

**SCHEDULE A
PRELIMINARY SCOPE OF SERVICES**

1. Representatives.

A. The District Project Manager (DPM) for this Agreement is as listed below. Unless otherwise provided in this Agreement, all correspondence to the District shall be addressed to the District Project Manager:

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Santa Clara Valley Water District
5750 Almaden Expressway,
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B. The Consultant's Contact and Principal Officer for this Agreement is as listed below. All District questions pertaining to this Agreement shall be referred to the Consultant's Project Manager. All correspondence to Consultant shall be addressed to the address set forth above.

Mary Paasch, PE, PMP (Consultant Project Manager)
Principal Engineer/Vice President

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All District questions pertaining to this Agreement shall be referred to the Consultant's Project Manager. All correspondence to Consultant shall be addressed to the address set forth above.

C. The Consultant's Principal Officer for this Agreement is:

David Harrison, PE (Consultant Principal Officer)
Senior Vice President, California Regional Manager
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2. Scope of Services.

This Schedule A Scope of Services describes the professional services to be performed by Consultant for the District's Pacheco Reservoir Proposition 1 Application Study (Project). The District may, at its discretion, choose to negotiate an amendment to this Agreement with Consultant for additional services.

3. Project Objectives.

The overall objective is to determine whether an expansion of the Pacheco Reservoir would qualify for Proposition 1 funding and if so, assist the District in preparation of the application for the Proposition 1 funding. It is expected that the steps to achieve this objective include the following:

- A. Identify and evaluate Pacheco Reservoir expansion alternatives
- B. Quantify the benefits for Pacheco Reservoir expansion using guidelines established by the California Water Commission (CWC) Water Storage Investment Program (WSIP) Final Rule Making Package dated January 23, 2017.
- C. Compile, review, update, as needed, existing cost estimates for Pacheco Reservoir expansion
- D. Prepare high level environmental documentation
- E. Assist in preparation of the Proposition 1 Application and supporting materials

4. Project Background.

The District is a public agency providing water supply, flood protection, and stream stewardship for Santa Clara County. It serves approximately two million people in 15 cities and unincorporated areas in the county. The District sells treated water to local water retailers, who in turn provide it to their customers. The District also manages the groundwater basins, which is the source of nearly half of the county's water supply. Groundwater basins are replenished with local surface water and with imported water conveyed through the Sacramento-San Joaquin Delta. Imported water and local surface

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water also supply three water treatment plants. The District collaborates and coordinates with local agencies and recycled water producers on recycled water development and use. For flood protection, the District carries out capital and maintenance projects throughout the year in neighborhoods across the county. In addition, the District also partners with cities and the county to provide open space and recreational opportunities at many of its 10 reservoirs and along creeks throughout the county. For more information about the District, visit www.valleywater.org.

This Project will look at the possibility of applying for a Proposition 1 funds and, if found potentially viable, prepare and submit an application for funding to expand Pacheco Reservoir in an effort to: provide more surface water storage; improve water supply reliability for the District; provide water supply for system-wide emergency response; and provide Delta and local ecosystem benefits.

The potential expansion of Pacheco Reservoir was previously evaluated by the US Bureau of Reclamation and the District as part of the San Luis Low Point Improvement Project (SLLPIP). However, this alternative was screened out during the planning process because, at the time, benefits as related to the SLLPIP were determined to be insufficient to justify projected costs. Recently updated modeling performed in preparation for the District's 2017 Water Master Plan update suggests that there may be greater water supply benefits than previously estimated, as well as potential ecosystem benefits for Delta and local fisheries that could make the expansion of this reservoir a viable project and potentially eligible for Proposition 1 funding.

Proposition 1 funding application requirements for storage projects are extensive. At a minimum, an application will require complex analyses of ecosystem, water supply, and water quality benefits, an economic evaluation, and analysis of two different climate change scenarios.

Time available for performing the required analysis is limited. Proposition 1 funding applications are expected to be due during summer of 2017. For an application for funding to expand Pacheco Reservoir to be completed in the amount of time remaining, the District will need to develop partnerships with San Benito County Water District, Pacheco Pass Water District, and other potential beneficiaries.

5. General Assumptions and Requirements.

The following is a list of general assumptions:

- A. Manage Scope of services.** The 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 the District and Project requirements.
- B. Deliverable Format.** Consultant shall submit deliverables in both electronic and hardcopy format. Deliverables shall be submitted in PDF and native (editable) format, including Word documents, Excel spreadsheets, PowerPoint files, AutoCAD files, etc. The hard copy deliverables shall be printed in professional quality presentation and

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submitted in 5 (five) copies. District may require original copies of signed documents and/or scanned (Adobe PDF) versions.

- C. Review of Deliverables.** The District will review and comment on all Project deliverables and forward to the Consultant for revision and preparation of final versions. As determined by the District, some of the deliverables may also be subject to review and comment from regulatory agencies and stakeholders following the District review process.
- D. District Quality Environmental Management System.** The District maintains a Quality Environmental Management System (QEMS) which has procedures, guidelines and work instructions for the performance of various District work. If requested, the Consultant will perform some of the contract tasks and/or sub-tasks in accordance with the QEMS framework. In such situations, the DPM will provide the Consultant with the specific QEMS procedure, guideline, and/or work instruction prior to the production of deliverables.
- E. Consultant Responsibility.** Consultant, with its expertise in the provision of the listed services, 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 Article 3.
- F. Document Control.** The Consultant is responsible for establishing and maintaining its own document control system to execute this Scope of Services. An internal document control system for this Project is maintained by the District.
- G. File Exchange Service.** Consultant will provide a file exchange service to facilitate communications; particularly of large files over three (3) megabytes. Difficulties in using and transmitting information with this exchange service shall be resolved by the Consultant. In the event that transmitting or receiving information does not occur in a timely manner, the District will not be responsible for delays in completing Project work. Consultant may need to work with District's Information Technology Unit to address any firewall issues and/or permissions required to allow for these communications.
- H. Project-Specific Assumptions and Requirements.** The District intends to retain a consultant with experience with preparation of a Proposition 1 application, experience in preparing feasibility reports and associated NEPA and CEQA documents, and familiarity with planning and design of earth dams, preferably with Pacheco dam specifically.

6. Scope of Services.

Task 1—Project Management.

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 limit stated in Attachment One to Schedule 1, Fees and Payments, and in accordance with the Project Schedule stated in Attachment Two to Schedule 1, Schedule of Completion, while ensuring that all services and deliverables by the Consultant meet the District and Project requirements.

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- 1.1 Project Work Plan.** Consultant will prepare a Project Work Plan in accordance with this Scope of Services. The work plan will be developed in two phases. Phase 1 will address Tasks 1 and 2. Upon a decision by the District to proceed with preparation of a Proposition 1 application, the Consultant will prepare Phase 2 of the work plan to address Tasks 3 and 4.
- 1.1.1** The Project Work Plan shall include Project objectives, requirements, constraints, a detailed Project Schedule (showing major tasks and deliverables), a breakdown of Consultant's costs for the major tasks, a list of the Consultant's team members and their roles and responsibilities, communication protocols (internal and external), document control procedures, and other administrative procedures.
- 1.1.2** The Project Work Plan shall include a Project Quality Assurance and Quality Control (QA/QC) Plan documenting the Consultant's procedures to ensure the Consultant's services and deliverables meet District requirements and accepted practices and standards of the Consultant's profession. The District reserves the right to request and review the Consultant's Project documentation demonstrating its adherence with their own quality assurance procedures.
- 1.2 Project Meetings and Workshops.** District and Consultant key staff and subconsultants as determined necessary and appropriate by Consultant, subject to DPM approval, will coordinate and attend progress meetings and workshops with District staff, regulatory and resource agencies, and review boards, as needed, to review, discuss and progress of the work. For each meeting or workshop, the Consultant shall prepare the meeting agenda and notes and submit them for review by the District. Immediately following the Contract Award, a kickoff meeting will be held at district headquarters to clarify any outstanding issues, District and Consultant responsibilities, as well as identification of critical path schedule.
- 1.3 Progress Meetings with District.** The Consultant Project Manager shall provide a brief update of the teams work activities completed within the week, the look-ahead activities, and the issues and actions that require the District's attention, in a weekly meeting/conference call with the DPM.
- 1.4 Coordination and Communication with External Agencies.** Consultant will assist the DPM with coordination and communication with appropriate regulatory or other agencies, as necessary, to execute this Scope of Services. This task includes support in drafting correspondence related to the Consultant's Project activities as requested by the District.
- 1.5 Public Outreach.** If requested, the Consultant will provide support and assistance to the District's public outreach activities. Work may include coordination and preparation of presentation materials and attendance to meetings, as well as preparation of newsletters, graphics, updates to the Project website, developing responses to questions, and other tasks as directed by the DPM.

Task 1—Deliverables.

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1. Project Work Plan (developed in two phases) including QA/QC Plan (Draft, Final Draft and Final).
2. Meeting Agendas, Minutes, and Presentations.
3. Report(s) of consensus established for major issues and other such documents and letters as are necessary for communication with SCVWD as work progresses.
4. Weekly Meetings/Conference Calls attendance and notes.

Task 1—Assumptions.

1. Anticipated notice to proceed date of March 1, 2017
2. Progress coordination meetings with District staff by phone; weekly for 5 months, plus four additional meetings over duration of task
3. One Project Kick-off meeting with District staff
4. A total of three workshops with District staff during performance of Tasks 2 and 3
5. Two coordination meetings with CWC staff during the application preparation period
6. Proposition 1 application preparation period will span from approximately mid-March to mid-August 2017, with an additional 60 days to file a petition.
7. Application requirements will be based on the WSIP Regulations and Technical Reference submitted by the California Water Commission to the Office of Administrative Law (OAL) on January 23, 2017
8. District will provide a sample work plan to the Consultant that is indicative of the desired level of detail and format.
9. The anticipated level of coordination between Consultant and District is based upon assumed continuity of identified District staff through the duration of the application process.

Task 2 – Develop Preliminary Feasible Alternatives

This task includes initial alternatives development and analysis, and the preparation of a preliminary benefit cost ratios to determine potential project viability. Technical work completed in this task will provide information needed for the District to decide to proceed with preparation of a Proposition 1 application and execution of Task 3.

2.1 – Compile and Review Existing Information – The Consultant will obtain and review previous studies, reports, drawings, and operating plans relevant to the project. The review will focus on the completeness, applicability, and timeliness of previously-prepared information for use in evaluating project facilities, operations, and effects.

2.2 – Develop operating objectives for Pacheco Reservoir – The Consultant will coordinate with District staff and other District consultants in defining operating objectives for an enlarged Pacheco Reservoir. The District will retain a hydrologic consultant to develop an operations model of existing and expanded Pacheco Reservoir that will be used in the evaluation of potential alternatives. The Consultant will provide technical assistance in identifying the range

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of operating objectives to be evaluated by the model, assist the District in coordination with resources agencies to identify instream fisheries flow objectives, and coordinate with the hydrologic consultant during the development and refinement of the Pacheco Reservoir model. The operating objectives will address:

- Existing flood control requirements and operations
- Reservoir releases to satisfy downstream water delivery requirements
- Required instream flows
- Potential supplemental instream flows that could be provided from enlarged Pacheco Reservoir to address previously identified fishery needs
- Reservoir storage dedicated for delivery to San Felipe Division in lieu of Delta pumping to provide Delta ecosystem benefits
- Water transfer rules to move water from San Luis Reservoir to Pacheco Reservoir

The Consultant will define a set of reservoir operating scenarios through coordination with the District and the District's hydrologic consultant. It is expected that reservoir operating scenarios will vary primarily based on total reservoir capacity and the portion of reservoir capacity dedicated to the management of water supply for instream requirements, District supplies, Delta ecosystem, and system-wide emergency storage. To the extent possible, Consultant will identify previous operations studies that are relevant and applicable to the range of identified operating objectives. Operating criteria will be developed in coordination with the District based on assumed infrastructure sizes and capacities and the range of operating objectives identified in this task.

The Consultant will prepare an Operations Scenarios Technical Memorandum describing the operating plans to be evaluated. The TM will briefly describe each operational objective and facility assumption, and present a table of simulations to be evaluated.

2.3 Simulate Project Operations – This task involves simulations of the project operational scenarios described in the TM prepared under Task 2.2. Simulations will be conducted as follows:

2.3.1 – Simulate Pacheco Reservoir Operations – The District's hydrologic consultant will perform operational simulations of Pacheco Reservoir of the operations scenarios described in the TM prepared in Task 2.2. The Consultant will coordinate with the District and District's hydrologic consultant to discuss simulated operations, review results, and suggest refinements. Results of Pacheco Reservoir simulations will be used, in part, to define operations guidelines for the coordinated simulation of San Luis Reservoir and Pacheco Reservoir.

2.3.2 – Simulate System-Wide Operations – The Consultant will modify and apply the version of the CALSIM model provided by the CWC based on 2030 climate change conditions to include Pacheco Reservoir and the transfer of water from San Luis Reservoir to Pacheco Reservoir. Criteria for the transfer of water from San Luis Reservoir to Pacheco Reservoir will be

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developed, in part, through Task 2.2.2. The Consultant will perform CALSIM simulations of scenarios that address the range of operations described in the TM prepared in Task 2.2.

2.3.3 – Quantify Physical Effects - The Consultant will prepare summary information of operations results to demonstrate the extent to which each operating scenario would contribute to achieving the desired physical effects of the operating objectives. Reporting metrics will include water quantities provided for project objectives, reported by year type, season, life-cycle requirement, and other relevant metrics to identify physical effects. Results will be summarized in tables and charts, and presented to the District in a PowerPoint Presentation. The Consultant will run additional simulations and present results as required to demonstrate the effect of operating refinements requested by the District. The District and Consultant will identify those operating plans to be carried forward for cost estimates and benefit monetization.

2.4 – Summarize Project Costs - The Consultant will summarize project facility costs using existing and District-provided conceptual designs and cost estimates. Energy costs will be estimated using output from the CALSIM simulation output. Cost estimates for dams, pumping plants, pipelines, and other facilities will be based on existing information available in previous layout and estimates. The Consultant will identify modifications, updates, or additional cost estimates that would be required for cost estimates in order to conform to CWC Proposition 1 application requirements. Cost estimates for application in Task 2 will be summarized in tables, showing total capital, annual operating, and total annualized costs for each operating plan carried forward from Task 2.3.

2.5 – Monetize Potential Benefits – The Consultant will develop monetary valuations for each benefit category provided by the project. For the purpose of determining a preliminary benefit cost ratio, the Consultant will apply readily available economic methods, including values provided in the CWC Technical Reference. It is anticipated that preliminary monetary values of project benefits will be determined using the following methods, however other methods may also be considered based on their suitability:

- Delta Ecosystem Restoration benefits will be valued using the Economic Values of water provided in the CWC Technical Reference.
- Pacheco Creek Ecosystem Restoration benefits will be valued based on a least cost alternative to achieve similar flows. This could be a new smaller reservoir or water acquisition and pumping facilities to convey water to the existing Pacheco Reservoir.
- Regional Emergency Water Supply benefits will be valued using the Economic Values of water provided in the CWC Technical Reference. The amount of water will be based on the supply that could be delivered to regional water users that is available in Pacheco Reservoir.
- System-wide Emergency Supply benefits will be valued using the Economic Values of water provided in the CWC Technical Reference. The amount of water will be based on

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the portion of the allocated supply for regional water users that is available in San Luis Reservoir and could be delivered regionally from supplies in Pacheco Reservoir.

- Regional Water Quality benefits will be valued using a least cost alternative, likely avoided treatment costs by the District. Quantification of avoided treatment, or other least cost alternatives, will be based on previous economic evaluations for the SLLPIP and other information provided by the District.

Monetization methods will be summarized in a table that identifies the method selected, the basis for valuation, and the values assigned to outputs.

The Consultant will apply the selected monetary benefit methods to the alternative operating plans carried forward from Task 2.3. For each alternative operating plan, monetary benefits will be reported in annual values. The Consultant will compute a benefit cost ratio for each operating plan.

Results will be summarized in tables and charts, and presented to the District in a PowerPoint Presentation. The results of the analysis will support a decision by the District to proceed with the preparation of an application to the CWC for Proposition 1 funds.

Task 2—Deliverables.

1. Description of Potential Operating Plans Technical Memorandum
2. PowerPoint Presentation of Operating Plan Results
3. PowerPoint Presentation of Benefit Monetization Methods
4. PowerPoint of Benefit-Cost information of Operating Plans

Task 2—Assumptions.

1. The District will provide existing information relevant to the project to the Consultant in a timely manner.
2. The District will retain the services of a consultant with knowledge of Pacheco Creek hydrology, fishery requirements, and the operation of Pacheco Reservoir. The retained consultant will assist the District and Consultant in developing a range of potential operating plans for an expanded Pacheco Reservoir.
3. The CWC 2030 model will be used for CALSIM simulations
4. Preliminary estimates of monetary benefits will be based on readily available methods identified in the CWC Technical Reference.
5. For Task 2 evaluations, facility layouts, quantities and cost estimates developed by the District will be used to evaluate potential feasibility.

Task 3 – Prepare Application for Water Supply Investment Program

This task includes technical services to conduct evaluations, prepare and submit an application to the CWC for Proposition 1 funds, and follow-up discussions with CWC staff. This task will

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only be initiated upon direction by the District. A single project alternative, comprised of facilities and project operations, will be developed for the Proposition 1 application based on the results of preliminary analyses completed in Task 2.

3.1 Technical Studies

The physical and economic public and non-public benefits provided by the Pacheco Reservoir Project shall be quantified in accordance with subsection 6004 of the California Code of Regulations, Title 23. Waters. Division 7, California Water Commission, Chapter 1 Water Storage Investment Program (Regulations). The quantification of benefits shall include the following:

3.1.1 Project Operations – The Consultant will perform simulations of project operational scenarios for the 2070 future conditions. If directed by the District, the Consultant will also perform simulations of a refined project operational scenario for the 2030 future conditions. Simulations will be conducted as follows:

3.1.1.1 – Refine Pacheco Reservoir Operations - The Consultant will coordinate with the District and the District's hydrologic consultant to identify refinements in operational scenarios for Pacheco Reservoir and perform simulations that reflect the Pacheco Reservoir portion of the operations. Results will be used to define operations guidelines for the coordinated simulation of San Luis Reservoir and Pacheco Reservoir.

3.1.1.2 – Simulate System-Wide Operations – The Consultant will apply the version of the CALSIM model provided by the CWC based on 2070 climate change conditions to include Pacheco Reservoir and the transfer of water from San Luis Reservoir to Pacheco Reservoir. The Consultant will also perform CALSIM simulations of a refined project operational scenario using the 2030 model and apply same project operating requirements in the 2070 model. The consultant will also perform DSM2 modeling of the refined alternative for 2030 and 2070 future conditions.

3.1.2 – Quantify Physical Effects - The Consultant will prepare summary information of operations results to demonstrate the extent to which each operating scenario would contribute to achieving the desired physical effects of the operating objectives. Reporting metrics will include water quantities provided for project objectives, reported by year type, season, life-cycle requirement, and other relevant metrics to identify physical effects.

3.1.3 – Refine Project Costs –The CWC application will require the inclusion of a cost estimate that has been prepared within the past 5 years and stamped by a California Professional Engineer. The Consultant will prepare project layouts, quantities, and cost estimates for facilities to be included in the alternative presented in the application. If the District opts to update previous layouts and estimate quantities rather than preparing new layouts, the Consultant will provide recent unit prices for the District use in preparing a cost estimate. The Consultant also

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will estimate energy costs based on CALSIM simulation output. Cost estimates for will be summarized in tables, showing total capital, annual operating, and total annualized costs.

3.1.4 – Refine Monetary Benefits – The Consultant will refine monetary valuations for each benefit category provided by the project for 2030 future conditions. The Consultant will apply economic methods consistent with the CWC Technical Reference and in accordance with subsections 6004 (a) (4) (A) – (K) of the Regulations. It is anticipated that monetary values of project benefits will be determined using the methods identified in Task 2.5, however other methods may also be considered based on their suitability.

The Consultant will apply the selected monetary benefit methods to the alternative operating plans carried forward from Task 2.3. For each alternative operating plan, monetary benefits will be reported in annual values. Results will be summarized in tables and charts, and presented to the District in a PowerPoint Presentation. The results of the analysis will support development of the application to the CWC for Proposition 1 funds.

3.2 Application Preparation

The consultant shall prepare sections of the Proposition 1 application submittal for District review. The application will be prepared as individual sections in response to specific requirements identified in the application guidelines. At the initiation of this task, the Consultant will prepare a master list of application requirements, identifying the entities (Consultant or District) responsible for preparation and review, and a schedule for completion.

3.2.1 Executive Summary - Section 6003 (a)(1)(A) - The consultant will develop an Executive Summary for the application consistent with Section 6003(a)(1)(A), including:

- a) Describe Project facilities and operation.
- b) Summarize how Project is integrated into State water system and its inclusion into an integrated regional water management plan
- c) Document that the Project increases the flexibility of water systems that it will be integrated with.
- d) Describe how the added quantity of water increases water system reliance and achieves public benefits.
- e) Project's ability to contribute to sustainable groundwater management.
- f) Project's ability to expand upon its current capacity.
- g) Physical and economic magnitude of public and non-public benefits

3.2.2 Project Name and Objective - Section 6003 (a)(1)(B) - The consultant shall prepare Section 6003 (a)(1)(B) of the application, including:

- a) Project name and objective
- b) County
- c) Latitude/longitude
- d) Water source
- e) Watershed

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- f) Groundwater basin
- g) Hydrologic region
- h) Senate district
- i) Assembly district
- j) Congressional district
- k) Project description including maps, schematics and drawings

The project description will include discussion of project facilities and operations. The project description may refer to other sections of the application (i.e., project schedule - Section 6003 (a)(1)(G) , environmental documentation – Section 6003(a)(1)(S)).

3.2.3 Signed Resolution to Execute Agreement with State – (Section 6003 (a)(1)(C) -

The consultant will develop a brief introductory text for this section of the application. The District will develop the text for the resolution and obtain required signatures (see assumptions below).

3.2.4 Contact Information - Section 6003 (a)(1)(D) - The consultant shall prepare Section 6003 (a)(1)(D), including contact information for the primary District point of contact for the application.

3.2.5 Eligibility of SCVWD - Section 6003 (a)(1)(E) - The consultant shall prepare Section 6003 (a)(1)(E) of the application to briefly describe the eligibility of the project and District under the Water Code for funding.

3.2.6 Program Funding Request – Section 6003(a)(1)(F) - The consultant shall prepare Section 6003 (a)(1)(F) of the application, including identification of program funding requested:

- a) Capital cost
- b) Total estimated Project cost
- c) Benefit and cost analysis
- d) Cost allocation (to stakeholders)

Development of this section will be based upon benefit monetization and cost estimate updates conducted under Subtask 3.1. Cost allocation shall be developed consistent with Section 8 of the Technical Reference. Costs will be allocated among the benefit categories in proportion to public and non-public monetized benefits.

3.2.7 Project Schedule – Section 6003(a)(1)(G) - The consultant shall prepare Section 6003 (a)(1)(G) of the application including a project schedule. This section will include a brief narrative regarding the project schedule and a graphical representation of the project schedule. The project schedule will include activities from application submission to initial year of project operation. Activities will include: environmental compliance (e.g., CEQA, NEPA), permitting (e.g., ESA, CWA, NHPA Section 106, CESA, water rights), preliminary and final design (including data acquisition), land acquisition, construction and commission/start-up.

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3.2.8 Preliminary Operations Plan – Section 6003(a)(1)(H) - The consultant shall prepare a preliminary operations plan consistent with Section 6003 (a)(1)(H). The Preliminary Operations Plan shall include:

- a) Project operations and public benefits under a range of hydrologic conditions, including wettest and driest years and multiple dry years.
- b) Actions taken to meet public benefit objectives.
- c) Monitoring plan to assure public benefit outcomes
- d) Preliminary adaptive management strategies
- e) Process by which the adaptive management strategy and monitoring plan will be developed for approval by the agency administering the public benefit
- f) Funding sources and commitments for developing an implementing adaptive management program.
- g) Potential uncertainties that may impact Project operations.
- h) Potential measurable objectives, performance measures and triggers to monitor Project performance and achieve desired outcomes.
- i) Decision making process for changes in operation, including corrective actions

3.2.9 Wild and Scenic Rivers – Section 6003(a)(1)(I) - The consultant shall prepare a statement describing that there will be no adverse consequences to either Federal or State Wild and Scenic Rivers consistent with Section 6003 (a)(1)(I).

3.2.10 Sustainable Water Use and Demand Reduction – Section 6003(a)(1)(J) - The consultant shall prepare Section 6003 (a)(1)(J), including a statement describing that district follows Water Code requirements for sustainable water use and demand reduction.

3.2.11 Groundwater – Section 6003(a)(1)(K) - The consultant shall prepare Section 6003 (a)(1)(K), including discussions on how the Project will reduce or eliminate undesirable effects within affected groundwater basins. Groundwater basins anticipated to be affected include those underlying Pacheco Creek and CVP San Felipe Division contractors.

3.2.12 Quantification of Physical Benefits – Section 6003(a)(1)(L) - The consultant shall summarize physical benefits evaluated in Task 3.1 and prepare documentation of public and non-public physical benefits analytical methodologies for each benefit category. This section of the application shall also address:

- a) Specific water rights or contracts that will need to be amended to assure public benefits to the Delta ecosystem.
- b) Supporting documentation of parties' willingness to enter contracts assuring public benefits

3.2.13 State Water System Flexibility – Section 6003(a)(1)(M) The consultant shall prepare documentation that describes how the Project will improve state water system, including a discussion of San Luis Reservoir low point issues and how Pacheco Reservoir improves CVP/SWP flexibility.

3.2.14 Physical and Economics Summary Tables and Documentation– Section 6003(a)(1)(N) - Based on monetization of benefits conducted in Task 3.1, the consultant shall

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prepare Physical and Economic Benefits Summary Tables consistent with Section 6004(A)(4), including:

- a) Physical benefits
- b) Economic benefits, including total economic benefits
- c) Present value of project costs, including capital costs, interest during construction, and O&M costs
- d) Allocated cost by benefit category
- e) Cost effectiveness measure
- f) Public benefit ratio

The consultant shall also prepare documentation describing the methodologies used to monetize each of the public and non-public benefits.

3.2.15 Feasibility Documentation – Section 6003(a)(1)(O) - The consultant shall prepare documentation describing the engineering, environmental, economic, and financial feasibility of the project, in accordance with California Water Code, Division 26.7, Chapter 8, Section 79755 (a)(5)(B). This section shall include the following:

- a) Project Objectives
- b) Project Description
- c) Project Costs
- d) Project Benefits
- e) Cost Allocation
- f) Technical Feasibility
- g) Environmental Feasibility
- h) Economic Feasibility
- i) Financial Feasibility
- j) Constructability

As requested feasibility-related information may be located in other sections of the application,

3.2.16 Coordination with Other Facility Owners/Operators – Section 6003(a)(1)(P) - The consultant shall prepare documentation that summarizes coordination with Owners and Operators of water systems affected by the Project.

3.2.17 Ecosystem and Water Quality Priority Worksheets/Tables – Section 6003(a)(1)(Q) - The consultant shall develop *Ecosystem Priorities Application Worksheets* and *Water Quality Priority Application Tables* based on evaluations completed under Task 3.1.

3.2.18 Supporting Documentation for Ecosystem and Water Quality – Section 6003(a)(1)(R) - The consultant shall prepare documentation that describes how the Project advances the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta.

3.2.19 Environmental Documentation – Section 6003(a)(1)(S) - The consultant shall prepare a CEQA Initial Study for the Project. The Initial Study will be based upon (1) existing

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environmental resources information, and (2) information developed in support of the physical benefit quantification (e.g., water operations modeling). The Initial Study will be included as part of the application to satisfy Section 6003(a)(1)(S).

3.2.20 Summary of Environmental Impacts – Section 6003(a)(1)(T) - Based on the CEQA Initial Study, the consultant shall prepare a summary of potential impacts to environment and cultural resources. For each anticipated significant environmental impact, potential mitigation measures will be identified and summarized.

3.2.21 Tribal Cultural Resource Consultation – Section 6003(a)(1)(U) - If applicable, the consultant shall prepare a brief narrative describing any Tribal Cultural Resources consultation under CEQA.

3.2.22 Consistency with Applicable Laws – Section 6003(a)(1)(V) - The consultant shall prepare a statement describing that how the Project is consistent with Federal, State, and local laws and regulations, including existing environmental mitigation obligations.

3.2.23 Permit Inventory – Section 6003(a)(1)(W) - The consultant shall prepare a tabular inventory of Federal, State, and local permits that may be required for the project, including the current status and estimated time to acquire each permit.

3.2.24 Early Funding Request – Section 6003(a)(1)(X) - The consultant shall prepare a request for early funding of environmental compliance and permit efforts. This shall include:

- a) amount requested
- b) schedule
- c) scope
- d) budget

3.2.25 Statement of True and Correct Information – Section 6003(a)(1)(Y) – The contractor shall prepare a statement, attesting to information provided on the application is true and correct, for signature by the District.

3.2.26 Non-Monetized Public Benefits – Section 6003(a)(1)(Z) - The consultant shall prepare a narrative summary of public benefits that cannot be monetized. Non-monetized public benefits may include land and water-based recreation at Pacheco Reservoir and flood damage reduction along Pacheco Creek.

3.2.27 Public Benefits/Existing Mitigation Obligations – Section 6003(a)(1)(AA) - The consultant shall prepare a list of existing environmental mitigation or compliance obligations, and shall document how these obligations are accounted for in the water operations model analyses.

3.2.28 Current, 2030 and 2070 With-Project Conditions – Section 6003(a)(1)(BB) - The consultant shall prepare a description of the with-project conditions for 2030 and 2070 used for quantification of public benefits. This section shall also describe the with- and with-out project current conditions, including a discussion of the current operations of Pacheco Reservoir.

SCHEDULE A PRELIMINARY SCOPE OF SERVICES

3.2.29 Documentation of Pacheco Creek Hydrology – Section 6003(a)(1)(CC) - The consultant shall prepare a narrative summary of public benefits that cannot be monetized. Non-monetized public benefits may include land and water-based recreation at Pacheco Reservoir and flood damage reduction along Pacheco Creek.

3.2.30 Uncertainty Analysis – Section 6003(a)(1)(DD) – The contractor shall document potential uncertainty, including qualitative discussions of climate change and other future projects/water management actions. This section will also document how the Project would perform at the during a drought, consistent with Section 6004(a)(8).

3.3 Post-Application Support

The consultant shall provide technical support during the CWC review of the application. It is anticipated that technical support will be to provide clarification of information presented in the application in response to CWC inquiries.

Task 3—Assumptions.

1. District to develop and provide signed resolution for application Section 6003 (a)(1)(C).
2. District to provide previous grant applications submitted to DWR or other state agencies for water resource related funding to Consultant, as appropriate.
3. District to provide information on the District's financial capacity in support of financial feasibility evaluations

Task 3—Deliverables.

1. PowerPoint presentation on refined alternative physical effects
2. PowerPoint presentation on refined alternative costs and benefits
3. Draft, Final Draft, and Final version of Proposition 1 Application Sections (A through DD) and Executive Summary

Task 4 - Supplemental Services for Water Storage Investment Program Application

1. The District may require, and the Consultant shall perform, Supplemental Services on an as-needed basis through the CWC evaluation period, which is anticipated to be one year after closure of the application period.
2. Prior to performing such Supplemental Services, the Consultant must obtain written authorization in the form of a Task Order approved by the District's authorized representative. Written authorization will state the agreed upon scope of the services requested, the classifications of staff performing the Supplemental Services associated with the Not-to-Exceed fees, and schedule.
3. Details of the specific scope, deliverables, schedule, and fees for any Supplemental Services will be developed with the District and submitted in writing prior to approval to begin work.

SCHEDULE A PRELIMINARY SCOPE OF SERVICES

4. The Not-to-Exceed limit for each Supplemental Services Task Order will be based upon the negotiated hourly rate schedule (time and materials), and must include all of the following information:

- a. The total price for the Consultant to complete the Supplemental Services Task Order.
- b. The schedule for completing the Supplemental Services Task Order.
- c. the Consultant key staff and classifications that will be assigned by the Consultant without prior written authorization from the District.

5. The Supplemental Services Task Order fees will not be exceeded by the Consultant without prior written authorization from the District.

6. Under no circumstances shall Consultant start work on Supplemental Services until:

- a. The Supplemental Services Task Order is received, reviewed, and approved by the District.
- b. The Consultant received a Task Order Notice-to-Proceed from the District's Project Manager.

7. The Consultant shall perform additional services necessary to fulfill the Project objectives.

Specific examples of possible Supplemental Services include, but are not limited to:

- Technical Support to prepare a revised application or appeal the application
- Additional technical analyses
- Stakeholder communication support

6. Attachments. The following listed Attachments are incorporated herein by this reference as though set forth in full:

Attachment One to Schedule A — Fees and Payments
Attachment Two to Schedule A — Schedule of Completion
Attachment Three to Schedule A — Consultant's Key Staff and Subconsultants
Attachment Four to Schedule A — Reference Materials

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**ATTACHMENT ONE
TO SCHEDULE A
FEES AND PAYMENTS**

1. Total Authorized Funding.

Total payment for Services performed, to the satisfaction of the District, as described in the Schedule(s) will not exceed a total amount of **NOT-TO-EXCEED** (NTE). Under no conditions will the total compensation to the Consultant exceed this NTE payment amount without prior written approval in the form of an amendment to this Agreement executed by the District's Board of Directors (Board), or Chief Executive Officer, or designee, as authorized by the Board.

2. Cost Breakdown.

The fixed fee total compensation of this Agreement consists of the following task fee breakdown. No Services will be performed or fees paid by the District to the Consultant for Supplemental Services or sub tasks requiring the issuance of Task Orders without prior written authorization by the District as stated in Schedule ADMIN-GEN, Scope of Services.

COST BREAKDOWN

Task	Description	Not-to-Exceed
1	Project Management	\$
2	Develop Preliminary Feasible Alternatives	\$
3	Prepare Application for Water Supply Investment Program	\$
	NTE	\$
	SUPPLEMENTAL SERVICES:	
4	Supplemental Services for Water Storage Investment Program Application	\$
	Total NTE	\$

**ATTACHMENT ONE
TO SCHEDULE A
FEES AND PAYMENTS**

3. Terms and Conditions.

Payments for Services performed, as described in this attached Schedule, which applies to the specific Services, will be based on the following terms:

- A.** The District 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.
- B.** The stated hourly and unit rates listed in the Hourly/Unit Rate Table are effective for the term of this Agreement unless otherwise revised as indicated. After twelve (12) months from the Effective Date of this Agreement, and each 12 months thereafter, these hourly and unit rates may be negotiated by the Consultant and the District, provided Consultant submits written notice to District of Consultant's request to revise the hourly and unit rates ninety (90) calendar days prior to the Effective Date of this Agreement. Both Parties will use as a benchmark for negotiations the percent change for the previous twelve (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 [PERCENTAGE]% whichever is less. A negative index will result in rates remaining the same. Such rate revisions are subject to written approval by the District's Water Supply Division Deputy Operating Officer.
- C. Reimbursable Expenses.** 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 will be billed on a monthly basis at actual cost plus [PERCENTAGE]% percent linked to each Agreement Task, as approved by the District's Project Manager, provided that the Agreement total NTE amount is not exceeded. Consultant shall provide receipts for each other direct expense item(s) with monthly invoices submitted. Any equipment purchased on behalf of the District that cost \$50 or more must receive the prior written approval of the District Project Manager. All equipment that the District is invoiced for becomes the property of the District when the Consultant is reimbursed for the amount it paid for that equipment.

4. Approval Required for Services Performed at Specified Rate.

- A.** For staff with rates exceeding the rate of \$[RATE LIMIT]/hr, the Consultant shall obtain written approval from the District Project Manager as to the numbers of hours per task prior to that individual working on the Project.

**ATTACHMENT ONE
TO SCHEDULE A
FEES AND PAYMENTS**

HOURLY/UNIT RATE TABLE

CLASSIFICATION/STAFF	HOURLY/UNIT RATE
Consultant:	
Fellow / Practice Leader	\$294.00
Principal	\$240.00
Lead / Supervising	\$210.00
Senior	\$161.00
Project Professional	\$140.00
Staff / Associate	\$119.00
Assistant / Admin	94.50
Subconsultant – WestWater Research	
Principal	\$209.51
Senior Economist	\$174.59
Economist	\$118.73
Junior Economist	\$80.36
GIS Technician	\$104.76
Accounting Manager	\$76.83
Subconsultant – Cascade Economics	
Senior Economist	\$189.24
Subconsultant – Christy Clark	
Technical Writer	\$150.00

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**ATTACHMENT TWO
TO SCHEDULE A
SCHEDULE OF COMPLETION**

1. This Agreement commences on the Effective Date, subject to accomplishment of all of the conditions to formation of an agreement listed in the Agreement at Section Twelve, Miscellaneous Provisions, subsection 2. Formation of Agreement.
2. This Agreement expires on **August 30, 2018**, unless, prior to its expiration, its term is modified by a written amendment hereto, signed by both Parties.
3. District's Project Manager 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

Task	Description	Duration From Notice to Proceed (months)
1	Project Management	18
2	Develop Preliminary Feasible Alternatives	2
3	Prepare Application for Water Supply Investment Program	5
	SUPPLEMENTAL SERVICES:	
4	Supplemental Services for Water Storage Investment Program Application	18

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**ATTACHMENT THREE
TO SCHEDULE A
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

1. Consultant's key staff assigned to the Project are as follows:

Team Member	Project Role	Contact Information
William (Bill) Swanson, PE	Project Director	william.swanson@mwhglobal.com
Mary Paasch, PE, PMP	Project Manager/Lead Planner	mary.paasch@mwhglobal.com
Meredith Parkin	Environmental Compliance/Permitting	meredith.parkin@mwhglobal.com
Thomas Fitzhugh	Water Operations Modeling	thomas.fitzhugh@mwhglobal.com
William (Bill) Smith	Physical Benefits	william.smith@mwhglobal.com
Jim Herbert	Engineering Geology	james.herbert@mwhglobal.com
Danelle Pecot	Planning	danelle.pecot@mwhglobal.com
Vic Iso-Ahola	Engineering	vik.iso-ahola@mwhglobal.com

2. The following Subconsultants are authorized to perform Services on the Project:

Firm	Contact Information
WestWater Research (Economics)	Harry Seely, Principal seely@waterexchange.com (360) 695-5233
Christy Clark (Technical Writing)	Christy Clark christy.l.clarkmwh@gmail.com (916) 973-9889
Cascade Economics (Economics)	Mike Taylor

**ATTACHMENT THREE
TO SCHEDULE A
CONSULTANT'S KEY STAFF AND SUBCONSULTANTS**

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**ATTACHMENT FOUR
TO SCHEDULE A
REFERENCE MATERIALS**

Ref No.	Description
1	Quality and Environmental Management System (QEMS) Fact-Sheet.
2	Santa Clara Valley Water District Non-Disclosure Agreement (NDA)

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