Valley Water may continue to operate it at capacity. This objective would be achieved by:
 - a. Replacing the existing dam to withstand the maximum credible earthquake (MCE) on the Calaveras and Coyote Creek Range Front Faults;
 - b. Replacing the existing spillway to meet FERC and DSOD safety requirements related to the safe passage of a probable maximum flood (PMF); and
 - c. Replacing the outlet works to meet current DSOD outlet works requirements and accommodate fault offset.
 - 2) Improve cost efficiency of dam operations by decommissioning the hydroelectric facility.
 - 3) Avoid and minimize environmental effects of construction and operations.

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4. Project Background (UNCHANGED)

- A. The mission of the Santa Clara Valley Water District, now known as Valley Water, is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

Valley Water is a public agency providing water supply, flood protection, and stream stewardship for Santa Clara County. Valley Water manages an integrated water resources system that includes the supply of clean safe water, flood protection and stewardship of streams on behalf of Santa Clara County’s 2 million residents. Valley Water effectively manages ten dams and surface water reservoirs, three water treatment plants, a state-of-the-art water quality laboratory, and more than 275 miles of streams. For information about Valley Water, visit www.valleywater.org.

- B. Anderson Dam and Reservoir is a major water supply facility located adjacent to the City of Morgan Hill, California, about 18 miles southeast of San Jose. Anderson Reservoir is the largest of the ten reservoirs owned and operated by Valley Water and provides a greater water storage capacity than the other nine reservoirs combined. It is thus a critical facility to Valley Water and to the communities it serves. The dam was completed in 1950 as a zoned, rockfill embankment. It has a maximum height of approximately 240 feet and impounds up to 90,373 acre-feet (AF) of water at its maximum reservoir operating elevation.

- C. Anderson Dam and Reservoir is subject to dam safety regulation by the DSOD and FERC as FERC Project 5737. Anderson Dam is classified under FERC guidelines as a “High Hazard Potential” dam due to the potential incremental loss of life should failure occur. Between 2008 and 2012, several dam safety deficiencies associated with seismic shaking, fault offset, flood capacity, and emergency drawdown capabilities were identified. The presence of liquefiable materials in the embankment and foundation of the dam could result in major slumping and failure of the embankment following a future large earthquake and the presence of active faults in the foundation that could rupture the existing low-level outlet. The spillway has inadequate capacity to safely pass large floods and the outlet does not have sufficient capacity to quickly draw down the reservoir during floods or other emergency events.

- D. The purpose of the ADSRP is to seismically retrofit, maintain, and operate Anderson Dam and Reservoir to meet FERC and DSOD safety requirements, thereby allowing Valley Water to maximize water supply and related incidental benefits, while avoiding and minimizing environmental impacts of the implementation of those safety directives and requirements. The ADSRP will require an extensive environmental compliance process, including evaluation under California Environmental Quality Act (CEQA) and regulatory permits.

- E. As part of the ADSRP, the project consists of conservation measure components including the Ogier Ponds Conservation Measure, Maintenance Activities, at the Live Oak Restoration Reach, Phase 2 Coyote Percolation Dam Conservation Measure, and the Sediment Augmentation Project. One of the conservation measures is the Phase 2 Coyote Percolation Dam Conservation Measure. The first phase of the improvements at Coyote Percolation Dam was completed under FOCP, known as the Phase 1 Coyote

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Percolation Dam Replacement Project. The Phase 1 Coyote Percolation Dam Replacement Project consisted of replacing the existing flashboard dam with a motorized bladder dam. The second phase, is known as the Phase 2 Coyote Percolation Dam Conservation Measure. The Phase 2 Coyote Percolation Dam Conservation Measure includes constructing a fish lane designed to provide passage over the newly installed bladder dam. This will require support from the Consultant to develop the Phase 2 Coyote Percolation Dam Conservation Measure features such as the radial gates and channel tie-in.

- F. On October 21, 2024, FERC issued the Notice of Intent to prepare an Environmental Impact Statement and the environmental review schedule for ADSRP. The environmental schedule resulted in adjusting Valley Water's anticipated start date for ADSRP construction from April 2026 to January 2027. Additionally, the project team encountered unforeseen site conditions that resulted in additional regulatory reviews that had extended the FOCP. ADSRP will require additional regulatory services to ensure Valley Water remains in compliance with the regulatory requirements and continues to meet the necessary steps to start of ADSRP in January 2027.

5. Project Delivery Approach (UNCHANGED)

Valley Water plans to deliver the ADSRP by utilizing the retained independent, separate consulting firms as described below:

- A. Project Management Consultant (PMC Team) led by Black & Veatch Corporation has been retained to assist with managing and overseeing the delivery of the ADSRP Project at the direction of Valley Water.
- B. Planning Consultant (PC or Planning Team) led by HDR Engineering, Inc. (HDR), was retained to perform preliminary engineering services and to develop the required draft environmental documents (Draft Environmental Impact Report and Draft Environmental Impact Statement) in support of the Project. The Planning Consultant is responsible for defining deficiencies in existing facilities; defining criteria that provide a basis for engineering solutions to address the deficiencies; development of conceptual engineering solutions that address the deficiencies; and evaluation of the concepts and recommendation of a Project to the District for authorization by the District's Board of Directors (Board).

HDR Engineering, Inc.'s consultant agreement with the District was amended to reduce its scope, which has now been completed, consistent with HDR's completed Project role. The District's Consultant Agreement with HDR expired on April 30, 2021.

- C. Design Consultant (Design Team), led by URS Corporation, DBA URS Corporation Americas, was retained to perform design services in compliance with Valley Water, DSOD, and FERC requirements in support of the Project, including developing the Project design, preparing construction documents, and providing engineering support for the bid process and during the construction phases of the Project.

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- D. Environmental Consultant (EC or Environmental Team) led by Horizon Water and Environment, LLC (Horizon) prepared initial drafts of the Draft EIR. On November 1, 2021, Horizon was acquired by Montrose Environmental Group, Inc., and has continued to operate as a separate legal entity and wholly owned subsidiary of Montrose Environmental Group, Inc. since that date.

On September 21, 2023, an amendment to the agreement was executed with Horizon to significantly reduce the environmental planning and regulatory permitting scope of services to be performed after release of the Draft Environmental Impact Report (EIR) for public review.

- E. A second Environmental Consultant (EC or Environmental Team) led by Rincon Consultants, Inc. (Rincon) was retained on July 13, 2023 to provide additional resources for technical editing, quality assurance, quality control, finalization of select sections, and document production of the initial Draft EIR sections prepared by Horizon. An amendment to the agreement directed Rincon to assist with the initial preparation of response to comments on the Draft Environmental Impact Report (EIR), and provide technical modeling support of select EIR sections. EC will also provide draft EIR materials related to air quality, greenhouse gas, and noise impact analyses. The District's Consultant Agreement with Rincon expires on December 31, 2025. A separate Agreement was executed with Rincon Consultants, Inc. (Rincon) effective April 23, 2024, to provide environmental planning and permitting services to produce the Final EIR, complete the CEQA process, support possible environmental documentation required under the National Environmental Policy Act, and perform environmental planning tasks that may arise for other Project environmental approvals.
- F. Construction Management Consultant (CM or Construction Manager), led by COWI North America, Inc., was retained to oversee the Anderson Dam Tunnel Project (ADTP) construction contract and coordinate with the Design Consultant during construction in conformance with the Design Consultant's engineering plans and specifications, stamped and signed by a registered engineer; DSOD and FERC's construction inspection and monitoring requirements; the Valley Water-certified environmental compliance, specifically the requirements defined in the mitigation and monitoring plan; and ADTP Project close-out in accordance with Valley Water requirements.
- G. An additional Environmental Consultant (EC or Environmental Team), Stillwater Sciences (Stillwater) has been retained to provide regulatory permitting services, creek restoration modeling and design support for Project conservation measures, federal Endangered Species Act Section 7 consultation for fisheries resources, biological monitoring of fisheries resources for FERC Order Compliance Project environmental compliance, and general environmental support services for fisheries resources topics, as needed.
- H. Another Environmental Consultant (EC or Environmental Team), H.T. Harvey and Associates (HT) has been retained to provide state and federal regulatory agency permit application development and processing, Santa Clara Valley Habitat Plan compliance documentation, terrestrial habitat restoration design support, biological monitoring of terrestrial natural resources for FERC Order Compliance Project environmental

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compliance, and general environmental support services for terrestrial natural resources topics, as needed.

6. Assumptions and Requirements (UNCHANGED)

A. General Assumptions and Requirements

- 1) **Manage Scope of Services.** Consultant shall manage the Scope of Services such that the work is completed within the Not-to-Exceed Fees limit and in accordance with the Project schedule and ensure that all services and deliverables meet Valley Water and Project requirements.
- 2) **Deliverable Format.** Consultant shall submit deliverables in both electronic and hardcopy format if requested. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, Autodesk files, etc. The hard copy deliverables shall be printed in professional quality presentation, and submitted in 5 (five) copies, if requested. Valley Water may require original copies of signed documents and/or scanned (Adobe PDF) versions.
 - a. Valley Water Standardization Requirements
 - (1) Consultant shall perform the Services utilizing Valley Water nomenclature, standardized forms, software requirements, documented procedures, and best management practices. Consultant shall use Microsoft Office software and Autodesk Civil 3D software that is compatible with Valley Water's current Microsoft Office software and Autodesk software used at the time(s) Valley Water issues a Notice to Proceed pursuant to this Agreement.
 - (2) Engineering drawings prepared by Consultant must be in compliance with Valley Water's Computer-Aided Design and Drafting (CADD) standards including line types, line weights, text sizes, text orientation, dimensioning, labeling/numbering system for detailed plan views and detailed section views. Drawings prepared using different CADD software and versions must be converted to be compatible with Valley Water's CADD software at no additional cost to Valley Water. Prior to acceptance, Valley Water reserves the right to test the submitted CADD files to verify that the files are not corrupted or missing linkages (for blocks, etc., used in the drawings) and that the standards are retained during the conversion process used by the Consultant.
 - 3) **Review of Deliverables.** Valley Water will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by Valley Water, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following Valley Water review process. For each deliverable, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant. The comments provided by Valley Water

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staff during the workshops will be documented by the Consultant as meeting notes and will be included in the next revision of the documents.

- 4) **Valley Water Quality Environmental Management System.** Valley Water maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines, and work instructions for the performance of various Valley Water work. If requested, Consultant will perform the applicable Agreement tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, the VWPM will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.
- 5) **Consultant Responsibility.** Consultant, with its expertise in performing the Services described herein, is responsible for making the appropriate assumptions in each task to complete each task's deliverables and to achieve the Project objectives of this Agreement as described in Section 3. Project Objectives.
- 6) **Document Control.** Consultant must utilize the document control system designated by Valley Water (Capital Project Management and Project Controls Program).
- 7) **File Exchange Service.**
 - a. Consultant must utilize the file exchange service designated by Valley Water (Capital Project Management and Project Controls Program), accessible to all parties as designated by Valley Water, to facilitate communications.
 - b. Consultant may need to coordinate with Valley Water's Capital Project Management and Project Controls Program (CPMPC@valleywater.org) to address any firewall issues and/or permissions required to allow for these communications.

B. Project-Specific Assumptions and Requirements (UNCHANGED)

None

7. Scope of Services Tasks (REVISED)

Task 1 - Project Management (REVISED)

- 1.1 The purpose of this task is for Consultant to manage this Scope of Services such that the work is completed within the not-to-exceed fees limit stated in Schedule EP, Attachment One, Fees and Payments, and in accordance with the Project Schedule stated in Schedule EP, Attachment Two, Schedule of Completion, while ensuring that all services, meetings, and deliverables by the Consultant meet Valley Water and Project requirements.

This task includes additional meetings through December 31, 2028, including but not limited to Valley Water internal meetings, inter-agency meetings, coordination and communication tasks with appropriate regulatory or other agencies, as necessary,

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coordination calls and email correspondence with regulatory or other agencies, and participation in Multi-Agency Working Group (MAWG) meetings (including support in developing agendas, preparing presentation materials, advising Valley Water staff, discussing strategy, working on approach with the MAWG facilitator, and reviewing meeting notes), .Kick-off meetings for project components, and any other required meetings to coordinate the additional scope of work in this amendment.

- 1.2** This includes general project management activities and associated meetings including but not limited to Valley Water internal meetings, inter-agency meetings, coordination and communication tasks with appropriate regulatory or other agencies, as necessary, coordination calls and email correspondence with regulatory or other agencies, participation in Multi-Agency Working Group (MAWG) meetings (including support in developing agendas, preparing presentation materials, advising Valley Water staff, discussing strategy, working on approach with the MAWG facilitator, and reviewing meeting notes).

Task 1 - Deliverables

1. Monthly Status Reports
2. Attendance at Valley Water internal and agency meetings as directed by Valley Water
3. Meeting Agendas, Minutes, including review of comments, and Presentations
4. Email and phone calls with Valley Water staff and/or agency staff as directed by Valley Water
5. Agenda review and meeting notes, follow-up correspondence, and action items as directed by Valley Water
6. Monthly invoices and progress summaries
7. Project Schedule and Action Item tracking with project leads

Task 1 - Assumptions

1. Six in-person meetings at Valley Water headquarters and any additional ones are assumed to be virtual.
2. Ten hours per month of participation by the Principal-in-Charge in meetings (includes attendance, prep and follow-up) in the first year, and 2.5 hours in Years 2, 3, 4, 5, and 6.
3. Five hours per month for other project management staff attendance at meetings (including prep and follow-up) in the first year, and 1.25 hours in Years 2, 3, 4, 5, and 6.

Task 2 – Planning and Permitting Support (UNCHANGED)

- 2.1** Consultant will provide technical support for fisheries resources to Valley Water during planning, permitting, and compliance processes, including impact assessment, developing project designs and plans, and preparing additional documents required for permit applications.

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Task 2 – Deliverables

1. Biological Evaluation (BE) responses to comments related to aquatic resources (in the form of a comment response table)
2. Environmental Impact Report (EIR) Fisheries Resources responses to comments (in the form of a comment response table)
3. Final National Marine Fisheries Service (NMFS) Biological Evaluation
4. Final ADSRP EIR Fisheries Resources Impact Analysis
5. Final ADSRP EIR Fisheries Technical Appendix
6. Other permitting deliverables at Valley Water's discretion
7. Supplemental information for NMFS Biological Opinion (BO) as needed
8. Supplemental CEQA document(s) as needed – Fisheries Resources Impact Analysis, Alternatives, and Cumulative Impacts sections
9. Other permit plans at Valley Water's discretion within time and materials limitations including as-needed support for incorporation of restoration design information from the Live Oak Restoration Reach Project, Phase 2 Coyote Percolation Dam Conservation Measure, and the Ogier Ponds Restoration Design into permitting and planning documents.
10. Review fisheries-related sections of FERC's National Environmental Policy Act (NEPA) document
11. Review fisheries-related sections of EPA's NEPA document

Task 2 – Assumptions

1. Permitting and planning labor requested beyond the budget labor would require a budget amendment, particularly if the number of comments and technical complexity far exceeds the expectations (e.g., require in-depth quantitative analysis/modeling) of this scope and budget or the Proposed Action in the BE and/or the Project Description in the EIR are modified in a way that substantially changes the level of effects/impacts to fisheries resources.
2. Administrative record of references will include electronic references. For references that have a cost, the budget for these will be included in this task as expenses.
3. Consultant will develop documents, provide document reviews and revisions, and supplemental information up to the budgeted amount. Permitting and planning labor requested beyond the budgeted not-to-exceed amount will require a budget amendment.
4. Administrative record of references will include electronic references. For references that have a cost, the budget for these will be included in this task as expenses.

Task 3 – Ogier Ponds Restoration Project Technical Support (UNCHANGED)

- 3.1 Hydrology and Land Cover Study (Model Prep)** - Consultant will use known flow release values from Anderson Dam Fish and Aquatic Habitat Collaborative Effort (FAHCE-plus modified rule curves) combined with data from the Madrone gage, information from groundwater and surface water reports, defined Habitat and Geomorphic Flows from the BE, and fish passage exceedance flows developed by Valley Water to establish modified return interval flood flow, modified habitat and

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geomorphic flows, and modified fish passage flows for the Ogier Pond Reach of Coyote Creek. Consultant will develop a Manning's roughness map (land cover mapping) Modeling Alternative 5, Alternative 6, and existing conditions.

Task 3.1 - Deliverables

1. Hydrology Table
2. Land Cover (roughness) Figures for existing and proposed conditions (two alternatives)
3. Draft technical memorandum of the Ogier Ponds Restoration Project Hydrology and Land Cover Study which would include roughness factor (to become final technical memorandum in subtask 3d) (approximately 6 pages)

Task 3.1 – Assumptions

1. Flow variation due to groundwater interactions is characterized at a level of detail sufficient to include in hydraulic modeling simulations. Flow variation due to groundwater can be averaged along ¼ mile segments of the project area for a total of 6 sub reaches with unique groundwater interactions.
2. Lateral variations in groundwater will not be factored into the 2-Dimensional (2-D) model.
3. 2020 Santa Clara County Light Detection and Ranging (LiDAR) will be used for model terrain development & design surfaces.
4. The roughness map can be done with available landcover data, imagery, and LiDAR via desktop delineation methods.
5. The Draft technical memo may undergo two review cycles, incorporating two rounds of review in which Valley Water staff and/or the legal team provides consolidated, non-conflicting comments and Stillwater responds to comments.
6. The Draft technical memo will use general scientific reporting styles (e.g., Introduction/Background, Methods, Results, Discussion or Conclusion and Recommendations) and will undergo technical, editorial, and formatting review prior to final review. Technical reviews will be conducted by the appropriate discipline leads who will perform cross-checks to ensure statements made are supported by included figures, tables, and citations. Editorial and formatting reviews will be conducted for clarity, grammar, citations, and will ensure any public-facing documents are compliant with the Rehabilitation Act, Section 508. All deliverables are subject to approval by Valley Water prior to release to the public or technical working groups to ensure reports meet project requirements and review steps have been completed.

Task 3.2 - Preliminary Design Analysis

- 3.2.1 **Ponds 1 and 2 Overtopping structure(s)** - Consultant will develop design criteria for the overtopping structure at the upstream extent of Pond 2 or Pond 1, coincident with the upstream extent of the new channel realignment for both alternatives. Consultant will work with Valley Water to establish the maximum flow capacity in the proposed channel for both alternatives such that flooding does not occur in adjacent developments and

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dwellings. Consultant will use Manning’s equation, appropriate weir equations, and conservation of mass (continuity) equations to develop a range of crest elevation and width criteria for the overtopping structure such that high flows are routed through Ogier ponds to keep flows below the maximum flow capacity threshold in the proposed channel (approximately 2,000 (cubic feet per second) (CFS). From the design criteria range developed in this task, Consultant will select up to two geometries (iterations) for each overtopping structure (Pond 1 and Pond 2) to include in model simulation runs for the proposed conditions.

- 3.2.2 **Pond 4 Outlet Structure** - Consultant will develop design criteria for an outlet structure at the downstream extent of Pond 4 such that flood flows routed through Ogier ponds are returned to Coyote Creek at the downstream end of Pond 4. Consultant will develop design criteria for the outlet structure assuming that it is comprised of screened culverts and an emergency overtopping weir component. Consultant will select three geometries (iterations) for the outlet structure to include in model simulation runs for proposed conditions. Consultant will also describe appropriate fish screening measures for the outlet structure.

Task 3.2 – Deliverables

1. 4-page section added to draft technical memo (to become final technical memo), with the following items:
 - a. Two tables listing design geometries of the overtopping structure and outlet structure and flow split relationship with respect to total flow for each
 - b. Two figures showing simple schematic line drawings (to scale) of cross section and profile view of the overtopping structure and the outlet structure
 - c. One paragraph description of each outlet structure

Task 3.2 – Assumptions

1. The overtopping structures will differ in location between the two alternatives. The outlet structures do not vary between alternatives.
2. The outlet structure will be a large-diameter culvert array with an emergency overtopping weir component.
3. Detailed drawings and 3-Dimensional (3D) designs of the outlet structures are not included as part of this analysis.

Task 3.3 – Hydraulic Modeling

- 3.3.1 Consultant will create a 2-D model of the Ogier Pond Reach in Hydraulic Engineering Center River Analysis System (HEC-RAS), with a total model domain of approximately 1.5 miles in length and 0.5 miles in width. Consultant will model existing conditions, Alternative 5 conditions, and Alternative 6 Conditions for the full suite of flows developed in Subtask 3a. Consultant will model three geometries (as described in Subtask 3.2) for

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the overtopping structure between the proposed Coyote Creek alignment and Ogier Ponds for flood flows only under the FAHCE-plus conditions. Consultant will work with the Valley Water Ogier Pond Project team to select 3 iterations of the overtopping structure based on the design criteria range developed in Subtask 3.2 to incorporate into the model simulation runs for alternative 5 and 6.

- 3.3.2 Consultant will factor in variations in flow due to groundwater interactions throughout the project reach based on referenced reports including the consultant, TODD Groundwater’s report for Ogier Ponds.

Task 3.3 - Deliverables

1. A section (Up to 14 pages) and appendix will be added to the Draft Technical Memo (to become the Final Technical Memo). The section will include descriptions of hydraulic modeling methodology, model inputs, groundwater characterization, calibration, and results including 10 key results figures from the Appendix.
2. Hydraulic modeling appendix with up to 47 figures (up to 24 created in GIS and remaining portion of figures available as plan view outputs from HEC-RAS) including:
 - a. Figures of depth and velocity for Alternative 5 and 6 for two flood flow scenarios, to be determined by Valley Water (8 figures)
 - b. Figures of depth and velocity for Alternative 5 and 6 for up to three habitat and geomorphic flow scenarios determined by Valley Water (up to 12 figures)
 - c. Figures of depth and velocity for Alternative 5 and 6 for up to three fish passage flow scenarios determined by Valley Water (up to 12 figures)
 - d. Figures of water elevation profiles for 8 select flows for Alternative 5 and 6 (to correspond to selected flows above) (2 figures)
 - e. Figures of 10 model-output cross-sections showing the 8 selected flows, for Alternatives 5 and 6, corresponding to either known Federal Emergency Management Agency (FEMA) cross-sections for flood flow comparisons or at areas of particular interest of habitat, geomorphic, or fish passage performance (20 cross sections, up to 5 figures)
 - f. Figures showing depth and shear stress for two design flows at the overtopping structure and the outlet structure using the final/optimized iteration of geometry for each (up to 8 figures)
3. Electronic hydraulic model files with descriptions

Task 3.3 – Assumptions

1. The overtopping structures will differ in location between the two alternatives. The outlet structures do not vary between alternatives.
2. Up to 25 flows for 3 terrains and 3 iterations of overtopping structure for flood flows, flow runs not to exceed 95 total runs.
3. Post-processing in Geographic Information System (GIS) for up to 24 figures as needed for planning-level study to be conducted by Valley Water.

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Task 3.4 - Design Recommendations (Fish Habitat, Fish Passage, Geomorphology, and Hydraulic Structures)

- 3.4.1 Consultant will provide recommendations to Valley Water in the form of a technical memo, email correspondence, virtual meetings, and in-person site visits. Consultant will use the findings of the design analysis (Subtask 3.2), hydraulic modeling (Subtask 3.3) and results of Consultant, Environmental Science Associates sediment transport modeling for alternatives 5 and 6 to qualitatively evaluate and make recommendations for:
1. Management of non-native species in the form of fish screens for outflow culverts from adjacent ponds
 2. Creation of suitable spawning and rearing habitat for native species, primarily federally listed steelhead
 3. Fish passage performance for native species (steelhead, and Pacific lamprey) through Alternative 5 and Alternative 6 channel features
 4. Geomorphic considerations including channel sinuosity, throughput of sediments (sediment transport), erosion and avulsion risk areas, and recommendations for sediment management including sediment augmentation considerations.
 5. Consultant will summarize the final geometry (optimized based on model iteration) of the overtopping structure and the outlet structure and include recommendations for refinement and erosion prevention at the structure locations.
 6. Consultant will provide general recommendations for environmentally compliant dewatering during construction.

Task 3.4 – Deliverables

1. Final technical memorandum including sections from Subtasks 3.1, 3.2, and 3.3. (approximately 26 pages)

Task 3.4 – Assumptions

1. Up to two site visits for two Consultant staff.
2. Up to 10 virtual meetings.
3. The final technical memo may undergo two review cycles, incorporating two rounds of review in which Valley Water staff and/or the legal team provides consolidated, non-conflicting comments and Stillwater responds to comments.
4. The final technical memo will use general scientific reporting styles (e.g., Introduction/Background, Methods, Results, Discussion or Conclusion and Recommendations) and will undergo technical, editorial, and formatting review prior to final review. Technical reviews will be conducted by the appropriate discipline leads who will perform cross-checks to ensure statements made are supported by included figures, tables, and citations. Editorial and formatting reviews will be conducted for clarity, grammar, citations, and will ensure any public facing documents are compliant with the Rehabilitation

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Act, Section 508. All deliverables are subject to approval by Valley Water prior to release to the public or technical working groups to ensure reports meet project requirements and review steps have been completed.

Task 4 – Phase 2 Coyote Percolation Dam Design (UNCHANGED)

- A. Consultant will provide modeling and engineering support for the Coyote Percolation Dam Phase 2 Fish Passage Enhancements design. The fish passage will be designed by Valley Water to meet applicable NMFS National Oceanic and Atmospheric Administration (NOAA) Fisheries West Coast Region Anadromous Salmonid Passage Design Manual (NMFS 2023) and the California Department of Fish and Wildlife (CDFW) California Salmonid Stream Habitat Restoration Manual (Love and Bates 2009) fish passage criteria for adult and juvenile steelhead/salmonids.
- B. As part of the FERC-Order Compliance Project (FOCP), Valley Water is undertaking improvements to the Coyote Percolation Facility referred to as Phase 1 of the Coyote Percolation Dam and Fish Ladder Operations Renovations. Phase 1 includes replacing the existing flashboard dam with an inflatable bladder dam, along with improvements to the existing fish ladder to provide fish passage during interim operations of the facility during Seismic Retrofit Improvements.
- C. Under Phase 2, Valley Water plans to construct a roughened ramp fishway extending up to the spillway to allow for improved fish passage over the deflated bladder dam over a range of flow conditions, including necessary alterations to the existing facility to provide adequate flow depths and velocities across the foundation, apron, and deflated bladder dam. This task also includes the designs to tie the downstream end of the fish lane into the main stem channel of Coyote Creek. Based on a conceptual design developed under a separate contract, as well as updates to the existing HEC-RAS 2D hydraulic model developed by Valley Water staff, Consultant will provide modeling and engineering support to design the new roughened ramp fishway and bypass channel. Consultant will work with Valley Water staff, NMFS, and CDFW representatives to develop preliminary through 100 percent Phase 2 designs for the Coyote Percolation Dam to allow continued percolation pond operations, while meeting the NMFS and CDFW requirements for fish passage of adult and juvenile steelhead/salmonids.

Task 4.1 - Hydraulic Modeling

Based upon field surveys to be conducted by Valley Water staff, Consultant will extend the model domain of the existing HEC-RAS 2D model for Coyote Creek to encompass the historical channel alignment downstream to the Highway 101 overpass, increasing the modeled reach in Coyote Creek by approximately 1,600 ft. Modeling will be conducted for the existing conceptual design and up to two iterations that may include modifications to the roughened ramp fishway, radial gate bypass structure, roughened approach channel, and attractant pool. Six flow conditions will be modeled, including the design maximum as well as seasonal flow requirements corresponding to NMFS and CDFW design flow criteria for steelhead, as well as Pacific lamprey.

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Task 4.1 – Deliverables

1. Hydraulic modeling of up to three design surfaces and six flow scenarios (one would be existing, and two of them would be Alternative 5 and Alternative 6)
2. Figures of the staff recommended alternative to be developed for use in the planning study report and optimized design, and will include at a minimum depth, velocity, and shear stress outputs in plan view. Figures will also include hydraulic profile plots of fish passage routes within the model domain.

Task 4.1 – Assumptions

1. Two virtual coordination meetings with Valley Water and technical team.
2. Valley Water will provide site survey data of the existing Pond 10B breach and lower Coyote Creek upstream of Hwy 101 to expand the existing model domain.
3. Initial modeling results to be completed within six weeks of delivery of survey data and existing HEC-RAS 2D model files.
4. Modeling of existing conceptual design and up to two design iterations.

Task 4.2 - Preliminary Design

- 4.2.1 Consultant will meet with Valley Water and technical team members (including NMFS and other agency staff as appropriate) in up to three coordination meetings to discuss preliminary design concepts that will allow the facility to be operated at a range of flows and water surface elevations while meeting NMFS and CDFW fish passage criteria. Consultant will provide up to two design iterations of the existing conceptual design to allow model simulations to be conducted (See Task 4.1).
- 4.2.2 Following Valley Water's completion of preliminary design and modeling, Consultant will prepare a Draft Preliminary Basis of Design Report that will include the plan and profile plots for the design iteration that best meets the overall design function. The Draft Preliminary Basis of Design Report will summarize the following:
 - a. Background and Project Understanding
 - b. Dam Hydrology
 - c. Summary of Modeling Results and Fish Passage Analyses
 - d. Discussion and Alternatives Recommendation for detailed design
- 4.2.3 Based on a consolidated set of non-conflicting Valley Water staff and legal comments, the Draft Preliminary Basis of Design Report will be revised by Consultant as a Draft Final version for subsequent review. Based on a consolidated set of non-conflicting Valley Water staff and legal comments on the Draft Final version, a Final Preliminary Basis of Design Report will be prepared by Consultant that can be distributed to the broader technical team members (e.g., NMFS and CDFW staff). The Final Preliminary

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Basis of Design Report will be submitted to Valley Water with electronic versions of plan and profile sheets of the recommended design as well as supporting CAD files.

Task 4.2 – Deliverables

1. Draft Preliminary Basis of Design Report (electronic submittal)
2. Draft Final Preliminary Basis of Design Report (electronic submittal)
3. Final Preliminary Basis of Design Report (electronic submittal)
4. Plan and Profile sheets of the recommended alternative with supporting CAD files that will be provided as an electronic submittal

Task 4.2 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables will not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Up to three virtual coordination meetings with Valley Water and technical team.
3. Valley Water will provide Consultant with existing survey data of the Phase 2 design area in standard point format (.csv, .txt or within a .dwg file) for development of a digital elevation model (DEM) and designs.
4. Valley Water will provide Consultant with CAD standard formats and guidelines.
5. No geotechnical or structural engineering analyses is included in this task.
6. Preliminary design will evaluate fish passage criteria for adult and juvenile steelhead/salmonids and lamprey and will be based on the versions indicated below:
 - a. NOAA Fisheries West Coast Region Anadromous Salmonid Passage Design Manual (NMFS February 2023)
 - b. California Salmonid Stream Habitat Restoration Manual, Part XII Fish Passage Design and Implementation (CDFG 2009)
 - c. Practical guidelines for incorporating adult Pacific lamprey passage at fishways, Version 2.0 (Lamprey Technical Workgroup 2022)
7. Two drafts and one final version of the Preliminary Basis of Design Report. Assumes review will be conducted by Valley Water technical team only, with comments provided as a single set of non-conflicting comments for each review cycle.
8. Consultant will revise and finalize the Basis of Design report within four weeks of receipt of comments by Valley Water and legal team for each draft cycle.
9. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the Subtask 4.2 recommended alternative will be limited to one additional

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modeling iteration. Any updates to fish passage criteria assessment will be included in the Basis of Design Report.

10. Assumes comment responses can be resolved on the basis of completed designs, BOD, and associated modeling and no additional quantitative analysis or modeling is necessary to address the comments (see modeling assumption below).
11. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the designs will be limited to one additional modeling iteration.
12. Updates to fish passage criteria assessment will be included as part of an amended Final Basis of Design Report.

Task 4.3 - 60 Percent Design Plans, Specifications, Estimate (PSE), and Basis of Design (BOD) Report

- 4.3.1 In consultation with Valley Water and based upon hydraulic modeling results of the preliminary design, and comments submitted by Technical Working Group (TWG) members (including NMFS or other agency staff) on the Final Preliminary Basis of Design Report from Subtask 4.2, Consultant will incorporate any refinements to the recommended alternative. Consultant will generate 60 percent design plans, technical specifications, and engineer's cost estimate. The design plans at the 60 percent level will include the following sheets:
 - a. Title Sheet, General Notes,
 - b. Survey Layout including Survey Datums and Rights of Way
 - c. Site Utilities Plan (Underground and Overhead)
 - d. Existing Conditions & Demolition Plan
 - e. Grading Overview Plan
 - f. Staging, Access, and Creek Diversion and Dewatering Plan
- 4.3.2 Consultant will provide an administrative review version of the 60 percent design plans (including the technical specifications and engineer's cost estimate) and a draft Final Basis of Design Report to Valley Water for review. Based on a consolidated version of Valley Water staff comments, Consultant will revise the 60 percent design plans and the draft Final Basis of Design Report for distribution of Final 60 percent design plans and Final Basis of Design Report to the technical team. The Final 60 percent design plans (including the technical specifications and engineer's cost estimate) and Final Basis of Design Report will be electronically submitted to Valley Water with the 60 percent design plans in CAD format.

Task 4.3 – Deliverables

1. Draft and Final Basis of Design Report (electronic submittal)
2. Draft and Final 60 Percent Design Plans, Technical Specifications and Engineers Cost Estimate (electronic submittal)

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Task 4.3 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Up to two virtual coordination meetings with Valley Water and technical team.
3. Any geotechnical or structural engineering required will be conducted by Valley Water or other subcontractor and is not included in this scope.
4. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the Subtask 4.2 recommended alternative will be limited to one additional modeling iteration. Any updates to fish passage criteria assessment will be included in the Basis of Design Report.
5. Draft and Final Basis of Design Report, including any updated modeling results, 60 percent design plans, technical specifications and engineer's cost estimate will be provided to Valley Water electronically.
6. Valley Water staff and attorney comments on 60 percent designs will be provided as a single set of non-conflicting comments.

Task 4.4 - Final Design Plans and Specifications

- 4.4.1 Consultant will prepare draft and final versions of the 90 and 100 percent design plans in coordination with Valley Water. Based on a consolidated version of Valley Water staff and attorney comments on the 90 percent design plans and Final Basis of Design Report, and comments received by TWG members (including NMFS or other agency staff), Consultant will finalize the 100 percent designs and Basis of Design Report.
- 4.4.2 Consultant will attend up to four coordination meetings with Valley Water and technical team members (including agency staff as appropriate) as Consultant develops the 90 percent and 100 percent design plans. Consultant will include an updated and Final Engineer's Estimate of probable construction costs.

Task 4.4 – Deliverables

1. 60 Percent Design and 90 Percent Design responses to NMFS and CDFW technical comments
2. Draft and Final 90 Percent Design Plans, Technical Specifications and Engineers Cost Estimate (electronic submittal)
3. Draft and Final versions of an Amended Final Basis of Design Report (if required).
4. Draft and Final 100 Percent Design Plans, Technical Specifications and Engineers Cost Estimate (electronic submittal)

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Task 4.4 – Assumptions

1. Because Project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Consultant will respond to NMFS and CDFW technical comments on the 60 percent and 90 percent design plans (including the technical specifications and engineer's cost estimate) and the Final Basis of Design Report.
3. Technical review comments provided by NMFS and CDFW will be reviewed by Consultant and addressed in coordination with Valley Water. Assumes Valley Water will lead responses to comments that are process-based and not related to the engineering design or technical aspects of fisheries resources.
4. Up to three virtual coordination meetings with Valley Water and technical team.
5. Valley Water and any attorney comments on the 90 percent and 100 percent Designs will be provided as a single set of non-conflicting comments for each review cycle.
6. Assumes comments from NMFS and CDFW on the 90 percent or 100 percent design.
7. Assumes comment responses can be resolved on the basis of completed designs, BOD, and associated modeling and no additional quantitative analysis or modeling is necessary to address the comments (see modeling assumption below).
8. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the 90 percent designs will be limited to one additional modeling iteration.
9. Updates to fish passage criteria assessment will be included as part of an amended Final Basis of Design Report.

Task 4.5 - Operations Support

Based on the final design and supporting modeling, Consultant will provide recommendations for facility operations and other as-needed support for project permitting in the form of areas, volumes, linear feet, and other quantity take-offs from the design plans. Deliverables will be coordinated with Valley Water for appropriate phasing, as requested by Valley Water.

Task 4.5 – Deliverables

1. Technical memoranda, emails, and copies of existing files as required to support information requests (electronic submittals)

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Task 4.5 – Assumptions

1. Up to three virtual coordination meetings with Valley Water and permitting team.
2. Permitting support will be provided on a time and materials basis up to about 109 hours of support time.

Tasks 4.6 – Radial Gate and Attractant Pool: 30 Percent Design

4.6.1 Radial Gate and Attractant Pool Hydraulic Model

Consultant will develop designs for the radial gate and attractant pool area to deliver designs for the radial gate replacement component. Consultant will prepare a 2-Dimensional (2-D) hydraulic model of the proposed radial gate and attractant pool reconfiguration.

4.6.2 30 Percent Design of Radial Gate and Attractant Pool Area Reconfiguration

Consultant will prepare Draft 30 Percent Design plans including layout and up to three sections demonstrating the intended layout and will prepare an engineer's opinion of probable cost. These will be integrated into the Draft Reconfiguration 30 Percent BOD Report.

Based on consolidated comments from Valley Water staff on the Draft Reconfiguration 30 Percent BOD Report, the Consultant will prepare the Final Reconfiguration 30 Percent Design Plans and a Final Reconfiguration 30 Percent BOD Report that can be distributed to the TWG. The Final Reconfiguration 30 Percent BOD Report will be submitted to Valley Water with electronic versions of plan and profile sheets of the recommended design.

4.6.3 Radial Gate Replacement 30 Percent Design

The Consultant will lead the 30 percent radial gate replacement design, including review of existing information and drawing sets and a site visit to confirm built condition and examine structural details and condition. The Consultant will develop alternatives and prepare a 30 Percent Feasibility Report. This report will be incorporated as an appendix into the Reconfiguration 30 Percent BOD Report. The Consultant will also develop Draft Radial Gate Replacement 30 Percent Design documents for the radial gates. These will include draft specifications to address modifications to the existing structure and a Class 5 cost estimate as defined by American Association of Cost Engineering. Last, the Consultant will prepare a Final Radial Gate Replacement 30 Percent Design based on consolidated Valley Water staff comments on the Draft 30 Percent Design documents.

Task 4.6 – Deliverables

1. Draft and Final Reconfiguration 30 Percent BOD Report including Hydraulic model results
2. Draft and Final 30 Percent Design plans for radial gate and attractant pool area reconfiguration and engineer's opinion of probable cost; included in Draft and Final Reconfiguration 30 Percent BOD Report.

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3. Radial gate replacement 30 Percent Feasibility Report including Draft and Final 30 Percent Design plans for the radial gate replacement with structural details specifications and preliminary costs; incorporated into Draft and Final Reconfiguration 30 Percent BOD Report.

Task 4.6 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Up to two virtual coordination meetings with Valley Water and technical team.
3. Up to 2 surface design iterations for the configuration Radial Gate and Attractant Pool Area Hydraulic Model.
4. Consultant will use Valley Water CAD standard formats and guidelines (already provided under a separate contract).
5. The Reconfiguration 30 Percent Design will evaluate downstream fish passage conditions for the radial gate replacement and upstream passage up to the attractant pool and entrance to the fish ladder based on NOAA Fisheries West Coast Region Anadromous Salmonid Passage Design Manual (NMFS February 2023) and California Salmonid Stream Habitat Restoration Manual, Part XII Fish Passage Design, and Implementation (Flosi et al. 2010).
6. Passage through the fish ladder alone will not be evaluated (i.e., no evaluation for flows below 25 cfs).
7. All deliverables will be provided to Valley Water electronically.
8. For all deliverables, one round of review will be conducted by Valley Water with comments provided as a single set of non-conflicting comments for each review cycle.

Tasks 4.7 – Radial Gate and Attractant Pool: 60 Percent Design

- 4.7.1 Radial Gate and Attractant Pool Area Reconfiguration
Consultant will refine the recommended design by incorporating TWG comments on the Final Reconfiguration 30 Percent BOD and hydraulic modeling results in collaboration with Valley Water generating the Reconfiguration 60 Percent Design plans, draft technical specifications, and engineer's opinion of probable cost.

Consultant will provide the Draft Reconfiguration 60 Percent Design plans and a Draft Reconfiguration 60 Percent BOD Report along with responses to TWG comments to Valley Water for review. Based on Valley Water staff comments, Consultant will prepare the Final Reconfiguration 60 Percent Design plans and a Final Reconfiguration 60 Percent BOD Report.

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4.7.2 Radial Gate Replacement

The Consultant will refine the Radial Gate Replacement Design in consultation with Valley Water based on TWG comments on the Final Radial Gate Replacement 30 Percent BOD Report from Subtask 4.6.3. The Consultant will generate Radial Gate Replacement 60 Percent Design plans, technical specifications, and engineer's opinion of probable cost.

The Consultant will provide Draft Radial Gate Replacement 60 Percent Design plans and a Draft Radial Gate Replacement 60 Percent BOD Report (including the draft technical specifications and engineer's opinion of probable cost) and responses to TWG comments on the Draft Radial Gate Replacement 30 Percent BOD Report to Valley Water for review. Based on Valley Water staff comments, the Consultant will prepare Final Radial Gate Replacement 60 Percent Design plans and a Final Radial Gate Replacement 60 Percent BOD Report.

Tasks 4.7 – Deliverables

1. Draft and Final Reconfiguration 60 Percent BOD Report and Draft and Final Reconfiguration 60 Percent Design Plans, for the radial gate and attractant pool area reconfiguration.
2. Draft and Final Radial Gate Replacement 60 Percent Technical Report and Draft and Final Radial Gate Replacement 60 Percent Design plans.
3. Responses to TWG comments in table format

Tasks 4.7 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Up to 3 virtual coordination meetings with Valley Water and consultant technical team.
3. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the Subtask 4.6.1 recommended alternative will be limited to one additional modeling iteration. Any updates to fish passage criteria assessment will be included in the Reconfiguration BOD Report.
4. All deliverables will be provided to Valley Water electronically.
5. Valley Water staff and technical team comments on draft 60 percent designs will be provided as a single set of non-conflicting comments.
6. Technical review comments provided by NMFS and CDFW will be reviewed by Consultant and addressed in coordination with Valley Water in table format. Assumes Valley Water will lead responses to comments that are process-based and not related to the engineering design or technical aspects of fisheries resources.

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7. Consultant team will respond to one round of comments from TWG participants on the Final Reconfiguration and Radial Gate Replacement 30 Percent BOD Reports. Responses to up to 30 comments will be included in the Draft Reconfiguration and Radial Gate Replacement 60 Percent BOD Reports in table format.

Tasks 4.8 – Radial Gate and Attractant Pool Area Final Design Plans and Specifications

Consultant will advance the design of the radial gate and attractant pool area reconfiguration and collaborate with structural consultant to deliver the radial gate replacement component, each to a 100 percent design level.

4.8.1 Radial Gate and Attractant Pool Area Reconfiguration

Consultant will prepare Reconfiguration 90 and 100 Percent Design plans for the radial gate and attractant pool area in coordination with Valley Water. Consultant will finalize the Reconfiguration 100 Percent Design plans and prepare the Final Reconfiguration BOD Report that will include an updated final engineer’s opinion of probable costs.

4.8.2 Final Design of Radial Gate Replacement

The Consultant will prepare Radial Gate Replacement 90 and 100 Percent Design plans in coordination with Valley Water. The Radial Gate Replacement 90 Percent Design plans will be based on comments received on the Radial Gate Replacement 60 Percent Design plans and accompanied by a Draft Final Radial Gate Replacement Technical Report. The Consultant will finalize the Radial Gate Replacement 100 Percent Design plans and Final Radial Gate Replacement Technical Report that will include an updated estimate of construction costs

Tasks 4.8 – Deliverables

1. Draft Final and Final Reconfiguration BOD Report and Reconfiguration 90 and 100 Percent Design plans.
2. Draft Final and Final Radial Gate Replacement Technical Report; incorporated into the Draft and Final Reconfiguration BOD Report, and Radial Gate Replacement 90 and 100 Percent Design plans.
3. Updated estimate of construction costs.

Tasks 4.8 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. One design meeting with Valley Water internal staff and one TWG meeting with CDFW and NMFS.
3. Consultant will attend up to three virtual coordination meetings with Valley Water and technical team.

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4. Technical review comments provided by NMFS and CDFW will be reviewed by Consultant and addressed in coordination with Valley Water in table format. Assumes Valley Water will lead responses to comments that are process-based and not related to the engineering design or technical aspects of fisheries resources.
5. Consultant team will respond to one round of comments from TWG participants on the Reconfiguration and Radial Gate Replacement 60 Percent BOD Reports. Responses to up to 30 comments will be included in the Draft Reconfiguration and Radial Gate Replacement 90 Percent BOD Reports in table format.
6. All deliverables will be provided to Valley Water electronically.
7. Valley Water staff and technical team comments on all deliverables will be provided as a single set of non-conflicting comments.
8. Comment responses can be resolved on the basis of completed designs, BOD, and associated modeling and no additional quantitative analysis or modeling is necessary to address the comments (see modeling assumption below).
9. Any design modifications made to address fish passage criteria will be verified through supplemental 2D hydraulic modeling. Additional modeling that may be required due to refinements to the 90 percent designs will be limited to one additional modeling iteration.

Tasks 4.9 – Lamprey Passage: Fish Ladder Retrofit

The existing fish ladder is not designed with consideration for upstream passage of Pacific lamprey, a California species of special concern. The two primary options to improve passage are to modify the existing ladder or to create a bypass facility designed specifically for lamprey. During this Task, Consultant will investigate alternatives, developing conceptual plans for each alternative and will advance a preferred alternative. Because the lamprey passage elements are expected to be relatively minor modifications to the fish ladder, the design will proceed directly from 30 Percent Design to Final Design.

4.9.1 Alternatives Analysis and 30 Percent Design

Consultant will prepare a brief Draft 30 Percent Lamprey Passage Memorandum with descriptions, images, and conceptual layouts for up to three lamprey passage alternatives.

Based on comments received and an agreed preferred alternative, Consultant will develop Draft 30 Percent Design plans for the lamprey passage improvements. Comments on the Draft 30 Percent Design plans from Valley Water and by TWG members will be incorporated into Final 30 Percent Design plans and a Final 30 Percent Lamprey Passage Memorandum, which will include an engineer's opinion of probable costs.

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4.9.2 Final Design Plans and Specifications

The Reconfiguration 90 Percent Design plans (Task 4.11) will be accompanied by a Draft Final Lamprey Design Memorandum. Consultant will prepare the Final Lamprey Design Memorandum to be included with the Reconfiguration 100 Percent Design plans.

Consultant will attend up to three coordination meetings with Valley Water and technical team members (including agency staff as appropriate) while developing the lamprey passage 90 Percent and 100 Percent Designs. Consultant will include an updated and final engineer's opinion of probable construction costs.

Tasks 4.9 – Deliverables

1. Draft and Final 30 Percent Lamprey Passage Memorandum
2. Draft and Final Lamprey Passage 30 Percent Design plans
3. Draft Final and Final Lamprey Passage Memorandum.
4. Lamprey Passage 90 and 100 Percent Design plans.

Tasks 4.9 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases
2. Up to 2 virtual coordination meetings with Valley Water and technical team.
3. All deliverables will be provided to Valley Water electronically.
4. The lamprey passage design will not include hydraulic modeling of the fish ladder. If the proposed alterations have the potential to modify flow in the fish ladder, hand calculations will be undertaken to assess flow impacts and iterate the design to ensure upstream salmonid passage criteria are maintained.
5. Valley Water staff and technical team comments on all deliverables will be provided as a single set of non-conflicting comments.
6. NMFS and or CDFW will comment on the Lamprey Passage 30 Percent and 90 Percent Designs. Technical review comments provided by the TWG will be reviewed by Consultant and addressed in coordination with Valley Water. Assumes Valley Water will lead responses to comments that are process-based and not related to the engineering design or technical aspects of fisheries resources.
7. The lamprey passage Memorandum would be a separate document and deliverable from the Basis of Design Report being prepared under the existing Consultant Agreement A4932A which focuses on design of the Fish Lane. These two documents may be integrated into a single, consolidated document at Valley Water's discretion.

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Tasks 4.10 – Channel Tie-in

Consultant will develop a channel tie-in design, working with Valley Water to establish the design intent and criteria. It is assumed that the channel tie-in design will include the following elements:

1. Establishment of an engineered berm between the historical Coyote Creek Channel and Pond 10B, including external dimensions, surface treatment and internal layering.
2. A spillway at the upstream limit of Pond 10B to safely pass high flows from Coyote Creek, over the new engineered berm and into the pond.
3. Placement of engineered streambed material and grade control elements within the currently incised section of Coyote Creek between the downstream end of the fish lane and the percolation dam.

4.10.1 Channel Tie-In Hydraulic Model 30 Percent Design

Consultant will develop a proposed design surface that meets the hydraulic performance requirements of the project. The model will be used to set Coyote Creek bed level tying into the engineered berm footing and fill and grade control elevations for the incised channel.

Consultant will present model results at a technical design meeting with Valley Water. Results of the hydraulic model will be incorporated into a Channel Tie-In Draft 30 percent BOD Report with a recommended configuration to carry forward.

Consultant will incorporate any comments received from Valley Water on the Draft Preliminary BOD Report and will prepare a Final 30 percent BOD Report along with 30 percent Design plans. The latter must include a layout and up to 3 sections to demonstrate the intent of the preferred project configuration. Consultant will estimate cut and fill quantities and provide an engineer's opinion of probable cost.

4.10.2 Channel Tie-In 60 Percent Design Plans and Specifications

Consultant will incorporate any refinements to the recommended design. Consultant will generate Channel Tie-In 60 percent Design plans, draft technical specifications, and engineer's opinion of probable cost. The Channel Tie-In 60 percent Design plans will include the following sheets:

- Title Sheet, General Notes,
- Survey Layout including Survey Datums and Rights of Way
- Existing Conditions & Demolition Plan
- Grading Overview Plan
- Staging, Access, and Creek Diversion and Dewatering Plan

Consultant will provide Draft Channel Tie-In 60 percent Design plans and a Draft Channel Tie-In 60 percent BOD Report (including the draft technical specifications and engineer's opinion of probable cost) to Valley Water for review. Based on Valley Water staff

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comments, Consultant will prepare Final Channel Tie-In 60 percent Design plans and a Final Channel Tie-In 60 percent BOD Report to the technical team.

4.10.3 Channel Tie-In Final Design Plans and Specifications

Consultant will advance the design of the channel tie-in to a final design level. Consultant will prepare Channel Tie-In 90 percent and Final Design plans in coordination with Valley Water. The Channel Tie-In 90 percent Design plans will be based on comments received to the Final Channel Tie-In 60 Percent Design plans and will be accompanied by a Draft Final Channel Tie-In BOD Report. Based on Valley Water staff comments, and TWG comments on the Channel Tie-In 90 Percent Design plans and Draft Final Channel Tie-In BOD Report, Consultant will finalize the Channel Tie-In Final Design plans and prepare the Final Channel Tie-In BOD Report.

Task 4.10 – Deliverables

1. Hydraulic model results for the channel tie-in; included in the Draft and Final Channel Tie-In 30 percent BOD Report.
2. Draft and Final Channel Tie-In 30 percent Design plans and engineers opinion of probable cost; included in Draft and Final Channel Tie-In 30 percent BOD Report.
3. Draft and Final Channel Tie-In 60 percent Basis of Design Report.
4. Draft and Final Channel Tie-In 60 percent Design Plans for the berm repair.
5. Draft Final and Final Channel Tie-In BOD Report.
6. Channel Tie-In 90 percent and Final Design plans.

Task 4.10 – Assumptions

1. Because this project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure (WBS) guidance documents for planning (W-730-122) and design (W-730-122) phases
2. Up to eight virtual coordination meetings with Valley Water and TWG participants.
3. Modeling of proposed channel tie-in design includes up to 3 surface design iterations and 4 design flows and a USACE no-rise condition.
4. Additional modeling that may be required due to refinements to the Subtask 4.15.
5. Additional modeling that may be required due to refinements to the Channel Tie-In 90 percent designs will be limited to one additional modeling iteration.
6. Valley Water will provide design criteria for the project including but not limited to flows at which water will begin to spill into Pond 10B.

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7. The channel tie-in design will not consider fish passage and will not include review or comment regarding fish passage from agencies including NMFS and CDFW.
8. TWG participants will comment on the Channel Tie-In 30 and 60 percent Designs. Technical review comments provided by the TWG will be reviewed by Consultant and addressed in coordination with Valley Water. Assumes Valley Water will lead responses to comments that are process-based and not related to the engineering design or technical aspects of fisheries resources.
9. Consultant will respond to up to 30 TWG comments and responses will be incorporated in table format into the Channel Tie-In 60 percent BOD Report.
10. The design will not include details for how high flows will return to Coyote Creek at the downstream end of Pond 10B. This is considered to be an aspect of the Pond 10B design rather than the upstream channel tie-in (this scope).
11. All deliverables will be provided to Valley Water electronically.
12. Valley Water staff comments will be provided as a single set of non-conflicting comments for each review cycle.
13. Comment responses can be resolved on the basis of completed designs, BOD, and associated modeling and no additional quantitative analysis or modeling is necessary to address the comments (see modeling assumption).
14. Valley Water staff and technical team comments on all deliverables will be provided as a single set of non-conflicting comments.

Task 5 - Live Oak Restoration Reach Design Support and Field Support

Task 5.1 - Hydraulic Modeling

- 5.1.1 Consultant will run hydraulic modeling using the existing 2-D HEC RAS model developed during 30 percent and 60 percent design phases. Consultant will incorporate flow split hydraulics provided by AECOM and post dam retrofit hydraulics (FAHCE+) to create a flow distribution for the south channel and main reaches of Live Oak for the range of flows.
- 5.1.2 Hydraulic modeling runs will include the full range of return intervals under FAHCE+ and Habitat and Geomorphic flows as outlined in the BE Table 5 shown below. The Table shows the flow runs and terrains included in this task.

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Table 5 – Biological Evaluation (UNCHANGED)

Return period or flow	Reference	Terrains
500 Year	FAHCE Stochastic Flows	Existing, Proposed
200 Year	FAHCE Stochastic Flows	Existing, Proposed
100 Year	FAHCE Stochastic Flows	Existing, Proposed
50 Year	FAHCE Stochastic Flows	Existing, Proposed
25 Year	FAHCE Stochastic Flows	Existing, Proposed
20 Year	FAHCE Stochastic Flows	Existing, Proposed
10 Year	FAHCE Stochastic Flows	Existing, Proposed
5 Year	FAHCE Stochastic Flows	Existing, Proposed
2 Year	FAHCE Stochastic Flows	Existing, Proposed
1000 cfs	BE Habitat and Geomorphic	Existing, Proposed
250 cfs	BE Habitat and Geomorphic	Existing, Proposed
90 cfs	BE Habitat and Geomorphic	Existing, Proposed (3 iterations)
50 cfs	BE Habitat and Geomorphic	Existing, Proposed (3 iterations)
30 cfs	BE Habitat and Geomorphic	Existing, Proposed (3 iterations)

Task 5.1 – Deliverables

1. Refined roughness raster and hydraulic modeling summary figure in BOD
2. Appendix with results for existing versus proposed terrain simulations showing depth and velocity for 8 of the simulated flows

Task 5.1 – Assumptions

1. Flow regime will not change during the 90 percent design analysis.
2. Upstream design work as part of ADSRP and ADTP is provided to Consultant as DEM to integrate into downstream hydraulics.
3. New habitat suitability analysis using CDFW code is not included.

Task 5.2 - 90 Percent Design: Design Analysis and Refinement, Plans, Specifications, Estimate (PSE) and Basis of Design Report (BOD)

- 5.2.1 Consultant will conduct design analysis to optimize target aquatic species habitat and substrates under proposed conditions. This analysis will include up to 3 iterations of possible in-channel designs. Digital elevation models for each iteration will be analyzed for appropriate depth and velocity conditions for fry rearing and adult spawning habitat criteria. The optimized design iteration will become the 90 percent design to be used for plans, specifications, estimates, habitat suitability mapping, and BOD report. Design refinement will incorporate results from the design analysis and comments to the 60 percent PSE and BOD in to the 90 percent PSE and BOD.

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5.2.2 Consultant will prepare 90 percent design plans and specifications. Deliverables will be coordinated with Valley Water and H.T. Harvey and Associates for appropriate phasing, as requested by Valley Water and include response to resource agency comments on the 60 percent PSE and BOD.

5.2.3 Design Plans

Consultant will include design plans reflecting a 90 percent understanding of design conditions which include the following sheets:

Sheet 1	Title sheet
Sheet 2	General Notes
Sheet 3	Site Key & Construction Access Plan
Sheet 4	Existing Conditions, Demo, and Site Preparation Plan
Sheet 5	Grading Overview and Horizontal Control Plan
Sheet 6-8	Typical Sections
Sheet 9-12	Grading Plans and Profiles
Sheet 13-16	Grading Sections
Sheet 17-20	Enhancement and Revegetation Plans
Sheet 21-22	Large Wood Details
Sheet 23	Large Wood Anchoring and Log Schedule
Sheet 24	Revegetation Tables

5.2.4 Specifications

Consultant will include revised draft specifications.

5.2.5 Cost Estimate

Consultant will include an Engineer's Estimate of probable construction costs in the BOD report.

5.2.6 Basis of Design Report

Consultant will include the following items in the BOD report:

- Background and Project Understanding
- Field Assessment Summary (Topography & Grain Sizes)
- Dam Hydrology and Hydraulic Modeling
- Design Calculations and Discussion
- Summary of Design Approach
- Habitat Suitability Analysis of Proposed Conditions
- Permit Impacts
- Quantities and Construction Costs
- Construction Methods
- Monitoring and Maintenance

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Task 5.2 – Deliverables

1. Draft 90 percent design plans, specifications, Engineer's Estimate and Basis of Design Report (electronic submittals only)
2. Final 90 percent design plans, specifications, Engineer's Estimate and Basis of Design Report (electronic submittals only)
3. Updated Appendix B from the 60 percent design (Gravel Augmentation Plan)

Task 5.2 – Assumptions

1. Because the project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure guidance documents for planning (W-730-122) and design (W-730-122) phases.
2. Two virtual coordination meetings with Valley Water and Live Oak Restoration team.
3. One TWG meeting presentation.
4. Consultant will provide support for 90 percent design plans and specifications using Consultant standardized formatting.
5. Two Consultant staff will attend a site visit with Valley Water to check site access conditions for the contractor, vegetation, utilities (overhead and below ground that are visual) and any foreseeable site constraints for the contractor.

Task 5.3 - Final (100 Percent) Design: Plans, Specifications, Estimate (PSE), and Basis of Design Report (BOD)

Consultant will integrate resource agency permitting conditions, comments from Valley Water, and other Consultants, as well as general comments from Agency representatives in the TWG into a revised design. Consultant will prepare final (100 percent) plans, specifications, and cost estimates. Consultant will revise the BOD report to reflect the final design. Consultant will also revise Appendix B – Gravel Augmentation Monitoring, Maintenance and Management Plan (GAMMMP) to reflect the input received through review of the 90 percent design and permitting applications.

Task 5.3 – Deliverables

1. Construction bid package with Final (100 percent) design plans, specifications, Engineer's Estimate and Basis of Design Report (electronic submittals only)
2. Updated Appendix B from the 90 percent design (GAMMMP)

Task 5.3 – Assumptions

1. Because the project has been developed to address ADSRP/FOCP requirements, work process and deliverables do not fully conform to Valley Water Work Breakdown Structure

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guidance documents for planning (W-730-122) and design (W-730-122) phases.

2. Consultant will provide 100 percent design plans and specifications using Consultant standardized formatting.
3. Up to 4 virtual meetings with Valley Water and 1 TWG meeting.
4. No additional changes in dam-release hydrology, no additional hydraulic modeling is needed beyond 90 percent design phase, and no additional changes in overall hydraulic conditions.

Task 5.4 – Field Support

Consultant will assist Valley Water and the selected contractor with field support through meetings, RFI responses, and on-site support including field fitting, providing clarity of the design drawings, and field verification of specification compliance.

Task 5.4 – Assumptions

1. Up to 60 labor hours for RFI responses.
2. Up to two Consultant staff attend weekly 1-hour meetings with Valley Water staff for 12 weeks total.
3. Up to 30 hours/week for three weeks of on-site design implementation support (including associated travel-related expenses).

Task 6 - Supplemental Services (UNCHANGED)

Valley Water may require, and the Consultant shall perform, Supplemental Services on an as-needed basis. Prior to performing such Supplemental Services, the Consultant must obtain written authorization in the form of a Task Order approved by Valley Water's authorized representative. The form of this Task Order will be as per the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, Subsection 13. Task Orders; and, Appendix Three of the Standard Consultant Agreement, Task Order Template.

6.1 Specific examples of possible Supplemental Services include:

- 6.1.1 Additional new technical studies or new subject area studies or permits required that may arise as the project matures.
- 6.1.2 Additional support on designs or modeling as necessary
- 6.1.3 Additional public outreach visual materials

6.2 Additional Services. The Consultant will provide additional quantities of previously identified services as requested by Valley Water. Consultant will provide additional services for any quantity of tasks and deliverables beyond those stated in Task 1 through 5 as Task 6 Supplemental Services, to include but not be limited to:

6.2.1 Additional meetings;

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- 6.2.2 Additional time allotted for meetings;
- 6.2.3 Additional status/progress reports;
- 6.2.4 Additional telephone conference calls;
- 6.2.5 Additional technical memorandums and reports

Task 7 - FOCF Monitoring Support (UNCHANGED)

7.1 Environmental DNA (eDNA) Monitoring (2025 and 2026)

Consultant will coordinate with Valley Water staff and the Aquatrace Genomics eDNA laboratory during 2025 and 2026 eDNA monitoring efforts. The eDNA monitoring will be conducted by Valley Water staff according to Valley Water's Fish Rescue and Relocation Plan, the Temperature and Fisheries Monitoring Plan, and/or future eDNA monitoring at the direction of the FOCF Technical Working Group (TWG). Samples will be analyzed for *Oncorhynchus mykiss* DNA.

Task 7.1 - Deliverables

1. Lab coordination
2. Data quality control and assurance review

Task 7.1 - Assumptions

1. Up to 264 filtered water samples (132 per year) will be analyzed for *Oncorhynchus mykiss* eDNA
2. Samples will be analyzed using qualitative PCR to detect the presence of *Oncorhynchus mykiss* DNA using a previously published genetic assay
3. Valley Water staff will conduct sampling and ship eDNA samples to the laboratory

Task 7.2 - Spawning Gravels Sediment Deposition Monitoring and Reporting (2025 and 2026)

Consultant will conduct spawning gravel and benthic macroinvertebrate monitoring during 2025 and 2026 as described in Section 4.1.1 of FERC Order B (11) (FERC Order) to assess sediment deposition within steelhead spawning gravels and benthic macroinvertebrate habitat in Coyote Creek downstream of Anderson Dam. Transect monitoring also described in the FERC Order will be conducted separately by Valley Water. Consultant will combine the results from both studies into a single annual report.

Task 7.2 - Deliverables

1. Consultant will provide separate annual reports for 2025 and 2026
2. The annual reports will combine the analysis and results from Valley Water's transect monitoring along with the analysis and results of Consultant spawning gravel and benthic macroinvertebrate monitoring per Section 4.1.1 of FERC Order B (11).
3. For each annual report Consultant will prepare one draft and one final report document.

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Task 7.2 - Assumptions

1. Transect monitoring per Section 4.1.2 of the FERC Order will be conducted by Valley Water in 2025 and 2026.
2. Consultant will monitor sediment deposition in steelhead spawning habitat in 2025 and 2026, following the methods described in the FERC Order.
3. For reporting of 2025 and 2026 results Consultant will prepare the main report document and Valley Water will provide analysis and results of steelhead transect monitoring at least two months before the final report is due to the permitting agencies. This will allow Consultant one month to incorporate the results.
4. Draft reports will be provided to Valley Water one month after transect monitoring results are provided to Consultant. Valley Water will provide reviewed draft document with track changes edits and compiled, non- conflicting comments from Valley Water within two weeks of receiving the draft reports.
5. Consultant will have at least two weeks to incorporate Valley Water comments and edits into a final annual report to be submitted to FERC.
6. Although, not expected, Consultant will respond to up to 10 minor edits/comments from FERC or the TWG. Minor comments are assumed to not include any additional field work or quantitative analysis.

Task 7.3 – Turbidity Monitoring

This task includes acquiring, summarizing, and reporting on turbidity data pursuant to the Sediment Monitoring Plan (Horizon Water and Environment 2022) developed to address FERC ordered environmental monitoring within Coyote Creek.

Consultant will develop data summaries of available turbidity data from available stations in Coyote Creek (HWY 237, Madrone, Coyote Ranch Road, and Edenvale) on a monthly basis between July 1, 2026 and December 31, 2027.

Task 7.3 - Deliverables

1. One draft and one final monitoring report summarizing USGS turbidity and suspended sediment concentration data acquired from existing stations for Water Year 2026.
2. Up to 18 monthly summaries of the turbidity monitoring data in an email format for distribution to the TWG in the mid-month email.

Task 7.3 - Assumptions

1. USGS turbidity data from the HWY 237, Madrone, Coyote Ranch Road, and Edenvale stations in Coyote Creek will be accessible and in a usable format.
2. All deliverables will be electronic submittals.

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3. Anderson Dam outfall suspended sediment concentration and turbidity data collected by Stillwater Sciences during Water Year 2025 sampling visits are determined to be representative of data from the USGS gage at Madrone, and Anderson Dam outfall suspended sediment and turbidity monitoring is discontinued.

Task 8 – Anderson Dam Seismic Retrofit Project Monitoring Support (NEW)

Consultant will continue supporting environmental DNA (eDNA), sediment deposition, and suspended sediment monitoring through December 2028.

8.1 eDNA Monitoring

Consultant will continue coordination with Valley Water staff and the Aquatrace Genomics eDNA laboratory during 2027 and 2028 eDNA monitoring efforts. The eDNA monitoring will be conducted by Valley Water staff according to Valley Water’s Fish Rescue and Relocation Plan, the Temperature and Fisheries Monitoring Plan, and/or future eDNA monitoring at the direction of the MAWG. Samples will be analyzed for *Oncorhynchus mykiss* (*O. mykiss*) DNA.

Task 8.1 – Deliverables

1. Laboratory coordination
2. Data quality control and assurance review

Task 8.1 – Assumptions

1. Includes analysis of eDNA to be sampled in 2027 and 2028 Up to 264 filtered water samples (132 per year) will be analyzed to detect for *O. mykiss* eDNA.
2. Samples will be analyzed using qualitative polymerase chain reaction (PCR) to detect presence of *O. mykiss* DNA using a previously published genetic assay.
3. Valley Water staff will conduct sampling and ship eDNA samples to the laboratory

Task 8.2 – Sediment Deposition Monitoring

Consultant will continue implementation of spawning gravel and benthic macroinvertebrate habitat monitoring in 2027 and 2028 as described in Section 4.1.1 of FERC Order B (11) (FERC Order) to assess sediment deposition within steelhead spawning gravels and benthic macroinvertebrate habitat in Coyote Creek downstream of Anderson Dam. Transect monitoring also described in the FERC Order will be conducted separately by Valley Water. Consultant will combine the results from both studies into a single annual report for 2027 and for 2028.

Task 8.2 – Deliverables

1. 2027 Annual Report
2. 2028 Annual Report

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One draft version of each annual report in Microsoft Word; a revised version of the final report, which shows responses to Valley Water comments in track changes, and clean versions of the final report in Microsoft Word and pdf formats.

Task 8.2 – Assumptions

1. Transect monitoring per Section 4.1.2 of the FERC Order will be conducted by Valley Water in 2027 and 2028.
2. Consultant will monitor sediment deposition in steelhead spawning habitat in 2027 and 2028, following the methods described in the FERC Order.
3. For reporting of 2027 and 2028 results, Consultant will prepare the main report and Valley Water will provide analysis and results of transect monitoring.
4. Annual reports will combine the analysis and results from Valley Water’s transect monitoring with Consultant’s analysis and results of the spawning gravel and benthic macroinvertebrate monitoring per the FERC Order B (11).
5. Consultant will provide draft version of the annual report for 2027 and 2028 to Valley Water for one round of review. Valley Water will provide its comments using the *Track Changes* feature in the Microsoft Word file. A final version of the report will be updated following receipt of the Valley Water-reviewed draft document with compiled, non-conflicting comments from Valley Water staff.

8.3 – Suspended Sediment Monitoring

Consultant will acquire, summarize, and report on suspended sediment concentration and turbidity data pursuant to the Sediment Monitoring Plan (Horizon Water and Environment 2022) developed to address FERC-ordered environmental monitoring within Coyote Creek. Consultant will prepare summaries of available turbidity data from stations in Coyote Creek (Highway 237, Madrone, Coyote Ranch, and Edenvale) on a monthly basis between January 1 and December 31, 2028.

Task 8.3 – Deliverables

1. Monitoring report that summarizes available U.S. Geological Survey (USGS) suspended sediment concentration and turbidity data acquired from existing stations for water year 2027.
2. One draft version of the monitoring report in Microsoft Word; a revised version of the final monitoring report, which shows responses to Valley Water comments in track changes, and clean versions of the final monitoring report in Microsoft Word and pdf formats.
3. Up to 12 monthly summaries of the turbidity monitoring data provided in an email format for distribution to the ADSRP MAWG in the mid-month email.

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Task 8.3 – Assumptions

1. USGS turbidity and suspended sediment concentration data from the Highway 237, Madrone, Coyote Ranch Road, and Edenvale stations in Coyote Creek will be accessible and in a usable format.
2. USGS suspended sediment concentration data for water year 2027 will be available in Spring 2028.
3. All deliverables will be electronic submittals.

Task 9 –Permit Required Plans (NEW)

Consultant will provide support for developing plans that address the requirements in the National Marine Fisheries Service (NMFS) 2025 Biological Opinion and the Water Quality Certification as detailed below.

Task 9.1 – Juvenile Salmonid Migration Evaluation Plan (Biological Opinion Requirement)

Under this task, the Consultant will develop a Coyote Percolation Pond Juvenile Salmonid Migration Evaluation Study Plan (Migration Evaluation Plan) to implement the Biological Opinion Terms and Conditions of Reasonable and Prudent Measure 6. The study plan will describe a study that could be conducted with marked/tagged juvenile salmonids to evaluate transit times and survival rates post-Phase 2 construction. The study should evaluate passage through the pond and across the dam under various operational scenarios (pond drained, pond full, bladder raised, and bladder lowered) and flow pathways (fish ladder, new bypass gates, and roughened channel). This plan will be developed in collaboration with NMFS, and the AMT will be informed of progress.

Task 9.1 – Deliverables

1. One administrative draft version of the Migration Evaluation Plan (for Valley Water review) in Microsoft Word.
2. Responses to Valley Water comments on the administrative draft.
3. One draft version of the Migration Evaluation Plan for NMFS as a clean version.
4. Comment Matrix in Microsoft Excel showing responses to NMFS comments on the Draft Migration Evaluation Plan.
5. One final version of the Migration Evaluation Plan in Microsoft Word and pdf formats.

Task 9.1 – Assumptions

1. For the administrative draft, Valley Water will collect comments from all Valley Water stakeholders and provide a single set of consolidated comments to the Consultant.
2. For the draft version of the Migration Evaluation Plan, Valley Water will collect comments from NMFS and provide a single set of consolidated comments to the Consultant.

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3. Consultant will provide consolidated responses to comments and edits made using the *Track Changes* feature of Word on subsequent draft documents.
4. Scope includes development of the study plan but does not include implementing the plan.

Task 9.2 Gravel Augmentation and Habitat Complexity Improvements Plan (Water Quality Certificate Requirement)

Consultant will prepare a Gravel Augmentation and Habitat Complexity Improvements Plan to support compliance with the Water Quality Certification. The Gravel Augmentation and Habitat Complexity Improvement Plans is required to be completed no later than three months prior to the start of ADSRP construction. The start of ADSRP construction is expected to begin January 1, 2027. Therefore, the Consultant shall complete this task by October 1, 2026, which is three month prior to January 1, 2027. The plan will be developed in collaboration with the MAWG and include the following components:

- Maintenance Activities at the Live Oak Park Restoration Reach, which consists of maintaining gravel and large woody debris constructed under the FOCB; and
- Sediment Augmentation Program, which consists of planning and implementing spawning gravel augmentation in multiple sites in the Live Oak Park Restoration Reach and Ogier Ponds during ADSRP.
- A description of the spawning gravel and large woody debris augmentation that has taken place as part of the FOCB; detailed plans including site maps, drawings, and/or pictures of additional gravel and large woody debris augmentation that will be performed at Live Oak Park Restoration Reach and/or Ogier Ponds as part of the ADSRP.
- A schedule for implementation of the Gravel Augmentation and Habitat Improvements Plan that includes initial gravels placement for spawning and rearing habitat, monitoring of the gravel augmentation site(s), and subsequent gravels placement.
- Information on the gravel particle size(s) to be used.
- A quantitative breakdown of how much gravel will be placed at each location(s) or reach(es) and/or how monitoring will determine the volumes of gravel to be placed at a later date as part of maintenance efforts.
- Monitoring procedures that will be implemented to track gravel mobilization and effects of gravel on beneficial uses, and to track stability of habitat complexity structures placed as part of the FOCB in the Live Oak Park Restoration Reach.
- A description of how placement of gravels in the reach will benefit steelhead habitat, how success criteria will be defined, and adaptive management.
- Evaluation of the feasibility of extending the gravel augmentation program's 20-year timeframe, due to Anderson Dam's long-term effects on sediment transport.
- Reporting schedule to document plan implementation and effectiveness relative to success criteria.

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Documentation of consultation with MAWG in development of the Gravel Augmentation and Habitat Improvements Plan.

Water staff and/or members of the MAWG. Consultant will respond to comments and update the plans in consultation with Valley Water.

Task 10 – Deliverables

1. Responses to Valley Water comments on Administrative Draft Sediment Augmentation and Geomorphic Flows Plan
2. Permitting agencies version of the Draft Sediment Augmentation and Geomorphic Flows Plan
3. Responses to permitting agencies comments on the Draft Sediment Augmentation and Geomorphic Flows Plan
4. Administrative Revised Draft Sediment Augmentation and Geomorphic Flows Plan
5. Responses to Valley Water comments on Administrative Revised Draft Sediment Augmentation and Geomorphic Flows Plan
6. Revised Draft Sediment Augmentation and Geomorphic Flows Plan with permitting agencies comments incorporated
7. Responses to permitting agencies Comments on the Revised Draft Sediment Augmentation and Geomorphic Flows Plan
8. Final Revised Draft Sediment Augmentation and Geomorphic Flows Plan
9. Hydraulic model files

Task 10 – Assumptions

1. Each round of review with Valley Water will include one set of compiled, non-conflicting comments in a spreadsheet matrix or similar format.
2. For each round of review from the MAWG, Stillwater will receive a set of compiled comments in a spreadsheet matrix or similar format.
3. Revisions may include minor hydraulic modeling adjustments and iterations. Major changes to the modeling will require a contract amendment or will be executed from Supplemental Services.

Task 11 - Live Oak Monitoring and Maintenance Plan Implementation (NEW)

Consultant will implement the Monitoring and Maintenance Plan for the Live Oak Restoration Reach Project (Appendix B of the Coyote Creek Live Oak Reach Restoration Project 100% Basis of Design Report) (herein LORRP Monitoring and Maintenance Plan), which includes conducting surveys to document pre-project and As-Built conditions of the Live Oak Restoration Reach Project (LORRP) and additional surveys if significant flows occur (e.g., ≥ 250 cfs) following construction.

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Task 11.1 – Hydrologic Monitoring

Consultant will conduct hydrologic monitoring to characterize the measured hydrology at the LORRP site during water year 2027 and water year 2028. Hydrologic monitoring will consist of analysis and post-processing of local gage data and synthesizing any other dam operations hydraulics data. Hydrologic data will be processed and used to evaluate site performance and compare with expected hydrologic regimes for the FOCP, seismic retrofit construction, and post-construction operations of ADSRP.

Task 11.1 – Deliverables

1. Figures and supporting data summarizing stream flow levels from local gages along with relevant dam operations hydraulics data included in each annual Maintenance and Monitoring Report (described under Task 11.6)

Task 11.1 – Assumptions

1. Coyote Creek stream flow data will be accessible and in a usable format.

11.2 – Topographic Surveys

This subtask covers two years (2027 and 2028) of post-construction topographic survey monitoring of the LORRP site (from the most downstream established transect to the most upstream established transect in the project reaches) to monitor geomorphic changes at individual LORRP restoration features. The topographic surveys will include transects and channel longitudinal profiles at the thalweg.

Task 11.2 – Deliverables

1. Up to 2 topographic surveys when triggered and after flows recede in 2027 and/or 2028
2. A figure showing the location of all survey transects and end pins will be included in each Annual Maintenance Report (Subtask 11.6)
3. Channel longitudinal profiles showing streambed elevations at the thalweg will be included in each Annual Maintenance Report when surveys are triggered (Subtask 11.6)

Task 11.2 – Assumptions

1. As-Built topography and survey monitoring transects will be established that incorporate each restoration feature (up to 41 transects total) under a different contract and this amendment covers monitoring at established transects for up to two years post-construction.
2. Budget assumes 2 topographic surveys (i.e., topographic surveys are triggered in both years 2027 and 2028).
3. Surveys would occur once per year and would be triggered if flows increase 250 cfs or greater within the water year.

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4. Topographic surveys include up to 41 transects at spawning gravel features to be established with end pins under a separate contract.
5. Longitudinal Profiles will begin at the most downstream cross section for the LORRP and end at the most upstream cross section in the South Channel with point spacing of 6-10 ft.
6. Topographic surveys following major maintenance activities are not included and would need to be covered under Supplemental Services or a contract modification if required.

11.3 – Repeat Photography

Consultant will attend site visits to photograph and assess pre-project and As-Built conditions, and additional site visits will be conducted during or following high flows (>250 cfs) and other geomorphically significant events (site repairs, sediment replenishment). Photo points will be established with landmarks from previous photos and repeat photography will be performed to monitor the creek banks for erosion and large wood for stability for each restoration feature and shown in a figure as part of the Annual Maintenance and Monitoring Report (Subtask 11.6).

Task 11.3 – Deliverables

1. Photo point locations will be included on an 11” x 17” scale map in the Annual Maintenance and Monitoring Report (Subtask 11.6)
2. A photo at each photo point will be included in an appendix to the Annual Maintenance and Monitoring Report (Task 11.6) with two photos per 8.5” x 11” page

Task 11.3 – Assumptions

1. Photos will be collected during three events: Once shortly after construction (assumed 2026) to document As-Built conditions and once each winter after stream flow reaches or exceeds 250 cfs then recedes in water year 2027 and/or water year 2028.

11.4 – Sediment Surveys

This subtask comprises sediment sampling and tracer rock surveys. The sediment sampling component includes pebble counts and volumetric sieve sampling under post-construction conditions. The sediment sampling will occur after construction and will be repeated if flows meet or exceed 250 cfs in 2027 and/or 2028. Sediment sampling locations will be co-located at sample locations established as part of Valley Water’s Coyote Creek Sediment Augmentation Program and may include additional locations, if budget allows, to fill data gaps and assess geomorphologic changes of the LORRP and changes in distribution of adult spawning habitats.

The tracer rock study will be conducted using either tagged or painted rocks (i.e., tracer rocks) of various diameters to track sediment mobility and bed evolution in order to understand the mobility of sediments in the system. Tracer rocks will be placed directly following construction and monitored after high flows (250 cfs) when the stream is wadable. Monitoring will occur annually through 2028 to understand the flows at which particles are mobile.

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Task 11.4 – Deliverables

1. Sediment sampling methods and results will be summarized in the Annual Maintenance and Monitoring Report (Subtask 11.6)

Task 11.4 – Assumptions

1. Consultant will collect 4 volumetric sieve samples and 8 pebble counts during each monitoring event.
2. Sediment sampling will occur if gravels are present and includes 3 events: one event post-construction to document As-Built conditions, one event in 2027, and one event in 2028. The surveys in 2027 and 2028 would only occur when triggered by a flow event of 250 cfs or greater within the water year once flows recede.
3. Tracer rock surveys would occur in 2027 and/or 2028, following flow events greater than 250 cfs once flows recede.

Task 11.5 – Habitat Suitability Monitoring

Consultant will conduct habitat suitability monitoring that will be completed to document As-Built conditions at the design flows of approximately 30 and 50 cfs as well as following flows greater than 250 cfs. A post-construction scale map (basemap) of the LORRP habitat will be created to document habitat conditions following construction. During each monitoring event, suitable fry, juvenile, and spawning habitat will be mapped on the basemap of the LORRP, based on the steelhead habitat suitability criteria summarized in Table 3-1 of the LORRP 100% Basis of Design.

Task 11.5 – Deliverables

1. Methods and results will be summarized in the Annual Maintenance and Monitoring Report each year for 2026 report, 2027, and 2028 (Subtask 11.6)

Task 11.5 – Assumptions

1. A scale As-Built map will be created using aerial imagery collected with a drone or unmanned aerial vehicle (UAV)
2. Habitat suitability monitoring will occur during two flow levels each year - approximately 30 cfs and 50 cfs
3. Monitoring will occur for three years to document As-Built conditions following construction (assumed in 2026), 2027 assuming stream flow reaches or exceeds 250 cfs during the prior winter, and 2028 assuming stream flow reaches or exceeds 250 cfs during the prior winter.

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Task – 11.6 Annual Maintenance and Monitoring Report

Consultant will prepare the Annual Maintenance and Monitoring Report for 2027 and 2028. The annual reports will discuss changes between pre- and post-construction conditions in relation to target conditions, hydrology including triggering flow events, observed baseflows and deviations from expected hydrologic regimes, and any maintenance actions and will provide recommendations for future monitoring and maintenance.

Task 11.6 – Deliverables

1. Draft and final versions of the Annual Maintenance and Monitoring Report comparing pre- and post-construction conditions prepared for each year of monitoring (2026, 2027, and 2028)
2. One draft version of Annual Maintenance and Monitoring Report in Microsoft Word; a revised version of the final report, which shows responses to Valley Water comments in track changes, and clean versions of the final Annual Maintenance and Monitoring Report in Microsoft Word and pdf formats

Task 11.6 – Assumptions

1. Consultant will provide draft version of the annual reports for 2026, 2027 and 2028 to Valley Water for one round of review. Valley Water will provide its comments using the *Track Changes* feature in the Microsoft Word file. A final version of the report will be updated following receipt of the Valley Water-reviewed draft document with compiled, non-conflicting comments from Valley Water staff.

Task 12 – Additional Coyote Perc Phase 2 Project Support (NEW)

Consultant will provide additional services to support the completion and construction stage of the Coyote Perc Phase 2 Project.

Task 12.1 – Log Boom Attachment and Upstream Bank Stabilization

Following the Draft 60% Phase 2 submittal, Valley Water requested integration of a log boom structure upstream of the existing radial gates and improved bank stabilization/erosion control on the left bank just upstream of the existing radial gates. Consultant will first develop a brief alternatives memorandum for a log boom structure and bank stabilization options including considerations for type and materials, cost effectiveness, durability and lifespan, anchoring configurations and other tension and support needs, environmental considerations and vehicle/maintenance access. Based on this initial assessment, Consultant will make recommendations for the boom design and bank stabilization features.

Following feedback from Valley Water, Consultant will prepare 60% and Final construction drawings for the log boom feature with additional comment from Valley Water following the 60%

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design stage. Each design stage will be accompanied by an engineer's opinion of probable cost. Subconsultant will provide any structural designs including the anchoring system.

Task 12.1 – Deliverables

1. Log boom and bank stabilization alternatives memorandum
2. 60% design plans and engineer's opinion of probable cost
3. Final design plans and engineer's opinion of probable cost

Task 12.1 – Assumptions

1. Time will include a 1-day site visit for a civil engineer and a structural engineer to investigate anchoring options.
2. Includes 1 day for Stillwater survey team consisting of 2-staff to survey upstream bank surface.
3. Assumes no additional surveys needed other than those indicated.

Task 12.3 – Fish Monitoring Design Support

Following the Draft 60% Phase 2 submittal, Consultant received comments from Valley Water related to design of a concrete staging platform for fish monitoring equipment, associated electrical routing conduits crossing the dam facility, and anchoring systems for VAKI System or Passive Integrated Transponder (PIT) tag array antennae.

Consultant will prepare 60% and Final design details for the staging platform and other fish counting accommodations within the fish lane. Subconsultant will provide any structural design needs, including design of the platform foundation and antennae anchoring.

Task 12.3 – Deliverables

1. 60% design of the fish monitoring staging platform
2. Final design of the fish monitoring staging platform

Task 12.3 – Assumptions

1. Valley Water will provide comments on the 60% design.
2. Consultant will not undertake design of the fish monitoring equipment or any associated electrical engineering, including routing from the dam to the platform, panels or subpanel needs and monitoring system controls.

Task 12.4 – Bid Support and Construction Observation

Consultant will undertake a range of construction-related activities during construction planning and construction of the Coyote Perc Phase 2 Project. Activities and services that Consultant will undertake and provide for this task include the following:

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- Assist Valley Water with review of construction bids documents, participate in pre-bid meeting, respond to contractor questions during the bidding period. Contract award will be in accordance with Valley Water procedure and based on the lowest responsive and responsible bidder s. Conduct site walkthrough and review construction staking prior to initiation of construction activities.
- Make construction observations (geomorphologists and/or engineers) during critical stages of construction, for example, during dewatering and water management plan implementation, excavation, field fitting of grade control and engineered streambed material (ESM) ; provide onsite presence of an engineer or geomorphologist (or botanist in the case of revegetation phases) during these times to observe and document the construction progress; and make real-time decisions about use and placement of materials and design changes that may be necessary based on field conditions.
- Attend bi-weekly construction update meetings with the contractor, permitting consultants, and regulators.
- Respond to Requests for Information (RFIs) from the contractor, Valley Water or permitting agency.
- Review and comment on As-Built surveys and related documentation including markup of construction documentation.
- Continue to meet with the Valley Water project manager on a bi-weekly basis during construction to discuss progress, observations and field notes.

Task 12.4 – Deliverables

1. Written responses to bid-period questions and technical input for addenda
2. Field notes for construction staking walkthrough and construction observation
3. Meeting notes from regular meetings with the contractor and Valley Water’s project manager
4. Responses to RFIs and submittals
5. Review of and comment on As-Built Plans

Task 12.4 – Assumptions

1. Consultant will be onsite to observe and advise, but the contractor remains ultimately responsible for construction quality and permit compliance.
2. The site walkthrough and review of construction staking will be limited to 3 days total time (1 day site visit with 2 Stillwater staff and 1 structural subconsultant staff).
3. Total onsite time for construction observation by a geomorphologist or engineer will be limited to 3 weeks.
4. Assume 1-hour bi-weekly contractor update meetings over 9-month total construction window (20 meetings). Attendance by Contractor’s Project Manager and Deputy Project Manager. Assume structural sub attends ¼ of all meetings
5. Total of 20 30-minute PM meetings with Valley Water
6. Consultant will not provide full construction management services.

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Task 12.5 – Coyote Perc Phase 2 Maintenance and Monitoring Plan

Consultant will develop a Maintenance and Monitoring Plan for the Phase 2 Coyote Percolation Dam facilities including the fish lane, crest gate, historical channel adjacent to the fish lane and the berm repair area. The plan shall include descriptions and anticipated frequency of various activities including condition surveys, debris management, fish rescue, invasive plant management, operation and care for the crest gate and associated equipment, and annual hydrologic analysis. The plan will include figures related to data collection and survey/monitoring points and cross sections, will outline reporting needs, and provide data collection and reporting templates. Consultant shall undertake an on-site survey to identify observation points, and sections for inclusion in the plan. The maintenance and monitoring plan shall be included as an appendix to the Final Basis of Design Report for the Project. Consultant will prepare draft and final versions of the plan and shall respond to consolidated comments from Valley Water

Task 12.5 – Deliverables

1. Draft Maintenance and Monitoring Plan
2. Final Maintenance and Monitoring Plan

Task 12.5 - Assumptions

1. Scope is for preparation of the plan and excludes plan execution.
2. Excludes design and description of biological surveys such as fish counts.
3. Assumes two staff will survey monitoring points over the course of a single day in the field.
4. Valley Water will provide a single set of consolidated comments to the Draft Maintenance and Monitoring Plan. Stillwater will proceed with a Final Plan upon notification from Valley Water.

8. Attachments

The following Schedule EP, Scope of Services, listed Attachments are incorporated herein by this reference as though set forth in full:

Revised Attachment One - Fees and Payments
Revised Attachment Two - Schedule of Completion
Revised Attachment Three - Consultant's Key Staff and Subconsultants
Revised Attachment Four - Reference Materials

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REVISED ATTACHMENT ONE
FEES AND PAYMENTS**

1. Total Authorized Funding (REVISED)

Total payment for Services performed, to the satisfaction of Valley Water, as described in the Schedule(s) will not exceed a total amount of **\$4,169,706** (Not-to-Exceed Fees or NTE). Under no conditions will the total compensation to the Consultant exceed NTE payment amount without prior written approval in the form of an amendment to this Agreement executed by Valley Water’s Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown (REVISED)

The NTE total compensation of this Agreement consists of the following task fee breakdown. No services will be performed or fees paid by Valley Water to the Consultant for Supplemental Services without prior written authorization by Valley Water as stated in this Agreement.

COST BREAKDOWN					
Task	Description	Original Not-to-Exceed Fees	Amendment No.1 (6/25/2025) (+/-)	Amendment No. 2 (+/-)	Revised NTE Fees Total
1	Project Management	\$183,268	\$99,272	\$159,065	\$441,605
2	Planning and Permitting Support	\$500,748	\$44,173	\$152,907	\$697,828
3	Ogier Ponds Restoration Project Technical Support	\$367,804	\$0	\$0	\$367,804
4	Phase 2 Coyote Percolation Dam Design	\$418,815	\$626,471	\$0	\$1,045,286
5	Live Oak Restoration Reach Design Support and Field Support	\$346,974	\$0	\$0	\$346,974
6	Supplemental Services	\$182,391	\$0	\$100,000	\$282,391
7	FOCP Monitoring Support	\$0	\$148,677	\$0	\$148,677
8	Anderson Dam Seismic Retrofit Monitoring Support	-	-	\$149,465	\$149,465
9	Permit Required Plans	-	-	\$104,979	\$104,979
10	Sediment Augmentation and Geomorphic Flows Revised Draft Plan	-	-	\$98,658	\$98,658
11	Live Oak Monitoring and Maintenance Plan Implementation	-	-	\$242,294	\$242,294
12	Additional Coyote Perc Phase 2 Project Support	-	-	\$243,745	\$243,745
Total Not-to-Exceed Fees		\$2,000,000	\$918,593	\$1,251,113	\$4,169,706

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REVISED ATTACHMENT ONE
FEES AND PAYMENTS**

3. Terms and Conditions (UNCHANGED)

A. Payments for services performed, as defined in this Schedule, which applies to the specific Services, will be based on the following terms:

- 1) Valley Water will pay for Services provided by the Consultant according to the schedule of rates for professional, technical, and administrative personnel as well as materials and supplies as listed below in the Hourly/Unit Rate Schedule.
- 2) The stated hourly rates are effective for the term of this Agreement unless otherwise revised as indicated. After 12 months from the date this Agreement is entered into by parties ("anniversary date"), and each 12 months thereafter, these hourly rates may be negotiated by the Consultant and Valley Water, provided Consultant submits written notice to Valley Water of Consultant's request to revise the hourly rates 90 calendar days prior to the anniversary date of this Agreement. Both parties will use as a benchmark for negotiations the percent change for the previous 12 months of the "Employment Cost Index (ECI), for total compensation for private industry workers, for the San Francisco-Oakland-San Jose, CA CSA Census region and metropolitan area (not seasonally adjusted)" as published by the U.S. Department of Labor, Bureau of Labor Statistics, or 3.5%, whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by Valley Water's Deputy Operating Officer.

B. Reimbursable Expenses (UNCHANGED)

- 1) All reimbursable expenses not already covered in overhead may include, but are not limited to, mapping, rendering, printouts, leased equipment, mailing and delivery services, printing services, film and processing, plotting, and supplies. These other direct expenses as approved by Valley Water Project Manager (VWPM) will be billed on a monthly basis at actual cost plus 5% linked to each Agreement Task, provided that the Task total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted. No markup will be applied to reimbursable expenses, either by the Consultant or by its subconsultants, subcontractors, or vendors. Consultant shall provide invoices for all such services regardless of cost.
- 2) Equipment purchased on behalf of Valley Water that costs \$50 or more must receive the prior written approval of Valley Water Project Manager (VWPM). All equipment purchased on behalf of Valley Water and paid for by Valley Water shall become the property of Valley Water and be delivered to Valley Water prior to expiration of this Agreement.
- 3) Travel expenses are reimbursed at actual costs. Travel and overnight accommodations, including per diem, required for performance of this Agreement will be paid at reasonable cost not to exceed the U.S. General Services Agency Per Diem Rates for Sunnyvale/Palo Alto/San Jose, California area, provided prior approval has been obtained from Valley Water Project Manager (VWPM). For air

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FEES AND PAYMENTS**

travel, Valley Water will pay the cost of a coach class or equivalent ticket. Where air travel is required, Valley Water will pay the total cost of taxi, rideshare, public transportation, or a rental car, which may include insurance, gas, car fee, and taxes and will be paid at the actual costs incurred. Vehicle rental is limited to a compact or economy model, unless prior approval has been obtained from Valley Water Project Manager (VWPM) for a different type of vehicle.

- 4) Expenses incurred by the Consultant, including for Subconsultants, subcontractors and vendors, including lab services, will be reimbursed at actual cost plus 5%. Consultant shall provide invoices for all such services regardless of cost. The 5% markup will be applied only once, either by the Consultant or by its subconsultants, subcontractors, or vendors.

- 5) For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant must obtain written approval from the Valley Water Project Manager (VWPM) as to the numbers of hours per task prior to that individual working on the Project. [NOT USED]

C. Prevailing Wage Requirements [NOT USED] (UNCHANGED)

- 1) The Scope of Services described in a Task INSERT APPLICABLE TASK NUMBER HERE may be considered by Valley Water to be "Public Works" requiring the payment of prevailing wages. See Standard Consultant Agreement, Section Four, Fees and Payments, subsection 3. Prevailing Wages.
- 2) In accordance with prevailing wage laws, the Director of the California Department of Industrial Relations (Director) has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the Project. These rates are set forth in the latest determination obtained from the Director, which is on file in Valley Water's Office of the Clerk of the Board of Directors and incorporated herein by reference the same as though set forth in full. The rates are also available on the State of California Department of Industrial Relations website at <http://www.dir.ca.gov>.

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REVISED ATTACHMENT ONE
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE (REVISED)

CLASSIFICATION/STAFF	ORIGINAL HOURLY/UNIT RATE EFFECTIVE 11/9/2023	HOURLY/UNIT RATE EFFECTIVE 12/1/24	HOURLY/UNIT RATE EFFECTIVE 1/22/25	HOURLY/UNIT RATE EFFECTIVE 3/1/2026
Consultant: Stillwater Sciences				
Principal-in-Charge	\$265.00	-	\$272.16	\$280.59
Principal Scientist/Engineer	\$232.00	-	\$238.26	\$245.65
Senior Scientist/Engineer	\$208.00	-	\$213.62	\$220.24
Associate Scientist/Engineer	\$186.00	-	\$191.02	\$196.94
Assistant Scientist/Engineer	\$165.00	-	\$169.46	\$174.71
Scientist II	\$148.00	-	\$152.00	\$156.71
Scientist I	\$136.00	-	\$139.67	\$144.00
Senior Technician II	\$120.00	-	\$123.24	\$127.06
Senior Technician I	\$105.00	-	\$107.84	\$111.18
Technician/Administrative	\$84.00	-	\$86.27	\$88.94
Subconsultant: GEI Inc.				
Principal-in-charge Grade 8	-	\$370.00	\$370.00	\$381.47
Project Manager Grade 7	-	\$330.00	\$330.00	\$340.23
Senior Engineer – Grade 5	-	\$244.00	\$244.00	\$251.56
Project Professional Grade 4	-	\$207.00	\$207.00	\$213.42
Senior CADD Drafter	-	\$184.00	\$184.00	\$189.70
CADD Drafter	-	\$168.00	\$168.00	\$173.21
Administrative Support	-	\$137.00	\$137.00	\$141.25

REIMBURSABLE COSTS (UNCHANGED)

EQUIPMENT/UNIT NAME	ACTUAL COST RATES				
	PIECE	PER HOUR	PER DAY	PER WEEK	PER MONTH
GPS RTK GNSS Survey Package	1	N/A	\$600	N/A	N/A
Water Quality Meter YSI EXO 2	1	N/A	\$300	N/A	N/A
Water Quality Meter YSI Pro DSS	1	N/A	\$150	N/A	N/A

Note: Reimbursable Costs are paid at the Actual Cost Rates. These rates will remain fixed for the duration of this Agreement.

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REVISED ATTACHMENT TWO
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all of conditions to formation of an agreement listed in the Standard Consultant Agreement, Section Twelve, Miscellaneous Provisions, subsection 2. Formation of Agreement.
2. This Agreement expires on December 31, 2028, unless, prior to its expiration, its term is modified by a written amendment hereto, and signed by both Parties.
3. Valley Water and Consultant may agree to modify the schedule specified for Consultant's performance as an administrative modification to the Agreement and will confirm such modification in writing.

PROJECT SCHEDULE (REVISED)

Task	Description	Duration From Notice to Proceed Due Date
1	Project Management	Duration of Agreement
2	Planning and Permitting Support	December 2028
3	Ogier Ponds Restoration Project Technical Support	August 2028
4	Phase 2 Coyote Percolation Dam Design	August 2028
5	Live Oak Restoration Reach Design Support and Field Support	December 2027
6	Supplemental Services	Duration of Agreement
7	FOCP Monitoring	January 2027
8	Anderson Dam Seismic Retrofit Monitoring Support	Duration of Agreement
9	Permit Required Plans	Duration of Agreement
10	Sediment Augmentation and Geomorphic Flows Revised Draft Plan	December 2028
11	Live Oak Monitoring and Maintenance Plan Implementation	December 2028
12	Additional Coyote Perc Phase 2 Project Support	December 2028

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REVISED ATTACHMENT FOUR
REFERENCE MATERIALS**

Ref No.	Description
1	Santa Clara Valley Water District Non-Disclosure Agreement (NDA) and Personal Non-Disclosure Agreement (PNDA) (FC 1650)
2	Santa Clara Valley Water District (Valley Water) Standards for GIS Products April 2021 version: http://gis.valleywater.org/Download/GIS_PRODUCT_STANDARDS.pdf
3	Ogier Ponds Feasibility Study : Feasibility of Removing Surface Hydraulic Connection Between Coyote Creek and Ogier Ponds (Consultant: Todd Groundwater) March 2018 https://californiarevealed.org/do/07aaf9e7-1e7f-4ea2-9134-1a6e167769d2
4	Draft Environmental Impact Report dated September 1, 2023 https://www.valleywater.org/public-review-documents
5	Final Environmental Impact Report dated February 25, 2025 https://www.valleywater.org/public-review-documents
6	Flosi, G., S. Downie, J. Hopelain, M. Bird, R. Coey, and B. Collins. 2010. California salmonid stream habitat restoration manual. Fourth edition. Prepared by California Department of Fish and Game, Sacramento, California.
7	National Marine Fisheries Service (NMFS) 2023. NOAA Fisheries West Coast Region Anadromous Salmonid Passage Design Manual, NMFS, WCR, Portland, Oregon. Addendum #1.
8	California State Water Resources Control Board. Anderson Dam Seismic Retrofit Project Water Quality Certification. June 29, 2025. https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/docs/2025/adsrp-final-wqc.pdf
9	National Marine Fisheries Service. Anderson Dam Seismic Retrofit Project Biological Opinion. May 29, 2025. https://repository.library.noaa.gov/view/noaa/70708/noaa_70708_DS1.pdf

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