



County of Santa Barbara
BOARD OF SUPERVISORS

Minute Order

February 12, 2019

Present: 5 - Supervisor Williams, Supervisor Hart, Supervisor Hartmann, Supervisor Adam, and Supervisor Lavagnino

PUBLIC WORKS, BOARD OF DIRECTORS, WATER AGENCY

File Reference No. 19-00129

RE: Consider recommendations regarding an agreement for Services of Independent Contractor with GSI Water Solutions, Inc., Third and Fifth Districts, as follows:

Acting as the Board of Directors, Water Agency:

a) Approve and authorize the Chair to execute the Agreement for Services of Independent Contractor with GSI Water Solutions, Inc. (a local vendor) to provide consulting services for a hydrogeological study of the Santa Ynez River Valley Groundwater Basin Eastern Management Area for the period of February 12, 2019 through June 30, 2022 in an amount not to exceed \$968,136.00;

b) Approve a 10% contingency with GSI Water Solutions, Inc. in the amount of \$96,813.00 for additional work that may be needed to complete the hydrogeological study; and

c) Determine that the proposed actions are not a project under the California Environmental Quality Act, pursuant to Guidelines Section 15378(b)(5), organization or administrative activities that will not result in a direct or indirect physical change in the environment.

A motion was made by Supervisor Adam, seconded by Supervisor Hartmann, that this matter be Acted on as follows:

Acting as the Board of Directors, Water Agency:

a) Approved and authorized; Chair to execute; and

b) and c) Approved.

The motion carried by the following vote:

Ayes: 5 - Supervisor Williams, Supervisor Hart, Supervisor Hartmann, Supervisor Adam, and Supervisor Lavagnino

Board Contract Summary

BC 19-182

For use with Expenditure Contracts submitted to the Board for approval. Complete information below, print, obtain signature of authorized departmental representative, and submit this form, along with attachments, to the appropriate departments for signature. See also: Auditor-Controller Intranet Policies->Contracts.

D1.	Fiscal Year	2018-19
D2.	Department Name	PW Water Agency
D3.	Contact Person	Matt Young
D4.	Telephone	X3546

K1.	Contract Type (check one):	Personal Service	Capital
K2.	Brief Summary of Contract Description/Purpose	Prepare hydrogeological study of the SYRV Groundwater Basin Eastern Management Area	
K3.	Department Project Number	WA8245	
K4.	Original Contract Amount	\$1,064,949 (\$968,136 plus \$96,813)	
K5.	Contract Begin Date	February 12, 2018	
K6.	Original Contract End Date	June 30, 2022	
K7.	Amendment? (Yes or No)	N/A	
K8.	- New Contract End Date	N/A	
K9.	- Total Number of Amendments	N/A	
K10.	- This Amendment Amount	N/A	
K11.	- Total Previous Amendment Amounts	N/A	
K12.	- Revised Total Contract Amount	N/A	

B1.	Intended Board Agenda Date	February 12, 2019
B2.	Number of Workers Displaced (if any)	N/A
B3.	Number of Competitive Bids (if any)	N/A
B4.	Lowest Bid Amount (if bid)	N/A
B5.	If Board waived bids, show Agenda Date	N/A
	and Agenda Item Number	
B6.	Boilerplate Contract Text Changed? (If Yes, cite Paragraph)	N/A

F1.	Fund Number	3050
F2.	Department Number	054
F3.	Line Item Account Number	7460
F4.	Project Number (if applicable)	WA8245
F5.	Program Number (if applicable)	3016
F6.	Org Unit Number (if applicable)	
F7.	Payment Terms	Net 30

V1.	Auditor-Controller Vendor Number	097788
V2.	Payee/Contractor Name	GSI Water Solutions, Inc.
V3.	Mailing Address	55 SW Yamhill St., STE 300
V4.	City State (two-letter) Zip (include +4 if known)	Portland, CA 97204
V5.	Telephone Number	(805) 895-3956
V6.	Vendor Contact Person	Jeff Barry
V7.	Workers Comp Insurance Expiration Date	11/1/19
V8.	Liability Insurance Expiration Date	11/1/19
V9.	Professional License Number	
V10.	Verified by (print name of county staff)	

V11 Company Type (Check one): Individual Sole Proprietorship Partnership Corporation

I certify information is complete and accurate; designated funds available; required concurrences evidenced on signature page.

Date: 1/17/18 Authorized Signature: 

BC 19-182

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the Santa Barbara County Water Agency, a political subdivision of the State of California (hereafter COUNTY) and GSI Water Solutions, Inc. with an address at 418 Chapala Street, STE F, Santa Barbara, CA 93101 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. DESIGNATED REPRESENTATIVE

Matt Young at phone number (805) 568-3546 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Jeff M. Barry at phone number (805) 895-3956 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY:	Mr. Thomas D. Fayram, Santa Barbara County Water Agency, 130 E. Victoria Street, Suite 200, Santa Barbara, CA 93101
To CONTRACTOR:	Mr. Jeff M. Barry, GSI Solutions, Inc., 55 SW Yamhill Street, STE 200, Portland, OR 97204

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. SCOPE OF SERVICES

CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

4. TERM

CONTRACTOR shall commence performance on **February 12, 2019** and end performance upon completion, but no later than **June 30, 2022** unless otherwise directed by COUNTY or unless earlier terminated.

5. COMPENSATION OF CONTRACTOR

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing

shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under

this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

13. COUNTY PROPERTY AND INFORMATION

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

14. RECORDS, AUDIT, AND REVIEW

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at

any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

15. INDEMNIFICATION AND INSURANCE

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT C attached hereto and incorporated herein by reference.

16. NONDISCRIMINATION

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

17. NONEXCLUSIVE AGREEMENT

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

18. NON-ASSIGNMENT

CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.
2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the

term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.

3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. **By CONTRACTOR.** Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.
- C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. SECTION HEADINGS

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. SEVERABILITY

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. REMEDIES NOT EXCLUSIVE

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. TIME IS OF THE ESSENCE

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. NO WAIVER OF DEFAULT

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. SUCCESSORS AND ASSIGNS

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. COMPLIANCE WITH LAW

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

28. CALIFORNIA LAW AND JURISDICTION

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. AUTHORITY

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. **SURVIVAL**

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

32. **PRECEDENCE**

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

//
//

Agreement for Services of Independent Contractor between the Santa Barbara County Water Agency and GSI Water Solutions, Inc.

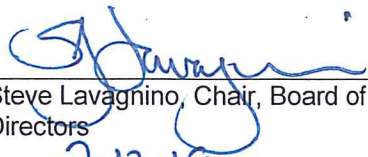
IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Ex Officio Clerk of Board of Directors
of the Santa Barbara County Water
Agency

**SANTA BARBARA COUNTY WATER
AGENCY:**

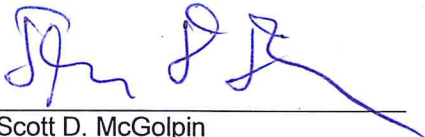
By: 
Deputy Clerk


By: 
Steve Lavagnino, Chair, Board of
Directors
Date: 2-12-19

RECOMMENDED FOR APPROVAL:

Santa Barbara County Water
Agency

**CONTRACTOR:
GSI Water Solutions, Inc.**

By: 
Scott D. McGolpin
Public Works Director

By: 
Authorized Representative
Name: David Livesey
Title: President


APPROVED AS TO FORM:

Michael C. Ghizzoni
County Counsel

APPROVED AS TO ACCOUNTING FORM:

Betsy M. Schaffer, CPA
Auditor-Controller

By: 
Deputy County Counsel

By: 

APPROVED AS TO FORM:

Ray Aromatorio, ARM, AIC
Risk Manager

By: 
Risk Management

EXHIBIT A
STATEMENT OF WORK

GSI Water Solutions, Inc.
Santa Ynez Basin EMA GSP
Scope of Work

Updated: 12/21/18

Task 1 - Stakeholder Communications and Engagement (C&E) Plan and Outreach Support

In this task, GSI will develop a Communications and Engagement (C&E) Plan that will provide a focused approach to addressing stakeholder C&E activities during GSP development and implementation. We recommend that outreach begin early in the GSP process. Early stakeholder engagement can lead to improved outcomes and broader support for the GSP, as interested parties are allowed active input to the decision-making process. Outreach continues throughout GSP development and implementation. This task also includes customization of a groundwater communications portal (GCP) that will be used to capture and organize public comments and responses throughout the project. Each element is described in the following subtasks.

1.1 Prepare Stakeholder C&E Plan

The C&E Plan will be written following guidelines provided in the DWR Guidance Document on Stakeholder Communications and Engagement, available on the DWR website. The C&E Plan will address effective engagement with multiple and varied stakeholders, methods and tools for communicating, and ways to conduct meaningful outreach for GSP development and participation in the decision-making process.

Task 1.1 Deliverable:
Stakeholder C&E Plan

1.2 Customize a GCP

The level of stakeholder engagement required by SGMA and the GSP Regulations is substantial. We will utilize a tool developed by GEI to facilitate the successful execution of these requirements. The tool is called the Groundwater Communication Portal (GCP). The GCP provides an automated method for the EMA-GSA to reach out to their constituents and to track that outreach for reporting to DWR. The GCP is web-based, easy to use, and requires no special training (but a User Guide will be prepared for documentation purposes). Because the tool already exists, the only labor required for implementation will be for customization. There are two types of users who engage with a GCP: public users (interested parties) and administrative users (GSA and stakeholder engagement consultant staff). Public users visit the GCP to register as an interested party, view events, view public documents, and comment on the draft GSP. Administrative users, such as EMA staff, utilize the GCP for much more. The core administrative functions of the GCP are listed below.

- **Interested Parties List.** The GCP stores the interested parties list and allows new interested parties to self-register. Part of customization will be importing the GSA's existing contacts to the GCP. After this one-time data upload, the interested parties list will maintain itself, automatically updating as new people register. The interested parties list can be exported at any time from the GCP with the click of a button.
- **Calendar of Events.** Create events for the public calendar and send notices to interested parties.

Materials related to an event (e.g., agenda) can be saved on the event page for public download. Interested parties may choose to register for an event to receive updates if the event details (e.g., time) change.

- **Email blasts (e-blasts).** Send email messages to everyone on the interested parties list. This feature is convenient for sending reminders such as the close of a comment period.
- **Stakeholder surveys.** Invite interested parties to participate in surveys.
- **Communication log.** Document communications from interested parties (e.g., emails) as well as any GSA responses. A short form may be completed for each communication.
- **Public comments.** Collect public comments using the GCP's online form. All comments will be captured and stored in the GCP database. The customizable form allows comments to be input by GSP Chapter and Section for easy sorting at the close of the comment period. A feature to enter and store GSA responses to comments may be developed if desired.
- **Outreach reporting.** The reporting feature for the GCP will be finalized after DWR releases information about how GSP data should be submitted. After this information becomes available, the reports out of the GCP will be tailored to include exactly the information requested by DWR.

An exceptional benefit of utilizing the GCP is the capture of stakeholder information to a database for knowledge transfer over time. The GSP implementation period is long, with multiple GSP updates and numerous annual reports before reaching sustainability by 2042. The GCP allows for adding new administrators as time passes and staff roles shift. Everything remains archived in the GCP.

We have assumed that the GCP will be hosted by GEI during the development stage for no additional fee. After GCP deployment, the application will be transferred to client servers or may be hosted by GEI for an annual fee of \$1,000 annually. GCP administration activities are typically conducted by GSA staff, but GEI is available to perform these functions (e.g. post events) if desired on a time and materials basis.

Task 1.2 Deliverable:

GCP with user manual

1.3 Prepare for and Attend GSA meetings

The GSI team will prepare for and attend up to 12 GSA meetings (including GSA Committee, advisory committee, and any potential stakeholder meetings) to provide technical support in the SGMA process. Personnel from the GSA member agencies will organize and facilitate meetings, and GSI will be available to provide presentations of technical materials and be available to answer questions as appropriate.

The C&E Plan will include a meeting schedule for the GSP development process that identifies which decisions need to be made at each meeting to complete the GSP by the scheduled delivery date (no later January 2022). This schedule will identify the general agenda items for each meeting, and which members of the consulting team will be expected to attend each meeting. Before each meeting, GSI will work with the GSA staff, GSA Board, and specific team members to develop the agenda and meeting content for each meeting.

Task 2 - Data Management System

To support the HCM and groundwater conditions portions of the GSP, a web-based DMS will be developed to function as a data storage, analysis, visualization, and reporting tool for groundwater-related information. The DMS will store and display information from previous, ongoing, and future groundwater studies and monitoring programs and will protect against the loss of invaluable data.

A populated DMS allows greater understanding, review, and refinement of conceptual and simulated hydrogeologic conditions used to develop a GSP. It also facilitates direct production of tables, charts, and graphs needed for analysis and to meet the annual reporting requirements of SGMA. It is understood that the DMS will be relied upon by the GSA for years to come and will be the repository for all future monitoring efforts.

The DMS contains a comprehensive relational database structure integrated with a geographic information system (GIS) as well as an interactive, web-based, mapping, and graphing interface. Regional or localized information can be visualized using the interactive interface, accessible via the internet. DMS functions are designed to minimize the amount of effort needed by GSA partner staff members to address questions related to groundwater regulations or Santa Ynez River Water Conservation District (District) operations. Functionality of the final, web-based DMS will include:

- Storing, viewing, retrieving, and presenting groundwater data, including existing pumping and other records stored by the District in Excel workbooks
- Streamlined reporting of data and information to DWR as required by GSP regulations
- Integration of geographic information with hydrologic data
- Automated generation of materials for required regulatory or internal reporting
- Review and analysis of groundwater conditions to guide District staff members on future activities, operations, and projects
- Various levels of District, stakeholder, and public access to specified information via a user-friendly map interface

In addition to supporting preparation of the GSP, the DMS can be used to store pumping and water use records being collected by the District. It also fosters data transparency to facilitate coordination and collaboration among the GSAs. Information can readily be queried and provided for review. Similarly, pertinent information (GSA, state, and federal data along with relevant modeling results) will be input into the DMS for review and comparison with data already contained in the system. The DMS design and data framework is spatially scalable and can be expanded to include information from the partner GSAs, districts, or agencies within the GSA, and information contained within the DMS can be exported and incorporated into other data management frameworks.

2.1 Prepare Data Management Plan

One of the key starting points is understanding the needs of each client and basin. Development of the proposed Data Management Plan will provide the opportunity to identify the project needs and align them with available budget for each GSA to establish the priorities of the DMS and Data Viewer as identified in the RFP work plan. This task begins with a needs assessment to determine the goals of the DMS and to provide guidance on the central tasks and approach to efficiently produce an effective DMS. This task will be initiated with a meeting that includes key managerial and technical staff. The needs assessment will:

- Identify key questions that should be addressed before DMS development.
- Decide key data components/modules to be included in the DMS.
- Evaluate opportunities to build off of existing databases.

- Determine the appropriate type of database to be used to store GSP-related data based on costs, utility, and potential future SGMA-related activities.
- Review the spatial and temporal gaps in available data sets and qualitatively estimate uncertainty for required data.
- Determine the required features and functionality to be included in the first version of the DMS.
- Determine the level of user access for various project entities, including data review and data input and export permissions.
- Assess the degree of effort to load existing or future data into the proposed DMS.
- Assess software, hosting, maintenance, and deployment requirements

Task 2.1 Deliverable:
Data Management Plan

2.2 DMS Development

GEI currently is developing SGMA-compliant DMSs for critically overdrafted basins and plans to apply that same data structure for the Santa Ynez Basin. The DMS includes a web-based data viewer. Many of the modules to support the DMS and the Data Viewer have already been developed and will be leveraged for this project, resulting in considerable cost savings for the EMA GSA. The DMS will be specifically designed to be useful for HCM and groundwater conditions sections of the GSP, and will be expandable to support other GSP components such as water budgets and groundwater modeling. The DMS will store and display information from previous, ongoing, and future hydrogeologic studies and monitoring programs.

Task 2.2 Deliverable:
DMS and a technical memorandum/user guide to describe functions of the web-based DMS tool

2.3 Data Compilation and Review

This task consists of formatting, reviewing, and importing data into the DMS. Data from all sources will be converted to a standardized format with fields compatible with the formatting protocol established for the DMS. To complete the data compilation portion of this task, various activities can be undertaken, such as the following:

- Consult with ID-1 and Stetson Engineers regarding data availability and request electronic files.
- Data requests to agencies, companies, landowners, and other stakeholders in the GSA
- Compilation of subsurface information from well logs, E-logs, pumping data, and water level monitoring
- Verifying well locations/estimating surface elevations
- Informational meetings (2) with agencies, companies, landowners, and other stakeholders in the GSA
- Importation of data from state and local online databases

In order to manage costs, we have assumed that our data compilation effort for the DMS will only include electronic data collected since 1980. We have been told that Stetson Engineers has these data in electronic format because they have been preparing ID-1's annual reports and have collected other data in the basin for that time period. Data compilation since 1980 is assumed because this is the likely time

period of interest for the GSP because it includes wet, normal, dry, and very dry years. This is what is required by DWR. Additional data can be added to the DMS at a later date after the GSP is submitted, if desired.

2.4 Data Entry and QA/QC

The GSI/GEI team will review the data and populate the DMS with formatted data. Given the variability of the data types and sources, all data will have to be quality checked to verify the type of data, quality of the original data, and the number of data sources being compiled for each type. We will work with the GSA to establish a process to complete this task as efficiently as possible to make the best use of consultant time and agency time. We understand that Stetson Engineers has a great deal of data that needs to be captured in the DMS for use in the project. We will work with Stetson and ID-1 to identify what data should be captured, how confidential data should be protected, and review electronic data files provided by them for incorporation into the DMS.

Task 2.4 Deliverables:

Technical memorandum describing the data collected and sources thereof.

Task 3 - Hydrogeologic Conceptual Model and Groundwater Conditions

One of the purposes of the HCM and groundwater conditions information is to provide stakeholders with a more detailed understanding of the Basin's mechanics to illustrate why certain portions of the Basin behave differently than neighboring areas. This basic understanding then can be applied when considering undesirable results, developing sustainability indicators, and interpreting model results. The HCM also will inform the numerical modeling effort to support the evaluation, selection, and configuration of numerical models to be used to investigate specific groundwater management projects and programs.

The Santa Ynez Uplands is separated from the rest of the Basin by bedrock, but there are a few notches in the bedrock potentially allowing groundwater to discharge into CMA and to Santa Ynez River alluvium. The location and degree of connection with the Santa Ynez River alluvium (underflow) is a critical issue that must be resolved. The proposed geophysical survey is intended to help us resolve this issue. Additionally, the northwestern boundary is a watershed divide and abuts the San Antonio Creek Valley Basin, which may be in significant overdraft. Bedrock units in the EMA may extend into the San Antonio Creek Valley Basin and there could be hydraulic continuity. This issue must be resolved in order to develop reliable water budgets in both basins.

GSI and GEI currently are working together to prepare the GSP for the San Antonio Creek Valley Basin. Because of this work, we have developed a deep understanding of the hydrogeologic setting in the basin and are investigating the boundary between the two basins. As part of that project, the U.S. Geological Survey (USGS) has collected water samples from 40 wells in the basin. The data strongly indicate that there may be another significant source of recharge to the San Antonio Basin. USGS and GSI plan to further investigate whether the additional source of recharge is coming from the Santa Ynez Basin.

This task includes several subtasks to support the development of a SGMA-compliant HCM, as outlined on the following pages.

3.1 Hydrogeologic Visualization Tool

The scope of work for this task includes:

- Select 3D hydrogeologic visualization tool with input from GSA. GSI recommends Leapfrog, a cost-effective and powerful tool for this purpose.
- Develop a 3D hydrogeologic visualization tool with input from GSA.
- Use the DMS and other technical data to approximate geologic layering and boundaries of the management area and populate the 3D tool.
- Use the 3D tool to display cross sections of subsurface geology including geologic units, physical properties of aquifers and aquitards, and potential barriers to flow.
- Use the 3D tool to prepare groundwater level contour maps, water quality maps, and thickness and distribution of principal aquifer maps to characterize existing groundwater conditions in the management area.
- Diagram pumping locations in the management area.
- Identify potential storm water capture and other potential recharge areas.
- Coordinate work with the other two management areas in the Basin.

The 3D tool will help generate geologic cross sections required for the HCMs, aid in defining principal aquifers, characterize water quality conditions, and inform the numerical groundwater modeling processes. It also can create graphics for presentations to stakeholders about hydrogeologic topics and groundwater conditions.

Task 3.1 Deliverable:

A technical memorandum describing the 3D tool and providing technical output data.

3.2 Correlate Existing Groundwater Levels to Principal Aquifers and Identify Groundwater/Surface Water Interactions

There are more than 70 wells in the Basin being voluntarily monitored in the current CASGEM network. Only four of the wells have well construction details to identify which aquifer they monitor. The objective of this task is to: (1) attempt to obtain additional information about the existing voluntary wells from well owners and pump contractors to use the existing data, and (2) review other well logs available through review of private well data available to our team and DWR's website to identify additional wells that could be suitable to improve and be added to the monitoring network dependent upon owner permission. The work for this task will involve ongoing communication and coordination with well owners and will include incorporating newly obtained well data into the DMS and correlating those wells to the principal aquifers.

This task also includes reviewing and using representative well data to describe groundwater elevations and flow directions, lateral and vertical gradients, and regional pumping patterns, including: (1) groundwater elevation contour maps depicting the groundwater table or potentiometric surface associated with the current seasonal high and seasonal low for each principal aquifer within the management area; and (2) hydrographs depicting long-term groundwater elevations, historical highs and lows, and hydraulic gradients between principal aquifers in the management area.

This task also includes identifying locations where groundwater is hydraulically connected to surface water. Because the Santa Ynez River resides in alluvial deposits that may be connected to the principal aquifers in the Basin to a limited extent (if at all), identifying and characterizing the degree to which the principal aquifers are recharging the alluvial deposits (river underflow) and where the river is gaining will be important to the extent possible.

Task 3.2 Deliverable:

A technical memorandum describing the review and categorization of selected well logs, DGPS of wells, identification of additional private voluntary wells, and a summary of the groundwater data analysis. It will also include a discussion of groundwater/surface water interaction.

3.3 Water Quality Sampling

A program for water quality sampling using CASGEM wells is needed to develop baseline water quality and trends. While water quality is generally good in the area, there are local nitrate issues associated with septic system failures and use of fertilizers. In addition, there are areas of elevated naturally occurring hexavalent chromium concentrations present in upland groundwater. Poor quality water (elevated total dissolved solids [TDS] and hydrogen sulfide [H₂S]) has been observed in some areas resulting from both surrounding sediments and from the underlying bedrock (e.g., Monterey Formation and volcanics). Initial water quality constituents that will be evaluated include general minerals, drinking water metals, nitrates, boron, arsenic, and hexavalent chromium. Up to eight wells in the EMA are included in this scope of work. Optional constituent testing may include stable isotopes of oxygen, tritium, and carbon 14/13 for identifying the age of the water and sources of recharge. Up to eight wells are included in this scope.

Task 3.3 Deliverable:

GSI will prepare a technical memorandum describing the recommended additional groundwater quality monitoring efforts and programs in support of the EMA GSA's GSP, including sampling methods and protocols; a summary table of the water quality and analytical reports, including well location maps; tables of well construction details; and principal aquifers that the water quality samples represent.

Task 3.3 Assumptions:

- The GSA will coordinate landowner approvals and access.
- Sample port for collecting samples is available.
- The GSA will cover the cost of lost probes and possible pump pull caused by tangles or obstructions.
- Water quality data will be uploaded to the DMS and State Board's GAMA program website.

3.4 Develop Land Surface Subsidence Monitoring

Land subsidence is one of the undesirable results identified in SGMA and is believed to be of limited concern in the Basin; however, this has not been proven. Subsidence information will be obtained from available satellite imagery from NASA-JPL and InSAR, and past studies (LSCE, Borchers and Carpenter, 2014). Our approach to monitoring is based on the identification of key facilities vulnerable to subsidence. We will identify up to three benchmarks historically surveyed by Santa Barbara County in the management area and perform a review of the leveling data to evaluate historical trends and assess if subsidence has occurred, and if so, to what degree. The identified benchmark stations will be resurveyed once by a California-registered land surveyor for use in the land surface subsidence monitoring network for the management area. If changes in land surface elevation are observed, the leveling survey data will be compared to the worldwide tectonic GPS network to assess whether the changes are local as the result of historical declines in groundwater levels or are caused by tectonic activities.

Task 3.5 Deliverable:

Prepare technical memorandum providing the historical leveling trend graphs (if available) with the most

recent benchmark survey results.

3.5 Aquifer Testing

We will perform up to three aquifer tests using existing water supply or irrigation wells that have suitable access for water level monitoring. Data collected during aquifer tests will be used to support determination of aquifer geometries and groundwater movement, and to inform the HCM. The tests also will be used to develop estimates of aquifer transmissivity and specific yield and/or storativity values for use in change of storage calculations.

Each aquifer test will include a constant-rate pumping period of 24 hours in duration. Groundwater levels will be monitored in both the pumping well and observation wells (if available) for a period at least equal to the pumping duration. The aquifer tests will be conducted by supervised personnel that includes a California-certified hydrogeologist. A drawdown and recovery test also will be performed.

Potential EMA wells that could be used for aquifer testing include:

- ID No. 1 Upland Well #28 will be pumped and groundwater levels will be observed in the adjacent monitoring well #4, and Upland Well #27. The wells were constructed to similar depths in the Paso Robles Formation. The wells are located just north of the township of Santa Ynez.
- One of the four ID No. 1 wells (Wells #4, #7, #24, and
- #25) that are located near the town of Los Olivos, about
- 2 miles north of Upland Well #28. All are within a 1-mile radius of each other. The wells were constructed in the Paso Robles Formation and Careaga Formation.
- ID No. 1 has two wellfields; nine wells are located within one wellfield and five wells are within the second wellfield. Both wellfields are in the Santa Ynez River alluvium. One set of these wellfields will be used to obtain hydraulic characteristics of the river alluvium.

Task 3.5 Deliverables:

- Aquifer test work plan
- Technical memorandum describing the processes for aquifer testing and analysis along with data developed

Task 3.5 Assumptions:

- The GSA will coordinate landowner approvals and access.
- Access port is available for water level device needed for collecting water levels.
- The GSA will cover the costs of lost probes and possible pump pull caused by tangles or obstructions.

3.6 Seismic/Resistivity Surveys

The purpose of this task is to characterize the geometry of the bedrock surface in the southwestern portion of the Santa Ynez Uplands (EMA), define the alluvial profiles, and to estimate inflow and outflow of groundwater from the uplands basin to the Santa Ynez River alluvium and from the EMA to the CMA. The unconsolidated formations thin in the southwestern portion of the Santa Ynez Uplands, and the depth to bedrock decreases. Previous studies have shown that a bedrock ridge inhibits the flow of groundwater to the south and to the west from the Santa Ynez Uplands to the Santa Ynez River alluvium and Buellton Uplands (CMA), respectively. Groundwater outflow likely occurs from the EMA to the Santa Ynez River

through notches in the bedrock that are filled with alluvium from tributaries of the Santa Ynez River.

The bedrock ridge extends to the west and likely acts as a divide between the CMA and EMA. The amount of flow across the bedrock ridge has not been studied and without quantification of the subsurface outflow, the EMA and CMA water budgets will have a high degree of uncertainty. Information is needed to characterize the bedrock geometry and quantify groundwater outflow and interactions between the Santa Ynez Uplands and the river alluvium in the EMA, and the CMA and EMA. The geophysical survey work will help to define the thickness and geometry of the bedrock notches that are filled with alluvium and that may communicate groundwater to the adjacent CMA. Seismic refraction surveys will be the primary geophysical method used to image the areas of interest, and where surface infrastructure interferes with the seismic method, an electric resistivity method will be used to fill-in the areas and produce a continuous dataset along each survey line. All data will be modeled to define the major sedimentary layers, including the top of the bedrock and groundwater surface.

Preliminary locations of the survey transects and estimated length of each transect are provided in Figure A4-8 of the Proposition 1 grant application. Final survey locations will be selected after data compilation (Task 2.3) is completed. The geophysical data will be used in the HCM. Santa Barbara County has agreed to pay for the geophysical survey.

Task 3.6 Deliverable:

Technical memorandum describing the methods, results, and interpretation of the seismic/resistivity surveys.

Task 3.6 Assumptions:

The GSA will coordinate landowner approvals and access.

3.7 Technical Memorandum Summarizing HCM

We will prepare a technical memorandum documenting the HCM resulting from the compilation, review, and interpretation of technical information evaluated in the Task 3 subtasks.

Task 4 - Water Budget Assessment and Forecasting

For this task, we will compile and summarize key elements of the water budgets—pumping and agricultural water use, rainfall, evapotranspiration (ET), streamflow data, etc.—from available information, import data into the DMS, and organize the data for importation into a numerical groundwater flow model. The numerical groundwater model will be developed and used to generate historical, present, and future water budgets.

4.1 Develop Water Budget Information

The objective of this subtask is to quantify each component of the water budget as required by SGMA and the GSP regulations. Under this subtask, GSI will:

- Obtain data by year for crop types, acreages, demand factors and water use estimates from water District meter data and resources planning information gathered from local agencies and private well users.
- Establish periods for historical, current, and future water budgets.
- Characterize historical, current, and projected future changes in land use, and using this

information, calculate projected water uses. Additional land planning information may be obtained from DWR's new online land use tool, Santa Barbara County's Planning and Development Department, and City of Solvang's Planning Department.

Task 4.1 Deliverables:

Prepare a water budget technical memorandum describing the following:

- Approach to completing the water budget
- Sources of information used in calculating water budget components
- Level of certainty with water budget calculations and data gaps
- Water budget summarized in tables and graphics

4.2 Develop Numerical Groundwater Model for Water Budgets and Forecasting

The Basin has two groundwater models and an independent Santa Ynez River model to manage releases from Lake Cachuma. A MODFLOW model was initially created for a portion of the WMA by USGS. The model then evolved into the FEMFLOW modeling platform. We understand that the FEMFLOW model has been updated through 2012 or 2013. The model grid does not extend across the entire WMA Basin; the EMA and Santa Rita area are not included. The geologic formations are similar across the three management areas, but have differing thickness and geometries. The Paso Robles Formation and Careaga Sands are modeled as single layers, but we think it will be necessary to subdivide them to fully represent the complex folding in the EMA.

It appears that there will be separate groundwater models for each of the three GMA's in the basin. The greatest issue will be coordinating the grids and layering so the input and output data can be exchanged between models, the necessary extensions of the model domain outside of the management area to reduce boundary effects and using similar hydrologic characteristics. We will consult with Stetson Engineers during development of the EMA groundwater model to coordinate these elements between the GMAs.

This subtask has three parts, as follows:

1. Model Selection.

We will review available groundwater modeling tools including strengths, weaknesses, and relative cost, and the potential for interfacing with the modeling efforts and development of GSPs in the other management areas. Each of the GSAs will determine which groundwater model will be used for preparing its respective GSP. GSI will provide input into this process on behalf of the EMA so that the models are integrated for preparing the GSPs.

2. Groundwater Model Development.

Our team will prepare the new groundwater model to be used in the EMA, which will entail the following, subject to approval from the GSA:

- Use the soil textural database compiled in the DMS and output from the 3D tool to create model layers, including geologic structure presented in the 3D tool.
- Create a model grid.
- Input actual and estimated groundwater pumping and other technical data (precipitation,

streamflow, evaporation, ET).

- If multiple models are developed by the three GSAs, coordinate the model base-period, layering, grids, boundary conditions, and output with the other models.
- Conduct calibration runs to compare actual versus measured water levels.
- Adjust model parameters to improve calibration as needed.

3. Groundwater Model Simulations.

- Estimate basin yield by principal aquifer during the historical base period and, as necessary, reduce the yield, if there is a deficit.
- Compare the basin yield to the model results for historical, current, and projected future conditions to assess the amount of surplus or deficit and reduction in storage that will need to be managed.
- Input 50-year projected climate data (provided by DWR) along with water demand forecasts to estimate the effects of climate change.
- Identify areas of water budget uncertainty through use of the groundwater model.
- Assess future changes in water budget with alternative future scenarios (i.e., changes in land use, crop types, and pumping population growth; climate change; and implementation of GSP management actions and projects) using the groundwater model.

Task 4.2 Deliverables:

- Calibrated groundwater model – coordinated with model(s) to be used in other management areas
- Technical memorandum documenting the modeling selection processes and describing development of the model to be used in the management area

Task 4.2 Assumptions:

Model parameters including aquifer parameters, pumping, ET, return flow, boundary conditions, etc. will be developed based upon available data and in coordination with Stetson Engineers who is developing the model for the CMA and WMA. The model will be used to evaluate four management scenarios developed with input from the GSA. A total of 80 hours is assumed to be necessary to achieve adequate calibration of the model once it is constructed.

Task 5 - Development of Monitoring and Measurement Program (MMP)

The MMP will describe the monitoring network for the management area with a map showing the spatial coverage of monitoring wells by principal aquifer, for each of sustainability criterion, and a table describing the validity of each monitoring point. The purpose of the monitoring network is to identify wells that will be used for establishing minimum thresholds and measurable objectives, and wells that will be used to illustrate groundwater occurrence, flow direction, hydraulic gradients, changes in storage, and groundwater quality, among other factors. Data collected from the network will be used to evaluate trends of sustainability indicators and measure minimum thresholds and measurable objectives for the GSP. If improvement(s) to the monitoring network are identified, proposals will be developed to acquire additional data to support the required cost of the implementation section of the GSP.

The MMP will address:

- Monitoring protocols, including technical standards and data collection methods

- Analytical methods of water quality parameters
- Location, rationale, and selection of representative monitoring sites, network density, and monitoring frequency
- Network improvement plan, including annual assessment of the monitoring network for data gaps

Task 5 Deliverables:

- Technical memorandum presenting and describing the adequacy of the existing monitoring network and, if recommended, providing a proposal for developing additional monitoring
- MMP consistent with DWR's BMPs

Task 6 - Develop Sustainable Management Criteria

The purpose of this task is to develop sustainable management criteria for the EMA GSA's GSP, which includes collaborating with the EMA GSA, other GSAs in the Basin, and the stakeholder process to: Review sustainability indicators.

- Outline sustainability goals.
- Correlate groundwater levels to each sustainability indicator to allow them to be used as a surrogate and be representative.
- Identify minimum thresholds.
- Identify undesirable results and compare against current conditions.
- Identify measurable objectives and interim milestones over a 5-year period.
- Identify sustainable yield that does not result in undesirable results. Sustainable management goals and criteria will be developed through a series of workshops (two are assumed). The GSI team will prepare draft of sustainability goals for GSA input. The team will describe undesirable results based on Basin conditions, prepare draft minimum thresholds that seem appropriate for Basin conditions (water-level based), and obtain stakeholder input. Alternative thresholds will be presented for cases where the goal is to recover water levels, versus stopping continued declines, versus maintaining water levels where they are. Input from stakeholders on appropriate goals, minimum thresholds, and measurable objectives will be obtained using a questionnaire and workshop process. The GSA will decide goals as a policy matter.

Development of sustainable management criteria will be an iterative process involving discussion of sustainability goals, identification of undesirable results, and identification of minimum thresholds and measurable objectives. The GSI team will prepare a concise description of how sustainability in the management area would be reached, using SGMA, SGMA regulations, and DWR's BMPs for Sustainable Management Criteria as a guide.

Task 6 Deliverable:

Technical memorandum presenting the sustainability goals, minimum thresholds for all representative monitoring sites, undesirable results, measurable objectives, and interim milestones.

Task 7 - Develop and Assess Projects and Management Actions

Projects and management actions to achieve sustainability will be determined, evaluated, prioritized, and

described in the GSP. Work will include meetings with the management area's leadership group (technical advisory committee, if one is established), and interested parties to discuss and select projects and appropriate management actions. To evaluate possible projects and management actions, a process will be created to select the best projects and management actions for the Basin. This process will be introduced, created, and implemented as agenda items through meetings with the GSA staff, Board, and/or technical advisory committee.

The Santa Barbara IRWMP is one potential source of candidate projects, but this is only the starting point. Our approach includes identifying projects based on needs that emerge through development of the GSP. Our general strategy is to (1) identify needs, including amount of water that is required, (2) configure projects to satisfy one or more of these needs, (3) estimate costs per acre-foot for candidate projects, and (4) identify funding programs with objectives that align with the needs to be served by the candidate projects. One advantage of this approach is that it aims to identify multiple benefit projects; a second advantage is that it is scalable, lending itself to advancing a broad range of projects aimed at obtaining sustainable groundwater conditions.

We will prepare a matrix and conduct an initial screening of the identified projects to rank the projects and management actions regarding their effectiveness to achieve sustainability. Projects that collectively allow the GSA to achieve sustainability will be further evaluated and prioritized on the basis of several criteria that may include:

- Benefit to the Basin (expressed in acre-feet)
- Capital costs
- Operation and maintenance costs
- Permitting and environmental compliance
- Public acceptance
- Effectiveness for improving groundwater quality
- Effectiveness for improving groundwater quantity
- Ease of construction

Our team will work with the GSA to develop this required information. We have assumed projects that go through the management action screening include the top 10 prioritized projects and management actions needed to achieve sustainability. Completion of this task will involve meetings with the GSA staff and Board. The prioritized projects and management actions will be further evaluated according to technical feasibility, environmental impact, and constructability. The results of this task will be presented in a planning-level feasibility report describing the identification and selection process for potential projects and management actions. This feasibility report will be included in an appendix of the GSP and used to support the GSP implementation plan (see optional task).

Task 7 Deliverable:

Planning-level feasibility report describing the identification and selection process for potential projects and management actions.

Project Management

During the course of the project, GSI will plan and track significant activities leading to development of the GSP. Project management includes tracking budgets and preparing invoices, tracking project progress and schedule, regular client communication and conference calls, and in-person meetings to perform coordination as needed. Costs for project management activities are distributed within individual tasks.

Keeping within the Scope as described in this document is critical to successful completion of this project – any and all tasks or levels-of-effort that exceed the assumptions and budgets included in this scope will be identified and conveyed to the client. We have included a \$30K contingency in the budget to cover unanticipated issues or additional meetings and analysis that may be driven by the stakeholder process. GSI will not use this contingency without approval from Santa Barbara County and the GSA in advance. GSI will alert the County and GSA if we believe that additional funds are needed and provide a forecast of additional funding if necessary.

We have assumed that grant management will be performed by the GSA staff members. GSI will provide input into eight quarterly reports prepared by the GSA throughout the extent of the funding agreement as well as contribute to preparation of a project completion report upon submittal of the final GSP to DWR. The GSA grant manager will have regular communication with DWR's grant manager.

Deliverables:

- Regularly scheduled calls to discuss a range of project activities not described in previous tasks (assumed 1 per week, 1 hour duration)
- Monthly invoices with budget update and description of activities performed for previous month and planned for next month
- We will identify all items requested by the GSA that are not included in this scope of work or budget, including items which require more work than anticipated and budgeted.
- Monthly progress reports submitted to GSA project manager

Meetings and Workshops

Following is a summary of the meetings and workshops that are included in this scope of work:

- **Task 1.3** – Up to 12 scheduled GSA meetings (4 per year, assumed to be an average of 2 hours each)
- **Task 2.1** – Data Management Plan kickoff meeting (assumed to be a 2 hour meeting)
- **Task 2.3** – Two informational meetings with agencies, companies, landowners, and other stakeholders in the GSA (assumed to be an average of 2 hours each)
- **Task 6** – Two workshops to develop sustainable management criteria (assumed to be an average of 3 hours each)
- **Task 7** – Two meetings with the management area's leadership group (technical advisory committee, if one is established) and interested parties to discuss Projects and Management Actions (assumed to be an average of 2 hours each)

Santa Ynez River Basin

Eastern Management Area (EMA)

Groundwater Sustainability Plan Budget

Prepared for Santa Barbara County Water Agency for the EMA GSA
 Prepared by GSI, 12/20/18

Task	Budget Total
Task 1 - Stakeholder Communications and Engagement (C&E)	
1.1 Develop Stakeholder C&E Plan	\$24,050
1.2 Customize Groundwater Communication Portal	\$21,920
1.3 Prepare for and Attend GSA Meetings	\$52,605
Project Management	\$6,600
Total Task 1	\$105,175
Task 2 - Data Management System	
2.1 Develop a Data Management Plan (DMP)	\$26,025
2.2 Create a DMS	\$78,525
2.3 Perform Data Compilation and Review	\$41,184
2.4 Data Entry and Qa/Qc	\$14,205
Project Management	\$6,070
Total Task 2	\$166,009
Task 3 - Hydrogeologic Conceptual Model and Groundwater Conditions	
3.1 Hydrogeologic Visualization Tool	\$49,354
3.2 Correlate Existing Groundwater Levels to Principal Aquifers	\$39,760
3.3 Water Quality Sampling	\$29,043
3.4 Develop Land Surface Subsidence Monitoring	\$10,445
3.5 Aquifer Testing	\$43,803
3.6 Seismic/Resistivity Surveys	\$112,000
3.7 Technical Memoranda Summarizing (HCMs)	\$43,605
Project Management	\$6,070
Total Task 3	\$334,080

Task	Budget Total
Task 4 - Water Budget Assessment and Forecasting	
4.1 - Develop Current and Historical Water Budget Information	\$46,540
4.2 Develop Num. GW Model for Water Budgets/Forecasting	\$129,923
Project Management	\$6,070
Total Task 4	\$182,533
Task 5 - Development of Monitoring and Measurement Program	
5.1 - Develop Monitoring and Measurement Program	\$29,855
Project Management	\$6,070
Total Task 5	\$35,925
Task 6 - Develop Sustainable Management Criteria	
6.1 Develop Sustainable Management Criteria	\$53,759
Project Management	\$6,070
Total Task 6	\$59,829
Task 7 - Develop and Assess Projects and Management Actions	
7.1 Identify Projects and Actions	\$29,980
7.2 Prioritize Projects and Actions	\$20,680
7.3 Evaluate and Select Projects and Actions	\$27,855
Project Management	\$6,070
Total Task 7	\$84,585
Project Totals	\$968,136



EXHIBIT B

PAYMENT ARRANGEMENTS

Periodic Compensation (with attached Schedule of Fees)

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed **\$968,136**.
- B. Extra Work required to complete the project may be authorized only if CONTRACTOR receives written approval by the COUNTY's designated representative as identified in Paragraph 1 of the Agreement at the same rate per unit as defined in **Attachment B1**. The total amount of this contingency fund is 10% of the agreement amount or **\$96,813**.
- C. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY. Payment for services and/or reimbursement of costs shall be based upon the costs, expenses, overhead charges and hourly rates for personnel, as defined in **Attachment B1** (Schedule of Fees). Invoices submitted for payment that are based upon **Attachment B1** must contain sufficient detail to enable an audit of the charges and provide supporting documentation if so specified in **EXHIBIT A**.
- D. **Monthly**, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY DESIGNATED REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory and within the cost basis of **Attachment B1** shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.
- E. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.
- F. CONTRACTOR shall comply with the California Labor Code, including but not limited to the payment of prevailing wage when required. The general prevailing wage rates determined by the Director of Industrial Relations, for the county or counties in which the work is to be done, are on file at the office of the Santa Barbara County Water Agency, 130 E. Victoria Street, Suite 200, Santa Barbara, CA 93101. Copies of these general prevailing wage rates shall be made available to any interested party on request. Changes, if any to the general prevailing wage rates will be available at the same location. The prevailing wage rates are also available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/dlsr/pwd>.



The following fee schedule presents billing rates by classification for each year of the contract, reflecting an assumed cost-of-living annual increase of 3 percent based on the CPI. Should the CPI increase be less than 3 percent, we will adjust our rates downward in any given year. Should it be higher than 3 percent, we will not increase our rates more than 3 percent. We feel that this is the best way to provide the EMA GSA with the fairest and most reasonable rates over the course of the multi-year contract.

Note that each classification has a range of hourly rates; the rates below reflect the maximum rate for each classification. Project team members with a lower rate than the maximum in their category will be billed at their actual rate.

Maximum Hourly Rates by Job Classification				
	Through Jan. 31, 2019	Feb. 1 2019–Jan. 31, 2020	Feb. 1 2020–Jan. 31, 2021	Feb. 1 2021– Jan. 31, 2022
GSI				
Principal	\$250	\$257	\$265	\$273
Supervising	\$210	\$216	\$222	\$229
Managing	\$180	\$185	\$190	\$196
Consulting	\$155	\$159	\$164	\$169
Project	\$135	\$139	\$143	\$147
Staff	\$115	\$118	\$122	\$125
GIS	\$130	\$134	\$138	\$142
Admin	\$90	\$92	\$95	\$98
Subconsultant (GEI)*				
Senior Consultant – Grade 8	\$275	\$283	\$292	\$300
Senior Professional – Grade 7	\$245	\$252	\$260	\$268
Senior Professional – Grade 6	\$206	\$212	\$219	\$225
Senior Professional – Grade 5	\$181	\$186	\$192	\$198
Project Professional – Grade 4	\$154	\$159	\$163	\$168
Project Professional – Grade 3	\$137	\$141	\$145	\$150
Staff Professional – Grade 2	\$125	\$129	\$133	\$137

*Outside services (including subconsultants) will be invoiced at cost plus 5 percent markup.

EXHIBIT C

Indemnification and Insurance Requirements (For Professional Contracts)

INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person or entity and for any costs or expenses (including but not limited to reasonable attorneys' fees) incurred by COUNTY on account of any claim except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation applies to COUNTY's active as well as passive negligence but does not apply to COUNTY's sole negligence or willful misconduct.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage except Professional Liability and Workers' Compensation Insurance shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.
9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.

10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:
- i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
 - iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.
11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.