This is an agreement between the Monterey County Water Resources Agency, hereinafter called "Agency," and GEOSCIENCE Support Services, Inc., a California Corporation, hereinafter called "CONTRACTOR".

In consideration of the mutual covenants and conditions set forth in this Agreement, the parties agree as follows:

1. Employment of CONTRACTOR. Agency hereby engages CONTRACTOR and CONTRACTOR, and CONTRACTOR hereby agrees to perform the services set forth in Exhibit A, in conformity with the terms of this Agreement. CONTRACTOR will complete all work in accordance with the Scope of Work/Work Schedule set forth in Exhibit A:

   (a) The scope of work is briefly described and outlined as follows:
       Performance of work necessary to acquire permits and develop intake and monitoring well designs in preparation for the Regional Water Supply Project.

   (b) The CONTRACTOR shall perform its services under this agreement in accordance with usual and customary care and with generally accepted practices in effect at the time the services are rendered. The CONTRACTOR and its agents and employees performing work hereunder are specially trained, experienced, competent, and appropriately licensed to perform the work and deliver the services required by this Agreement.

   (c) CONTRACTOR, its agents and employees shall perform all work in a safe and skillful manner and in compliance with all applicable laws and regulations. All work performed under this Agreement that is required by law to be performed or supervised by licensed personnel shall be performed in accordance with such licensing requirements.

   (d) CONTRACTOR shall furnish, at its own expense, all materials and equipment necessary to carry out the terms of this Agreement, except as otherwise provided herein. CONTRACTOR shall not use Agency premises, property (including equipment, instruments, or supplies) or personnel for any purpose other than in the performance of its obligations hereunder.

2. Term of Agreement. The term of this Agreement shall begin upon execution of this Agreement by CONTRACTOR and Agency, and, unless earlier terminated as provided herein, shall remain in force until the work required by this Agreement is completed.

3. Payments to CONTRACTOR; maximum liability. Subject to the limitations set forth herein, Agency shall pay to CONTRACTOR the amounts provided in Exhibit B. The maximum amount payable to CONTRACTOR under this contract is five hundred eighty five thousand nine hundred seventy dollars ($585,970).

MCWRA PSA with Surveyors, Architects, Engineers & Design Professionals
Revised 09/30/08

Project ID: GeoScience Support Services, Inc.
September 27, 2010

(a) CONTRACTOR shall submit to Agency an invoice, in a format approved by Agency, setting forth the amounts claimed by CONTRACTOR, together with an itemized basis for such amounts, and setting forth such other pertinent information Agency may require. CONTRACTOR shall submit such invoice monthly or as agreed by Agency, but in no event shall such invoice be submitted later than 30 days after completion of CONTRACTOR’s work hereunder. Agency shall certify the claim if it complies with this contract and shall promptly submit such claim to the Monterey County Auditor-Controller, who shall pay the certified amount within 30 days after receiving the invoice certified by Agency. It is understood and agreed that CONTRACTOR shall complete all work described in Exhibit A for an amount not exceeding that set forth above, notwithstanding CONTRACTOR’s submission of periodic invoices.

(b) CONTRACTOR agrees that Agency may withhold ten percent (10%) of the amount requested by CONTRACTOR from any progress payment, until such time as all goods and services are received in a manner and form acceptable to Agency.

(c) If, as of the date of execution of this Agreement, CONTRACTOR has already received payment from Agency for work which is the subject of this Agreement, such amounts shall be deemed to have been paid under this Agreement and shall be counted toward Agency’s maximum liability set forth above.

(d) CONTRACTOR shall not be reimbursed for travel expenses unless expressly stated in this Agreement.

5. Indemnification

5.1 For purposes of the following indemnification provisions ("Indemnification Agreement"), “design professional” has the same meaning as set forth in California Civil Code section 2782.8. If any term, provision or application of this Indemnification Agreement is found to be invalid, in violation of public policy or unenforceable to any extent, such finding shall not invalidate any other term or provision of this Indemnification Agreement and such other terms and provisions shall continue in full force and effect. If there is any conflict between the terms, provisions or application of this Indemnification Agreement and the provisions of California Civil Code Sections 2782 or 2782.8, the broadest indemnity protection for the COUNTY under this Indemnity Agreement that is permitted by law shall be provided by CONTRACTOR.

5.2 Indemnification for Design Professional Services Claims:
CONTRACTOR shall indemnify, defend and hold harmless COUNTY, its governing board, directors, officers, employees, and agents against any claims that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONTRACTOR, its employees, subCONTRACTORs, and agents in the performance of design professional services under this Agreement, excepting only liability arising from the sole negligence, active negligence or willful misconduct of the COUNTY, or defect in a design furnished by the COUNTY.
5.3 **Indemnification for All Other Claims or Loss:**
For any claim, loss, injury, damage, expense or liability other than claims arising out of the CONTRACTOR’s performance of design professional services under this Agreement, CONTRACTOR shall indemnify, defend and hold harmless COUNTY, its governing board, directors, officers, employees, and agents against any claim for loss, injury, damage, expense or liability resulting from or alleging injury to or death of any person or loss of use of or damage to property, arising from or related to the performance of services under this Agreement by CONTRACTOR, its employees, subCONTRACTORs or agents, excepting only liability arising from the sole negligence, active negligence or willful misconduct of the COUNTY, or defect in a design furnished by the COUNTY.

6. **Insurance.**

6.1 **Evidence of Coverage:**
Prior to commencement of this Agreement, the CONTRACTOR shall provide a “Certificate of Insurance” certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier shall accompany the certificate. In addition the CONTRACTOR upon request shall provide a certified copy of the policy or policies.

This verification of coverage shall be sent to the Agency’s Contact, unless otherwise directed. The CONTRACTOR shall not receive a “Notice to Proceed” with the work under this Agreement until it has obtained all insurance required and such, insurance has been approved by the Agency. This approval of insurance shall neither relieve nor decrease the liability of the CONTRACTOR.

6.2 **Qualifying Insurers:**
All coverage’s, except surety, shall be issued by companies which hold a current policy holder’s alphabetic and financial size category rating of not less than A- VII, according to the current Best’s Key Rating Guide or a company of equal financial stability that is approved by the County’s Purchasing Manager.

6.3 **Insurance Coverage Requirements:** Without limiting CONTRACTOR’s duty to indemnify, CONTRACTOR shall maintain in effect throughout the term of this Agreement a policy or policies of insurance with the following minimum limits of liability:

- **Commercial general liability insurance,** including but not limited to premises and operations, including coverage for Bodily Injury and Property Damage, Personal Injury, Contractual Liability, Broad form Property Damage, Independent CONTRACTORs, Products and Completed Operations, with a combined single limit for Bodily Injury and Property Damage of not less than $1,000,000 per occurrence.
- **Business automobile liability insurance,** covering all motor vehicles, including owned, leased, non-owned, and hired vehicles, used in providing services under this Agreement, with a combined single limit for Bodily Injury and Property Damage of not less than $1,000,000 per occurrence.

☐ Modification (Justification attached; subject to approval).

☐ Modification (Justification attached; subject to approval).
Workers’ Compensation Insurance, if CONTRACTOR employs others in the performance of this Agreement, in accordance with California Labor Code section 3700 and with Employer’s Liability limits not less than $1,000,000 each person, $1,000,000 each accident and $1,000,000 each disease.

☐ Modification (Justification attached; subject to approval).

Professional liability insurance, if required for the professional services being provided, (e.g., those persons authorized by a license to engage in a business or profession regulated by the California Business and Professions Code), in the amount of not less than $1,000,000 per claim and $2,000,000 in the aggregate, to cover liability for malpractice or errors or omissions made in the course of rendering professional services. If professional liability insurance is written on a “claims-made” basis rather than an occurrence basis, the CONTRACTOR shall, upon the expiration or earlier termination of this Agreement, obtain extended reporting coverage (“tail coverage”) with the same liability limits. Any such tail coverage shall continue for at least three years following the expiration or earlier termination of this Agreement.

☐ Modification (Justification attached; subject to approval).

6.4 Other Insurance Requirements.

All insurance required by this Agreement shall be with a company acceptable to the Agency and issued and executed by an admitted insurer authorized to transact Insurance business in the State of California. Unless otherwise specified by this Agreement, all such insurance shall be written on an occurrence basis, or, if the policy is not written on an occurrence basis, such policy with the coverage required herein shall continue in effect for a period of three years following the date CONTRACTOR completes its performance of services under this Agreement.

Each liability policy shall provide that the Agency shall be given notice in writing at least thirty days in advance of any endorsed reduction in coverage or limit, cancellation, or intended non-renewal thereof. Each policy shall provide coverage for CONTRACTOR and additional insureds with respect to claims arising from each subCONTRACTOR, if any, performing work under this Agreement, or be accompanied by a certificate of insurance from each subCONTRACTOR showing each subCONTRACTOR has identical insurance coverage to the above requirements.

Commercial general liability and automobile liability policies shall provide an endorsement naming the County of Monterey, its officers, agents, and employees as Additional Insureds with respect to liability arising out of the CONTRACTOR’S work, including ongoing and completed operations, and shall further provide that such insurance is primary insurance to any insurance or self-insurance maintained by the County and that the insurance of the Additional Insureds shall not be called upon to contribute to a loss covered by the CONTRACTOR’S insurance. The required endorsement form for Commercial General Liability Additional Insured is ISO Form CG 20 10 11-85 or CG 20 10 10 01 in tandem with CG 20 37 10 01 (2000). The required endorsement form for Automobile Additional Insured endorsement is ISO Form CA 20 48 02 99.

Prior to the execution of this Agreement by the Agency, CONTRACTOR shall file certificates of insurance with the Agency’s contract administrator, showing that the CONTRACTOR has in effect the
insurance required by this Agreement. The CONTRACTOR shall file a new or amended certificate of insurance within five calendar days after any change is made in any insurance policy, which would alter the information on the certificate then on file. Acceptance or approval of insurance shall in no way modify or change the indemnification clause in this Agreement, which shall continue in full force and effect.

CONTRACTOR shall at all times during the term of this Agreement maintain in force the insurance coverage required under this Agreement and shall send, without demand by Agency, annual certificates to Agency's Contract Administrator. If the certificate is not received by the expiration date, Agency shall notify CONTRACTOR and CONTRACTOR shall have five calendar days to send in the certificate, evidencing no lapse in coverage during the interim. Failure by CONTRACTOR to maintain such insurance is a default of this Agreement, which entitles Agency, at its sole discretion, to terminate this Agreement immediately.

7. **Maintenance of Records.** CONTRACTOR shall prepare, maintain and preserve all reports and records that may be required by federal, State, and local rules and regulations relating to services performed under this Agreement. CONTRACTOR shall retain all such records for at least five years from the date of final payment, or until any litigation relating to this Agreement is concluded, whichever is later.

8. **Right to Audit at Any Time.** Agency officials shall have the right, at any time during regular working hours and on reasonable advance notice, to examine, monitor and audit all work performed and all records, documents, conditions, activities and procedures of CONTRACTOR or its subCONTRACTORS relating to this Agreement. Government Code Section 8546.7 provides that an audit by the State Auditor General may be performed up to three years after the final payment under any contract involving the expenditure of public funds in excess of $10,000.

9. **Confidentiality: Return of Records.** CONTRACTOR and its officers, employees, agents, and subCONTRACTORS shall comply with all federal, State and local laws providing for the confidentiality of records and other information. To the extent permitted by applicable law and regulations, CONTRACTOR shall maintain confidentiality with respect to Agency's well database and other water use data. CONTRACTOR shall not disclose any confidential information received from Agency or prepared in connection with the performance of this Agreement without the express permission of Agency. CONTRACTOR shall promptly transmit to Agency all requests for disclosure of any such confidential information. CONTRACTOR shall not use any confidential information gained through the performance of this Agreement except for the purpose of carrying out CONTRACTOR's obligations hereunder. When this Agreement expires or terminates, CONTRACTOR shall return to Agency all records, which CONTRACTOR utilized or received, from Agency to perform services under this Agreement.

10. **Termination.** Either party may terminate this Agreement by giving written notice of termination to the other party at least thirty (30) days prior to the effective date of termination, which date shall be specified in any such notice. In the event of such termination, the amount payable hereunder shall be reduced in proportion to the services provided prior to the effective date of termination. Agency may terminate this Agreement at any time for good cause effective immediately upon written notice to CONTRACTOR. "Good cause" includes, without limitation, the failure of CONTRACTOR to perform the required services at the time and in the manner provided herein. If Agency terminates this Agreement for good cause, Agency may be relieved of the payment
of any consideration to CONTRACTOR, and Agency may proceed with the work in any manner, which it
deems proper. Costs incurred by Agency thereby shall be deducted from any sum due CONTRACTOR.

11. Amendments and Modifications. No modification or amendment of this agreement shall be valid unless it is
set forth in writing and executed by the parties.

12. Non-discrimination. Throughout the performance of this Agreement, CONTRACTOR will not unlawfully
discriminate against any person because of race, color, religion, gender, national origin, ancestry, physical
disability, medical condition, marital status, age older than 40, or sexual preference, either in CONTRACTOR's
employment practices or in the furnishing of services to recipients. CONTRACTOR shall ensure that the
evaluation and treatment of its employees and applicants for employment and all persons receiving and
requesting services are free of such discrimination. CONTRACTOR shall comply fully with all federal, State
and local laws and regulations which prohibit discrimination. The provision of services primarily or exclusively
to any target population designated herein shall not be deemed prohibited discrimination.

13. Independent CONTRACTOR. In its performance under this Agreement, CONTRACTOR is at all times
acting and performing as an independent CONTRACTOR and not an employee of Agency. No offer or
obligation of employment with Agency is intended in any manner, and CONTRACTOR shall not become
entitled by virtue of this Agreement to receive from Agency any form of benefits accorded to employees
including without limitation leave time, health insurance, workers compensation coverage, disability benefits,
and retirement contributions. CONTRACTOR shall be solely liable for and obligated to pay directly all
applicable taxes, including without limitation federal and State income taxes and social security arising out of
CONTRACTOR's performance of this Agreement. In connection therewith, CONTRACTOR shall defend,
indemnify, and hold harmless Agency from any and all liability, which Agency may incur because of
CONTRACTOR's failure to make such payments.

14. Delegation of Duties; Subcontracting. CONTRACTOR is engaged by Agency for its unique qualifications
and abilities. CONTRACTOR may not, therefore, delegate any of its basic duties under this Agreement, except
to the extent that delegation to CONTRACTOR's employees is contemplated herein. No work shall be
subcontracted without the written consent of Agency, except as provided in this Agreement or its attachments.
Notwithstanding any subcontract, CONTRACTOR shall continue to be liable to Agency for the performance of
all work hereunder. CONTRACTOR shall not assign, sell, mortgage or otherwise transfer its interest or
obligations in this Agreement without Agency's prior written consent.

15. Agency's Rights in Work Product. All original materials prepared by CONTRACTOR in connection with
its work hereunder -- including but not limited to computer codes, customized computer routines developed
using proprietary or commercial software packages, reports, documents, maps, graphs, charts, photographs and
photographic negatives -- shall be the property of Agency and shall be delivered to Agency prior to final
payment. CONTRACTOR may utilize any existing materials developed by CONTRACTOR prior to
commencement of work under this Agreement, which materials shall remain the property of CONTRACTOR.

16. Compliance with Terms of Federal or State Grant. If any part of this Agreement has been or will be funded
pursuant to a grant from the federal or State government in which Agency is the grantee, CONTRACTOR shall
comply with all provisions of such grant applicable to CONTRACTOR's work hereunder, and said provisions
shall be deemed a part of this Agreement as though fully set forth herein.
17. **Conflict of Interest.** CONTRACTOR warrants that it presently has no interest and shall not acquire any interest during the term of this Agreement, which would directly or indirectly conflict in any manner or to any degree with its full and complete performance of all services under this Agreement.

18. **Governing Laws.** This Agreement is entered into in the County of Monterey, State of California, and shall be construed and enforced in accordance with the laws of the State of California. The parties hereby agree that the County of Monterey shall be the proper venue for any dispute arising hereunder.

19. **Compliance with Applicable Law.** The parties shall comply with all applicable federal, state, and local laws and regulations in performing this Agreement.

20. **Construction of Agreement.** The parties agree that each party has fully participated in the review and revision of this Agreement and that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply in the interpretation of this Agreement or any exhibit or amendment. To that end, it is understood and agreed that this Agreement has been arrived at through negotiation, and that neither party is to be deemed the party which prepared this Agreement within the meaning of Civil Code Section 1654. Section and paragraph headings appearing herein are for convenience only and shall not be used to interpret the terms of this Agreement.

21. **Waiver.** Any waiver of any term or condition hereof must be in writing. No such waiver shall be construed as a waiver of any other term or condition herein.

22. **Successors and Assigns.** This Agreement and all rights, privileges, duties and obligations hereunder, to the extent assignable or delegable, shall be binding upon and inure to the benefit of the parties and their respective successors, permitted assigns and heirs.

23. **CONTRACTOR.** The term “CONTRACTOR” as used in this Agreement includes CONTRACTOR’s officers, agents, and employees acting on Contractor’s behalf in the performance of this Agreement.

24. **Interpretation of Conflicting Provisions.** In the event of any conflict or inconsistency between the provisions of this Agreement and the Provisions of any exhibit or other attachment to this Agreement, the provisions of this Agreement shall prevail and control.

25. **Time is of the Essence.** The parties mutually acknowledge and agree that time is of the essence with respect to every provision hereof in which time is an element. No extension of time for performance of any obligation or act shall be deemed an extension of time for performance of any other obligation or act, nor shall any such extension create a precedent for any further or future extension.

26. **Contract Administrators.** CONTRACTOR’s designated principal responsible for administering CONTRACTOR’s work under this Agreement shall be Dennis Williams; Agency’s designated administrator of this Agreement shall be ________________ .
27. Notices. Notices required under this Agreement shall be delivered personally or by electronic facsimile, or by first class or certified mail with postage prepaid. Notice shall be deemed effective upon personal delivery or facsimile transmission, or on the third day after deposit with the U.S. Postal Service. CONTRACTOR shall give Agency prompt notice of any change of address. Unless otherwise changed according to these notice provisions, notices shall be addressed as follows:

TO AGENCY
Name: Robert Johnson / Curtis Weeks
Address: 893 Blanco Circle
Salinas, CA 93901
Telephone: 831.755.4860
Fax: 831.424.7935
E-Mail: johnsonr@co.monterey.ca.us

TO CONTRACTOR
Name: Dennis Williams
Address: 620 W. Arrow Highway, Suite 2000
La Verne, CA 91750
Telephone: 909.451.6650
Fax: 909.451.6638
E-Mail: dwilliams@geoscience-water.com

28. Electronic Deliverables. Where feasible, all reports, documents and other printed information provided to the Agency pursuant to this Agreement shall be submitted in both written and Electronic formats in accordance with the specifications listed in Exhibit C.

29. Non-exclusive Agreement. This Agreement is non-exclusive and both parties reserve the right to contract with other entities for the same or similar services.

30. Execution of Agreement. Any individual executing this Agreement on behalf of an entity represents and warrants that he or she has the requisite authority to enter into this Agreement on behalf of such entity and to bind the entity to the terms and conditions hereof. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

31. Exhibits. The following Exhibits are attached hereto and incorporated by reference:

   Exhibit A – Scope of Work / Work Schedule
   Exhibit B - Fee Schedule (monies to be reimbursed to Agency from reimbursement agreement with California-American Water Company, or by Bond funds if Bond is in place).

32. Entire Agreement --As of the effective date of this Agreement, this document, including all exhibits hereto, constitutes the entire agreement between the parties, and supersedes any and all prior written or oral negotiations and representations between the parties concerning all matters relating to the subject of this Agreement.
MONTEREY COUNTY WATER RESOURCES AGENCY
AGREEMENT FOR PROFESSIONAL SERVICES
WITH SURVEYORS, ARCHITECTS, ENGINEERS AND/OR DESIGN PROFESSIONALS

IN WITNESS WHEREOF, Agency and CONTRACTOR execute this agreement as follows:

MONTEREY COUNTY WATER RESOURCES AGENCY

BY:  
Curtis V. Weeks
General Manager
Date: 11/3/10

CONTRACTOR

BY:  
Dennis Williams
Type Name: President
Date: 1-0CT-10

BY:  
Meridee Williams
Type Name: CFO
Date: 1-0CT-10
MONTEREY COUNTY WATER RESOURCES AGENCY
AGREEMENT FOR PROFESSIONAL SERVICES
WITH SURVEYORS, ARCHITECTS, ENGINEERS AND/OR DESIGN PROFESSIONALS

* INSTRUCTIONS: If CONTRACTOR is a corporation (including limited liability and nonprofit corporations), the full legal name of the corporation shall be set forth together with the signatures of two specified officers. If CONTRACTOR is a partnership, the name of the partnership shall be set forth together with the signature of a partner with authority to execute this Agreement on behalf of the partnership. If CONTRACTOR is contracting in an individual capacity, the individual shall set forth the name of his or her business, if any, and shall personally sign the Agreement.

( Agreement/Amendment No # ( )

*******************************

Approved as to form:

Deputy County Counsel

Dated: 10/07/10

Approved as to fiscal provisions:

Administrative Analyst

Dated: 10/22/10

RISK MANAGEMENT
COUNTY OF MONTEREY
APPROVED AS TO INDEMNITY/
INSURANCE LANGUAGE

By: J. Schumaka

Date: 10-21-10

Auditor-Controller:

Dated: 10-21-10

MCWRA PSA with
Surveyors, Architects, Engineers & Design Professionals
Revised 09/30/08

10 of 10       Project ID: GeoScience Support Services, Inc.
Revised 09/27, 2010
Exhibit A – Scope of Work

Background

The Regional Water Project Facilities will provide up to 10,500 AFY of desalinated water supply to northern Monterey County through construction of a 10 mgd desalination plant including intake wells and pipelines, distribution pipelines, storage tanks, and pump stations. This scope of work is for preliminary and final design of the test well associated with the Project.

The scope of work for the test wells is divided amongst two parties. In this scope of work, GeoScience (MCWRA’s Consultant) will perform the preliminary and final design of the test slant well and all modeling work associated with the test wells. RMC Water and Environment (RMC), under a separate agreement with the MCWD, will perform the preliminary and final design of the test vertical well and acquire the permits necessary for both test wells. Both GeoScience and RMC will coordinate and review all work associated with this project.

Test Well Scope of Work

1  Project Management/Coordination

1.1  Project Management

MCWRA’s Consultant will coordinate and manage the various activities, communications, and consultants involved in the program elements included in the Test Well scope of work as well as related to activities being undertaken by others outside of this scope of work.

1.2  Project Meetings

MCWRA’s Consultant shall conduct as-needed conference calls and meetings with MCWRA and its Project Partners to discuss work progress and outstanding issues. These conference calls and meetings will cover status of work products, schedule, and budget. MCWRA’s Consultant will identify outstanding issues, concerns, etc. and obtain guidance/direction from MCWRA at these conference calls and meetings. This scope of work assumes the following meetings will occur to the completion of the design work for the monitoring wells and test vertical and slant well:

- Up to ten (10) conference calls with MCWRA and its Project Partners
- Ten (10) progress meetings with MCWRA and its Project Partners

MCWRA’s Consultant will also conduct internal meetings to coordinate activities and discuss ongoing issues. These meetings will include individuals involved in each element of the project.

1.3  Project Administration

MCWRA’s Consultant will procure necessary subconsultants for related studies, and administer the subconsultant contracts. MCWRA’s Consultant will administer the following:

- Preparation of monthly invoices by task and by individual.
- Preparation of monthly progress report describing specific accomplishments during the reporting period, problems encountered or anticipated, work scheduled for the next reporting period, and cost report.
1.4 Quality Assurance/Quality Control
MCWRA's Consultant and its subconsultants will provide internal quality assurance and quality control (QA/QC) activities which will include detailed review of project design documents, drawings, and calculations.

2 Test Wells - Preliminary and Final Design

2.1 Ground Water Modeling
The existing groundwater model of the area will be used to help develop the aquifer testing program for the test wells, including the location and screen intervals of monitoring wells needed to assess the ultimate source of water to project wells. Existing wells will be used as monitoring wells to the extent possible. Accordingly, the location and construction information for nearby existing wells will be compiled and these wells evaluated for incorporation into the test program as appropriate. In addition, up to three sites will be located for installation of monitoring wells near to the vertical test well, and up to three sites will be located near the test slant well. The ultimate intent is to develop a test program that will provide results necessary to differentiate sources of water to the intake wells (seawater vs. intruded brackish water). Based on the results of the modeling exercise, a Technical Memorandum (TM) summarizing the proposed test program will be prepared.

This task assumes the following:
- 5 modeling runs will be necessary to develop the aquifer testing program
- Up to 3 meetings will be conducted with the project stakeholders to review and discuss the ground water modeling and test program.

2.2 Permitting Coordination
- MCWRA’s Consultant will coordinate with RMC who is taking the lead in acquiring the necessary permits needed for installing one vertical and one slant test well and associated monitoring wells. MCWRA’s consultant will work with RMC to provide the necessary information needed to acquire the following permits:
  - Central Coast RWQCB Waste Discharge Permit (compliance under the existing General Permit for Low Threat Discharges)
  - Coastal Development Permit
  - Monterey County Health Department well permits

2.3 Preliminary Design – Monitoring Wells, Slant Test Well, and Vertical Well coordination
The preliminary design report will include preliminary designs for the monitoring wells, the vertical test well and the slant test well and will consist of the following. Information on the vertical test well will be will provided by RMC to be included in the final preliminary design report.

The preliminary design of the test wells will consist of the following items:
- Finalize the locations of the monitoring wells, vertical test well and slant test well. This task will be done in coordination with Task 2.1 and based on updated geohydrologic information as the project progresses.
- Prepare preliminary conceptual designs of the construction of monitoring wells, vertical test well
and slant test well.

- Acquire easements/approval from the land owner(s) for the wells.
- Determine the source of water for drilling at the various locations
- Determine location for disposal of the pumped water
- Conduct a site visit to determine the source of power for the long term pumping tests
- Determine location for disposal of cuttings from well installation

Task 2.3 Deliverables:

- TM that summarizes the findings of the outcomes of the preliminary design for the monitoring wells, vertical test well, and slant test well including appropriate maps or drawings.

2.4 Final Design for Monitoring Wells, Slant Test Well, and Vertical Well coordination

2.4.1 Final Design – Monitoring Wells

This task includes preparing a final design TM and detailed technical specifications for monitoring well drilling, construction, and development to be included with front end contractual documents (to be provided by others) for formation of a bid package. Additionally, a detailed bid schedule, to be attached to the technical specifications, will be prepared with specific line items showing units and unit quantities for the drilling program. Items included in the technical specifications will include (but are not necessarily limited to) the following:

The Final Design TM will include the following items:

- Borehole locations and depth;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g. noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage); and
- Destruction of boreholes;

The Contract Documents will include the following:

- Bid documents;
- General and Special conditions;
- Mobilization, demobilization and cleanup;
- Site access and preparation;
- Noise control measures;
- Drilling method;
- Equipment and materials and records to be furnished by the contractor;
- Borehole drilling and sampling including;
  - Drilling and sampling methodology
  - Sample preservation
  - Falling head permeameter testing
  - Borehole destruction
- Water quality sampling and analyses;
MCWRA’s Consultant will prepare an engineer’s estimate of contractor costs for the drilling and destruction of the exploratory boreholes based on local conditions and recent contractor cost estimates for similar projects. This task assumes the design for drilling, construction, and development of up to six monitoring wells.

2.4.2 Final Design – Vertical Test Well

MCWRA’s Consultant will coordinate with RMC who is taking the lead in the implementation of the test vertical well. MCWRA’s Consultant will coordinate with RMC to gather all the information necessary for preparing a final design TM and detailed technical specifications for the vertical test well to be included with front end contractual documents (to be provided by others) for formation of a bid package.

2.4.3 Final Design – Slant Test Well

This task includes preparing a final design TM and detailed technical specifications for the slant test well to be included with front end contractual documents (to be provided by others) for formation of a bid package. Additionally, a detailed bid schedule, to be attached to the technical specifications, will be prepared with specific line items showing units and unit quantities for the construction of the well. Items included in the technical specifications will include (but are not necessarily limited to) the following:

The Final Design TM will include the following items:
- Well location, depth, materials and dimensions;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g. noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage); and
- Abandoned boreholes;

The Contract Documents will include the following:
- Bid documents;
- General and Special conditions;
- Mobilization, demobilization and cleanup;
- Site access and preparation;
- Noise control measures;
- Drilling method;
- Equipment and materials and records to be furnished by the contractor;
- Well drilling and construction, including:
  - Drilling borehole and installation of telescoping casings,
  - Alignment, plumbness, borehole integrity, fluid properties and drilling speed,
  - Well casing and screen installation,
  - Filter pack material selection and approved placement method,
  - Annular cement seal installation.
- Well development, including:
  - Initial airlift development between packers, and
  - Development by pumping.
- Aquifer pumping and recovery tests,
- Water quality sampling and analyses;
- Dye tracer survey,
- Downhole video camera survey;
Exhibit B – Scope of Work

- Gyroscopic alignment survey;
- Wellhead survey; and
- Well cover and final inspection.

MCWRA’s Consultant will prepare an engineer’s estimate of contractor costs for the drilling, construction, development, and testing of the well based on local conditions and recent contractor cost estimates for similar projects. This task assumes the design of one slant test well.

Task 2.4 Deliverables:
A separate set of contract documents will be prepared for the monitoring wells, the vertical test well, and the slant test well. Each set of contract documents will contain bidding documents, agreement, bonds, insurance requirements, general and special conditions and detailed technical plans and for the monitoring wells, vertical test well, and the slant test well. The final deliverable will include one (1) electronic copy and two (2) bound hard copies of each of the contract documents and cost estimate.

Task 2.5 Assistance with Bidding Process
The consultant team will assist MCWRA in the contractor bid process for the monitoring wells, vertical well, and slant test well. This assistance will include the following tasks:
- Providing a list of qualified bidders for each specific project;
- Responding to contractor inquiries;
- Attending pre-bid meetings (including site walks); and
- Responding to contractor inquiries and preparing bid addenda as necessary.
## Test Well Work
### Monterey Regional Water Supply Project

### Fee Estimate

<table>
<thead>
<tr>
<th>Test Wells</th>
<th>Geo Science Total Labor Costs (1)</th>
<th>T&amp;C</th>
<th>Luhdorff &amp; Scalmari</th>
<th>Subtotal Subconsultants</th>
<th>Sub Consultant Total Cost (2)</th>
<th>Total Fee</th>
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### Task 2: Test Well Design

| 2.1 Ground Water Modeling | $61,000 | $9,000 | $9,000 | $8,900 | $80,800 |
| 2.2 Permitting | $10,000 | | $0 | $0 | $10,000 |
| 2.3 Preliminary Design (Monitoring Wells, Vertical and Slant Test Wells) | $89,000 | $10,000 | $5,000 | $15,000 | $16,500 | $105,500 |
| 2.4.1 Final Design (Monitoring Wells) | $20,000 | | $0 | $0 | $20,000 |
| 2.4.2 Final Design (Vertical Well) | $30,000 | $12,000 | $2,500 | $14,500 | $15,950 | $46,000 |
| 2.4.3 Final Design (Slant Well) | $30,000 | $12,000 | $2,500 | $14,500 | $15,950 | $46,000 |
| 2.5 Assistance with Bidding Process | $20,000 | | | $0 | $0 | $20,000 |
| Subtotal Task 2 | $280,000 | $34,000 | $15,000 | $53,000 | $58,300 | $338,400 |

### Contingency:

<table>
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<th>Geo Science Total Labor Costs (1)</th>
<th>T&amp;C</th>
<th>Luhdorff &amp; Scalmari</th>
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1. The individual hourly rates include salary, overhead, and profit.
2. Subconsultants will be billed at actual cost plus 10%.
3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
4. For Task 1.1 - Attendance at up to 10 Meetings and 10 Conference Calls for GEOSCIENCE and AMC Water ad Environment. Luhdorff & Scalmari will attend 5 meetings and up to 10 conference calls. 

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**GEOSCIENCE Support Services, Inc.**

31-Jul-10

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