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EAST WATER
DISTRICT**

PROVIDING SERVICE SINCE 1948
www.sewd.net

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MEETING NOTICE

The Municipal Operations Committee
of the Stockton East Water District
Board of Directors will meet at
12:30 p.m., Wednesday, July 15, 2026
at the District Office, 6767 East Main Street, Stockton, CA

Assistance for the Disabled: If you are disabled in any way and need accommodation to participate in the meeting, please contact Administrative Staff at (209) 948-0333 for assistance so the necessary arrangements can be made.

Agendas and minutes are located on our website at www.sewd.net.

AGENDA

- | | | |
|----|--|------------------------|
| 1. | Roll Call - Chairperson McGurk, Director Panizza, Director Nakaue, Director Atkins (Alternate) | <u>Page No.</u> |
| 2. | Public Comment | |
| 3. | Stockton East Water District – Staff Report – Professional Services Agreements for WSEP Environmental Review, Permitting, and Modeling Service | 01 |
| 4. | Adjournment | |

Certification of Posting

I hereby certify that on July 10, 2026, I posted a copy of the foregoing agenda in the outside display case at the District Office, 6767 East Main Street, Stockton, California, and said time being at least 72 hours in advance of the Municipal Operations Committee Meeting (Government Code Section 54954.2). Executed at Stockton, California on July 10, 2026.

Priya Ram, Director of Finance & Administration
Stockton East Water District

Any materials related to items on this agenda distributed to the Municipal Operations Committee of the Stockton East Water District less than 72 hours before the public meeting are available for public inspection at the District's office located at the following address: 6767 East Main Street, Stockton, CA 95215. Upon request, these materials may be available in an alternative format to persons with disabilities.

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DATE: July 15, 2026

AGENDA ITEM NO. 3

TITLE: Professional Services Agreements for WSEP Environmental Review, Permitting, and Modeling Services

SUBJECT: Consideration of Recommending Board of Directors Approval of Professional Services Agreements with Environmental Science Associates and Stantec Consulting Services, Inc. for CEQA Environmental Review, Regulatory Permitting, and CalSim 3/DSM2 Modeling Services in Support of the Water Supply Enhancement Project

Executive Summary

Staff is requesting that the Municipal Operations Committee (Committee) review and recommend that the Board of Directors (Board) authorize the General Manager to amend the District's engagement with Herum\Crabtree\Suntag (District Counsel) to advance Stockton East Water District's (District or SEWD) Water Supply Enhancement Project (WSEP) and pending Water Right Applications 31534, 30602, 31535, and 13333X01 – 133338X01:

(1) Retain, under District Counsel's direction, Environmental Science Associates (ESA) to prepare the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) and associated regulatory permit applications, in an amount not to exceed \$1,208,764; and,

(2) Retain, under District Counsel's direction, Stantec Consulting Services Inc. (Stantec) to update CalSim 3 and DSM2 modeling in support of the EIR, in an amount not to exceed \$282,964.

The combined subtotal cost of the two agreements is \$1,491,728, plus a 10% contingency of \$149,172, for a combined total cost of \$1,640,900. Staff recommends the Committee recommend the Board authorize the General Manager to amend the District's engagement with District Counsel to add ESA and Stantec as consultants under counsel's direction, for the scopes of work described below.

Background

SEWD holds the following pending water right applications with the California State Water Resources Control Board (Water Board): (1) Application A031534 to divert up to 108,300 acre-feet per year (AFY) of unappropriated Calaveras River flows for recharge of the Eastern San Joaquin Groundwater Basin (Basin), together with up to 36,400 AFY by direct diversion for municipal, industrial, and irrigation uses, and (2) Applications 30602, 31535 and 13333X01 through 133338X01 to divert up to 199,000 AFY of unappropriated Littlejohns and Rock Creeks flows for recharge of the Basin. Perfection of the applications will be accomplished through implementation of the WSEP, which includes new distribution pipelines and recharge facilities to capture predominantly wet-season flows through in-lieu recharge, on-farm field flooding, direct recharge, and dry wells. The WSEP is estimated to cost approximately \$150 million and, together with the Calaveras River FloodMAR Study completed in cooperation with the California Department of Water Resources, is intended to help address an estimated 56,000 AFY basin-wide recharge deficit needed for groundwater sustainability.

An Administrative Draft EIR was previously prepared for the WSEP in June 2018 using CalSim II and DSM2 modeling. Since that time, the Proposed Project description has been revised and updated hydrologic modeling tools (CalSim 3) have become the industry standard. To advance the applications, SEWD must complete a certified CEQA document and obtain associated federal and state regulatory permits, supported by updated surface water modeling reflecting the current Proposed Project description.

Legal counsel solicited proposals from ESA to prepare the EIR and regulatory permit applications, building on the 2018 Administrative Draft EIR to the maximum extent practicable, and from Stantec to update the CalSim 3 and DSM2 modeling that will support the EIR's surface water, hydrology, and water quality analyses.

Following a meeting between staff, ESA, and District Counsel, the parties agreed that ESA's and Stantec's work should be retained and directed by District Counsel, rather than contracted directly with SEWD, in order to preserve attorney-client privilege and attorney work-product protections over technical work associated with the District's pending water right applications. Given the history of scrutiny and opposition SEWD's water right applications have received, staff and District Counsel believe this structure is prudent to protect the District's interests should the Application, EIR, or related permits be challenged or protested.

Summary

ESA Scope of Work

ESA's proposed scope of work includes the following tasks:

- Task 1 - Project Initiation and Background Review, including a kickoff meeting and data request memorandum;
- Task 2 - Preparation of the Draft Project Description;
- Task 3 - AB 52 Tribal Notification and Consultation support;
- Task 4 - Technical Reports, including a Cultural Resources Inventory Report, Hydraulic and Ecohydraulic Study, and Hydrologic and Water Quality Analysis (which relies on Stantec's updated CalSim 3/DSM2 modeling);
- Task 5 - Preparation and circulation of the Notice of Preparation;
- Task 6 - Preparation of the Administrative Draft, Screencheck Draft, and public Draft EIR, addressing all CEQA-required technical resource topics;
- Task 7 - Project management and meetings, including public scoping and Draft EIR meetings; and

- Task 8 - Regulatory permitting support, including preparation of a USACE Section 404 Standard Individual Permit, RWQCB Section 401 Water Quality Certification, CDFW Section 1602 Lake and Streambed Alteration Agreement, and CDFW California Endangered Species Act Incidental Take Permit applications, along with supporting technical studies (e.g., Aquatic Resources Delineation Report, Biological Assessments, and a Compensatory Mitigation Plan).

ESA anticipates the Draft EIR will be completed in approximately 18 months, including a 45-day public review period, with publication anticipated in early 2028, followed by ongoing permitting support.

Stantec Scope of Work

Stantec's proposed scope of work includes updating the modeling previously prepared for the 2018 Administrative Draft EIR:

- Task 1 - CalSim 3 Model Update, simulating Existing Conditions, Future No Project (with climate change hydrology), Proposed Project on Existing Conditions, and Proposed Project on Future No Project, including a technical memorandum on baseline model assumptions and comparative analysis of results;
- Task 2 - DSM2 Model Update, rerunning Delta simulations using the updated CalSim 3 scenarios and incorporating projected sea-level rise;
- Task 3 - Update Report, revising the modeling appendix (Appendix F) of the EIR and providing updated tables for the Surface Water chapter; and
- Task 4 - Project Management and Coordination.

Both scopes of work are structured to build on the existing 2018 Administrative Draft EIR analysis to the extent practicable, minimizing duplication of effort while ensuring the EIR and supporting modeling reflect the current Proposed Project description and applicable regulatory and scientific standards.

Both ESA and Stantec will perform the scopes of work described above; however, rather than SEWD contracting directly with each consultant, both engagements will be structured as retentions by District Counsel, consistent with SEWD's Purchasing Policy No. 6035, Section E, which permits the General Manager to approve a Scope of Work through means other than the standard proposal/RFP process "in preparation for litigation [or] other situations requiring confidentiality." ESA and Stantec will perform the same scopes of work, deliverables, and schedules described in their respective proposals; the only change is that their agreements will be executed with, and directed by, District Counsel on the District's behalf.

Financial Impact

The combined cost of the ESA and Stantec engagements is \$1,491,728, plus 10% contingency of \$149,172, consisting of \$1,329,640 for ESA and \$311,260 for Stantec, both to be invoiced on a time-and-materials basis. Because the scopes of work will be performed over approximately 18 months, the engagements are expected to span two fiscal years. Both engagements will be structured as consultant retentions under District Counsel's direction and these costs will be processed through the District's legal services engagement with District Counsel rather than as standalone professional services agreements; however, the costs remain attributable to, and budgeted as, professional/technical services associated with the WSEP and the applications, and will be accounted for accordingly regardless of the contracting structure


SEWD has budgeted \$750,000 in the current fiscal year for this effort. The remaining balance of approximately \$890,900 will need to be budgeted in the Fiscal Year 2027-2028 budget to fully fund both agreements through completion.

Recommendation

Staff recommends that the Municipal Operations Committee recommend that the Board of Directors:

1. Approve a Professional Services Agreement with Environmental Science Associates in an amount not to exceed \$1,208,764 for preparation of the CEQA Environmental Impact Report and associated regulatory permit applications for the Water Supply Enhancement Project;
2. Approve a Professional Services Agreement with Stantec Consulting Services Inc. in an amount not to exceed \$282,964 for CalSim 3 and DSM2 modeling services in support of the Environmental Impact Report; and,
3. Authorize the General Manager to execute both agreements on behalf of the District.

Staff Responsible for Report



Justin M. Hopkins, General Manager

Date: 07/15/26

Attachments

1. ESA Proposal
2. Stantec Proposal



May 9, 2025

Jeannie M. Zolezzi
Attorney-at-Law
Herum/Crabtree/Suntag
5757 Pacific Ave, Suite 222
Stockton, CA 95207

Subject: Proposal for Stockton East Water District, Water Supply Enhancement Project environmental review and permitting services.

Dear Ms. Zolezzi:

ESA is pleased to provide the following scope of work to provide professional services for the Stockton East Water District's (SEWD) proposed Water Supply Enhancement Project (WSEP or Proposed Project). Our proposal includes preparation of the California Environmental Quality Act (CEQA) environmental clearance document, assumed to be an Environmental Impact Report (EIR), and environmental permits in support of project implementation.

ESA is proposing to prepare an EIR to satisfy CEQA requirements, for SEWD's proposed WSEP under Water Right Application 31534 Project. The Proposed Project includes diversion of up to 108,300 acre-feet per year (AFY) of unappropriated water from the Calaveras River, Mormon Slough, and Stockton Diverting Canal located in San Joaquin County, California for recharge of the Eastern San Joaquin Groundwater Basin (Basin) by percolation.

Project Understanding

ESA understands the purpose of Water Rights Application 31534 would support SEWD's proposed WSEP. The WSEP would divert unappropriated surface water from the Calaveras River and provide groundwater recharge of the Eastern San Joaquin Groundwater Basin through percolation. Groundwater recharge would occur through discharge of diverted Calaveras River water onto established recharge basins, percolation through natural stream channels and unlined canals/sloughs, in (flooded) fields and in-lieu delivery of surface water. Water diverted to underground storage in the ESJGB would be stored and extracted in the future for various beneficial uses in SEWD's service area.

Under Water Rights Application 31524, SEWD through implementation of the WSEP proposes to divert water from the Calaveras River for direct use (direct diversion). The proposed diversion season is November 1 to April 30. Water diverted under 31524 would be used for numerous beneficial uses, i.e. municipal, industrial, irrigation, fish and wildlife enhancement, water quality improvements, and saline (brackish) water intrusion barrier. The place of use for the diverted water would be SEWD's service area and other lands within the sphere of influence of the City of Stockton plans totaling 163,989 acres, including 70,000 acres of irrigated agricultural land.

WSEP and Existing Infrastructure

The proposed WSEP and water diverted under Application 31534 will construct and install new infrastructure to complement existing infrastructure currently utilized by SEWD for diversion and distribution of Calaveras River water to SEWD's retail and wholesale customers in their service area as authorized under SEWD's existing water right License 2021 (A006522) and the U.S. Bureau of Reclamation (Reclamation) Permit 14434 (A018812).

Under License 2021, SEWD currently diverts water from the Calaveras River from January 1 to about June 15 at rates up to 13.75 cubic feet per second (cfs) into the Old Calaveras River at Bellota Weir. Surface water can then be rediverted from the Old Calaveras River for irrigation and domestic use. In addition, Calaveras River water may also be rediverted at Bellota Weir for groundwater storage. Pursuant to this license, up to 11,500 acre-feet per year (AFY) may be absorbed (percolated) into underground storage “throughout the length of these [sic] channel, intensified by the action of check dams at several points thereon.”

New Hogan Dam impounds the Calaveras River, under Permit 14434, Calaveras River surface water is diverted at New Hogan Dam and conveyed 16 miles downstream via the river channel to the Bellota Weir, where the Calaveras River bifurcates into Mormon Slough and the Old Calaveras River. Under existing rights, surface water is rediverted through the Bellota Intake Structure, to the Bellota Pipeline and runs approximately 13 miles by gravity to SEWD’s Dr. Joe Waidhofer Water Treatment Plant (WTP) in Stockton, CA. Water taken through the Bellota Pipeline can be released into Potter Creek and into SEWD’s Peters Pipeline for distribution and re-diversion to agricultural lands. In conjunction with these diversions at the Bellota Weir, surface water is also diverted into the Old Calaveras River via the existing Old Calaveras River Headworks structure. Surface water diverted into the Old Calaveras River can then be re-diverted for irrigation uses, and re-diverted into Mosher Creek thence Bear Creek for re-diversion by SEWD customers. Surface water not diverted to the Bellota Pipeline or Old Calaveras River flows into Mormon Slough thence the Stockton Diverting Canal (SDC) and can then be re-diverted for irrigation by SEWD customers along these waterways. From the Bellota Weir, Mormon Slough flows about 13 miles southwesterly and discharges to the SDC. The SDC then flows about 5 miles northwesterly and converges with the Old Calaveras River to re-form the Calaveras River. From this location, the Calaveras River flows about 5.7 miles westerly to the San Joaquin River. All the existing facilities described above will be used for diversions and/or re-diversions under Application 31534.

In addition, ESA recognizes that as part of the Calaveras River Habitat Conservation Plan (August 2019), it is anticipated that SEWD would construct the Bellota Weir Modifications Project (BWMP) prior to issuance of a water right permit on Application 31534. The BWMP is a continuation of the Calaveras River Anadromous Fish Protection Project and includes reconstruction of the Bellota Weir and fish passage facility, and construction of a new intake/fish screen above the Bellota Weir for diverting water the Old Calaveras River and will also function as an alternative intake into the Bellota Pipeline. SEWD evaluated environmental impacts of the BWMP and adopted a Mitigated Negative Declaration in 2022 (State Clearinghouse #2022090262).

ESA further understands that SEWD, through implementation of the WSEP would use existing and new facilities divert and redivert surface water at various locations along the Calaveras River, Mormon Slough, Stockton Diverting Canal, North Fork Potter Creek, Potter Creek, Duck Creek, Old Calaveras River, Mosher Creek/Slough, Bear Creek, Bellota Pipeline, and Peters Pipeline, for use within SEWD’s service area and vicinity.

Approach to the Environmental Review

Our approach to preparing the EIR is to use existing information and relevant analyzes developed for the 2018 Administrative Draft EIR to the maximum extent practicable. We will review the 2018 Administrative Draft EIR technical sections and will update them as needed to reflect any changes in the existing conditions and regulatory context. In addition, we will review and update the analysis to reflect updated approaches to evaluating impacts and proposed mitigation measures, as needed. In some cases, we anticipate that new analyses will be necessary to properly evaluate potential effects of the Proposed Project on the environment, such as surface water hydrology, groundwater, climate change and air quality Furthermore, CEQA technical topics added in 2019 will be added and evaluated pursuant to the CEQA Guidelines, i.e. energy, wildfire.

In addition to using information prepared for the 2018 Administrative Draft EIR, ESA will conduct an environmental review based on the current WSEP project description. Our assumption is that most of the existing information provides sufficient level of detail to evaluate most of the potential impacts associated with the following direct diversion components of the Proposed Project at a project level. However, additional technical studies will be needed to complete the environmental review as discussed in Task 4.

- Direct diversion at 300 cfs, not to exceed 36,400 AFY for Municipal, Industrial, and Irrigation use throughout SEWD's service area.
- Conveyance to SEWD's Dr. Joe Waidhofer WTP for treatment and subsequent municipal and industrial uses.
- The exact location and use of potential groundwater recharge has not been determined, we will evaluate the associated impacts programmatically. We will capture the range of potential impacts and identify mitigation measures which can be implemented, as appropriate, once additional details are developed. This programmatic approach also will allow SEWD to prepare more focused subsequent environmental review, if needed. Proposed Project components we propose to evaluate at a programmatic level include: 108,300 AFY diversion to underground storage for groundwater recharge and use as a salinity barrier and repulsion and improving groundwater levels within San Joaquin County.
- SEWD has identified three existing facilities that would be utilized for groundwater recharge: SJCFCA Detention Basin No. 1; SJCFCA Detention Basin No. 2 and several recharge basins co-located at SEWD's Dr. Joe Waidhofer WTP in Stockton, CA.
- SEWD has identified six proposed groundwater recharge projects that would be used for percolation to groundwater storage and provide for in-lieu recharge of groundwater.
- West Linden Pressurized Irrigation and Aquifer Recovery Projects; Clements South/Houston/Demartini Gravity Pipelines; Mosher Pressurized Irrigation Pipeline; Bellota Pipeline Flood-MAR Project; Flood-MAR along Existing Surface Water Farms and West Groundwater Recharge Basin Project.
- According to current project information, ESA assumes the landowners within SEWD and Central San Joaquin Water Conservation District (CSJWCD) service areas overlying these groundwater basins will put the stored groundwater described above to beneficial use per the water rights petition map.

Based on our Project Understanding and our approach to the analysis, ESA has prepared the following scope of work. Our scope of work, tasks and subtasks are discussed in detail below.

Scope of Work

Task 1: Project Initiation and Background Review

Key ESA team members will attend an in-person kickoff meeting with SEWD staff, legal representation and other project team members prior to commencing work on the environmental document. Subjects for review and discussion will include, but not be limited to: (1) confirmation of the project components and appropriate baseline; (2) identification of project data, information sources, and key contacts; (3) discussion of key issues known to be of concern to agencies, interest groups, and the public and (4) confirmation of the scope of work, level of analysis, budget, schedule, and communication protocols. To gain a better understanding of the Proposed Project, key ESA staff, including the project director and project manager, along with the project team will tour the project area and key facilities to review existing conditions and identify any issues not readily identifiable via aerial views. The site visit can occur as part of the kick-off meeting.

As part of this task, ESA's project manager and key technical staff and EIR section writers will review existing documentation, i.e., 2018 Administrative Draft EIR, protest letters, technical reports, and studies and provide a summary of data needs that will be used to prepare a request for information memorandum.

Task 1 Deliverables:

- Kick off meeting agenda, and supporting materials
- Request for Information and data request memorandum
- Revised scope of work, budget and schedule, if needed

Task 2: Draft Project Description

ESA will collaborate closely with SEWD and its legal team to develop the draft CEQA project description based on existing information and supplemental information identified under Task 1. The project description will provide the level of detail required by CEQA Guidelines, sufficient for agencies and the public to understand the Proposed Project and provide comments on the scope and content of the EIR as discussed in Task 5. The draft project description will include: (1) project location; (2) project objectives; (3) description of the Proposed Project, facilities and components; (4) agency use of the EIR, and (5) anticipated regulatory requirements and approvals. The draft project description will be provided to SEWD and its legal team for review and comment. Based on one round of consolidated comments, ESA will revise the project description and prepare a final project description for incorporation into the Notice of Preparation (NOP) (Task 4) and the Draft EIR (Task 5).

Task 2 Deliverables:

- Draft and final project description

Task 3: AB 52 Tribal Notification and Consultation

Consultation with Native American representatives, as required under California Public Resources Code Sections 21074(a)/21080.3.1 (AB 52) will be conducted by SEWD (the CEQA lead agency). Prior to publication of the NOP (Task 4), ESA will contact the California Native American Heritage Commission (NAHC) to request a search of their Sacred Lands File for the project area and a list of contacts for California Native American Tribes who may have an interest in the Proposed Project. ESA will draft project AB 52 notification letters for SEWD to send to those Tribes that have previously requested from SEWD to be notified of any projects, pursuant to AB 52. The description of the Proposed Project will be consistent with the NOP and will clearly describe the project area and the nature of potential activities. ESA assumes SEWD will send the notification letters and provide ESA with any responses so that ESA can maintain a record of all Tribal correspondence. ESA can provide additional AB 52 and general Tribal consultation support under an amended budget, if needed.

Task 3 Deliverables:

- Draft and final AB 52 Project notification letters

In addition to the 2018 Administrative Draft EIR, existing studies and reports, this Administrative Draft EIR will also rely on focused technical reports to support the environmental review, and as such, ESA will complete the following technical studies and reports:

Task 4: Techn Reports

Subtask 4.1: Cultural Resources Inventory Report

Cultural Resources Inventory Report. ESA will prepare a Cultural Resources Inventory Report (CRIR) to document and evaluate archaeological and architectural / structural resources in the project area in accordance with CEQA requirements. Research will include a records search at the Central California Information Center of the California Historical Resources Information System, communication with the Native American Heritage Commission, and a geoarchaeological analysis. The CRIR will be compliant with CEQA and Section 106 of the National Historic Preservation Act.

ESA will conduct a pedestrian survey of the Proposed Project facilities and associated appurtenances, i.e. pump stations, pipelines. ESA anticipates that the Proposed Project will not adversely affect any districts, sites, highways, structures, or objects listed in or eligible for listing in the State or National Register of Historic Places. The results of the investigation will be described in the CRIR, along with recommendations for additional actions to avoid or reduce impacts on cultural resources, as necessary. The CRIR will be suitable for submittal to the USACE to support Proposed Project permitting. The draft CRIR will be submitted to SEWD and the legal team for review and comment.

Task 4.1 Deliverables:

- Draft and final Cultural Resources Inventory Report

Assumptions: ESA will prepare the Draft Cultural Resources Inventory Report and then based on one round of comments prepare the Final Cultural Resources Inventory Report. The Final Cultural Resources Inventory Report will be used to support the EIR analysis.

Subtask 4.2: Hydraulic and Ecohydraulic Study

The following scope of work is to provide technical analysis to assess potential hydrologic, hydraulic, and geomorphic effects of the Proposed Project on environmental resources within the local stream systems and assess the potential effects of the Proposed Project on regional water supplies and system operations within the study area. ESA understands an Administrative Draft EIR (2018) was prepared for SEWD by Stephens Consulting and Kleinfelder, Inc for the WSEP project. The previous WSEP project was similar but was generally broader in scope, larger diversions than the current Proposed Project. The 2018 Administrative Draft EIR included hydrologic and hydraulic modeling and several technical analyses to assess impacts on aquatic resources, surface water resources, and groundwater resources. Several other studies, hydrologic or hydraulic models, and datasets are available that are useful to assess impacts of the Proposed Project on environmental resources.

It is ESA's understanding that modeling and supporting technical analyses will need to be updated to reflect the current Proposed Project. This scope of work assumes these updated models and technical analyses will be completed by other consultants under separate contracts with SEWD and made available to ESA. Modeling and technical analyses assumed to be updated include but may not be limited to the following:

- Updated modeling analysis using current versions of CalSim and DSM2 (presumably Stantec).
- Updated water availability analysis (presumably Wagner & Bonsignore).

It is ESA's understanding that the Proposed Project diversions have the potential to temporarily increase flows in certain surface waters and reduce flow in other surface waters. Such changes could result in impacts due to flooding, impact aquatic biological resources, and impact geomorphic processes. ESA will complete a Hydraulic and Ecohydraulic Study of the Proposed Project to characterize potential impacts; this study will be used to support CEQA analysis. The Hydraulic and Ecohydraulic Study will leverage relevant information from the 2018 Administrative Draft EIR, its appendices and other available studies, hydrologic or hydraulic models, and datasets identified during the completed as part of Task 1. No new or additional hydrologic or hydraulic modeling is currently envisioned to be required as part of the Hydraulic and Ecohydraulic Study.

The Hydraulic and Ecohydraulic Study will use outputs from the Project's updated water availability analysis to generate time series of pre-diversion (i.e., existing baseline) and post-diversion (i.e., with-project) flows. These flows will be used in combination with existing information on flood capacity, passage impediments to migrating adult and juvenile salmonids and minimum bypass flows for salmonid passage, existing wetted useable area (WUA) curves, and best available science on flows associated with landform maintenance to address the potential impact to topics listed above. The analysis will require the development of simple operational criteria to reasonably partition diversions between

surface waters for analysis purposes. ESA will develop and present a preliminary approach for diversion partitioning to be finalized in collaboration with SEWD and the project team.

The Hydraulic and Ecohydraulic Study can be used to support applications for permits for approval required for implementation of the Proposed Project (e.g., Sections 404 and 401 of the Clean Water Act and CDFW Lake and Streambed Alteration Agreement), which are not included in this task.

Subtask 4.2 Deliverables:

- One Draft and Final Technical Memorandum describing the analytical approach for diversion partitioning.
- One Draft and Final Hydraulic and Ecohydraulic Study Report.

Assumptions: ESA will prepare the Draft Hydraulic and Ecohydraulic Study Report and then based on one round of comments prepare the Final Hydraulic and Ecohydraulic Study. The Final Hydraulic and Ecohydraulic Study will be used to support the EIR analysis.

Subtask 4.3: Hydrologic and Water Quality Analysis

ESA will support comparative evaluation of potential hydrologic, hydrodynamic, and water quality effects resulting from the Proposed Project on the aquatic species and surface water resources of the Sacramento-San Joaquin River Delta (Delta). We understand that updated modeling analysis using current versions of CalSim and DSM2 will be completed by others and will be made available to ESA. It has been our experience that documentation and delivery of results from such modeling comes in the form of raw output files (e.g., DSS or CSV), processed tabular results files (e.g., Excel), and technical reports. It is typical that CEQA impact assessment requires additional analysis of model results beyond standard reporting. Support under this task will include:

- Coordination with SEWD and the modeling team on modeling approach and reporting (e.g., project representation, model scenarios to run [e.g., demands, hydrologic conditions, etc.], and metrics/output locations to report).
- Additional analysis and presentation of model results to support preparation of the EIR.

This subtask includes no separate deliverable. The hydrologic and water quality analysis from additional analysis conducted under this subtask will either be directly incorporated into CEQA resource chapters or will be used to update model technical reports to be completed by others.

Task 5: Prepare and Circulate Notice of Preparation

ESA will prepare the NOP consistent with CEQA Guidelines section 15082. In addition to providing a brief project description, location and key components of the Proposed Project, the NOP will identify the technical resource topics anticipated to be evaluated in the EIR and an explanation summarizing the changes to Proposed Project since the previously released NOP. Based on one round of SEWD comments, ESA will revise the draft NOP and will prepare the NOP for public circulation.

ESA will also prepare the Notice of Completion (NOC) and assist SEWD with uploading the documents to the State Clearinghouse's CEQASubmit portal to initiate the 30-day public and agency review period. It is assumed SEWD will be responsible for posting the CEQA notices with the newspaper and County Clerk's office and will electronically distribute the NOP to interested parties and responsible agencies. ESA will provide a web-ready version of the NOP for SEWD to post on its website. ESA assumes SEWD will be responsible for paying all CEQA Noticing fees.

Task 5 Deliverables:

- Draft and Final Notice of Preparation
- Notices for publication
- Notice of Completion

Task 6: Prepare Draft EIR

ESA will prepare a Draft EIR in accordance with Public Resources Code sections 21000-21177, and the CEQA Guidelines. The environmental analysis will use relevant and applicable information from the 2018 Administrative Draft EIR, and additional information, studies gathered and reviewed as part of Task 1. ESA's approach to the environmental analysis will to the extent practical information in the 2018 Administrative Draft EIR to assess at a project-level, potential direct physical changes to the environment associated with direct diversion at key locations as described in the project description and a program level review of the intended use of surface water as described in the project description.

Following public review and circulation of the NOP, ESA will review comments received with SEWD to confirm the technical resource topics to be evaluated in the EIR and the scope of the analysis. ESA will provide a scope of work for any additional analysis, if needed.

Assumptions: For budgeting purposes, we assume a second administrative draft EIR will not be necessary and all edits, revisions and updates will be presented in the Screencheck Draft EIR as described in Subtask 6.2. However, if requested, ESA can prepare and submit a separate scope of work and cost estimate to prepare Administrative Draft EIR 2.

The subtasks for preparing the Draft EIR are presented below.

Subtask 6.1: Administrative Draft EIR

ESA will prepare an Administrative Draft EIR that will include the following:

Executive Summary. The Executive Summary will summarize: the project's objectives; project description; discussion of alternatives considered and environmentally superior alternative; key findings; and areas of controversy as relevant. This chapter will also include a table summarizing the impacts and associated mitigation measures along with the level of significance both before and after mitigation.

Introduction. The introduction chapter will contain an overview of the project background; describe the environmental review and approval process; scope of the analysis; and organization of the EIR.

Project Description. Based on the project description developed in Task 2 as expanded for the Draft EIR analysis, this chapter will describe the location and components of the Proposed Project. Given the nature of the Proposed Project, it is recommended that a summary of the background on the water rights, including response to petitioners.

Environmental Analysis. This chapter of the EIR will include individual sections for the environmental resource areas identified to be evaluated in the NOP prepared in Task 4. An introduction to the analysis will be included that describes the approach to the analysis and a summary of the resource topics not being fully evaluated, if any, and describe why they are focused out. The analysis will include direct, indirect and cumulative impacts associated with implementation of the Proposed Project.

Each section will include the following:

Environmental and Regulatory Setting. The setting discussion will provide sufficient background information to characterize existing environmental conditions associated with the project area to provide context for the impact analysis. The setting will also include a discussion of relevant regulatory conditions that shape the assumptions and the policy environment for implementation of the Proposed Project.

Significance Criteria. The thresholds of significance will be based on Appendix G of the CEQA Guidelines and will be used to determine the significance of identified impacts.

Impacts and Mitigation Measures. The impacts and mitigation measures section will include the analysis of impacts associated with implementation of the Proposed Project. Findings of significance will be made based on thresholds of significance identified above. The impact discussions will provide information necessary to

support the findings. For all identified significant impacts, ESA will develop feasible mitigation measures to reduce the magnitude of the impact. The mitigation measures will identify the action, responsible party and timing of implementation to facilitate development of the Mitigation Monitoring and Reporting Program (MMRP). Discussion will also be provided describing the effectiveness of proposed mitigation measures. The impact analysis will assume compliance with relevant existing laws (including ordinances) when making a finding of significance.

Alternatives Analysis. An EIR must include an analysis of a reasonable range of potentially feasible alternatives to the Proposed Project that would achieve most of the goals of the project but could avoid or substantially lessen the magnitude of one or more of the project’s significant impacts (see CEQA Guidelines Section 15126.6(a)). The Alternatives chapter will reiterate the objectives of the Proposed Project and briefly describe each alternative. The impacts of each alternative will be quantified where necessary but otherwise discussed quantitatively. Potential alternatives will be presented for discussion with SEWD staff. For purposes of this scope, consistent with the 2018 Administrative Draft EIR, ESA anticipates analyzing up to three (3) alternatives including a no project alternative, redesign of key facilities alternative and a reduced diversion alternative. We will also describe alternatives that were considered but rejected for full analysis. The final reasonable range of alternatives (in addition to the no project) will be determined, with SEWD, following initial review of potential impacts.

Other CEQA Considerations. In addition to the sections described above, ESA will prepare all other statutory required sections (summary of cumulative impacts, summary of significant unavoidable impacts, and significant irreversible changes).

Growth-Inducing Impacts. The growth-inducing analysis will include an evaluation of the Proposed Project’s direct or indirect growth inducement potential based on putting the water to beneficial use in the Place of Use.

Cumulative Impacts. The cumulative impact analysis will include: a description of the cumulative context; cumulative projects considered; and an evaluation of the Proposed Project’s contribution to identified cumulative impacts. Mitigation measures will be incorporated by reference, as necessary.

Summary of Significant and Unavoidable Impacts. This section will present a summary of any significant and unavoidable impacts identified for the Proposed Project in the individual environmental resource area sections.

Significant and Irreversible Environmental Changes. Consistent with CEQA Guidelines section 15126.2(c), this section will provide an evaluation of the significant and irreversible changes to the environment that could result with Proposed Project implementation.

Administrative Draft EIR Technical Sections

Consistent with the CEQA Guidelines, the Administrative Draft EIR will fully evaluate the technical resource areas presented below.

Aesthetics	Agricultural/Forestry Resources	Air Quality
Biological Resources	Cultural Resources and Tribal Cultural Resources	Energy
Geology/Soils	Greenhouse Gas Emissions	Hazards and Hazardous Materials
Hydrology and Water Quality	Land Use and Planning	Mineral Resources
Noise	Population and Housing	Public Services
Recreation	Transportation	Utilities and Service Systems
Wildfire		

Descriptions of key environmental resources are described in the following technical discussions.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

The Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) (SJVAPCD, 2015) is an advisory document prepared by SJVAPCD which offers Lead Agencies, consultants, and Project applicants with uniform procedures for addressing air quality in environmental documents. The GAMAQI defines certain thresholds of significance for assessing air quality impacts associated with Project operations:

- *Ozone precursor emissions* - Project operations would generate 10 or more tons per year of either ROG or NOx; and
- *Particulate matter emissions* - Project operations would cause “visible dust emissions” and thereby violate SJVAPCD Regulation VIII or would generate 15 or more tons of particulates per year.

The GAMAQI quantitative thresholds for construction emissions are the same as for operational emissions, but each are evaluated separately on a calendar-year basis. For construction emissions, the annual emissions are evaluated on a rolling 12-month period. ESA will use the GAMAQI to estimate construction emissions, including consideration of on-site and on-road (off-site) mobile source emissions, and evaluated the results against the thresholds of significance. In addition, compliance with SJVAPCD Regulation VIII and District Rule 9510 (i.e., Indirect Source Rule) were considered to reduce fugitive dust and construction exhaust emissions, respectively. Therefore, the updated impact analysis will use the methodologies defined in GAMAQI, as amended or revised. ESA will use updated methodology as appropriate. The SJVAPCD utilizes a screening tool, Small Project Analysis Level (SPAL), to assess the significance of the impact of criteria pollutant emissions from a given project. As analyzed in the 2018 Administrative Draft EIR, the Proposed Project and its various components did not meet SPAL. Furthermore, ESA assumes the updated air quality analysis will be consistent with the 2018 Administrative Draft EIR, as currently proposed, the Project is would not generate a substantial volume of traffic, as such, a Full Analysis Level would not be necessary.

With regard to air quality and greenhouse gas, both construction activities and operation of the Proposed Project would result in air pollutant emissions. Therefore, ESA will analyze construction-generated dust, criteria air pollutant emissions, and emissions of toxic air contaminants from heavy construction equipment, as well as operational effects, including those from transportation emissions and building operations for the Proposed Project. ESA staff will calculate both construction and operational emissions using the CalEEMod air quality model (version 2022.1.1) and will separately calculate emissions from stationary sources.

GHG emissions would result directly and indirectly from constructing and operating the WSEP. Potential sources of direct GHG emissions would include employee travel and the operation of heavy and light construction and maintenance equipment powered by internal combustion engines. Indirect GHG emissions would result from the use of electrical energy to construct and operate the WSEP.

The WSEP is a utility infrastructure project, rather than a development project. Utility infrastructure projects tend to be more linear in character, and do not affect a wide land area. ESA recognizes that computer models typically used to calculate GHG emissions for development projects are not the most appropriate for WSEP. Therefore, consistent with the 2018 Administrative Draft EIR Road Construction Emissions Model, developed by the Sacramento Metropolitan Air Quality Management District, to calculate emissions associated with the construction of some major WSEP facilities. In doing so, ESA will include a brief description of global climate change and GHGs contributing to it and summarize key regulatory measures applicable to the project at the federal, state, and local levels. GHG emissions from project construction will be addressed qualitatively, as the San Joaquin Valley Air Pollution Control District’s Environmental Review Guidelines (2000) do not provide a numeric threshold for GHG emissions from construction. ESA understands that City of Stockton has a Climate Action Plan (CAP) adopted in 2014 that is currently being updated. ESA will work with SEWD to identify a project-specific GHG threshold for operational emissions to show consistency with the state’s interim and long-term GHG reduction targets and evaluate impacts. The impact analysis of the EIR will also evaluate the project’s consistency with other applicable plans and policies adopted for the purpose of reducing GHG emissions such as

California Air Resources Board's 2022 Scoping Plan, the San Joaquin Valley Air Pollution Control District's Climate Change Action Plan (2009), the City of Stockton Climate Action Plan, General Plan and any ordinances.

AQUATIC BIOLOGICAL RESOURCES

At this time, we assume that existing fisheries studies and reports pertaining to aquatics will be sufficient to prepare the Aquatic Biological Resources section of the Draft EIR and a new Fisheries Technical Report will not be required. If, during our review of background information (Task 1) additional information is necessary, our PM will immediately communicate this information to SEWD and discuss how we can move forward while additional information is needed.

Consistent with the 2018 Administrative Draft EIR, the Proposed Project has the potential to impact special-status fish species, including Chinook salmon and steelhead, through construction-related impacts and changes in Calaveras River flows. Based on ESA's experience with other similar projects, the key biological issues associated with project construction include aquatic habitat disturbance and in-water impacts (e.g., water quality, underwater sound and vibration, dewatering) and potential for fish entrainment, fish impingement, and downstream effects on fish habitat and survival.

ESA fish biologists and aquatic ecologists will analyze potential impacts from the Proposed Project based on existing fisheries studies and reports pertaining to aquatics. A desktop review of publicly available information will be sufficient to prepare the Aquatic Biological Resources section, which is intended to provide detailed data on ecohydrology, aquatic habitat, and fish communities downstream of the spillway. ESA biologists will also review current special-status species lists from California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS). The Aquatic Biological Resources section of the EIR will rely on existing information from the 2018 ADEIR and updated information in support of the regulatory permits described in additional detail below (see Task 7). This includes analysis of flow-habitat relationships for different life stages of special-status species, including passage, spawning, and rearing for anadromous fish. The fisheries analysis will use the results of the hydraulic, hydrologic, and system-wide water supply (i.e., CALSIM III) modeling to be prepared by Stantec. If additional modeling is determined to be necessary to complete the Aquatic Biological Resources section, flow-dependent habitat availability (i.e., PHABSIM) modeling and water temperature (i.e., HEC-5Q) modeling will be conducted by ESA to analyze potential impacts to different life stages of special-status species at and downstream of the Proposed Project. An important aspect of our approach will be to clearly articulate the baseline conditions against which the Proposed Project will be evaluated. The analysis of aquatic biological resources impacts will address direct, indirect, and cumulative impacts to special-status species and sensitive habitats potentially affected by the proposed project. If significant impacts are identified, appropriate mitigation measures will be described.

TERRESTRIAL BIOLOGICAL RESOURCES

ESA will review the U.S. Fish and Wildlife Service (USFWS), California Native Plant Society (CNPS) and California Department of Fish and Wildlife (CDFW) databases, aerial photos, and existing biological reports, including the biological resources report prepared for the previous administrative draft EIR. ESA will develop an updated list of special-status species that have been recorded or have potential to occur in the area. Following the preliminary data review, ESA assumes reconnaissance surveys will be necessary to determine which terrestrial biological resources are present within or adjacent to the Proposed Project facilities. The surveys will be conducted by a biologist qualified to evaluate the presence of wetlands, riparian corridors, or other sensitive communities; and presence for rare plants and wildlife species.

To complete this section ESA will use existing information from the 2018 Administrative Draft EIR and updated information pursuant to State and federal wildlife species lists. ESA will analyze potential impacts to terrestrial biological resources associated with construction and operation of the Proposed Project. Consistent with the 2018 Administrative Draft EIR, Proposed Project construction will be defined to encompass the construction of permanent WSEP features

including the proposed creek diversions, dams, pump stations, canals, pipelines, and shallow and deep recharge basins, as well as the creek diversion structures associated with these basins.

ESA will use the information described above along with supporting technical reports to prepare the Terrestrial Biological Resources section including a summary of existing conditions based on the information gathered in Task 1; a summary and evaluation of federal, State, and local policies and regulations as they pertain to biological resources; and an analysis of direct, indirect and cumulative impacts to these resources for implementation of the project and identified alternatives.

CULTURAL AND TRIBAL CULTURAL RESOURCES

To determine the sensitivity for archaeological resources and tribal cultural resources in the project area, ESA will incorporate information from the 2018 Administrative Draft EIR and the CRIR (Task 3.1). This information will be used to characterize potential impacts to archaeological resources and tribal cultural resources in the EIR. These sections will discuss potential impacts associated with implementation of the WSEP on cultural and paleontological resources, and the presence of documented or otherwise identified cultural and paleontological resources. The section will include a summary and evaluation of federal, State, and local policies and regulations as they pertain to Cultural resources and an analysis of direct, indirect and cumulative impacts to these resources. The results of AB 52 Tribal notification and Consultation will be summarized in the Tribal Cultural Resources section and appropriate mitigation will be provided, as feasible.

ENERGY

The CEQA Appendix G Guidelines recommend whether construction or operation of a project has the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources and whether they conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Energy consumption (electricity, natural gas, and petroleum fuel) during construction and operation of the project will be quantified and evaluated in the context of regional energy use. As applicable, energy conservation features such as delivering water by gravity or installation of energy efficient equipment will be considered as part of the analysis. ESA will evaluate whether the project would obstruct a state or local plan for renewable energy or energy efficiency such as the 2022 Building Energy Efficiency Standards, the California Green Building Standards code (CALGreen), the City of Stockton and San Joaquin general plan policies and local ordinances related to energy conservation.

HAZARDS AND HAZARDOUS MATERIALS

ESA will qualitatively assess potential hazards and hazardous materials impacts that may result from implementation of the Proposed Project. Areas of potential concern in this analysis include transportation hazards associated with railroad and airport operations, high-voltage power lines, and environmental contamination by hazardous materials and wastes. Information about hazardous materials sites will be based on a review of the California Environmental Protection Agency's Cortese List Data Resources. The section will also describe the chemicals that will be used during construction and maintenance; potential impacts from the transport, use, storage and disposal of chemicals and hazardous materials to and from the Proposed Project facilities; and potential for accidental releases of chemicals and hazardous materials.

RECREATION

Consistent with the CEQA Guidelines, ESA will analyze potential impacts to existing land-based recreational facilities or as result of the Proposed Project cause the need for new recreational facilities. ESA assumes on-water recreational activities are primarily centered around New Hogan Lake fishing and boating with some on-water recreation on the Calaveras River below New Hogan Dam downstream to Jenny Lind and beyond. Pursuant to the CEQA Guidelines, ESA will prepare a qualitative assessment of potential impacts to access to and use of recreational facilities in the project area as a result of implementation of the Proposed Project. The CEQA Guidelines do not include significance thresholds

for on-water recreation and potential impacts to whitewater boaters, however, based on our experience with other water rights projects, we recommend describing the whitewater boating uses and whether implementation of the Proposed Project could adversely affect the whitewater boating experience on the Calaveras River and how, if any, the Proposed Project could minimize the effects on whitewater boaters.

SURFACE WATER HYDROLOGY AND QUALITY

ESA will use the findings from the modeling and technical studies prepared by the project team (Task 3.2) and others, such as the hydrology and hydraulic and water quality reports to assess potential impacts on hydrology and water quality. Based on the hydrologic modeling results this section describes the corresponding changes in water supply that could result from implementation of the Proposed Project. Specifically, the surface water hydrology section will evaluate changes in flows resulting from operation of the Proposed Project under specific water year types, i.e. dry, multiple dry years and over extended drought periods. It also evaluates changes in surface water inflows to the Delta, and the effects these flow changes may have on selected Delta water users. The water quality section will evaluate changes in water quality resulting from operation of the Proposed Project under various water year types. It also evaluates changes in Delta water quality (mainly salinity) resulting from changes in inflows to the Delta. Moreover, this section will analyze the effects of the Proposed Project on existing drainage patterns and rates of surface water runoff, flooding and sustainable groundwater management in the basin. To complete this section, we will analyze the potential effects on water quality related to stormwater management during construction activities.

GROUNDWATER AND WATER SUPPLY EFFECTS

This section of the Draft EIR will describe potential changes to groundwater, water supply and delivery that could result from implementation of the Proposed Project. The discussion will provide a summary overview of the relevant water supply systems in the Project Area, including the existing water supply systems serving municipal, industrial and agricultural areas. While this analysis goes beyond the requirements of CEQA, ESA recommends including this analysis to illustrate to the public and interested stakeholders the potential effects of the Proposed Project on groundwater and water supplies associated with implementation of the Proposed Project. The analysis of water supply impacts in this section will focus on the diversion-related effects of the Proposed Project on groundwater, water supply systems, as measured by changes in storage, timing or rate of river flows, or in turn, could reduce water supply deliveries for municipal, industrial, agricultural uses and groundwater recharge areas.

Subtask 6.2: Screencheck Draft EIR

Following receipt of comments from SEWD on the Administrative Draft EIR 1, ESA will schedule a meeting to discuss comments and resolve the approach to revisions. Following that meeting, ESA will revise the Administrative Draft EIR and prepare a Screencheck Draft EIR for final review and approval prior to publication of the Draft EIR. It is assumed that any edits provided will be editorial and will not result in any major revisions or new technical analysis.

Subtask 6.3: Draft EIR

Based on any corrections or revisions to the Screencheck Draft EIR, ESA will prepare the backcheck Draft EIR for final review and comment. We assume that any edits provided will be editorial and will not result in any major revisions or new technical analysis. ESA will prepare the Notice of Availability (NOA) and NOC. ESA will assist SEWD with uploading the documents to the State Clearinghouse's CEQAnet web Portal to initiate the 45-day public and agency review period. ESA will draft the notice for publication in the local newspaper and with the County Clerk's office. ESA will provide a web-ready version of the EIR and NOA for SEWD to post on its website. It is assumed SEWD will be responsible for posting the notices with the newspaper and County Clerk's office and will electronically distribute the NOA to interested parties and responsible agencies.

At the time the EIR is published, ESA will convey the administrative record to SEWD via a file transfer program. ESA will update the administrative record during the response to comments/Final EIR preparation if needed.

Task 6 Deliverables:

- Administrative Draft EIR
- Screencheck Draft EIR and backcheck Draft EIR
- Draft EIR (electronic version; web-ready version)
- Administrative Record files
- Draft and final NOA
- Draft and final NOC

Assumptions: Payment of associated CEQA notices filing fees will be borne by the SEWD.

Task 7: Project Management and Meetings

Subtask 7.1: Project Management

ESA's Project management team will direct scope, schedule and budget performance during the execution of this task order. We will maintain regular communication with SEWD as well as other contractors, consultants, and the legal team as appropriate. ESA's Project Manager, Dave Beauchamp will be responsible for adherence to the schedule, budget management and quality control of the Draft EIR. Dave will manage the preparation of the Draft EIR, address specific issue items and with assistance from ESA's deputy project manager will handle the day-to-day administration of the project. Our Project Director, Cathy McEfee will have senior review responsibilities with an emphasis on Quality Control and Quality Assurance (QA/QC) of all documents during the environmental review process. For budgeting purposes, we assume 16 hours per month for ESA's Project Management team over the 12 month project period.

ESA will prepare monthly progress reports to be submitted with invoices that will summarize work done during that invoice period, contract summary, and budget and/or schedule concerns or issues to be addressed and resolved.

Subtask 7.1 Deliverables:

- Monthly progress reports and invoices
- Project schedule update

Subtask 7.2: Project Delivery Team Meetings

Project meetings will be an integral part of project success, to communicate the status of the preparation of the Draft EIR, and to quickly resolve any issues of concern that might arise. Key members of ESA's Project Management team will attend and participate in Project check-in meetings and calls, as needed. ESA Project Management staff will also participate, as needed, in specific Project Team strategy meetings. Under this task, ESA assumes the following:

- Ongoing virtual coordination calls (30 minutes each) – based on 1 per month for 12 months (12 meetings).
- Up to 12 virtual Project team meetings for 12 months, 2 hours each per ESA staff, for meeting preparation and input into the agenda and meeting notes, if necessary.
- Up to 3 in-person half-day Project team meetings, 6 hours each per ESA staff for meeting preparation, input into the agenda and travel time.

Subtask 7.2 Deliverables and Meetings:

- Input into the agendas and meeting minutes, if necessary.
- Review and comment on meeting summaries, specific action items

Subtask 7.3: CEQA Meetings

ESA's Project Manager and if necessary key technical resources experts will attend two public meetings during the CEQA process: (1) a public scoping meeting; and (2) a public meeting during public review of the Draft EIR. ESA will work with SEWD to prepare meeting materials, i.e. agenda, Power point presentation slides. ESA assumes SEWD will be responsible for meeting location and logistics and court reporter or similar, if needed. Each meeting is assumed to be 8 hours, inclusive of preparation time.

Subtask 7.3 Deliverables:

- Power point slides for public meetings

Task 8: Regulatory Permitting

From experience, ESA expects the Proposed Project will require pre-application regulatory support, regulatory permit applications, including supporting technical studies, and post-application regulatory support. Prior to submitting the regulatory applications and after completion of the Project Description in Task 2, ESA will engage the regulatory agencies together with SEWD in a pre-application Interagency Meeting to present the Proposed Project and obtain agency feedback on the design and identify any potential regulatory challenges. The regulatory permit applications and scoped supporting technical studies will utilize the existing information in the 2018 Administrative Draft EIR and CEQA addendum, as applicable. ESA's application packages will be comprehensive and pre-application efforts are intended to address and resolve many potential questions and issues from the regulatory agency staff, but ESA cannot guarantee agency approval within a specific timeframe or level of effort and anticipates regulatory agency support and coordination efforts will be needed after the applications are submitted.

Subtask 8.1: Pre-Application Regulatory Support

ESA anticipates at least two meetings and presentations with the regulatory agencies prior to submitting the applications, building on previous agency feedback and comments provided in prior meetings, to expedite agency review once the permit applications are submitted. To make the pre-application meetings most efficient and to provide a reasonable level of certainty in expected regulatory outcomes with the Proposed Project, we recommend synchronizing these meetings with key milestones throughout the Proposed Project's development.

ESA also anticipates compensatory mitigation will be required for the Project's impacts to aquatic resources and State and federal listed species. This task includes a Compensatory Mitigation Identification and Strategy Memorandum to identify potential compensatory mitigation sites in the pre-application permitting phase. Similarly, this task also includes a Permitting Strategy Memorandum to identify the key regulatory issues and integrates the feedback obtained during the pre-application Interagency Meetings into an actionable permitting strategy that outlines the most efficient pathway towards obtaining the required permits and authorizations expeditiously, and while minimizing aquatic resources mitigation and species mitigation.

Subtask 8.2: Regulatory Permit Applications

ESA anticipates the following permits and approvals will be required to construct the project:

- U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Standard Individual Permit
- U.S. Fish and Wildlife (USFWS) Biological Opinion (BO) (Section 7 of the Federal Endangered Species Act (FESA))
- National Marine Fisheries Service (NMFS) BO (Section 7 of FESA)
- Central Valley Regional Water Quality Control Board (CVRWQCB) CWA Section 401 Water Quality Certification (WQC)

- California Department of Fish and Wildlife (CDFW) Section 1600 Lake and Streambed Alteration Agreement (LSAA).
- CDFW Incidental Take Permit (ITP), Fish and Game Code 2081(b), California Endangered Species Act (CESA)

Each regulatory permit application will generally include a cover letter, Project description and Project maps, a summary of potential impacts on regulated resources, and proposed avoidance and minimization, and mitigation measures that will be implemented by the ESWD. The permit applications will be supported by resource reports including aquatic resource delineation report, biological resource technical memorandum, Cultural Resource Survey Report (see above), and demonstration of CEQA compliance.

ESA will prepare applications for the following permits and supporting technical studies:

USACE 404 Standard Individual Permit. ESA regulatory specialists will prepare a USACE CWA Section 404 Clean Water Act Standard Individual Permit (SIP) application package (Form 4345) for project impacts to wetlands and other waters of the U.S. This task assumes that the project design drawings and construction footprint in an appropriate format for analysis of potential impacts to wetlands and other waters of the U.S. We will prepare an Aquatic Resources Delineation Report (ARDR) for the Proposed Project site to support the permit applications. The delineation will be conducted in accordance with the USACE 1987 Wetland Delineation Manual, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), and current USACE requirements to follow the 2015 Clean Water Rule. We will also document any areas outside USACE jurisdiction that may be considered waters of the state and will summarize this information in the state permit applications. SIP applications require an Alternatives Analysis that meets the requirements in CWA section 404(b)(1) Guidelines. ESA will utilize information developed during the conceptual design phase to identify appropriate alternatives for this analysis requirement.

Additionally, as the anticipated federal lead on the project, FESA Section 7 species consultations and National Historic Preservation Act (NHPA) Section 106 consultations, including tribal outreach, will be initiated by the USACE in accordance with the FESA. ESA will prepare and submit the necessary USFWS and NMFS Biological Assessments for submission with the USACE application.

RWQCB 401 WQC. ESA will prepare and submit an application package for an individual WQC to the CVRWQCB. Much of the information required for the CVRWQCB application will be similar to that required by the USACE for the SIP application, but some information, such as the assessment of Proposed Project effects to CVRWQCB-designated Beneficial Uses per the Water Quality Control Plan for the San Joaquin River Basin Plan (or Basin Plan), is unique to this application. In addition, all information will be submitted in accordance with the State Water Resources Control Board's (SWRCB) 2019 Procedures (revised April 6, 2021) for Discharges of Dredged or Fill Material in Waters of the State (Wetland Procedures). It should be noted that the CVRWQCB will require a certified CEQA document to verify project compliance with state law, prior to issuance of a CVRWQCB WQC.

CDFW 1602 SAA. ESA will prepare a Section 1602 Notification of Lake and Streambed Alteration for submittal to CDFW. The Section 1602 Notification will describe the Project activities, and potential Project effects on any other fish or wildlife resources under CDFW jurisdiction. Information from the USFWS BA, NMFS BA, and the habitat assessment will be submitted with this notification, as well as demonstration of CEQA compliance. The notification will need to include specific biological, hydrological, engineering, construction, and operational information for the project. ESA will coordinate with SEWD and to submit the permit application through CDFW's Environmental Permit Information Management System (EPIMS) Document Repository Portal. It should be noted that CDFW will require a certified CEQA document to verify project compliance with state law, prior to issuance of the 1602 LSAA.

CDFW CESA Application. ESA will prepare a CESA Incidental Take Permit (ITP) application pursuant to Fish and Game Code 2081(b) for the project to obtain take authorization for listed state species, as applicable. ESA will coordinate with SEWD and CDFW on the ITP requirements and submit the permit application through CDFW's Environmental Permit Information Management System (EPIMS) Document Repository Portal.

The application will include a description of the project or activity for which the permit is sought; an analysis of whether and to what extent the project could result in the taking of species to be covered by the permit; an analysis of the impacts of the proposed taking on the species; an analysis of whether issuance of the ITP would jeopardize the continued existence of a species; proposed measures to minimize and fully mitigate the impacts of the proposed taking; a proposed plan to monitor compliance with the minimization and mitigation measures; description of the funding sources and level of funding available for implementation of the minimization and mitigation measures; and documentation of CEQA compliance. This task includes up to three virtual meetings with CDFW to specifically address the ITP requirements.

Subtask 8.3: Post-Applications Submission Regulatory Support

Following the submission of the permit applications, it is unknown to what level of effort may be required to support SEWD with responses to agency requests for additional information. Based on ESA extensive experience, and given the Proposed Project's complexity, ESA has included up to 152 hours for post-application regulatory support.

Task 8.3 Deliverables:

- Electronic version of draft (PDF and Word) and final (PDF) permit application packages
 - USACE Standard Individual Permit
 - CVRWQCB Water Quality Certification
 - CDFW 1602 Streambed Alternation Agreement
 - CDFW California ESA Incidental Take Permit
- Final permit application package for USACE will be submitted via their RRS
- Final permit application package to be entered into the CDFW EPIMS Document Repository.
- Electronic version of draft (PDF and Word) and final (PDF) supporting technical studies.
- Supporting Technical Studies:
 - Aquatic Resources Delineation Report
 - Two Biological Assessments (USFWS and NMFS)
 - Compensatory Mitigation Plan – up to 4 revisions
 - CWA section 404(b)(1) Alternatives Analysis
- Pre-application support for the regulatory agencies
 - Interagency Meeting agendas, presentations, meeting notes/
 - Permitting Strategy Memorandum
 - Compensatory Mitigation Identification and Strategy Memorandum
- Post-application support for the regulatory agencies
 - Responding to regulatory agency comments multiple times until all agencies deem the applications complete.
 - Revisions to impact calculations, additional analysis, mitigation plan revisions, and/or support from design team to explain/respond to regulatory agency questions.

Assumptions:

- SEWD will provide information requested by ESA to support the regulatory permit applications
- GIS data from the 2018 Administrative Draft EIR will be provided to ESA and will not need to be updated.
- Additional studies and biological surveys are not included in this scope and would be provided under a separate scope of work by ESA, if necessary.
- SEWD will be able to demonstrate to the satisfaction of jurisdictional agencies that it has avoided and minimize resource impacts to the maximum extent practicable.

- Permit application fees will be paid by SEWD.
- Preparation of permit applications will be performed using existing information and data from the 2018 Administrative Draft EIR and updated with current information as applicable.
- ESA permitting staff assumes up to two site visits (with both USACE and RWQCB staff) necessary to support the regulatory agencies permitting process.
- Technical studies or additional documents that are not identified in this proposal may be requested by the regulatory agencies. ESA can provide those documents under a separate scope of work.
- Compensatory mitigation will be required by the regulatory agencies for the Proposed Project's impacts to aquatic resources, FESA species impacts, and CESA species impacts.
- Permit applications will be based on the current project design drawings. Resource agencies may request design drawings to be at a level of 65% complete before granting the permit(s).
- Permit applications and supporting technical studies include one round of comments from SEWD.
- Permitting calculations, descriptions, and figures will be based on one single set of drawings. Our scope does not accommodate re-work associated with design drawing revisions or dividing project components into different permit applications.
- SEWD will be responsible for obtaining other federal and/or state permits, e.g., SWPPP under the Construction General Permit and San Joaquin County Permits, as applicable.

Schedule

ESA will complete the Draft EIR in approximately 8 months including 45-day public review period. This schedule is based on the following: (1) ESA receives an executed contract or notice to proceed within 2 weeks of accepting ESA's scope of work, schedule and cost estimate; an Draft Project Description in 6 weeks per CEQA Guidelines; the Administrative Draft EIR will be developed over 20 weeks after receiving comments on the project description; the Screencheck Draft EIR will be submitted for review and comment after 4 weeks of receiving comments on the Administrative Draft EIR. We anticipate publishing and circulating the Draft EIR in late 2025 or early 2026. Refer to **Attachment 1 – Project Schedule**. ESA does not anticipate any delays in this schedule; however, some amount of uncertainty exists with approval of the project description and project team review times.

As described in Task 8, permit applications prepared by ESA will meet regulatory agency requirements and ESA will support SEWD and WSEP. However, ESA cannot guarantee successful procurement of regulatory agency permits and approvals within the desired timeframe.

Cost Estimate

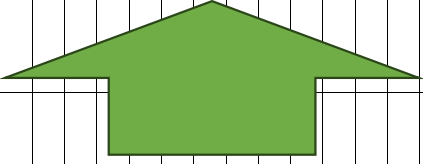
The cost estimate for the above-described scope of work is estimated at **\$1,208,764** inclusive of regulatory permits and will be invoiced on a time-and-materials basis. The estimated cost for acquisition of the suite of regulatory permits and supporting reports is **\$359,536** with the balance for project coordination and management duties, meetings and expenses. A detailed summary of our proposed fee for the work described herein is presented in Exhibit A, attached. Refer to Exhibit B is ESA's 2025 Fee Schedule for associated project costs and hourly rates. This estimate is not expected to be exceeded unless there is a change to the scope, project description or in response to a request from the project team. In the event of a change in the scope, the Project team will be informed as soon as possible of the change and its effect on the cost, if any.

ESA appreciates your patience and is excited about the opportunity to serve you and SEWD and we look forward to working on this important water supply project.

Sincerely,

Dave Beauchamp, Principal Consultant

Task	Task Descriptions	2026																				
		May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
1	Project initiation and Background Review																					
2	Project Description																					
3	AB 52 Tribal Notification and Consultation																					
4	Technical Reports																					
4.1	Cultural Resources Inventory Report																					
4.2	Hydraulic and Ecohydraulic Study																					
4.3	Hydrologic and Water Quality Analysis																					
5	Prepare and Circulate Notice of Preparation																					
6	Prepare Draft EIR																					
6.1	Administrative Draft EIR																					
6.2	Screencheck Draft EIR																					
6.3	Draft EIR																					
7	Project Management and Meetings																					
8	Regulatory Permitting																					
8.1	USACE 404 Permit																					
8.2	RWQCB 401 WQC																					
8.3	CDFW 1600 SAA																					



Schedule: May 2025 - December 2026
 Schedule based on current status of project information



COST ESTIMATE

EXHIBIT A

ESA Standard Rates
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NOTE: DO NOT ADD OR DELETE ANY ROWS OR COLUMNS.

SEWD Water Supply Enhancement Project		TOTAL BY HOURS / DOLLARS																TOTAL ESA LABOR COST & FEES		TOTAL PROJECT COST																
Task #	Task Name/Description	C. McEe	D. Beauchamp PM	K. Stiele	J. Pichardt/J. Grigg	R. Hoffman	J. Weiner	G. Weissman (EHD)	S. Ferrel	K. Berntge	P. Bierman	B. Schuster	J. Jyer	J. Manasala	M. Hensel	M. Frestone	M. Burns	E. Kline	R. Reyes	J. Medina	A. Sims	D. Huang	F. Spaulding	T. Stangis	S. Smith	J. Anderson (GIS)	Tech Editing/ NCRs	Graphics/Fell	Revisions - Open	ESA Total Labor Hours	ESA Total Labor Amount	Total Labor Fees	Total Labor Cost			
1	Task 1: Project Initiation, Background Review	8	24	16	8	0	0	0	0	24	8	0	8	8	8	8	0	8	8	8	0	0	0	0	0	0	0	0	0	0	0	168.00	\$ 38,792	\$ 1,184	\$ 39,976	\$ 42,258
1.1	Kick-off Meeting and Background Review	8	24	16	8	0	0	0	0	24	8	0	8	8	8	8	0	8	8	8	0	0	0	0	0	0	0	0	0	0	168.00	\$ 38,792	\$ 1,184	\$ 39,976	\$ 42,258	
2	Task 2: Project Description	4	8	16	0	0	0	0	0	24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96.00	\$ 18,132	\$ 544	\$ 18,676	\$ 18,676	
2.1	Draft and Final Project Description	4	8	16	0	0	0	0	0	24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96.00	\$ 18,132	\$ 544	\$ 18,676	\$ 18,676	
3	Task 3: Risk Identification/Consultation	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.00	\$ 6,208	\$ 224	\$ 6,432	\$ 6,432	
3.1	Risk Identification/Consultation	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.00	\$ 6,208	\$ 224	\$ 6,432	\$ 6,432	
4	Task 4: Technical Reports	4	10	8	0	50	16	300	320	0	20	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	862.00	\$ 187,002	\$ 6,610	\$ 193,612	\$ 193,612	
4.1	Cultural Resources Inventory Report	2	2	8	0	16	16	300	320	0	20	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	431.00	\$ 93,501	\$ 3,305	\$ 96,806	\$ 96,806	
4.2	Hydraulic-Ecological Study	2	4	8	10	16	100	160	160	8	8	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	231.00	\$ 47,501	\$ 1,305	\$ 48,806	\$ 48,806	
4.3	Hydrologic-Water Quality Analysis	2	4	8	40	40	200	40	200	12	12	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	413.00	\$ 85,501	\$ 2,409	\$ 87,910	\$ 87,910	
5	Task 5: Notice of Preparation and Circulation	1	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35.00	\$ 6,544	\$ 196	\$ 6,740	\$ 6,740	
5.1	Prepare Notice of Preparation-Circulation	1	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35.00	\$ 6,544	\$ 196	\$ 6,740	\$ 6,740		
6	Task 6: Prepare Draft EIR	84	102	224	180	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	1966.00	\$ 423,026	\$ 12,891	\$ 435,917	\$ 435,917		
6.1	Aesthetics	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Agriculture/Forestry Resources	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Air Quality	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Biological Resources (Terrestrial)	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Biological Resources (Aquatic)	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Cultural/Folklife Resources	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Energy	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Geology & Soils/Mineral Resources	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Greenhouse Gas Emissions	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Hazards and Hazardous Materials	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Surface Water Hydrology/Water Quality	16	24	80	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114.00	\$ 23,558	\$ 689	\$ 24,247	\$ 24,247		
6.1	Land Use / Planning	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Noise	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Population and Housing	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Public Services	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Recreation and On-Water Recreation	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Transportation	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Utilities and Service Systems	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Water Supply Effects	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Wetlands	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Wetlands Analysis	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Wetlands Mitigation	2	6	12	0	24	24	0	60	40	32	32	66	100	100	108	68	12	124	88	44	40	24	0	0	0	0	0	0	42.00	\$ 8,208	\$ 240	\$ 8,448	\$ 8,448		
6.1	Wetlands Mitigation/Consultation: Sum of SOI and SOI	4	12	48	0	48	48	0	120	80	64	64	132	160	160	176	104	24	240	160	80	80	48	0	0	0	0	0	0	84.00	\$ 17,416	\$ 496	\$ 17,912	\$ 17,912		
6.1	Wetlands Mitigation/Consultation: Sum of SOI and SOI	4	12	48	0	48	48	0	120	80	64	64	132	160	160	176	104	24	240	160	80	80	48	0	0	0	0	0	0	84.00	\$ 17,416	\$ 496	\$ 17,912	\$ 17,912		
6.2	Admin Draft EIR - Production (GIS+HotEdit+Piles+Opplies)	24	16	16	0	24	16	8	16	16	16	16	16	16	16	16	8	8	16	16	8	8	8	24	24	24	24	24	24	188.00	\$ 37,156	\$ 1,115	\$ 38,271	\$ 38,271		
6.2	Screening Draft EIR	24	16	16	0	24	16	8	16	16	16	16	16	16	16	16	8	8	16	16	8	8	8	24	24	24	24	24	24	188.00	\$ 37,156	\$ 1,115	\$ 38,271	\$ 38,27		



EXHIBIT B

Environmental Science Associates & Subsidiaries: 2025 Schedule of Fees

I. Personnel Category Rates

Charges will be made at the Category hourly rates set forth below for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category rate times 1.5.

LABOR CATEGORY	BILLING STEP I	BILLING STEP II	BILLING STEP III	BILLING STEP IV	BILLING STEP V	BILLING STEP VI
Senior Principal Consultant	\$258	\$285	\$314	\$344	\$375	\$405
Principal Consultant	\$218	\$248	\$276	\$305	\$334	\$363
Managing Consultant	\$197	\$219	\$243	\$266	\$289	\$312
Senior Consultant	\$163	\$180	\$202	\$223	\$245	\$266
Associate Consultant	\$147	\$162	\$175	\$189	\$203	\$217
Consultant	\$110	\$124	\$137	\$152	\$165	\$179
Project Technician	\$80	\$103	\$125	\$146	\$167	\$190

- (a) The range of rates shown for each staff category reflects ESA staff qualifications, expertise and experience levels. These rate ranges allow our project managers to assemble the best project teams to meet the unique project requirements and client expectations for each opportunity.
- (b) From time to time, ESA retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor may be charged at regular Employee Category rates.
- (c) ESA reserves the right to revise the Personnel Category Rates periodically to reflect changes in its operating costs.

II. ESA Expenses

A. Travel Expenses

- 1. Transportation
 - a. Company vehicle – fixed rate + fee for mileage in excess of 100 miles.
 - b. Common carrier or car rental – actual expense multiplied by 1.15
 - c. If company vehicle is to be used in off-road conditions, a daily \$15 use fee will be added to the standard daily vehicle rate.
- 2. Lodging, meals and related travel expenses – direct expenses multiplied by 1.15

B. Technology and Data Management Fee

Starting January 2023, ESA implemented a 3% Technology and Data Management fee on all applicable contracts, excluding charges related to equipment rentals, reimbursable expenses, and subcontractor fees. This fee plays a pivotal role in mitigating an array of technology and data management expenditures incurred by ESA to ensure the delivery of the comprehensive and high-quality services our clients expect. These expenses include, but are not limited to:

- **Long-Term Data Retention and Security Administration:** Covering the expenses associated with administering the protection of client data and assets throughout and beyond the contractual period.
- **Development and Maintenance of Internal ESA Software Tools:** Accounting for the ongoing investments required to create and maintain tools integral to our client engagements.
- **Data Privacy and Security Maintenance:** Encompassing the costs involved in maintaining data privacy and security, including regular security audits to uphold the highest standards.
- **Advanced Technology-Related Costs:** Addressing the escalating expenses associated with subscriptions for cutting-edge technical software, licenses, and cloud data services.

This fee structure enables ESA to uphold its commitment to providing clients with top-tier services while managing the ever-evolving demands of technology and data management in the work that we do.

C. Cloud-based Services

ITEM	RATE/HOUR	RATE/DAY	RATE/WEEK	RATE/MONTH
Cloud-based Services				
Nearmap High Resolution Images		\$55/image		
ArcGIS Online Hosting (Web Maps/Apps)				\$225
Website Hosting				\$200
Custom Application & Services Hosting*				\$300*
Modeling (GeoHECRAS, TUFLOW, Delft3D) + Drone Processing	\$7	\$160	\$950	\$3,900
Aviation Environmental Design Tool (AEDT) Processing	\$13	\$190	\$1,120	\$4,600
*includes support for database, SSL, IT support – costs vary by project. Contact software development services for firm pricing.				

D. Printing/Reproduction Rates

If a weekly or monthly rate is not provided, equipment usage is billed at a daily rate.

ITEM	RATE/PAGE	SAMPLE PRICING
Black & White – 8.5 x 11	\$0.15	
Black & White – 11 x 17	\$0.30	
Color – 8.5 x 11	\$0.50	
Color – 11 x 17	\$0.80	
B&W – Plotter (Toner – ECO Quality)	\$0.50/sf	24x36 B/W CAD drawing would cost \$3 per sheet
B&W – Plotter (Toner – Presentation Quality)	\$1.25/sf	24x36 B/W CAD drawing would cost \$7.50 per sheet
Color – Plotter (Inkjet – ECO Quality)	\$2.50/sf	24x36 Color Drawing would cost \$15 per sheet
Color – Plotter (Inkjet – Presentation Quality)	\$5.00/sf	24x36 Color Drawing would cost \$30 per sheet



CD	\$10.00	
Digital Photography	\$20.00 (up to 50 images)	
All Other Items (including bindings and covers)	At cost plus 10%	

E. Equipment Rates

ITEM	RATE/DAY	RATE/WEEK	RATE/MONTH
Project Specific Equipment:			
Vehicles – Standard size (no off-road usage)	\$ 100 ^a	\$ 500 ^a	
Vehicles – 4x4 /Truck (light duty)	150 ^a		
Vehicles – 4x4 /Truck (heavy duty)	175 ^a		
Vehicles – ATV	150		
Noise Meter	115		
Hydroacoustic Noise Monitoring Equipment	175		
Satellite Phone	15	70	250
Electrofisher	350	1,750	
Field Traps	50		
Digital Hypsometer (Nikon)	25		
Backpack Sprayer	30		
360-Degree 4k Camera	35	175	
High Resolution Time-Lapse Camera	20	100	350
Beach Seine	60		
Block Net	30		
PIT Tagging Kit	25		
Underwater Light Meter		500	
Otter Trawl	115		
Wildlife Acoustics Bat Detector	125	400	
Wildlife Trail Camera	30	100	
Fiber Optic Endoscope	150	750	
Spotting Scope	50	200	
Personal Protective Equipment (PPE)	25		
Photo and Video Production Equipment:			
Mirrorless Camera + Lens + SD Card	220	550	2000
Tripod + Camera Case	50	175	500
Lighting Equipment	20	75	250
Shotgun Microphone Kit	15	50	180
2 Person Microphone Kit	10	25	85
Topographic/Bathymetric Survey Equipment:			
Total Station	300		
UAV/Drone	300	1,500	
RTK-GPS	300		
RTK-GPS Smartnet Subscription	80		
Hypack Survey Software	150		
Laser/Auto Level	50		
Single-Beam Echoshounder	175	600	
Sidescan Sonar	200		
Sound Velocity Profiler	75		
1m GNSS Data Collection System	85	425	1,700
Sub-meter GNSS Data Collection System	115		
Sub-foot Data Collection System	230		
Garmin GPS or equivalent	30		
Hydrologic Data Collection, Water Current, Level and Wave Measurement Equipment:			
ISCO 2150 Area Velocity Flow Logger	\$ 50	\$ 300	\$ 800
SonTek IQ-Plus Area Velocity Flow Logger	100	500	1,500
Logging Rain Gage	10	50	200
Hand-Held Current Meter	50		
Surface Velocity Radar	50		
Wave Pressure Sensor		115	460
Wave Buoy		175	700
Sonic Wave Sensor	35	175	500
Logging Water Level - Pressure Transducer			125
Logging Barometric Pressure Logger			60
Well Probe / Water Level Meter	25		
Bottom-Mounted Tripod / Mooring	30	150	400

ITEM	RATE/DAY	RATE/WEEK	RATE/MONTH
Stormwater Crest Sampler			20
Radar Wave Sensor with Logger Box	150	300	1000
Water Quality Equipment:			
Logging Turbidimeter/Water Level Recorder	\$	\$	\$ 400
Logging Conductivity/Water Level Recorder			250
Remote Monitoring Logger Box		75	250
Recording Conductivity Meter w/Datalogger	20	60	200
Hand-Held Turbidimeter	50	200	
Hand-Held Salinity Meter or pH meter	35		
Logging Salinity Gauge			150
Logging DO/Temp Probe			150
Logging Water Quality Sonde 1 Sensor	50	200	700
Logging Water Quality Sonde 2 Sensor	65	250	800
Logging Water Quality Sonde 3 Sensor	75	300	900
Logging Water Quality Sonde 4 Sensor	90	350	1,000
Telemetry System Hardware			125
Water Quality Multi-Probe Depth Profiler	200		
Niskin Water Sampler	50		
ISCO 6712 Portable Sampler w/ISCO 2105 Module	60	350	900
Sedimentation / Geotechnical Equipment:			
Peat Corer	\$ 85		
60lb Helly-Smith Bedload Sampler	200		
Mini-Ponar Grab Sampler	50		
DH-76 Suspended Sediment Sampler	100		
D-96 Suspended Sediment Sampler	200		
Bridge Crane	150		
RSET	50		
AMS Soil Sampling Kit	50		
Hand-Held Helley-Smith Bedload Sampler	30		
Guelph Permeameter	60		
Sludge Sampler	60		
Shear Strength Vane	60		
Handheld DH-48 Suspended Sediment Sampler	30		
Boats:			
Small Watercraft	\$ 75	\$ 300	
15'-17' Boat	350	1,200	
18'-21' Boat	400	1,800	
22'-25' Boat	500	2,000	
Houseboat Floating Laboratory		4,500	

^a Actual project charges will include the daily rate plus \$0.75 per beyond 100 miles

III. Subcontracts

Subcontract services will be invoiced at cost multiplied by 1.15.

IV. Other

The fees above do not include sales tax. Any applicable or potential sales tax will be charged when appropriate.

V. Payment Terms

Unless otherwise agreed in writing, ESA will submit invoices on a monthly basis. Any unpaid balances shall draw interest at one and one half percent (1.5%) per month or the highest rate



allowed by law, whichever is lower, commencing thirty (30) days after date of invoice. All invoices not contested in writing within fifteen (15) business days of receipt are deemed accepted by Client as true and accurate and Client thereafter waives any objection to Client's invoices, which are payable in full.

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April 29, 2025

Attn: David Beauchamp, Senior Project Manager
Environmental Science Associates
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816

Subject: Proposed Scope of Work and Budget for CalSim 3 and DSM2 Model Updates for the Stockton East Water District Draft Environmental Impact Report

Dear Mr. Beauchamp,

At the request of Environmental Science Associates (ESA), Stantec Consulting Services Inc. (Stantec) has prepared this proposal for CalSim 3 and DSM2 Modeling services for the Stockton East Water District (SEWD) Draft Environmental Impact Report. This proposal presents Stantec's scope of work and budget for these services.

PROJECT OVERVIEW

Work will consist of updating the CalSim and DSM2 modeling previously conducted for the June 2018 Administrative Draft Environmental Impact Report (ADEIR) for SEWD's proposed Water Supply Enhancement Project (WSEP). This ADEIR analyzed the impacts of proposed new diversions under the WSEP from the Calaveras River/Mormon Slough, Littlejohns Creek, and Rock Creek. These proposed diversions would capture predominantly wet-season (i.e. November to April) flood flows.

CalSim modeling will be updated using CalSim 3 (the 2018 ADEIR used CalSim II). Except for the use of CalSim 3 instead of CalSim II, the overall project operations simulated are assumed to remain similar to those described in the 2018 ADEIR. This includes incorporating changes in the project description, such as adjustments in diversion amounts, which can be efficiently integrated into the updated modeling.

SCOPE OF WORK

Stantec will provide CalSim 3 and DSM2 modeling services as described below.

TASK 1 - CalSim 3 Model Update

Previous modeling conducted for the ADEIR was conducted using CalSim II. Stantec will update this previous modeling using CalSim 3. Four scenarios will be simulated:

- 1) Existing Conditions;

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United States

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- 2) Future No Action/No Project conditions incorporating climate change hydrology;
- 3) Proposed Project layered on Existing Conditions; and
- 4) Proposed Project layered on Future No Project.

This scope also includes budget for two additional scenarios (one for No Project and one for With Project conditions), in case those are needed for other purposes such as cumulative analysis or sensitivity analysis.

For Task 1, Stantec will provide support for determining the proper CalSim 3 baseline model and climate change hydrology to use as a starting point for this modeling. This will include discussions with the SEWD legal team on appropriate baseline assumptions. Assumption is that existing models can be obtained for both Existing and Future Conditions (and the additional scenarios), which can be used for simulating the No Project condition without substantial changes. In addition, in order to verify the proper assumptions for the baseline CalSim 3 models, Stantec will provide a technical memorandum outlining current assumptions in the model for the Calaveras watershed. After review of this technical memorandum by the SEWD or other appropriate entities, Stantec will make any necessary adjustments to the Calaveras watershed assumptions in CalSim 3. Assumption is that these changes will be implementable within the existing structure of the model.

Simulation of the Proposed Project in CalSim 3 will be conducted using similar methods as were used in the ADIER modeling, where proposed new diversions were integrated into the model using a timeseries approach. Assumption is that those timeseries will be provided to Stantec, and that if needed, only a few iterations with the model will be needed to fully define the assumptions of the Proposed Project in CalSim 3. Stantec will prepare a comparative analysis of the existing and future model runs to summarize the changes in model outputs from the No Project to the Proposed Project. Stantec will conduct QA-QC of model results, including identification and explanation of modeling artifacts and large (greater than 5%) changes in average outputs.

Deliverables: CalSim 3 models and post-processing spreadsheets with comparative analysis results.

TASK 2 - DSM2 Model Update

Following the completion of the CalSim 3 modeling, Stantec will rerun and update the DSM2 model simulations using results from the CalSim 3 scenarios described above. Delta simulation of future conditions will incorporate projected sea-level rise. Stantec will prepare a comparative analysis of the existing and future model runs to summarize the changes. Stantec will conduct QA-QC of model results, including identification and explanation of modeling artifacts and large (greater than 5%) changes in average outputs.

Deliverables: DSM2 models and post-processing spreadsheets with comparative analysis results.

TASK 3 - Update Report

Following completion of the CalSim 3 and DSM2 modeling, Stantec will update the modeling appendix for the ADEIR (Appendix F of the DEIR which consists of the report entitled "MWH Delta Modeling Report"). These updates will include updated model assumptions and model results similar to what were presented in the ADEIR. In addition, Stantec will provide review of model results and conclusions used to assess impacts using CalSim 3 and DSM2 model results. Stantec will provide updated tables showing CalSim 3 and DSM2 model results for incorporation into Chapter 13 (Surface Water) of the ADEIR.

Deliverables: Updated Appendix F and spreadsheets with updated tables for Chapter 13.

TASK 4 - Project Management and Coordination

Project management duties include coordination with staff, identifying resources, and monitoring schedule, budget, quality, and deliverables.

SCHEDULE

Stantec expects that the scope of work presented in this proposal will be completed within 12 months from the notice-to-proceed.

FEE ESTIMATE

Stantec's time and materials estimate for the scope of work presented in this proposal is **\$282,964.00**. A detailed fee estimate is provided in **Attachment A**, and Stantec's 2025 Fee Schedule is provided in **Attachment B**.

Stantec appreciates the opportunity to provide engineering services to ESA and SEWD. If you have any questions or require additional information, please contact me by phone at (425) 602-3532 or email (thomas.fitzhugh@stantec.com).

Sincerely,
STANTEC



Thomas FitzHugh
Principal Water Resource Scientist

Cc:
Gail Eaton, Senior Project Manager

Attachment:
A. Detailed Fee Estimate
B. Fee Schedule

ATTACHMENT A
Detailed Fee Estimate

FEE ESTIMATE

PROJECT: CalSim Modeling Update 2025

CLIENT: Stockton East Water District

SCHEDULE: April 1, 2025 to March 31, 2026

DATE: March 10, 2025

FEE: \$282,964.00

WBS	Classification	Rate/Hr	STANTEC LABOR										TOTAL STANTEC FEE by Subtask	TOTAL STANTEC FEE	
			Sr. Advisor / Technical Lead	Principal Engineer / Scientist II	Principal Engineer / Scientist I	Project Engineer/Scientist	Supervising Engineer/Scientist	Staff Engineer/Scientist	Contract Administrator	Administrative Assistant/Typist	TOTAL HOURS	TOTAL LABOR			
Task 1	CalSim 3 Modeling		12	105	0	200	0	250	0	0	0	567			\$118,906
1.1	Base Model Review and Selection		12	45		40		40				137	\$32,906		\$32,906.00
1.2	Existing Conditions (No Project and Proposed Project)			12		60		110				182	\$33,912		\$33,912.00
1.3	Future Conditions (No Project and Proposed Project)			16		40		40				96	\$19,856		\$19,856.00
1.4	Additional Scenarios (No Project and Proposed Project)			16		40		40				96	\$19,856		\$19,856.00
1.5	Results Analysis and QA-QC			16		20		20				56	\$12,376		\$12,376.00
Task 2	DSM2 Modeling		0	52	0	91	226	0	0	0	369			\$80,272	
2.1	Existing Conditions (No Project and Proposed Project)			12		25	62					99	\$21,336		\$21,336.00
2.2	Future Conditions (No Project and Proposed Project)			12		25	62					99	\$21,336		\$21,336.00
2.3	Additional Scenarios (No Project and Proposed Project)			12		25	62					99	\$21,336		\$21,336.00
2.4	Results Analysis and QA-QC			16		16	40					72	\$16,264		\$16,264.00
Task 3	Report Update		16	53	0	48	56	96	0	32	301			\$62,066	
3.1	Report Update Draft		8	45		40	40	80		16	229	\$47,538		\$47,538.00	
3.2	Report Update Final		8	8		8	16	16		16	72	\$14,528		\$14,528.00	
Task 4	Project Management		0	36	24	0	0	0	24	0	84			\$21,720	
4.1	Project Management and Coordination			36	24				24		84	\$21,720		\$21,720.00	
	Total, Hours		28	246	24	339	282	346	24	32	1,321				
	TOTAL FEE		\$9,744	\$75,276	\$6,480	\$73,902	\$55,554	\$53,976	\$4,224	\$3,808	\$282,964			\$282,964	

ATTACHMENT B
2025 Fee Schedule

**Stockton East Water District
2025 CalSim Modeling
STANTEC FEE SCHEDULE 2025**

CLASSIFICATION	HOURLY/ UNIT RATE
Consultant: Stantec Consulting Services, Inc.	
Sr. Advisor / Technical Lead	\$348.00
Principal Engineer / Scientist II	\$306.00
Principal Engineer / Scientist I	\$270.00
Senior Project Engineer/Scientist	\$239.00
Project Engineer/Scientist	\$218.00
Supervising Engineer/Scientist	\$197.00
Senior Engineer / Scientist	\$176.00
Staff Engineer/Scientist	\$156.00
Junior Engineer/Scientist	\$130.00
Senior GIS/CAD/Graphics	\$166.00
GIS/CAD/Graphics	\$130.00
Principal Public Affairs Specialist	\$291.00
Senior Public Affairs Specialist	\$192.00
Public Affairs Specialist I	\$166.00
Editor	\$156.00
Contract Administrator	\$176.00
Administrative Assistant/Typist	\$119.00
ADDITIONAL FEES	
Mileage Rate per mile	Billed at prevailing IRS rates
Markup on expenses	10%
Markup on subconsultants	10%

**Rates escalate 4% on January 1 of each calendar year*

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