

**AGREEMENT NUMBER A-20-1**  
**AGREEMENT FOR CONSULTING SERVICES FOR THE IMPLEMENTATION OF THE EAST**  
**SAN JOAQUIN SUBBASIN GROUNDWATER SUSTAINABILITY PLAN**

This AGREEMENT, made and entered into February 12, 2020 (“Effective Date”) by and between the EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY, a joint powers agency acting pursuant to Government Code Section 6500 et seq, hereinafter referred to as “GWA,” and WOODARD & CURRAN, INC., a Maine corporation, hereinafter referred to as “CONSULTANT”.

WITNESSETH:

WHEREAS, East San Joaquin Groundwater Authority (“GWA”) has prepared the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan (“ESJGSP”) in conformance with the Sustainable Groundwater Management Act (“SGMA”); and

WHEREAS, GWA and its member agencies are required to implement the ESJGSP and to comply with the provisions of SGMA; and

WHEREAS, SGMA requires the submittal of an annual report on the April 1 following adoption of the groundwater sustainability plan and each year thereafter; and

WHEREAS, in addition to annual reporting, the GWA, on behalf of its members, will implement provisions of the GSP which will include, but are not limited to, applying and implementing the Eastern San Joaquin Integrated Water Flow Model (“ESJ IWFM”), implement the Data Management Systems, develop a financial plan and further work to implement projects identified in the ESJGSP. These and other engineering activities are collectively referred to herein as the “PROJECT”; and

WHEREAS, Woodard & Curran (“CONSULTANT”) prepared the ESJGSP, supported the Proposition 68 Grant to help fund implementation of the ESJGSP, developed the groundwater flow model, employs experienced, uniquely qualified and duly licensed professional engineers, and has special expertise and knowledge that is unique to the Eastern San Joaquin Groundwater Subbasin; and

WHEREAS, GWA desires to engage the services of CONSULTANT for the PROJECT under a Master Services Agreement (AGREEMENT).

NOW, THEREFORE, the parties hereto mutually agree as follows:

## I – SCOPE OF WORK

CONSULTANT shall perform the work under this AGREEMENT as referenced and defined in Exhibit “A” attached hereto and incorporated herein by this reference, hereinafter referred to as “SCOPE OF WORK”. The SCOPE OF WORK can be revised, modified, or amended through the issuance of specific TASK ORDERS, each to be uniquely numbered and signed by an authorized representative of both parties to this AGREEMENT. TASK ORDERS will identify the specific TASK ORDER scope of work, schedule, budget and assigned staff. CONSULTANT shall provide all labor, equipment, tools and facilities necessary for the completion of the SCOPE OF WORK and any TASK ORDERS issued under this AGREEMENT.

A. CONSULTANT represents that all professional personnel required in performing the services under this AGREEMENT are qualified and will be identified in the SCOPE OF WORK AND TASK ORDERS.

B. CONSULTANT represents that all work performed pursuant to this AGREEMENT either by CONSULTANT or at its direction shall be sufficient to meet the SCOPE OF WORK, any TASK ORDER requirements and the terms of this AGREEMENT, and shall be rendered in accordance with the accepted practices and standards of CONSULTANT’s profession. All work shall be performed according to the requirements of GWA, and other applicable federal, state, and local agencies.

## II - SCHEDULE

A. Notwithstanding anything to the contrary in this Agreement, this Agreement shall commence upon the Effective Date and will remain in full force and effect for two calendar years unless sooner terminated. The ESJGWA may, at its sole option and discretion, extend the term of this Agreement for an additional period of one year, or other term mutually agreed to in a writing signed by both parties.

B. The time schedule for all work shown in the SCOPE OF WORK and any subsequently issued TASK ORDER shall be performed by CONSULTANT in accordance with the estimated schedule contained in the relevant SCOPE OF WORK or TASK ORDER. The time for performance by CONSULTANT will begin upon issuance of Notice to Proceed by GWA or its PLAN ADMINISTRATOR, currently designated as the San Joaquin County Director of Public Works.

C. The work shown in the SCOPE OF WORK or TASK ORDER shall be completed within the term specified within the schedule. CONSULTANT shall diligently pursue and coordinate the various tasks contained in the SCOPE OF WORK or TASK ORDER and proceed according to the schedule in an orderly and timely manner. The schedule may be modified by the written consent of GWA or its designated representative, but only in the event that such modifications are necessary due to revisions in the SCOPE OF WORK or TASK ORDER caused by the GWA or other reviewing agency, or for other reasons beyond the control of CONSULTANT or it is mutually agreed upon and a written request for modification by CONSULTANT is made at least eight (8) weeks prior to the end of the SCHEDULE. Completion of additional services will be done pursuant to Section IV - CHANGES IN SCOPE OF SERVICES.

D. Except as to any rights or obligations which survive discharge, this AGREEMENT shall be discharged, and the parties shall have no further obligation to each other, upon completion of the PROJECT as certified by CONSULTANT and accepted by GWA. The following provisions in this AGREEMENT shall survive discharge: Section VI - DOCUMENTATION AND SERVICES BY CONSULTANT and Section XII - HOLD HARMLESS. The time for performance by CONSULTANT will be completed upon issuance of Notice of Completion by GWA.

E. TASK ORDERS in excess of dollar amounts identified in the GWA's approved budget will be reviewed and approved by the GWA Board of Directors prior to any notice to proceed issued by the GWA designated representative. TASK ORDERS or change orders to any task order under this amount may be approved in writing by the GWA designated representative.

### III - COMPENSATION

A. CONSULTANT shall be compensated in accordance with the compensation schedule listed in Exhibit "B", attached hereto and incorporated herein by this reference, and any

subsequently issued and approved TASK ORDER. GWA shall reimburse CONSULTANT up to an amount not to exceed One Hundred Sixty Two Thousand Dollars (\$162,000.00), which sum includes all expenses of whatever nature including, but not limited to the tasks and deliverables identified in the SCOPE of WORK, and which amount includes those tasks which may be covered by subsequently issued TASK ORDERS. Actual costs shall not exceed the personnel wage rate sheets and other task costs set forth in the Exhibit B. CONSULTANT shall also comply with Title 49, Code of Federal Regulations, Part 18 (Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments) in the procurement of services, supplies or equipment.

B. GWA shall manage and administer the expenditure limits and associated CONSULTANT and subconsultant expenditure limits in accordance with the costs identified in Exhibit "B" ("COST PROPOSAL") and subsequently issued TASK ORDERS. If tasks are completed by CONSULTANT and subconsultants and accepted by GWA, and if CONSULTANT can verify cost savings that result in available residual unexpended funds, then these amounts shall be identified by CONSULTANT and reported to GWA. If CONSULTANT forecasts any task expenditure limit overruns and associated CONSULTANT cost limit overruns or subconsultant cost limit overruns, then these cost overruns shall be identified by CONSULTANT and reported to GWA. Prior written GWA approval must be secured before any cost overrun can be authorized. With prior written GWA approval, if residual unexpended funds are available, then these funds, at GWA'S discretion, may be applied to cost overruns as well as additional supplemental work GWA may request from CONSULTANT. CONSULTANT shall provide a monthly written summary of progress, critical issues, schedule and budget performance, etc, and any cost savings or forecasted overruns are to be identified by CONSULTANT and reported to GWA.

C. Compensation will be provided by GWA to CONSULTANT only for work actually performed during the term of this AGREEMENT. Compensation will be based on the actual amount of work performed in accordance with the SCOPE OF WORK and any subsequently issued TASK ORDERS, personnel wage rate sheets and other costs set forth in subsequently issued TASK ORDERS or the COST PROPOSAL. The GWA reserves the right to eliminate or reduce the scope of any work listed in the SCOPE OF WORK or any TASK ORDER. No additional compensation will be provided for work eliminated from the original SCOPE OF

WORK or any TASK ORDER or for work performed under a reduced SCOPE OF WORK/COST PROPOSAL regardless of the reason for such elimination or reduction.

D. For the purpose of compensation, payments shall be made monthly by GWA, based upon the actual hours of work performed by CONSULTANT. All actual direct costs must be specifically identified evidencing in proper detail the nature and propriety of the charges. Any direct costs not specifically identified in the COST PROPOSAL or TASK ORDER must be approved by GWA before any expenses are incurred and before any request for reimbursement can be made by CONSULTANT. CONSULTANT shall submit payment requests in duplicate addressed to GWA, which indicate the number of actual hours of work performed, the personnel wage rates, and the other costs related thereto. Monthly payment requests shall include progress updates comparing projected and actual progress, tasks completed, percent of work completed, and current levels of budget expenditures as a percentage of funds originally allocated for the specific task in the SCOPE OF WORK/COST PROPOSAL or TASK ORDERS.

E. Compensation by GWA to CONSULTANT shall be made within sixty (60) calendar days of receipt by GWA of the complete payment request for a specific month and shall not exceed ninety - five (95) percent of the payment request. The final five (5) percent of the compensation shall be paid by GWA to CONSULTANT within sixty (60) calendar days from the date of the completion of the following events:

1. The completion of the SCOPE OF WORK and any validly issued TASK ORDERS and the acceptance of CONSULTANT's work by GWA; and,
2. CONSULTANT's submittal of a certified statement that all subcontractors, subconsultants, agents, and material suppliers who may have a claim for payment for work done or materials supplied under this AGREEMENT are paid in full less any retention currently held by GWA.

F. Upon the written request of CONSULTANT, GWA may, at its sole discretion, reduce the retention percentage to less than five (5) percent of payments for completed Tasks and deliverables identified in the SCOPE OF WORK or validly issued TASK ORDER. CONSULTANT's request should provide a statement that no claims are anticipated on the additional money to be released.

#### IV - CHANGES IN SCOPE OF SERVICES

A. GWA reserves the right to make such alterations as may be deemed necessary or advisable and to require such extra work as may be required for the proper completion of the work by the CONSULTANT in connection with PROJECT and with implementation of PROJECT. Alterations in the services identified in the SCOPE OF WORK or subsequently issued TASK ORDERS shall be made by "CHANGE ORDERS". CHANGE ORDERS shall be authorized and issued in writing by GWA or its designated representative. CHANGE ORDERS will be issued as necessary and shall constitute a supplement to this AGREEMENT.

B. Each CHANGE ORDER shall list the scope of altered or additional services to be performed, state the time period within which the altered or additional work is to be completed, delineate any special conditions, state the compensation in accordance with the personnel wage rate sheets and other costs set forth in the SCOPE OF WORK/COST PROPOSAL, include work effort and cost detail support data, and authorize CONSULTANT to proceed with the services detailed in the CHANGE ORDER. When compensation for an item of work is subject to adjustment under the provisions of this section, CONSULTANT shall promptly furnish the authorized GWA official with adequate cost data for such item of work.

C. CONSULTANT shall perform services which alter the SCOPE OF WORK or subsequently issued TASK ORDERS only after receipt of a CHANGE ORDER from GWA executed and signed by GWA's designated representative and CONSULTANT. Additional services requested by GWA and not identified in the SCOPE OF WORK or subsequently issued TASK ORDERS, shall be performed by CONSULTANT only after issuance of a TASK ORDER executed by GWA or its designated representative.

#### V - DOCUMENTATION AND SERVICES BY GWA TO CONSULTANT

A. CONSULTANT shall collect and GWA shall furnish access to all information, data, and maps as currently exist in files necessary for carrying out the services as set forth in this AGREEMENT, to CONSULTANT, without charge, and GWA shall cooperate in every way possible in the carrying out of the work without undue delay. CONSULTANT agrees that GWA's responsibility to provide access to information is limited to data of record in GWA files and in the format as recorded. CONSULTANT shall check and investigate existing information and

conditions and notify the GWA of any deficiencies that the CONSULTANT discovers.

## VI - DOCUMENTATION AND SERVICES BY CONSULTANT TO GWA

A. CONSULTANT shall furnish all reports and drawings/plans in hard copy and electronic format as determined by GWA, and reproducibles of all reports and drawings submitted for under this AGREEMENT, to GWA upon completion of this AGREEMENT or earlier termination. All documents and electronic files including, but not limited to, passwords, source codes, etc., submitted by CONSULTANT to GWA shall become the property of GWA upon completion of this AGREEMENT or earlier termination.

B. No material prepared in connection with this AGREEMENT shall be subject to copyright in the United States or any other country. All drawings, specifications, documents and other memoranda relating to work and services hereunder, shall remain or become the property of the GWA whether executed by or for the CONSULTANT for GWA, or otherwise by or for the CONSULTANT, or by or for a subcontractor operating under the CONSULTANT'S supervision, or direction, and all such documents and copies thereof shall be returned or transmitted to GWA forthwith upon GWA written demand, termination or completion of the work under this AGREEMENT.

C. GWA agrees that if GWA substantially and materially alters any of the instruments of service, including supporting studies, materials, plans, and other documents delivered to GWA by CONSULTANT upon completion of the AGREEMENT, any use by GWA of such instruments of service for this or any other project shall be at the GWA's sole risk and responsibility.

D. CONSULTANT and subcontractors shall maintain all books, documents, papers, accounting records, and other evidence pertaining to performance under this AGREEMENT, but not limited to, the costs of administering this AGREEMENT. Such materials shall be available at their respective offices at all reasonable times during this AGREEMENT period and for three years from the date of final payment under this AGREEMENT.

E. Should any portion of the work conducted under this AGREEMENT be conducted using state or federal grant funds or monies, GWA will provide CONSULTANT a copy of any rules, requirements, restrictions, provisions or conditions

for receipt and use of those funds and the CONSULTANT agrees that it will be bound by and comply with the relevant provisions in any agreement between the GWA and funding agency.

#### VII. WORK PRODUCT

GWA and CONSULTANT acknowledge and agree that "Work Product", and all components of it, provided or developed by CONSULTANT hereunder or in connection herewith shall constitute "works made for hire" within the meaning of Title 17 United States Code Section 101 et seq. (the "Copyright Act"), and all right, title, and interest in and to the Custom Products shall vest in the GWA immediately upon development. To the extent any such Custom Products may not be the sole and exclusive property of the GWA and/or may not be a "work made for hire" as defined in the Copyright Act upon development, then CONSULTANT agrees to and hereby does sell, transfer, grant and assign to the GWA all copyrights, patents, trade secrets, inventions, and other proprietary rights, title, and interest in and to such Custom Products upon development. On all written material, whether in print, electronic, or any media form, constituting "Work Product", CONSULTANT shall place or cause to be placed the following legend preferably in the lower right corner: © 202\_ GWA of San Joaquin. All rights reserved.

#### VIII - PERSONNEL

A. CONSULTANT agrees that it employs, or will employ, at its expense, all personnel required in performing the services under this AGREEMENT. Such personnel shall not be employees of, or have any contractual relationship with GWA. The CONSULTANT further agrees that should any personnel be replaced or added after the execution of this AGREEMENT, the CONSULTANT shall notify the GWA within five (5) business days and said personnel shall be subject to the GWA's written approval prior to initiating any work under this AGREEMENT.

B. GWA acknowledges that CONSULTANT may subcontract certain portions of the SCOPE OF WORK or subsequently issued TASK ORDERS to subcontractors as specified in the SCOPE OF WORK, COST PROPOSAL or TASK ORDER. GWA hereby approves the use of these firms as subcontractors. Should any subcontractors be replaced or added after GWA's



approval, GWA shall be notified within five (5) days and said subcontractors shall be subject to GWA's designated representative's written approval prior to initiating any work under this AGREEMENT. CONSULTANT shall be fully responsible for the complete and full performance of all services of subcontractors and shall compensate all such subcontractors for their work. CONSULTANT shall certify in writing to GWA the payment, in full, of all sums due to subcontractors, subconsultants, agents, and material suppliers who may have a claim for payment for work done or materials supplied under this AGREEMENT.

All of the services required by this AGREEMENT shall be performed by CONSULTANT or under its direct supervision and all personnel engaged in the performance of such activities shall be fully qualified and shall be authorized or permitted under federal, state and/or local law to perform such services.

C. No discrimination shall be made by CONSULTANT in the employment of persons to work under this contract because of race, color, national origin, ancestry, sex, or religion of such person.

#### IX - CONFLICT OF INTEREST

The CONSULTANT affirms that the CONSULTANT presently has no interest that has not been previously disclosed to the GWA; and, shall not acquire any interest, direct or indirect, which could conflict in any manner or degree with the performance of services required to be performed under this AGREEMENT; and, in the event of change in either private interests or services under this AGREEMENT, the CONSULTANT will immediately raise with the GWA any question regarding possible conflict of interest which may arise as a result of such change. The CONSULTANT further agrees that in the performance of this AGREEMENT, no person having any such interest shall be employed. A potential conflict of interest includes, but is not limited to, work related to contracts with GWA member agencies, other cities, other parties, local land developers and current clients who may have a financial interest in the outcome of the PROJECT. At the GWA's discretion, a potential conflict of interest may be waived or factored into a modified TASK ORDER, as the case may be.

## X -- TERMINATION

GWA reserves the right to terminate AGREEMENT at any time prior to completion by CONSULTANT of the tasks and work outlined in the SCOPE OF WORK and any supplemental TASK ORDERS, upon receipt of written notice of termination to CONSULTANT. Upon termination, CONSULTANT shall immediately turn over to GWA all documents, records, papers, plans, drawings, and copies of electronic files, whether finished or not, generated by or supplied to CONSULTANT in connection with its performance of services pursuant to AGREEMENT. Costs to assemble, package and transmit information submitted to GWA shall be entirely the responsibility of CONSULTANT and subcontractors and shall not be chargeable in any way to GWA. Said documents, records, papers, plans, drawings, and copies of electronic files shall become the property of GWA. GWA agrees that if GWA substantially and materially alters any of the instruments of service, including documents, records, papers, plans, drawings, and copies of electronic files delivered to GWA by CONSULTANT upon termination of AGREEMENT, any use by GWA of such instruments of service for this or any other project shall be at GWA's sole risk and responsibility.

At the time, CONSULTANT submits project documents and materials to GWA, CONSULTANT shall also submit to GWA a request for final compensation for CONSULTANT and subcontractors for services rendered pursuant to AGREEMENT prior to the date of the written notice of termination. GWA shall review and approve all submittals, and negotiated compensation will not exceed original fiscal COST PROPOSAL budget limits. Furthermore, GWA may adjust final compensation upon termination to CONSULTANT and subcontractors to reflect remaining services necessary to complete the original SCOPE OF WORK or subsequently issued TASK ORDERS. GWA shall assume no liability for costs, expenses, or lost profits resulting from contracts entered into by CONSULTANT with third parties in reliance upon AGREEMENT. Such payment upon termination shall be accepted by CONSULTANT as complete compensation of CONSULTANT for all services, and CONSULTANT waives all payment claims against GWA arising directly or indirectly under AGREEMENT.

## XI -- ASSIGNMENT

Both parties shall give their personal attention to the faithful performance of this

AGREEMENT and shall not assign, transfer, convey, or otherwise dispose of this AGREEMENT or any right, title or interest in or to the same or any part thereof without the prior written consent of the other party and then only subject to such terms and conditions as the other party may require. A consent to one assignment shall not be deemed to be a consent to any subsequent assignments. Any assignments without such approval shall be void and, at the option of the other party, shall terminate this AGREEMENT and any license, right or privilege granted herein. This AGREEMENT and interest herein shall not be assignable by operation of law without the prior written consent of the other party.

#### XII - HOLD HARMLESS

A. The CONSULTANT shall, at its expense, defend, indemnify and hold harmless the Eastern San Joaquin Groundwater Authority, its members and their employees, officers, directors, contractors and agents from and against any losses, liabilities, damages, penalties, costs, fees including without limitation reasonable attorneys' fees, and expenses from any claim or action, including without limitation for bodily injury or death, to the extent caused by or arising from the negligence or willful misconduct of CONSULTANT, its employees, officers, agents or subconsultants.

B. The duty of CONSULTANT to indemnify and save harmless as set forth herein, shall include both the duty to indemnify and at CONSULTANT's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises when such claim is made and shall be independent of any finding of negligence. CONSULTANT shall provide legal counsel reasonably acceptable to the GWA.

#### XIII – INSURANCE

CONSULTANT shall not commence any work until CONSULTANT obtains, at CONSULTANT's own expense, all required insurance that shall be primary, shall name the GWA as additional insured, except for professional liability insurance and workers' compensation insurance, and shall expressly indicate that such insurance is related to CONSULTANT's activities under this AGREEMENT. CONSULTANT shall furnish certification of insurance within ten (10) calendar days of execution of this AGREEMENT by GWA and prior to

issuance by GWA of the Notice to Proceed. Such insurance must be from an insurer admitted to the State of California and have the approval of GWA as to limit, form and amount. The types of insurance CONSULTANT is required to obtain for the full term of this AGREEMENT will be Commercial General Liability Insurance, Professional Liability Insurance and Worker's Compensation Insurance. As evidence of specified insurance coverage, GWA may, in lieu of actual policies, accept certificates issued by the insurance carrier showing such policies are in force for the specified period during which services will be provided by CONSULTANT. Each policy, or certificate, will bear an endorsement or statement waiving right of cancellation or reduction in coverage without thirty (30) calendar days notice in writing to be delivered by registered mail to GWA.

A. Commercial General Liability Insurance - CONSULTANT shall obtain and keep in force and effect during the term of this AGREEMENT, at the CONSULTANT's own expense, General Liability Insurance on an occurrence based policy, including contractual liability with a combined single limit in the minimum amount of Two Million Dollars (\$2,000,000), and automobile liability insurance with a combined single limit in the minimum amount of One Million Dollars (\$1,000,000).

Such insurance shall name the GWA, its members and their officers, agents, employees, representatives as additional insureds.

B. Professional Liability Insurance - CONSULTANT shall obtain, at CONSULTANT's own expense, and provide evidence of Professional Liability Insurance on an occurrence based policy with an aggregate limit in the minimum amount of Two Million Dollars (\$2,000,000.00).

C. Workers' Compensation Insurance - CONSULTANT shall take out and maintain, during the life of the AGREEMENT, Workers' Compensation Insurance for all employees of CONSULTANT employed at the site of the project and, in case any work is sublet, the CONSULTANT shall require subconsultants to similarly provide Workers' Compensation Insurance for all of the latter's employees. If any class of employees engaged in hazardous work under this AGREEMENT at the site of the project is not protected under the Workers' Compensation Statute, the CONSULTANT shall provide and shall cause any subconsultant to provide insurance for the protection of employees engaged in hazardous work.

CONSULTANT, by executing this AGREEMENT, certifies that CONSULTANT is aware of the provisions of Section 3700 et. seq. of the Labor Code of the State of California requiring every employer to be insured against the liability for Workers' Compensation or to undertake self insurance in accordance with the provisions of that code, and certifies that CONSULTANT will comply with such provisions before commencing the performance of the work of this AGREEMENT.

#### XIV - WAIVER

In the event that either GWA or CONSULTANT shall at any time or times waive any breach of this AGREEMENT by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this AGREEMENT whether of the same or any other covenant, condition or obligation.

#### XV - COSTS AND ATTORNEY'S FEES

The prevailing party of any action brought to enforce or construe the terms of this AGREEMENT may recover from the other party its reasonable costs and attorney's fees expended in connection with such an action.

#### XVI - AGREEMENT CONTAINS ALL UNDERSTANDING

This AGREEMENT represents the entire integrated AGREEMENT between GWA and CONSULTANT, and supersedes all prior negotiations, representations or agreements, either written or oral. This document may be amended only by written instrument signed by both GWA and CONSULTANT. This AGREEMENT shall be governed by the laws of the State of California.

#### XVII – COUNTERPARTS

This AGREEMENT may be executed in one or more counterparts, all of which together shall constitute only one Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed on the day and year first above written.


EASTERN SAN JOAQUIN GROUNDWATER  
AUTHORITY "GWA"

WOODARD & CURRAN, INC.  
a Maine corporation

By:   
\_\_\_\_\_  
CHARLES WINN, Chairman  
"GWA"

By:   
Christy Kennedy, P.E., C.H.G.  
Project Manager  
"CONSULTANT"

RECOMMENDED FOR APPROVAL

By:   
\_\_\_\_\_  
KRIS BALAJI, PMP, P.E.  
Secretary of "GWA"

APPROVED AS TO FORM

By:   
\_\_\_\_\_  
MONICA J. STREETER  
General Counsel

EXHIBIT "A"  
SCOPE OF WORK

## Scope of Work for the ESJ Subbasin Annual Report and Support Services through June 30, 2020

The following scope of work, schedule and fee estimate is submitted by Woodard & Curran to support the next steps with the Groundwater Sustainability Plan. There are five discrete tasks including preparation of the Annual Report due April 1, 2020. The schedule for work and estimated fee is presented following the scope items. This work would be performed by Woodard & Curran staff for the East San Joaquin Groundwater Authority under direction by the County. The work would kick-off on February 12, 2020 following approval of this scope of work at the February Board Meeting.

### Task 1- Preparation of First Annual Report

Under [Water Code Section 10733.2](#), DWR was required to draft and adopt emergency regulations for the evaluation and implementation of GSPs<sup>1</sup>. The emergency regulations adopted by the California Water Commission spell out what is required in a GSP<sup>2</sup>. Article 7 covers Annual Reports and Periodic Evaluations by the Agency and describes the procedural and substantive requirements for the annual reports<sup>3</sup>. Each GSA, or the ESJGWA, is required to submit an annual report to the Department by April 1 of each year following the adoption of the Plan (§ 356.2. Annual Reports)<sup>4</sup>. The annual report must include the following components for the preceding water year:

- (a) General information, including an executive summary and a location map depicting the basin covered by the report.
- (b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:
  - (1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:
    - A. *Groundwater elevation contour maps* for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.
    - B. *Hydrographs of groundwater elevations* and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.
  - (2) *Groundwater extraction for the preceding water year*. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.

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<sup>1</sup> <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans>>

<sup>2</sup> Cal Code of Regs. Title 23. Waters Division 2. Department of Water Resources Chapter 1.5. Groundwater Management Subchapter 2. Groundwater Sustainability Plans  
[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I74F39D13C76F497DB40E93C75FC716AA&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I74F39D13C76F497DB40E93C75FC716AA&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

<sup>3</sup> Authority cited: [Water Code Section 10733.2](#), [Water Code](#).

<sup>4</sup> Authority cited: [Water Code Sections 10727.2](#), [10728](#).



- (3) *Surface water supply used or available for use, for groundwater recharge or in-lieu use* shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.
- (4) *Total water use* shall be collected using the *best available measurement methods* and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.
- (5) *Change in groundwater in storage* shall include the following:
  - (A) Change in groundwater in storage maps for each principal aquifer in the basin.
  - (B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.
- (c) A *description of progress* towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.
- (d) The first annual report for the ESJ Subbasin GSP will be due on April 1, 2020. Per California Code of Regulations §356.2 (SGMA regulations), annual reports must include three key sections: 1) General Information, 2) Basin Conditions, and 3) Plan Implementation Progress. Tasks to complete the Annual Report, along with other ongoing support of the GSP implementation process are detailed below.

### ***Subtask 1.1 – Collect, Compile, and Analyze Data***

The Basin Conditions section of the annual report will describe the current groundwater conditions and monitoring results, described further in the bullets below.

Woodard & Curran will work with the County to develop a list of each necessary dataset, the responsible GSA, and due dates for data collection (see “Schedule” section at end of Scope). Data will be compiled and reviewed for basic quality control (e.g. duplicate data or flagging data expected to have errors). Separately, note that groundwater elevation and groundwater quality data will be compiled and imported into the ESJ Subbasin Data Management System (DMS) in Subtask 1.2. Additionally, Woodard & Curran will update the Current Condition Baseline for the ESJWRM model to extend the hydrologic period to Water Year 2019 to support the estimation of data for the Annual Report. This is further explained in Subtask 1.3.

Data will be analyzed and presented for each data type as follows:

- Groundwater Elevation
  - Woodard & Curran will obtain groundwater elevation compiled from the County and the GSAs for monitoring in Fall 2018, and Spring and Fall 2019 and develop groundwater elevation contour maps for the principal aquifer that illustrates

seasonal high and seasonal low groundwater conditions for Water Year 2019 (WY2019), similar to the contour maps developed for the Current & Historical Conditions chapter of the GSP. Specifically, this will include the following map:

- Groundwater elevation contour maps for seasonal high and seasonal low for WY2019
- Hydrographs will also be compiled for each representative monitoring well, showing available historical groundwater elevations through WY2019 with reference to water year type.
- Groundwater Extraction
  - The updated Current Condition Baseline ESJWRM model will be used to estimate the agricultural groundwater extraction. Groundwater extraction by municipalities will be an outcome of the model Baseline update, verified by the data provided by the municipalities.
- Surface Water Supply and Use
  - Surface water diversion data will be collected from the GSAs and analyzed by Woodard & Curran for inclusion in the model. Surface water use data will be estimated consistent with the parameters (e.g. recoverable and non-recoverable losses), as well as delivery areas in the calibrated model. This will be for the period WY 2019.
- Total Water Use
  - Total water use will be estimated using the results from the updated Current Condition Baseline model and will include estimated groundwater extraction and surface water use data and summarized by water use sector and water source type. The measurement method and accuracy of measurements will be documented per the source of data, method of analysis using the model, as required by DWR.
- Annual Water Budget and Change in Groundwater Storage
  - The updated Current Condition Baseline model (ESJWRM) will be used to establish a water budget for WY2019. The model update will be as described in Subtask 1.3.
  - The updated Current Condition Baseline model (ESJWRM) will be used to estimate change in groundwater in storage for the principal aquifer. A map will be generated to show the location of change in storage, as well as graphical figures showing year type, groundwater use, the annual change in groundwater in storage, and the historical cumulative change in groundwater in storage from 1995 through WY 2019.

### ***Subtask 1.2 – ESJ Subbasin Data Management System Update***

This subtask includes time spent making the following updates to the ESJ Subbasin DMS.

- Input data received for Annual Report in template format

### ***Subtask 1.3 – ESJWRM Model Update for Annual Water Budget and Change in Storage***

Woodard & Curran will update the ESJWRM model for the Current Condition Baseline. Note that this Subtask does not include updating the historical model calibration. The Current Condition Baseline update includes:

- Extend precipitation data for WY 2019
- Extend streamflow data for WY 2019
- Update land use and cropping pattern to include the most recent land use survey by the DWR (LandIQ 2016)
- Update of population record and unit water use for municipalities for WY 2019 if available
- Update surface water delivery model input for WY 2019 data from agricultural entities and municipalities
- Update groundwater pumping input data for WY 2019 data from municipalities

The resulting Current Condition Baseline model simulation period will be through WY 2019. This updated CC Baseline model will provide the following information:

- Estimates of agricultural water demand for WY 2019
- Estimates of urban water demand for WY 2019
- Surface water delivery for WY 2019
- Estimate of groundwater pumping for WY 2019
- Estimate of groundwater storage change for WY 2018 to WY 2019
- Simulated groundwater levels in contour map as well as monthly trends in simulated groundwater level at the model calibration wells.

### ***Subtask 1.3 Assumptions:***

The San Joaquin County will be responsible for coordination with the GSAs for the collection of all required data for WY 2019, for input to the model, as follows:

- Surface water diversion data by each agricultural entity
- Surface water diversion data by each municipality
- Groundwater extraction data for each well and for each municipality

- Population records for each municipality
- If data requested does not come in Woodard & Curran will use the latest year information available and will extrapolate with reasonable water year assumptions.

#### ***Subtask 1.4 – Document Plan Implementation Progress***

The Plan Implementation section of the annual report will describe the progress made towards achieving interim milestones as well as implementation of projects and management actions.

Woodard & Curran will work with the GSAs to evaluate and report on the progress towards implementing the GSP, including the status of the shortlisted projects and ongoing development of management actions. Shortlisted projects will be summarized in tabular format. Management actions will be summarized in paragraph form.

#### ***Subtask 1.5 – Prepare Annual Report***

The results of Subtasks 1.1 through 1.4 will be used to develop the WY2019 Annual Report, including an executive summary that highlights the key content of the annual report. The following sections will be included:

1. Executive Summary
2. Introduction
3. Basin Setting
  - a. Groundwater Elevations
  - b. Groundwater Extractions
  - c. Surface Water Supply
  - d. Total Water Use
  - e. Change in Groundwater Storage
4. Plan Implementation Progress
5. References

A Draft Report will be prepared for review by the GSAs. Comments will be incorporated into a Final Report which will be distributed electronically (PDF).

Woodard & Curran will also provide the GSAs a copy of the digital files for supporting data, such as Excel spreadsheets and GIS maps/shapefiles.

#### ***Task 2 – DMS Update***

The Data Management System is a required component of a GSP and was developed for ESJ in 2019. Woodard & Curran will work with the County to collect, organize, and import readily available data beyond the date at which implementation of the DMS was complete. In addition, Woodard & Curran will organize and import data from the Spring 2020 monitoring event into the DMS when it becomes available (typically late April). The data will be reviewed in the DMS to verify no errors occurred during the import process. Data elements to support the Annual Report will be summarized and exported from the DMS as needed.

Woodard & Curran will work with the County to review the business needs and current functional elements for the GSA to enter, conduct QA/QC of, view, upload, generate reports for,

download, and share data. Woodard & Curran will also evaluate DWR's current data standards to ensure the DMS continues to meet those standards. DMS enhancements will be identified, and the DMS will be updated as appropriate in tandem with the work planned under the Prop 68 grant award. These enhancements may include additional geospatial functionality and analysis, enhanced charts, addition of new data types or well information, creation of predefined reports, enhanced quality control tools, or other general improvements. Woodard & Curran will continue to host and maintain the DMS for the term of this contract.

### ***Task 3 – Plan Administration Support***

Woodard & Curran will act in a supporting role to the County in administering the GSP. Tasks include attendance as needed at Advisory Committee meetings (assumed 2 meetings in person and 2 conference calls), attendance at monthly Board meetings until Annual Report is finalized and submitted (assume 2 meetings in person), and four additional as-needed conference calls for planning and strategy. Woodard & Curran will support development of meeting agendas and PowerPoint presentations (assumed two), development of two staff reports and review as needed of staff reports through June 30, 2020. Will support scoping and development of FY 2020-2021 workplan and budget and dovetailing work planning in with Prop 68 grant implementation once awarded.

### ***Task 4 – Outreach Support***

This task includes two subtasks 1) updating the ESJ website and 2) as-needed support for outreach such as a press release, a public outreach meeting and responding to media queries.

### ***Task 5 – Project Coordination***

Woodard & Curran will coordinate the project including developing monthly progress reports and conducting bi-weekly phone calls with County staff to drive project implementation forward.

### **Estimated Schedule**

The estimated schedule for 2020 is shown below and reflects that some prep work was initiated by the County.



EXHIBIT "B"  
COST PROPOSAL



# Fee Estimate

## ESJ Groundwater Authority ESJ Subbasin Annual Report & Support Services

Tasks	Labor						Total Labor Costs (1)	ODCs	Total Fee
	Ali Taghavi	Christy Kennedy	Jeanna Long	Sara Miller	Lindsay Martien	Developer (DMS)			
	PIC	Project Manger	DMS	Planner 2	Planner 2				
<b>Task 1: Annual Report</b>	\$315	\$289	\$289	\$217	\$192	\$151	\$110		
Collect, Compile, Analyze Data		16	4		24				
DMS			20					\$0	\$10,388
Model Update	24			80				\$0	\$5,780
Plan Implementation Progress Reporting	8	24	4	20	60				\$24,920
	32	42	28	100	88	0	0		\$1,346
<b>Subtotal Task 1:</b>								\$0	\$26,472
<b>Task 2: DMS Update for 2020</b>									\$68,906
DMS Update	16		62						
Subtotal Task 2:	16	0	62	0	0	80	0	\$0	\$35,038
<b>Task 3: Plan Administration Support</b>									\$35,038
GWA Meetings, Work Planning for FY 2020-2021	8	48		4	64				
Subtotal Task 3:	8	48	0	4	64	0	0	\$400	\$29,948
<b>Task 4: Outreach Support</b>									\$400
4.1 Support Website Maintenance and Updating		2			12				
4.2 Outreach support including materials and public meeting as-	4	22	4	12	12				\$2,682
Subtotal Task 4:	4	24	4	12	24	0	0	\$392	\$13,662
<b>Task 5: Project Coordination</b>									\$16,564
Progress reporting, invoicing, biweekly calls, administration	4	16			24				
Subtotal Task 5:	4	16	0	0	24	0	6	\$0	\$11,152
<b>TOTAL</b>	64	130	94	116	200	80	6	\$792	\$161,208

1. The individual 2020 hourly rates include salary, overhead and profit.