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# ATTACHMENT 1

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Geoscience



**AGREEMENT  
FOR  
LIMITED PROFESSIONAL SERVICES**

**November 1, 2007**

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**AGREEMENT FOR  
LIMITED PROFESSIONAL SERVICES  
BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
GEOSCIENCE  
FOR  
COASTAL WATER PROJECT- NORTH MARINA GROUND WATER MODEL**

THIS AGREEMENT, made and entered into this 1<sup>ST</sup> day of NOVEMBER in the year 2007 by and between CALIFORNIA AMERICAN WATER, with its principal office at 50 RAGSDALE DRIVE, SUITE 100, MONTEREY, CALIFORNIA, 93940, hereinafter referred to as "OWNER", and GEOSCIENCE providing professional services with its principal office at 1326 MONTE VISTA AVENUE, SUITE 3, UPLAND, CA 91786 hereinafter referred to as "CONSULTANT":

WHEREAS, CALIFORNIA AMERICAN WATER, desires to receive the professional services related to the COASTAL WATER PROJECT- NORTH MARINA GROUNDWATER MODEL with a scope generally defined by GEOSCIENCE proposal presented in Appendix A; and

WHEREAS, OWNER is desirous of engaging the services of said CONSULTANT to perform or furnish said services. WHEREAS, CONSULTANT has available and offers to provide personnel and facilities necessary to accomplish said services in a timely manner. NOW, THEREFORE, said OWNER and said CONSULTANT, for the considerations hereinafter set forth, mutually agree as follows:

**ARTICLE I - PROFESSIONAL ENGAGEMENT**

OWNER hereby engages GEOSCIENCE, as an independent contractor, to perform or furnish the services hereinafter more particularly described in Appendix A, commencing on the date of this Agreement.

CONSULTANT hereby agrees to perform or furnish as an independent contractor professional and related services as set forth herein. CONSULTANT may retain qualified subconsultants to assist in the performance of professional services. OWNER shall be notified prior to CONSULTANT subcontracting such services and sufficient time shall be provided to allow OWNER to review the subconsultant's qualification. Should OWNER, based upon reasonable cause, not accept any such subcontractor or subconsultant for use on the Project, OWNER shall so notify CONSULTANT within five (5) days following OWNER's receipt of such notice from CONSULTANT, and CONSULTANT shall not subcontract with any such subcontractor or subconsultant for the Project. OWNER shall have the right at any time to revoke its acceptance (whether given affirmatively or by its failure to object within said five (5) day period) of any subcontractor or subconsultant on the basis of reasonable cause, in which case CONSULTANT shall submit an acceptable substitute and, if necessary and agreed to by the parties, a Task Order equitably adjusting CONSULTANT'S compensation will be issued. No acceptance of any subcontractor or subconsultant shall waive: (1) OWNER's right not to accept defective services performed or furnished for CONSULTANT by said subcontractor or subconsultant; or (2) any other right or remedy OWNER has under this Agreement, including but not limited to its rights to suspend or terminate services under this Agreement.

CONSULTANT is an independent contractor and is not and shall not be deemed to be an employee, agent, servant, partner or joint venturer of OWNER. CONSULTANT shall have the exclusive supervision, direction and control of all employees, subconsultants, subcontractors, suppliers, materials, equipment and facilities, employed, contracted with, or used by, CONSULTANT in performing or furnishing services under this Agreement.

## **ARTICLE II - SCOPE OF SERVICES**

The scope of services performed or furnished by CONSULTANT under the terms of this Agreement is defined in Appendix A and in the executed Task Orders pursuant hereto which will authorize CONSULTANT to perform specific services related to the project. Unless modified in writing by both parties through a Task Order, duties of CONSULTANT shall not be construed to exceed those services specifically established in Appendix A. **Any additional fees associated with services not included in Appendix A must be defined and agreed to by OWNER in writing prior to initiation of those services.**

## **ARTICLE III - COOPERATION BY OWNER**

OWNER shall, to the extent reasonable and practicable, cooperate with CONSULTANT in the performance of CONSULTANT's services hereunder. Such cooperation shall include, but not necessarily be limited to: providing right of access to work sites as required for Consultant to perform or furnish services under this Agreement; providing relevant material available from OWNER'S files such as maps, drawings as available, records, and operation and maintenance information; serving all notices, attending all hearings; payment of all permit and other required fees associated with the Project; and rendering assistance in determining the location of existing facilities and improvements which may be affected by the Project.

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OWNER shall be responsible for providing legal services, which it deems necessary for the Project including review of contract documents, public advertising, and contract letting. OWNER shall pay fees for utility services to the Project.

**OWNER'S REPRESENTATIVE** with respect to the services to be performed under this Agreement shall be:

John Klein, P.E.  
California American Water Company  
50 Ragsdale Drive, Suite 100  
Monterey, CA 93942  
Phone: (831) 646-3273  
Fax: (831) 375-4367  
Email: [john.klein@amwater.com](mailto:john.klein@amwater.com)

OWNER'S REPRESENTATIVE shall have complete authority to transmit instructions, receive information, and interpret and define OWNER's policies. CONSULTANT shall be entitled to rely on representations made by OWNER'S REPRESENTATIVE unless otherwise specified in writing by OWNER.

**CONSULTANT'S REPRESENTATIVE** with respect to the services to be performed under this Agreement shall be:

Dennis E. Williams, Ph. D.  
GEOSCIENCE Support Services  
1326 Monte Vista Avenue, Suite 3  
Upland, CA 91786  
Phone: (909) 920-0707  
Fax: (909) 920-0403  
Email: [dwilliams@goescience-water.com](mailto:dwilliams@goescience-water.com)

CONSULTANT'S REPRESENTATIVE shall have complete authority to sign and transmit reports specifications recommendations and receive and execute OWNER instructions. OWNER shall be entitled to rely on representations made by CONSULTANT'S REPRESENTATIVE unless otherwise specified in writing by CONSULTANT.

#### **ARTICLE IV - SCHEDULE**

A schedule for carrying out services performed by CONSULTANT under the terms of this Agreement is set forth in Appendix A. CONSULTANT will perform or furnish all services under this Agreement in accordance with said schedule.

OWNER will be kept informed as to the progress of the services under this Agreement under the terms presented in Appendix A. Neither party shall hold the other responsible for damages caused by, arising out of or resulting from delays beyond the control of the other party. Delays in

work performed by CONSULTANT 's Subconsultants are deemed to be delays within the control of CONSULTANT.

#### **ARTICLE V - ASSIGNMENT OF CONTRACT**

CONSULTANT shall not assign this Agreement or any portion of the services to be performed or furnished hereunder without prior written approval of OWNER.

#### **ARTICLE VI - LITIGATION**

This Agreement does not require CONSULTANT to prepare for or appear as a witness in any litigation or alternative dispute resolution proceeding on behalf of OWNER, other than as specified in Appendix A, except in consideration of additional reasonable compensation negotiated as part of a Task Order specifically issued for such purpose. Notwithstanding the preceding, CONSULTANT shall participate without additional compensation in any litigation or alternative dispute resolution proceeding in which CONSULTANT is a party or in which a claim is made against OWNER based in whole or in part on CONSULTANT's negligence, professional errors or omissions, breach of contract or deficiencies in CONSULTANT's design or performance hereunder.

#### **ARTICLE VII - OWNERSHIP OF WORK PRODUCTS**

Reports, drawings, specifications, submittals, and other work products of CONSULTANT for the Project, except working notes and internal documents, become the property of OWNER upon delivery thereof to OWNER and payment for the services which produced said documents in accordance with this Agreement. Reuse of these work products of CONSULTANT by OWNER for other than the specific project covered in this Agreement, or modification and use by OWNER of any documents connected with this Agreement, without the written permission of CONSULTANT shall be at OWNER's risk and OWNER agrees to defend, indemnify, and hold harmless CONSULTANT from all claims, damages and expenses including attorney's fees arising out of such unauthorized reuse of CONSULTANT work product by OWNER or by others acting through OWNER.

#### **ARTICLE VIII - PAYMENT**

Payment for the services set forth in Appendix A and specific executed Task Orders shall be made by OWNER to CONSULTANT and shall be considered as full compensation for such services and all personnel, materials, supplies, and equipment used and costs incurred in carrying out such services.

- A. Payment for services performed or furnished under terms of Appendix A and/or Task Orders in which a lump sum basis of compensation is specified shall be as described below:

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1. Compensation to CONSULTANT shall be a lump sum amount specified in Appendix A and Task Orders.

2. Payments shall be monthly, based on percent completion. As each payment is due, a statement describing the services which have been performed or furnished and listing the percent of completion and the total amount of prior payments paid by OWNER shall be submitted to OWNER. Payment shall be made for the balance due under such statement, without retention unless OWNER contests all or part of said billing in which event only that portion so contested will be retained by OWNER pending resolution of the dispute and any uncontested portion will be paid.

B. If lump sum compensation is not agreed upon, payment for services performed in which a time and expense or unit price basis of compensation is specified shall be as described below:

1. Compensation to CONSULTANT shall be on a time and expense reimbursement basis or fixed unit rate basis as stipulated in Appendix A or an executed Task Order. A current copy of the Schedule of Charges will be included with CONSULTANT's proposal and each Task Order for time and expense or fixed unit rate reimbursement.

2. Payments for services provided by CONSULTANT on a time and expense basis shall be made monthly by the OWNER based on an itemized invoice from CONSULTANT which lists by task actual costs and expenses or units of work performed in the immediate preceding month. Such payments shall be for the invoice amount, without retention unless OWNER contests all or part of said billing in which event only that portion so contested will be retained by OWNER pending resolution of the dispute and any uncontested portion will be paid.

3. A budget for compensation for services provided by CONSULTANT on a time and expense basis will be established. The budget established shall not be exceeded without OWNER's written authorization. If at any time CONSULTANT believes the cost of the services will exceed the budget, CONSULTANT shall provide to OWNER a list of remaining services needed to complete the work and the estimated budget for performing these services. The budget may be increased by amendment if necessary to complete the scope of work.

4. Payment for the services listed in Appendix A shall not exceed One Hundred Seventeen Thousand Eight Hundred Dollars (\$117,800) without OWNER's written authorization. Consultant shall subdivide invoices by each of the subtasks as identified in the proposal.

C. CONSULTANT's final statement or invoice for any services which include construction, or the final statement or invoice for the Project, whichever occurs earlier in time, shall include properly completed and executed Releases of Liens and Claims (see Appendix C). Payment of any invoice not satisfying these requirements may be withheld until the requirements has been satisfied.

D. Payments are due upon receipt of a statement or invoice prepared in a manner acceptable to OWNER and approved by OWNER. Interest shall accrue and be paid on any unpaid approved statement or invoice amount at the legal rate of interest from the 45th day after receipt of such statement or invoice to the date of payment. Interest shall be payable at the same time that said statement or invoice amount is paid.

#### **ARTICLE IX - SUSPENSION OF WORK**

OWNER may, at OWNER'S discretion, suspend, in writing, all or a portion of the services under this Agreement. CONSULTANT may suspend the services under this Agreement in the event OWNER does not make payment in accordance with the payment terms in Article VIII. The services under this Agreement will only be suspended for non-payment after written notice is received by OWNER from CONSULTANT of its intention to suspend performance and a cure period of seven (7) days after receipt of this notification by OWNER. The time for completion of the services under this Agreement shall be extended by the number of days the services under this Agreement is suspended. If the period of suspension exceeds ninety (90) days, the terms of this Agreement are subject to renegotiation, and both parties shall have the option to terminate the services under this Agreement on the suspended portion of project in accordance with Article X.

#### **ARTICLE X - TERMINATION OF SERVICES**

OWNER, by notifying CONSULTANT in writing, may terminate any or all of the services covered by this Agreement. In the event of such termination, CONSULTANT shall have the right to expend a reasonable amount of additional time to assemble work in progress for the purpose of proper filing and closing of the job. Such additional time shall not exceed five percent (5%) of the total time expended to the date of notice of termination or a designated total time agreed upon in a Task Order. All charges thus incurred, together with associated expenses reasonably incurred by CONSULTANT and reasonable charges for any other commitments outstanding at the time of termination (such as for termination of subconsultants, rental agreements, etc.), shall be payable by OWNER within thirty (30) days following submission of a final statement by CONSULTANT. However, in the event that termination of said Agreement with CONSULTANT occurs at the completion of a specific phase of the services, the aforesaid provision for the proper filing and closing will not apply unless agreed to by OWNER under a specific Task Order. The payment provided for under this Article X shall constitute full satisfaction of any obligation OWNER has, may have or could be found to have to pay for

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services performed or furnished and expenses or charges incurred by CONSULTANT pursuant to this Agreement and any and all liabilities or damages arising out of or resulting from the termination of this Agreement.

**ARTICLE XI - INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT shall indemnify, hold harmless and defend OWNER, its parent, subsidiaries, partners, officers, directors, employees and agents from and against any and all claims, damages, costs, losses and expenses (including but not limited to attorneys' fees) caused by, arising out of or related to the negligence (including but not limited to professional negligence, errors or omissions) of CONSULTANT, its partners, officers, employees, agents, subconsultants and subcontractors in the performance or furnishing of services under this Agreement, provided however, that CONSULTANT's liability to OWNER under this Article XI shall not exceed the percentage share of such claim, damages, cost, loss and expense that the negligence (including professional negligence, errors or omissions) of CONSULTANT, its partners, officers, employees, agents, subconsultants and subcontractors bears to the total negligence of all negligent entities and individuals determined on the basis of comparative negligence principles.

**ARTICLE XII - INSURANCE**

A. CONSULTANT shall maintain worker's compensation and employers' liability insurance in accordance with the amount(s) and coverage(s) in the attached Appendix B.

B. CONSULTANT shall maintain commercial general liability and automobile liability insurance protecting it against claims arising from bodily or personal injury or damage to property, including loss of use thereof, resulting from operations of CONSULTANT pursuant to this Agreement or from the use of automobiles and equipment of or by CONSULTANT. The amount(s) and coverage(s) shall be in accordance with Appendix B.

C. CONSULTANT shall maintain a policy of professional liability insurance, protecting it against claims arising out of the negligent acts, errors, or omissions for which it is legally liable in the performance or furnishing of professional services pursuant to this Agreement. (Such insurance shall be maintained for one (1) year after final completion of construction. The amount(s) and coverage(s) shall be in accordance with Appendix B.

D. CONSULTANT is required to provide OWNER with Certificates of Insurance evidencing the afore-referenced coverages and, upon OWNER's written request, complete copies of such policies or other evidence of coverage satisfactory to OWNER shall be provided to OWNER. Approval or acceptance of said insurance by OWNER shall not relieve or decrease the liability of CONSULTANT hereunder.

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E. OWNER agrees to endeavor to include a provision in the OWNER's contract with the Construction Contractor engaged on the Project which requires that CONSULTANT be listed as an additional insured on such Construction Contractor(s) liability insurance policy and property insurance (Builder's Risk) policy, if any.

**ARTICLE XIII - CONTROLLING LAW**

This Agreement is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, this Agreement has been executed by the respective duly authorized agent of OWNER and CONSULTANT, all as of the day and year first above written.

CONSULTANT

OWNER

GEOSCIENCE

CALIFORNIA AMERICAN WATER

By



By



Title

President

Title

Vice President - Engineering

26-NOV-07

12/3/07

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**APPENDIX A**

**CONSULTANT'S PROPOSAL**

# GEOSCIENCE

October 18, 2007

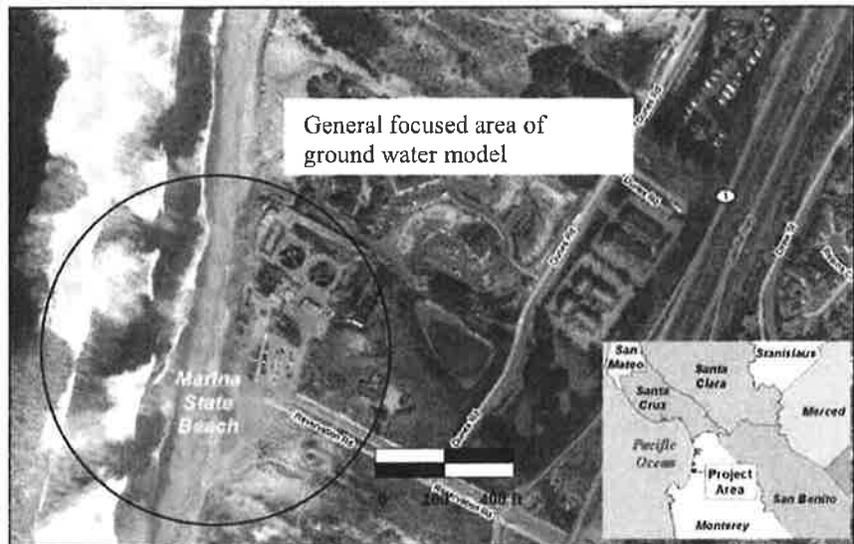
Mr. John Klein, P.E.  
Senior Operations Engineer  
California American Water  
Coastal Division  
50 Ragsdale Dr., Suite 100  
P.O. Box 951  
Monterey, CA 93942-0951

**Re: Coastal Water Project – North Marina Ground Water Model – Scope and Cost**

Dear John:

As per your request, GEOSCIENCE is submitting this scope and cost to provide geohydrologic consulting services to prepare a ground water modeling study for a proposed desalination plant in the North Marina area. The modeling work would be in support of the Coastal Water Project Subsurface Intake Feasibility Study for California American Water Company (Cal-Am).

Specifically, the scope and costs are essentially the same as for Task 9 (Construct Three-Dimensional Ground Water Flow and Variable Density Solute Transport Model) in the 5-Dec-06 proposal with the addition of a data review task. The specific area of the model will focus



on the Reservation Road and Dunes Road area and west of Highway 1 in Marina, California.

GEOSCIENCE SUPPORT SERVICES INCORPORATED

*Ground Water Resources Development*

P.O. Box 220, Claremont, CA 91711

FAX 909-920-0403

909-920-0707

As per our recent discussion, the modeling feasibility will include evaluation of both low angle (i.e. “slant” wells) as well as vertical wells as potential feedwater supply systems.

## **MODELING SCOPE OF WORK**

### **Background Data Review**

A thorough review of nearby coastal well information will be made to understand the coastal aquifer system in the area. In 2000, the U.S. Geological Survey (USGS) constructed and tested a deep monitoring well less than one mile southeast of the proposed site. The USGS monitoring well shows dune sand to a depth of 80 ft and alluvium of the “180-foot” aquifer from 80 to 180 ft below ground surface (bgs), with additional water-bearing alluvium between 180 and 250 ft bgs. The upper part of the “400-foot” aquifer was found between 250 and 450 ft bgs. It is understood that there is an existing shallow (approx. 50 ft) vertical desalination intake well on the MCWD property that could provide additional data.

In addition, a complete review of all available geohydrologic and well data from public and private entities in the vicinity of the North Marina site will be made. These data will include well driller’s logs, lithologic logs, geophysical borehole logs, drilling records, historical water level elevations, historical water quality, and pumping test data. (e.g., data from which aquifer and well parameters such as transmissivity, storativity, leakance, and well efficiency can be calculated).

### **Development of a Three-Dimensional Ground Water Flow and Variable Density Solute Transport Model**

A three-dimensional ground water flow and variable density solute transport model (SEAWAT-2000, developed by the USGS) will be constructed of the Marina site area in order to estimate full scale project yield and impacts from the well feed water supply intake system. Input to the model will include, but not be limited to, available geohydrologic data and available

data on upstream water levels, water quality, and aquifer parameters. The model will consist of multiple layers with the smallest model cell size being appropriately sized in order to accurately model the well array intake systems.

Model input data files will include, but not be limited to, ground surface elevations, initial water elevations, tidal elevation data, and initial salinity concentrations. Model input data will also include characterization of seawater quality, the fresh water-salt water interface, the dispersion zone of the interface, and its variability with depth and time. Boundary conditions will include:

- Constant head,
- Prescribed flux, and
- Mixed boundary (general head).

Model input files will include model layer elevations, water level elevations, and water quality (i.e., TDS) concentration maps generated using Geographic Information System (GIS) software.

The model will be calibrated to both steady state and transient conditions. Predictive model runs will be performed to simulate changes in ground water elevations and salinity with both time and space for various well input configurations.

Multiple model runs will be made to determine localized interference effects and optimum well spacing and yield. To encompass all potential well intake systems, slant well as well as vertical well configurations will be simulated. To accomplish this, an iterative process will be done which will consist of generating input well files using varied well screen length, well production, and well array geometries, and identifying potential spatial and temporal water level and water quality changes. For purposes of the cost estimation, it is assumed that two main well configuration scenarios (slant wells and vertical wells) will be evaluated to identify the optimum production, spacing and potential impacts from a full-scale project feed water supply system.

Five draft and five final copies of a technical memorandum summarizing the model results will be prepared. In addition, an electronic copy of the report in PDF format will be provided.

The modeling work can be completed after three months of the notice to proceed.

Please call if you have any questions.

Sincerely,



Dennis E. Williams, Ph.D.

President

Encl.

**Cost Estimate for Professional Geohydrological Services  
 Ground Water Model Development - North Marina Area**

		HOURS					Labor	Reimbursable Expenses	Total Cost
		Principal Hydrologist \$250/Hr	Senior Geohydrologist \$145/Hr	Staff Geohydrologist \$98/Hr	Graphics \$85/Hr	Clerical \$65/Hr			
1	Obtain and Review Background Data	4	16	32	8	4	\$ 7,396	\$ 600	\$ 7,996
2	Develop Conceptual Model with Boundary Conditions	8	120	40			\$ 23,320		\$ 23,320
3	Generate Model Input Files	8	80	100			\$ 23,400		\$ 23,400
4	Develop Preliminary Near Shore Production Well Configurations	12	36	8	12		\$ 10,024		\$ 10,024
5	Preliminary Modeling of Potential Well Configurations	16	120	80			\$ 29,240		\$ 29,240
6	Prepare Ground Water Model Analysis Technical Memorandum, Assume 5 Draft and 5 Final Copies	16	60	60	40	16	\$ 23,020	\$ 800	\$ 23,820
							<b>Subtotal</b>	<b>\$ 1,400</b>	<b>\$ 117,800</b>

**GEOSCIENCE Support Services, Inc.**

**FEE SCHEDULE**

**Schedule of Hourly Rates**

<b>Professional Services</b>	<b>Hourly Rates (\$US)</b>
Principal Hydrologist	
Project Work	\$250
Expert Witness - Depositions & Court Time	\$500
Senior Project Geohydrologist	\$145
Senior Ground Water Modeler	\$145
Staff Geohydrologist	\$98
Project Administrator	\$85
Technical and Graphics Illustrator	\$85
Clerical	\$65
<b>Reimbursable Expenses</b>	
Reimbursable Project Expenses	Cost + 5%
(Telephone, Outside Reproduction, Presentation Supplies, Postage, etc.)	
Computer Services	Project Dependent
Internal Photocopying- B&W	\$0.10/page
Internal Photocopying - Color	\$0.70/page
E-Size Color Plates	\$50/Plate
Subconsultant Services	Cost + 10%
Automobile Transportation	\$0.485/mile
Commercial Travel/Subsistence	Cost + 3%
Per Diem at Drilling Site	\$105/day

Note: Fees valid for January 1 – December 31, 2007. All fees subject to change January 1, 2008.

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**APPENDIX B**

**INSURANCE REQUIREMENTS**

Article XII, Insurance of the Agreement, is amended and supplemented to include the following agreement of the parties:

The limits of liability for the insurance required by Article XII are as follows:

XII	A. Worker's Compensation Employee's Liability	Statutory 1,000,000
	B. General Liability* General Aggregate Each Occurrence Products/Comp. Ops. Personal & Adv. Inj. Fire Damage (any one fire) Medical Expense (any one person)  Automobile Liability Bodily Inj. & P.D. Combined Single Limit Each Accident	1,000,000     1,000,000
	C. Professional Liability Limit Aggregate Deductible (if over 250,000)	1,000,000
	D. Excess Liability Occurrence Aggregate	1,000,000

\* Additional Insured: OWNER will be added to the policies required in XII B as an additional insured.

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APPENDIX C

RELEASE OF LEINS AND CLAIMS

**CONDITIONAL WAIVER AND RELEASE UPON  
PROGRESS PAYMENT**

**[Civil Code § 3262(d)(1)]**

Upon receipt by the undersigned of a check from \_\_\_\_\_  
(Maker of Check)

in the sum of \$ \_\_\_\_\_ payable to \_\_\_\_\_  
(Amount of Check) (Payee or Payees of Check)

and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release any mechanic's lien, stop notice, or bond right the undersigned has on the job of \_\_\_\_\_  
(Owner)

located at \_\_\_\_\_ to the following extent.  
(Job Description)

This release covers a progress payment for labor, services, equipment, or material furnished to \_\_\_\_\_ through \_\_\_\_\_  
(Your Customer) (Date)

only and does not cover any retentions retained before or after the release date; extras furnished before the release date for which payment has not been received; extras or items furnished after the release date. Rights based upon work performed or items furnished under a written change order which has been fully executed by the parties prior to the release date are covered by this release unless specifically reserved by the claimant in this release as follows: \_\_\_\_\_

\_\_\_\_\_  
(Change Orders Not Covered By This Release)

This release of any mechanic's lien, stop notice, or bond right shall not otherwise affect the contract rights, including rights between parties to the contract based upon rescission, abandonment, or breach of the contract, or the right of the undersigned to recover compensation for furnished labor, services, equipment, or material covered by this release if that furnished labor, services, equipment, or material was not compensated by the progress payment.

Before any recipient of this document relies on it, said party should verify evidence of payment to the undersigned.

Dated: \_\_\_\_\_  
(Company Name)

By \_\_\_\_\_  
(Title)

**UNCONDITIONAL WAIVER AND RELEASE UPON PROGRESS PAYMENT**

**[Civil Code § 3262(d)(2)]**

The undersigned has been paid and has received a progress payment in the sum of \$ \_\_\_\_\_ for labor, services, equipment or material furnished to \_\_\_\_\_  
(Your Customer)

on the job of \_\_\_\_\_ located at \_\_\_\_\_  
(Owner)  
(Job Description)

and does hereby release any mechanic's lien, stop notice, or bond right that the undersigned has on the above referenced job to the following extent.

This release cover a progress payment for labor, services, equipment, or materials furnished to \_\_\_\_\_ through \_\_\_\_\_  
(Your Customer) (Date)

only and does not cover any retentions retained before or after the release date; extras furnished before the release date for which payment has not been received; extras or items furnished after the release date. Rights based upon work performed or items furnished under a written change order which has been fully executed by the parties prior to the release date are covered by this release unless specifically reserved by the claimant in this release as follows:

(Change Orders Not Covered By This Release)

This release of any mechanic's lien, stop notice, or bond right shall not otherwise affect the contract rights, including rights between parties to the contract based upon rescission, abandonment, or breach of the contract, or the right of the undersigned to recover compensation for furnished labor, services, equipment, or material covered by this release if that furnished labor, services, equipment, or material was not compensated by the progress payment.

Dated: \_\_\_\_\_ (Company Name)

By \_\_\_\_\_  
(Title)

**NOTICE: THIS DOCUMENT WAIVES RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL RELEASE FORM.**

**CONDITIONAL WAIVER AND RELEASE UPON  
FINAL PAYMENT**

**[Civil Code § 3262(d)(3)]**

Upon receipt by the undersigned of a check from \_\_\_\_\_  
(Maker of Check)

in the sum of \$ \_\_\_\_\_ payable to \_\_\_\_\_  
(Amount of Check) (Payee or Payees of Check)

and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release any mechanic's lien, stop notice, or bond right the undersigned has on the job of \_\_\_\_\_  
(Owner)

located at \_\_\_\_\_  
(Job Description)

This release covers the final payment to the undersigned for all labor, services, equipment, or material furnished on the job, except for disputed claims for additional work in the amount of \$ \_\_\_\_\_, with such additional work described as follows: \_\_\_\_\_

\_\_\_\_\_  
(Work Not Covered By This Release)

Before any recipient of this document relies on it, the party should verify evidence of payment to the undersigned.

Dated: \_\_\_\_\_

\_\_\_\_\_  
(Company Name)

By \_\_\_\_\_  
(Title)

**UNCONDITIONAL WAIVER AND RELEASE UPON FINAL PAYMENT**

**[Civil Code § 3262(d)(4)]**

The undersigned has been paid in full for all labor, services, equipment or material furnished to \_\_\_\_\_ on the job of \_\_\_\_\_  
(Your Customer) (Owner)

located at \_\_\_\_\_ and does hereby waive and  
(Job Description)  
release any right to a mechanic's lien, stop notice, or any right against a labor and material bond on the job, except for disputed claims for extra work in the amount of \$ \_\_\_\_\_,  
with such extra work described as follows: \_\_\_\_\_

\_\_\_\_\_  
(Work Not Covered By This Release)

Dated: \_\_\_\_\_  
(Company Name)

By \_\_\_\_\_  
(Title)

**NOTICE: THIS DOCUMENT WAIVES RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL RELEASE FORM.**

ORIGINAL

Contract No. M0833

**TASK ORDER  
AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
GEOSCIENCE SUPPORT SERVICES, INC.  
FOR  
MONTEREY REGIONAL WATER SUPPLY PROGRAM  
NORTH MARINA GROUND WATER MODELING  
ADDITIONAL SCOPE AND COST**

Article II - Scope of Services shall be modified as set forth in the attached letter dated February 28, 2008 from GeoScience regarding the Monterey Regional Water Supply Program - North Marina Ground Water Modeling - Additional Scope and Cost, including the attached Scope of Work and the attached Budget (collectively, "ATTACHMENT 1"), all of which are incorporated by this reference as if fully set forth in this Task Order.

Article IV - Schedule for performance and completion of this Task Order shall be March 1, 2008 through December 31, 2008. Coordinate specific modeling work and submission of deliverables, including schedule, with RMC Water and Environmental. CONSULTANT shall provide all deliverables and work products to RMC Water and Environmental with a copy to OWNER.

Article VIII - Payment shall be amended to include completion of all work covered by this Task Order in an amount not to exceed \$57,498.00 as set forth in Attachment 1. CONSULTANT shall subdivide invoices by each of the subtasks as identified in Attachment 1.

All other articles of the November 1, 2007 AGREEMENT FOR LIMITED PROFESSIONAL SERVICES remain the same.

OWNER and CONSULTANT have caused this Agreement to be amended by representatives duly authorized to act, all as of the effective date shown by approval signature.

PREPARED BY: John Klein Date May 15, 2008  
John Klein

CONSULTANT  
GeoScience Support Services, Inc.  
By [Signature]  
Title President  
Date 3-JUN-08

OWNER  
California American Water  
By [Signature]  
Title Dir. Reg.  
Date June 5, 2008

# GEOSCIENCE

February 28, 2008

Mr. John Klein, P.E.  
Senior Operations Engineer  
California American Water: Coastal Division  
511 Forest Lodge Road, Suite 100  
P.O. Box 951  
Monterey, CA 93942-0951

**Re: Task Order MO750 –  
Monterey Regional Water Supply Program – North Marina Ground Water  
Modeling – Additional Scope and Cost**

Dear John:

As discussed at the meeting at Marina on February 27, 2008, we are submitting to you this scope and cost, which was previously sent to RMC, to perform additional model scenarios that cover other potential projects as part of the Monterey Regional Water Supply Program.

In order to model other water management options that are proposed as part of the Monterey Regional Water Supply Program, the present model area will need to be increased somewhat. In addition to changes to the model geometry, up to an additional six model scenarios will need to be developed, run and evaluated.

As you are aware, we are in contact with Ali Taghavi from WRIME, Inc. regarding compatibility of the regional model (IGSM) and the focused model (Cal-Am North Marina model). WRIME will provide data from the basinwide IGSM model in those nodes which lie within our model area so that we can ensure compatibility of model parameters. In other words, output from the

GEO SCIENCE SUPPORT SERVICES INCORPORATED  
*Ground Water Resources Development*  
P.O. Box 220, Claremont, CA 91711  
FAX 909-920-0404  
909-920-0707

IGSM will constitute boundary conditions for our model and output from our model will then be incorporated into the basinwide IGSM model.

## **MODELING SCOPE OF WORK**

### **Task 1: Background Data Collection and Review**

As the model area will be increased to encompass additional projects, further data will need to be collected from the water agencies. The data that will be needed includes:

1. Production wells (deep and shallow): well coordinates or shapefile, historical monthly production, historical water levels, historical ground water quality, expected future production from wells (by well).
2. Agricultural wells: well coordinates or shapefile, historical production, water quality.
3. Monitoring wells: well coordinates or shapefile, historical water levels and water quality.

### **Task 2: Expand Original Model Area**

Model parameters and boundary conditions for the original three-dimensional ground water flow and variable density solute transport model being developed for Cal-Am will need to be expanded to include all proposed projects and possible impacted projects.

The model will be calibrated to both steady state and transient conditions using the same calibration period as the basinwide IGSM model. Predictive model runs will be performed to simulate changes in ground water elevations and salinity with both time and space for the various proposed projects.

**Task 3: Develop and Run Up to Six Model Scenarios Representing Various Regional Projects**

To evaluate the impact of various proposed projects that are part of the Monterey Regional Water Supply Project, up to six model scenarios will be developed. These will include:

- Wells pumping in the 180 ft aquifer to form an extraction trough to prevent sea-water intrusion. This water would be used for desalination feedwater supply,
- Impacts from three IGSM scenarios that encompass regional projects, and
- Two additional scenarios that will be needed as part of the iterative process to optimize placement of wells.

**Task 4: Reporting**

The model scenarios and assumptions, together with the results of the model scenario runs will be described in the model report that is part of our original scope (October 18, 2007). This task includes additional hours to cover the costs of this work.

GEOSCIENCE has a signed contract with California American Water [Task Order M0750 in the amount of \$117,800, dated December 1, 2007] for the North Marina Ground Water Model. The scope and cost presented here is for work to be performed in addition to that effort. In order to perform the work presented above, we therefore respectfully request an amendment to the original Task Order in the amount of \$57,498 [see following table].

Please call if you have any questions.

Sincerely,



Dennis E. Williams, Ph.D.

President

encl.

**Cost Estimate for Professional Geohydrological Services  
 Additional Ground Water Modeling - North Marina Area**

		HOURS						Labor	Reimbursable Expenses	Total Cost
		Principal Hydrologist \$250/Hr	Senior Geohydrologist-Modeler \$155/Hr	Project Geohydrologist \$120/Hr	Staff Geohydrologist \$98/Hr	Graphics \$85/Hr	Clerical \$65/Hr			
1	Obtain and Review Background Data	4	24	20	8			\$ 7,904	\$ 50	\$ 7,954
2	Expand Original Model Area - integrate IGSM data	4	40	20				\$ 9,600	\$ -	\$ 9,600
<b>Sub Total Model Expansion and Integration</b>		<b>8</b>	<b>64</b>	<b>40</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>\$ 17,504</b>	<b>\$ 50</b>	<b>\$ 17,554</b>
3	Develop, Run and Process Model Scenarios Representing Various Proposed Projects- Assumes 6 scenarios	18	120	36				\$ 27,420	\$ -	\$ 27,420
4	Reporting of Model Scenarios and Results in the Model Report	4	32	16	8	40	4	\$ 12,324	\$ 200	\$ 12,524
<b>Total Hours and Cost</b>		<b>30</b>	<b>216</b>	<b>92</b>	<b>16</b>	<b>40</b>	<b>4</b>	<b>\$ 57,248</b>	<b>\$ 250</b>	<b>\$ 57,498</b>

**GEOSCIENCE Support Services, Inc.**

**FEE SCHEDULE**

**Schedule of Hourly Rates**

<b>Professional Services</b>	<b>Hourly Rates (\$US)</b>
<b>Principal Hydrologist</b>	
Project Work	\$250
Expert Witness - Depositions & Court Time	\$500
Senior Project Geohydrologist	\$155
Senior Ground Water Modeler	\$155
Project Geohydrologist	\$120
Staff Ground Water Modeler	\$98
Staff Geohydrologist	\$98
Project Administrator	\$85
Technical and Graphics Illustrator	\$85
Clerical	\$65
 <b>Reimbursable Expenses</b>	
Reimbursable Project Expenses	Cost + 5%
(Telephone, Outside Reproduction, Presentation Supplies, Postage, etc.)	
Computer Services	Project Dependent
Internal Photocopying- B&W	\$0.10/page
Internal Photocopying - Color	\$0.70/page
E-Size Color Plates	\$50/Plate
Subconsultant Services	Cost + 10%
Automobile Transportation	\$0.505/mile
Commercial Travel/Subsistence	Cost + 3%
Per Diem at Drilling Site	\$105/day

Fee Schedule

---

Note: Fees valid for January 1 – December 31, 2008. All fees subject to change January 1, 2009.

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3288



RECEIVED  
MAY 05 2008

CALAM WATER CO.

May 1, 2008

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

Re: Coastal Water Project EIR - Revised Scopes for RBF, RMC and Geosciences

Dear John:

The purpose of this letter is to follow up on my letters to you of February 11, 2008 and March 26, 2008, regarding the Scopes of Work (SOWs) prepared by RBF, RMC and Geoscience -- I understand it has been difficult to coordinate all of the various SOWs and contractors, as well as the necessary edits to drafts; thank you for helping get that accomplished. It has been very beneficial to have the input of the Marina Coast Water District (MCWD) and the Monterey County Water Resources Agency (MCWRA) as well as the coordination with the DRA, UCSC/CIWR, and the Monterey Regional Plan Work Group.

We have now received the final Scopes of Work (attached) that address the modeling efforts required to evaluate the groundwater basin effects of slant and vertical well intakes for ocean water and brackish water, as well as the plume modeling for the Monterey Regional Water Pollution Control Agency's (MRWPCA) outfall. The SOW contemplates a number of technical reports, including both a Draft and a Final Technical Memorandum presenting the results of the modeling efforts, as well as an EIR-ready Project Description for a regional approach to water supply in Monterey County.

We have reviewed the Scopes of Work prepared by RBF, RMC and Geoscience, and we believe that the efforts contemplated in these SOWs would satisfy a number of the items that remain outstanding from our Data Request No. 2. These attached SOWs developed by RBF, RMC and Geoscience would provide us with the data and information we need to satisfy Data Request 2.4; the groundwater modeling portion of Data Request 2.5; and Data Request 2.6. Cal Am and the CPUC DRA are working in conjunction with UCSC/CIWR to develop an alternative approach to Cal Am's proposed approach in the CWP PEA. As described in the CPUC Notice of Preparation for the CWP EIR, we intend to evaluate this alternative approach as a separate and viable alternative to Cal Am's proposed CWP project. The efforts contemplated in these SOWs will allow us to complete our Draft EIR for the Coastal Water Project, including the alternative approach currently being developed by Cal Am, the DRA and the UCSC/CIWR -- without these efforts our CEQA review would not be possible.

We urge Cal Am to continue to coordinate with stakeholders interested in additional water supplies in the County, and to proceed fully with the efforts outlined in the attached SOWs. The data and information that will result from the attached SOWs is absolutely required for the Commission to complete its evaluation of the Coastal Water Project and its alternative approaches. The prompt implementation of the schedule contemplated in the attached SOWs would allow us to integrate the resulting analysis into our current EIR schedule without any further delay.

We also request that the CPUC be included in any distribution of draft and final technical reports, memoranda, or project descriptions resulting from the modeling efforts – especially any technical memoranda, graphs, and charts that result from the SOWs.

Thank you once again for your efforts to coordinate with other interested parties in Monterey County regarding potential approaches and projects that would resolve some of the water supply issues facing the region. We are very encouraged by these efforts, and it is our sincere hope that a coordinated modeling effort will result in the data and information we need to complete our EIR within our current schedule. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data. If you have any questions, please contact me directly at 415-703-3221 or via e-mail at [bea@cpuc.ca.gov](mailto:bea@cpuc.ca.gov).

Sincerely,



Andrew Barnsdale  
CPUC Energy Division

cc: w/out attachments  
Michelle Cooke, Administrative Law Judge  
Jean Vieth, Administrative Law Judge  
Lester Wong, Advisor to President Peavey  
Laura Krannawitter, Advisor to Commissioner Bohn  
Sean Gallagher, Director -- CPUC Energy Division  
Jason Reiger, CPUC Legal Division  
David Berger, Cal Am  
Tom Bunosky, Cal Am  
Kent Turner, Cal Am  
Tim Miller, Cal Am Counsel  
Sara Leeper, Counsel to Cal Am  
Lyndell Melton, RMC  
Eric Zigas, ESA

Klein/Anthony/Berger-  
4200

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



RECEIVED  
MAR 31 2008

CAL-AM WATER CO.

March 26, 2008

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

Re: Coastal Water Project EIR - Revised Scope for Intake, Outfall & Groundwater Modeling

Dear John:

The purpose of this letter is to follow up on my letter to you of February 11, 2008, regarding a draft Scope of Work (SOW) prepared by RMC in coordination with the MCWD, the Monterey County Water Resources Agency (MCWRA), and California American Water (Cal Am). We have now received the final Scope of Work (attached) that addresses the modeling efforts required to evaluate the groundwater basin effects of slant and vertical well intakes for ocean water and brackish water, as well as the plume modeling for the Monterey Regional Water Pollution Control Agency's (MRWPCA) outfall. The final SOW was prepared by RMC in coordination with the DRA, UCSC/CIWR, and the Monterey Regional Plan Work Group. The SOW contemplates a number of technical reports, including both a Draft and a Final Technical Memorandum presenting the results of the modeling efforts, as well as an EIR-ready Project Description for a regional approach to water supply in Monterey County.

We have reviewed the Scope of Work prepared by RMC, and we believe that the efforts contemplated in that SOW would satisfy two of the three items that remain outstanding from our Data Request No. 2. The modeling SOW developed by RMC (with Cal Am) would provide us with the data and information we need to satisfy Data Requests 2.5 and 2.6 and allow us to complete our Draft EIR for the Coastal Water Project.<sup>1</sup> The SOW prepared by RMC to address the modeling efforts required for a proper groundwater basin analysis related to the intake and outfall for the CWP is critical to our EIR analysis efforts – and we urge Cal Am to continue to coordinate with stakeholders interested in additional water supplies in the County, and to proceed fully with the efforts outlined in the attached SOW. The data and information that will result from the attached SOW is absolutely required for the Commission to complete its evaluation of the Coastal Water Project.

We note that the collaboratively-prepared scope of work for the groundwater and plume modeling efforts, when completed, will have addressed the Cal Am-only project, in addition to a regional project that has been developed by the community with assistance from the DRA REPOG process and dialogue. We understand the completed scope of work will benefit the region, and not just Cal Am. We also understand that Cal Am is eager to continue its participation in the regional process and that Cal Am will continue to work with the other local agencies to develop and agree to a cost sharing formula for the conduct of this work. We are encouraged by Cal Am's efforts and participation in the regional process, and we look

<sup>1</sup> CalAm and the CPUC have agreed that CalAm will respond separately to DR 2.4

forward to any potential opportunities to develop stable sources of water supply at the least cost and with the least environmental impact.

Again, the attached SOW prepared by RMC to address the modeling efforts related to the intake and outfall for the CWP is critical to the CPUC EIR analysis efforts, and is absolutely required for the Commission to complete its evaluation of the Coastal Water Project. We urge Cal Am to proceed fully with the efforts outlined in the SOW as quickly as possible -- the prompt implementation of the schedule contemplated in the attached RMC SOW would allow us to integrate the resulting analysis into our current EIR schedule without any further delay. We also request that the CPUC be included in any distribution of draft and final technical reports, memoranda, or project descriptions resulting from the modeling efforts -- especially any technical memoranda, graphs, and charts that result from the SOW.

Thank you once again for your efforts to coordinate with other interested parties in Monterey County regarding potential approaches and projects that would resolve some of the water supply issues facing the region. We are very encouraged by these efforts, and it is our sincere hope that a coordinated modeling effort will result in the data and information we need to complete our EIR within our current schedule. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data. If you have any questions, please contact me directly at 415-703-3221 or via e-mail at [bca@cpuc.ca.gov](mailto:bca@cpuc.ca.gov).

Sincerely,



Andrew Barnsdale  
CPUC Energy Division

cc: Michelle Cooke, Administrative Law Judge  
Jean Vieth, Administrative Law Judge  
Lester Wong, Advisor to President Peavey  
Laura Krannawitter, Advisor to Commissioner Bohn  
Sean Gallagher, Director -- CPUC Energy Division  
Jason Reiger, CPUC Legal Division  
Tom Bunosky, Cal Am  
Kent Turner, Cal Am  
Tim Miller, Cal Am Counsel  
Sara Leeper, Counsel to Cal Am  
Lyndell Melton, RMC  
Eric Zigas, ESA

Allen/Bullisby/Anthony  
4200

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



February 11, 2008

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

RECEIVED  
FEB 11 2008  
CAL AM WATER CO

Re: Coastal Water Project EIR  
Revised Data Request 2

Dear John:

The purpose of this letter is to follow up on our meeting of January 30, 2008, at Marina Coast Water District (MCWD) where we reviewed a draft Scope of Work (SOW) prepared by RMC in coordination with the MCWD, the Monterey County Water Resources Agency (MCWRA), and California American Water (Cal Am). That SOW addressed the modeling efforts required to evaluate the groundwater basin effects of slant and vertical well intakes for ocean water and brackish water, as well as the plume modeling for the Monterey Regional Water Pollution Control Agency's (MRWPCA) outfall. The SOW contemplates a number of technical reports, including both a Draft and a Final Technical Memorandum presenting the results of the modeling efforts.

As you are aware, there are three responses still outstanding from a data request (Data Request No. 2) we made of Cal Am in November 2006. While your company responses in January 2007 included a scope, schedule and budget in response to our request, we have not been able to proceed with the development of major portions of the EIR without the results of the work detailed in our Data Request No. 2. Responses to these outstanding data requests will advance the concept of a desalination plant in the area of North Marina, utilizing subsurface intakes and the MRWPCA outfall for brine disposal. Your compliance with these requests will allow us to fully evaluate this alternative in the EIR, as required by CEQA.

We have reviewed the Scope of Work that was prepared by RMC, and we believe that the efforts contemplated in that SOW would satisfy two of the three items that remain outstanding from our Data Request No. 2, as explained more fully below. While we still require a response to DR 2.4, the modeling SOW developed by RMC with Cal Am would provide us with the data and information we need to satisfy Data Requests 2.5 and 2.6 and allow us to complete our Draft EIR for the Coastal Water Project. The SOW prepared by RMC to address the modeling efforts required for a proper groundwater basin analysis related to the intake and outfall for the CWP is critical to our EIR analysis efforts -- and we urge Cal Am to coordinate with the MCWD and the MCWRA, and to proceed fully with the efforts outlined in the SOW. The data and information that will result from the RMC intake/outfall SOW is absolutely required for the Commission to complete its evaluation of the Coastal Water Project.

We also urge Cal Am to move forward with efforts outlined in the RMC SOW as quickly as possible; while we have been unable to complete critical sections of the Draft EIR since approximately March of 2007, the prompt implementation of the schedule contemplated in the RMC SOW would allow us to

integrate the resulting analysis into our current Draft EIR schedule without any further delay. Accordingly, please substitute this Revised Data Request No. 2 (below) for the previous Data Request No. 2.

---

**Request 2.4** asked for a revised CEQA-ready project description of the subsurface intake techniques currently being considered to provide feed water for a North Marina desal plant location.

***There is no change to this request.*** Please provide a revised CEQA-ready project description (including maps, diagrams and text) of the subsurface intake techniques currently being considered to provide feed water for a North Marina desal plant location<sup>1</sup>. The project description should include, but is not limited to: numbers, locations, types, and capacities of any proposed subsurface intake facilities; proposed operational scenarios; and relevant geotechnical/hydrogeological information that support the feasibility of the technique(s). Document why other alternatives/techniques are infeasible at these same locations and/or why other alternatives/techniques were rejected.

**Request 2.5** asked for a scope of work and schedule to support the development of subsurface intake well(s) at North Marina.

This request had several subtasks, a few of which we have previously agreed may be more relevant for permitting than for the EIR. However, we have continued to encourage you to coordinate with the Marina Coast Water District and the Monterey County Water Resources Agency, specifically as it relates to coordinated planning, and modeling of impacts to the Salinas Basin groundwater resources.

In our meeting with you on January 30, 2008 at the offices of the Marina Coast Water District, we shared with you a scope of work that was prepared by RMC, in coordination with the MCWD, the MCWRA and yourselves. That scope of work, when completed, will provide us with the data we need to evaluate the impacts of subsurface intakes on the Salinas Basin groundwater resources, and allow us to proceed with preparing the EIR.

**Request 2.6** asked for a further evaluation of the joint use of MRWPCA's outfall for brine discharge, including possible operational scenarios and an approach for modeling the impacts of the plume.

Compliance with the RMC-prepared scope, in combination with continued coordination with the CPUC EIR Team during the conduct of the modeling effort, will satisfy our original Data Request 2.6.

We note that the collaboratively-prepared scope of work for the groundwater and plume modeling efforts, when completed, will have addressed the Cal Am-only project, in addition to a regional project that has been developed by the community with assistance from the DRA REPOG process and dialogue. We understand the completed scope of work will benefit the region, and not just Cal Am. We also understand that Cal Am is eager to continue its participation in the regional process and that Cal Am will continue to work with the other local agencies to develop and agree to a cost sharing formula for the conduct of this work. We are encouraged by Cal Am's efforts and participation in the regional process, and we look forward to any potential opportunities to develop stable sources of water supply at the least cost and with the least environmental impact.

---

<sup>1</sup> This would be in support of a CalAm only North Marina "Regulatory Requirements" only desalination project utilizing subsurface intakes that draw on ocean water.

Again, the SOW prepared by RMC to address the modeling efforts related to the intake and outfall for the CWP is critical to the CPUC EIR analysis efforts, and is absolutely required for the Commission to complete its evaluation of the Coastal Water Project. We urge Cal Am to proceed fully with the efforts outlined in the SOW as quickly as possible -- the prompt implementation of the schedule contemplated in the RMC SOW would allow us to integrate the resulting analysis into our current EIR schedule without any further delay. We also request that the CPUC be included in any distribution of draft and final technical reports or memorandums resulting from the RMC modeling effort -- especially any technical memoranda, graphs, and charts that result from Tasks 2.5, 3.3 and Task 4 from the RMC SOW.

Thank you once again for your efforts to coordinate with other interested parties in Monterey County regarding potential approaches and projects that would resolve some of the water supply issues facing the region. We are very encouraged by these efforts, and it is our sincere hope that a coordinated modeling effort will result in the data and information we need to complete our EIR within our current schedule. We look forward to your prompt reply. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data. If you have any questions, please contact me directly at 415-703-3221 or via e-mail at [bea@cpuc.ca.gov](mailto:bea@cpuc.ca.gov).

Sincerely,



Andrew Barnsdale  
CPUC Energy Division

cc: Michelle Cooke, Administrative Law Judge  
Jean Vieth, Administrative Law Judge  
Lester Wong, Advisor to President Peavey  
Laura Krannawitter, Advisor to Commissioner Bohn  
Sean Gallagher, Director -- CPUC Energy Division  
Jason Reiger, CPUC Legal Division  
Tom Bunosky, Cal Am  
Kent Turner, Cal Am  
Tim Miller, Cal Am Counsel  
Sara Leeper, Counsel to Cal Am  
Lyndell Melton, RMC  
Eric Zigas, ESA

Klein/Leonard

060675

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 27, 2006

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

**RECEIVED**

NOV 29 2006

**CAL-AM WATER**

Re: Coastal Water Project EIR  
Data Request 2

Dear Mr. Klein:

On October 4 and 5, 2006, CPUC staff and consultants from ESA participated in two project review meetings at RBF's offices in Marina. Topics discussed at the October 4<sup>th</sup> meeting included:

- an overview of CalAm's existing distribution system configuration and operations;
- key design considerations for the CWP;
- the Plan B history and resulting deviations to the current CWP design;
- CWP system design considerations;
- the CWP pipeline alignments; and
- the facility location selection process.

Topics discussed at the October 5<sup>th</sup> meeting included:

- subsurface intake alternatives;
- the recent work of GEOSCIENCE and the MWDOC test slant well; and
- the need for and possible approaches to developing subsurface intakes for the CWP.

At the meetings, we collectively identified a series of additional data that will be needed by the EIR team so that the team can:

- better understand and document the current project description;
- advance the description of a North Marina alternative; and
- explore newer technologies and approaches to project features.

We therefore request that you forward the following additional information to us by December 15, 2006.

**Request 2.1**

Please provide background on the recent Seaside Groundwater Basin adjudication decision; describe the resulting limits on current and future extractions from the basin; define how the adjudication decision would revise your CWP supply portfolio; and clarify whether or not the CWP is designed to protect the long-term reliability of the Seaside Basin coastal subareas, the inland subareas, or both.

**Request 2.2**

Please demonstrate (visually) how the combined portfolio of existing and proposed CWP supplies would be used throughout the system and throughout the year, by water-year type. Clarify the conditions under

which desalinated water would be pumped to the ASR system and confirm that this water would be injected into the basin.

**Request 2.3**

Please provide additional documentation on how you screened alternative pipeline, pump station, and Terminal Reservoir locations; why or how you concluded that the proposed locations/alternatives should be carried into the PEA analysis; and why or how you concluded that other locations/alternatives should be rejected. Describe any design modifications/options currently under consideration for any of the facilities proposed in the PEA. Specifically, provide information on the updated design, route, and construction methods being considered for the Segundo Pipeline, the Tarry Flats Pump Station, and/or other facilities that have been (or may be) changed since the publication of the PEA.

**Request 2.4**

Please provide a revised CEQA-ready project description (including maps, diagrams and text) of the subsurface intake techniques currently being considered to provide feed water for a North Marina desal plant location. The project description should include, but is not limited to: numbers, locations, types, and capacities of any proposed subsurface intake facilities; proposed operational scenarios; and relevant geotechnical/hydrogeological information that support the feasibility of the technique(s). Document why other alternatives/techniques are infeasible at these same locations and/or why other alternatives/techniques were rejected.

**Request 2.5**

Please provide a scope of work and schedule to support the development of subsurface intake test well(s). Upon our agreement regarding these items, please implement this scope of work, which should include but is not limited to:

- locating, designing, and installing exploratory borings intended to develop a comprehensive understanding of subsurface hydrogeology (i.e. saturated thickness, confining zones, seawater/saltwater interface) between the surf zone and areas east of the dunes;
- converting select exploratory borings to test wells capable of facilitating water quality testing and aquifer testing;
- the implementation of a subsurface intake water quality monitoring and treatment requirements testing program (pilot testing), that could be operated simultaneously with the Moss Landing Pilot Plant;
- a bluff erosion analysis, which could include literature review and field surveys to determine bluff erosion rates in the vicinity of North Marina;
- an inventory of existing coastal wells in the North Marina vicinity (south and north of the Salinas River), which includes documentation of well depth, intake screen intervals, well efficiency and production data;
- groundwater modeling for the revised approach to North Marina subsurface intake wells in the 180' and/or 400' aquifers. Modeling should compare the baseline with potential changes in the seawater-intruded area, including but not limited to changes in groundwater elevations and the estimated water level drawdown at all neighboring wells resulting from the operation of subsurface intake wells;
- discussions with MCWRA and MCWD regarding the use of the 180' and/or 400' aquifers as a source of feedwater, and how the CWP may be coordinated with the MCWD's desal planning efforts;
- discussions with coastal landowners regarding the CWP's development of wells on their properties; and

- extending your current and ongoing wildlife surveys to cover the potential subsurface intake locations in the North Marina area.

**Request 2.6**

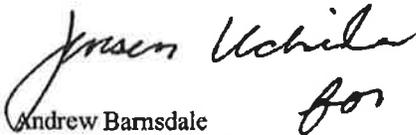
Please provide a further evaluation of the joint use of MRWPCA's outfall for brine discharge, including possible operational scenarios and an approach for modeling the impacts of the plume. Include the source of data to be used in the modeling of the plume, the type of model to be used, and how the modeling effort will be coordinated with the EIR team. Describe your approach and schedule for discussions with MRWPCA on the institutional issues that will need to be addressed to make this a feasible alternative.

**Request 2.7**

Please continue to coordinate with MCWD to advance the concept of sharing infrastructure for conveying product water. And if the concept is feasible, provide a CEQA-ready project description (including maps, diagrams and text) that details how the MCWD infrastructure would be utilized for conveying the CWP supplies. The project description should include, but is not limited to: facilities, locations, sizes, and operational scenarios.

We look forward to your prompt reply. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data.

Thank you,

  
Andrew Barnsdale  
CPUC Energy Division

cc: Jan Driscoll  
Larry Gallery  
Sara Leeper  
Eric Zigas

**TASK ORDER  
AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
GEOSCIENCE SUPPORT SERVICES, INC.  
FOR  
MONTEREY REGIONAL WATER SUPPLY PROGRAM  
NORTH MARINA GROUND WATER MODELING  
ADDITIONAL SCOPE AND COST**

Article II - Scope of Services shall be modified as set forth in the attached proposal from GeoScience regarding the Additional Ground Water Modeling - North Marina Area, including the attached Scope of Work and the attached Budget (collectively, "ATTACHMENT 1"), all of which are incorporated by this reference as if fully set forth in this Task Order.

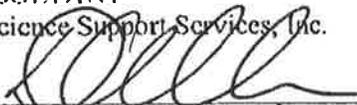
Article IV - Schedule for performance and completion of this Task Order shall be August 4, 2008 through December 31, 2008. Coordinate specific modeling work and submission of deliverables, including schedule, with RMC Water and Environmental. CONSULTANT shall provide all deliverables and work products to RMC Water and Environmental with a copy to OWNER.

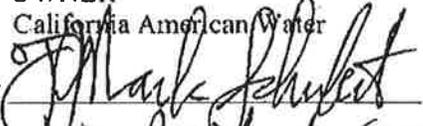
Article VIII - Payment shall be amended to include completion of all work covered by this Task Order in an amount not to exceed \$9,810.00 as set forth in Attachment 1. CONSULTANT shall subdivide invoices by each of the subtasks as identified in Attachment 1.

All other articles of the November 1, 2007 AGREEMENT FOR LIMITED PROFESSIONAL SERVICES remain the same.

OWNER and CONSULTANT have caused this Agreement to be amended by representatives duly authorized to act, all as of the effective date shown by approval signature.

PREPARED BY:  Date Aug 4, 2008  
John Klein

CONSULTANT  
GeoScience Support Services, Inc.  
By   
Title President  
Date 27-AUG-08

OWNER  
California American Water  
By   
Title Vice President - Engineering  
Date 8/27/08

## EXHIBIT A

### SCOPE OF SERVICES

This Scope of Services addresses analysis of issues associated with source water for a desalination facility located in the north Marina area. The key issue to be evaluated in this scope of work is an analysis of the use of vertical wells to access seawater along the coast as an initial phase of project development, prior to a later phase of the project that might be implemented to pump intruded, brackish groundwater from a series of wells located inland of the ocean based vertical wells.

The analysis will be based on the Project Description provided to the PUC in June, 2008. That Project Description includes project components in the Salinas Valley Groundwater Basin, including

- Use of stored recycled water for agricultural water deliveries to an expanded Castroville Seawater Intrusion Project (CSIP) distribution system
- Diversion of Salinas River water for augmentation of agricultural deliveries to an expanded CSIP distribution system
- Diversion of Salinas River winter-time flows for treatment and delivery for urban water use
- Extraction of "seawater" from vertical wells, located adjacent to the coastal dunes, as a source water for a regional desalination facility
- Extraction of "brackish" water from the intruded portion of the 180-foot aquifer of the Salinas Valley Groundwater Basin, as a source of water for a regional desalination facility

The alternative to be studied under this scope of work builds upon work completed to date and included in the July 25, 2008 North Marina Ground Water Model Evaluation of Potential Projects Technical Memorandum. The specific alternative to be evaluated is:

1. Use of 9,000 AFY for agricultural water deliveries to an expanded CSIP distribution system. The source of this additional recycled water is a combination of stored recycled water and added summer-time recycled water availability due to increased flows at the Regional Wastewater Treatment Plant.
2. Diversion of 5,000 AFY of Salinas River water for augmentation of agricultural deliveries to an expanded CSIP distribution system
3. Diversion of an average of 5,000 AFY of Salinas River winter-time flows for treatment and delivery for urban water use
4. Extraction of an average of approximately 10,000 AFY from vertical wells located adjacent to the coastal dunes, as a source water for a regional desalination facility, as the first phase of development of a regional desalination facility

Not to be analyzed, since it is already included in the analyses presented in the July 11, 2008 North Marina Ground Water Model Evaluation of Potential Projects Technical Memorandum, is the second phase of development of a regional desalination facility,

including extraction of an additional 8,100 AFY of intruded, brackish groundwater from the 180-foot aquifer of the Salinas Groundwater Basin.

This scope covers the modeling of potential project scenarios utilizing the existing calibrated North Marina Groundwater MODFLOW Model, utilizing output data from the Salinas Valley Integrated Groundwater and surface Water Model (SVIGSM).

#### **Metrics**

Five metrics will be used to analyze the impacts of the proposed Project compared to the Baseline results, and where applicable, versus time:

1. 180-foot groundwater elevations comparing the Baseline versus Phase 1 project scenario described above
2. Predicted TDS concentrations
3. Hydrographs of change in groundwater heads versus time at locations throughout the modeled area, consistent with the hydrograph locations depicted in the
4. Predicted TDS concentration from extraction wells
5. Percent ocean water versus native 180-foot Aquifer water present in the extracted water (percentage of 180 foot aquifer water should exclude the seawater that is rounding the wells and entering as groundwater from the east);

#### **DELIVERABLES**

A brief Technical Memorandum (TM) with sufficient text and figures to document assumptions and interpret results of the additional analyses will be prepared in draft form for review. Upon receipt of comments, the TM will be prepared in final form and provided in hardcopy and electronic PDF format.

**Cost Estimate for Professional Geohydrological Services  
 Additional Ground Water Modeling - North Marina Area**

HOURS							Labor	Reimbursable Expenses	Total Cost
Task Description	Principal Hydrologist	Senior Ground Water Modeler	Project Geohydrologist	Graphics	Clerical				
Hourly Rate:		\$270	\$165	\$125	\$85	\$65			
1	Obtain and Process Model Boundary Conditions Data from WRIME		8				\$ 1,320	\$ -	\$ 1,320
2	Modify Existing Well Package to Reflect Phase I			2			\$ 250	\$ -	\$ 250
3	Run and Process One Model Scenario Representing Phase I Project		8	4			\$ 1,820	\$ -	\$ 1,820
4	Reporting of Model Scenario and Results in a Technical Memorandum (Draft and Final versions)	2	16	20	6	2	\$ 6,320	\$ 100	\$ 6,420
<b>Total Hours and Cost</b>		<b>2</b>	<b>32</b>	<b>26</b>	<b>6</b>	<b>2</b>	<b>\$ 9,710</b>	<b>\$ 100</b>	<b>\$ 9,810</b>



Jill M  
Hanson/CAWC/AWWSC  
08/27/2008 11:38 AM

To dwilliams@geoscience-water.com  
cc David A Berger/CAWC/AWWSC@AWW, Laura L  
Weisberger/CAWC/AWWSC@AWW, Jill M  
Hanson/CAWC/AWWSC@AWW, John C  
bcc

Subject Re: Regional Water Supply Program--North Marina  
Additional Groundwater Modeling 

Hello Dennis,

Attached is the final Task Order M0850 for your signature. Please sign, keep a copy for yourself, and return a signed copy to me either via email reply with attachment, or fax (831) 646-3204.

Give us a call if you need anything further.

Thank you.



Task Order M0850.pdf

JILL HANSON  
ENGINEERING COORDINATOR,  
PROJECT DELIVERY



511 FOREST LODGE ROAD, SUITE 100  
PACIFIC GROVE, CA 93950  
PHONE: 831.646.3280  
FAX: 831.375.4367  
EMAIL: [JILL.HANSON@AMWATER.COM](mailto:JILL.HANSON@AMWATER.COM)

David A Berger/CAWC/AWWSC

David A  
Berger/CAWC/AWWSC  
08/27/2008 09:31 AM

To dwilliams@geoscience-water.com  
cc Jill Hanson, John Klein  
Subject Regional Water Supply Program--North Marina Additional  
Groundwater Modeling

Dennis,  
Confirming the phone message I left for you, we just received Andrew Barnsdale's written request for the

above-noted additional modeling work. Jill Hanson later today will be e-mailing you the final Task Order contract M0850 for this additional modeling work. Please follow her instructions, and proceed immediately with the additional modeling.

Let me know this week if you have any questions, or John Klein next week when he returns from vacation.

Thanks,

David A. Berger  
Manager, Coastal Water Projects  
California American Water  
511 Forest Lodge Road, Suite 100  
Pacific Grove, CA 93950  
T (831) 646-3241  
C (831) 915-2128  
F (831) 375-4367  
david.berger@amwater.com

4200-KLEIN

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

RECEIVED  
SEP 03 2008



CAL-AM WATER

August 27, 2008

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

Re: Coastal Water Project EIR - Revised Scopes for RMC, WRIME and Geoscience

Dear John:

The purpose of this letter is to follow up on my letter to you of March 26, 2008, regarding final Scopes of Work (SOWs) for RMC (including WRIME) and Geoscience to complete additional services related to the previous SOW by RMC in coordination with the MCWD, the Monterey County Water Resources Agency (MCWRA), and California American Water (Cal Am). We have now received the final Scopes of Work (attached) that address the additional modeling and coordination efforts required to fully evaluate the groundwater basin effects of our current approach to the CWP and its alternatives.

We have reviewed the Scopes of Work prepared by RMC (June 30, 2008 letter scope), and the specific task assignments for Geoscience and WRIME, and we believe that the efforts contemplated in those SOWs will complete the data gaps that remain outstanding from our Data Request No. 2 and our subsequent identification of additional required analyses. These additional modeling efforts and analyses will provide us with the data and information we need to complete our Draft EIR for the Coastal Water Project. The additional analysis to address the modeling efforts required for a proper groundwater basin analysis related to the CWP is critical to our EIR analysis efforts – and we urge Cal Am to proceed fully with the efforts outlined in the attached SOWs. The data and information that will result from the attached SOWs are absolutely required for the Commission to complete its evaluation of the Coastal Water Project.

California American Water Company should proceed fully with the efforts outlined in the SOWs as quickly as possible -- the prompt implementation of the effort contemplated in the attached SOWs would allow us to integrate the resulting analyses into our current EIR schedule without any further delay. We also request that the CPUC be included in any distribution of draft and final technical reports, memoranda, or project descriptions resulting from the modeling efforts – especially any technical memoranda, graphs, and charts that result from the SOWs.

Thank you once again for your efforts to coordinate with other interested parties in Monterey County regarding potential approaches and projects that would resolve some of the water supply issues facing the region. We are encouraged by Cal Am's efforts and participation in the regional process related to the CWP, and we look forward to any potential opportunities to develop stable sources of water supply at the least cost and with the least environmental impact. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data. If you have any questions, please contact me directly at 415-703-3221 or via e-mail at [bca@cpuc.ca.gov](mailto:bca@cpuc.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Barnsdale". The signature is fluid and cursive, with a long horizontal stroke at the end.

Andrew Barnsdale  
CPUC Energy Division

cc: Michelle Cooke, Administrative Law Judge  
Jean Vieth, Administrative Law Judge  
Lester Wong, Advisor to President Peavey  
Laura Krannawitter, Advisor to Commissioner Bohn  
Ken Lewis, Acting Director -- CPUC Energy Division  
Jason Reiger, CPUC Legal Division  
Tom Bunosky, Cal Am  
Kent Turner, Cal Am  
Tim Miller, Cal Am Counsel  
Sara Leeper, Counsel to Cal Am  
Lyndell Melton, RMC  
Eric Zigas, ESA



"Barnsdale, Andrew"  
<BCA@cpuc.ca.gov>  
08/27/2008 08:05 PM

To "Barnsdale, Andrew" <BCA@cpuc.ca.gov>,  
<John.Klein@amwater.com>,  
<david.berger@amwater.com>  
cc "Reiger, J. Jason" <JZR@cpuc.ca.gov>,  
<ezigas@esassoc.com>, <tom.bunosky@amwater.com>,  
<Kent.Turner@amwater.com>, <Tim.Miller@amwater.com>,  
bcc

Subject RE: 8-25-08 revised CWP SOW WRIME & Geoscience.doc

History:  This message has been replied to and forwarded.

OK, everybody sit tight -- I managed to pull things out of the mail room, fortunately they work on geologic time (it's been so long since I've had to dumpster dive) ...

So, a revised letter w/ be going out hard copy to J. Klein w/ attachments and signature ... everybody else gets a copy w/ no attachments. Too late for the mail tonite, so they will be sent Thursday morning to Pacific Grove, Chula Vista and Manatt Phelps.

Andrew Barnsdale

**From:** Barnsdale, Andrew  
**Sent:** Monday, August 25, 2008 8:25 PM  
**To:** 'John.Klein@amwater.com'; david.berger@amwater.com  
**Cc:** Barnsdale, Andrew; Reiger, J. Jason; 'ezigas@esassoc.com'; 'Tom Bunosky (tom.bunosky@amwater.com)'; 'Kent.Turner@amwater.com'; 'Tim.Miller@amwater.com'; 'Sarah E. Leeper (sleeper@steefel.com)'  
**Subject:** 8-25-08 revised CWP SOW WRIME & Geoscience.doc  
**Importance:** High

John & Dave: attached is a letter from me requesting that you proceed ahead with the efforts described in the attached SOWs from Geoscience and WRIME for the additional analyses needed for us to complete our CWP EIR.

I have placed a signed copy in the US mail. I will send out hard copies to the cc list tomorrow -- without attachments.

Regards,  
Andrew Barnsdale

ATTACHMENT 3



"Barnsdale, Andrew"  
<BCA@cpuc.ca.gov>  
08/25/2008 08:24 PM

To <John.Klein@amwater.com>,  
<david.berger@amwater.com>  
cc "Barnsdale, Andrew" <BCA@cpuc.ca.gov>, "Reiger, J.  
Jason" <JZR@cpuc.ca.gov>, <ezigas@esassoc.com>,  
<tom.bunosky@amwater.com>,  
bcc

Subject 8-25-08 revised CWP SOW WRIME & Geoscience.doc

John & Dave: attached is a letter from me requesting that you proceed ahead with the efforts described in the attached SOWs from Geoscience and WRIME for the additional analyses needed for us to complete our CWP EIR.

I have placed a signed copy in the US mail. I will send out hard copies to the cc list tomorrow -- without attachments.

Regards,



Andrew Barnsdale Extra Services - WRIME v2.doc Geoscience Extra Services v2.doc



8-25-08 revised CWP SOW WRIME & Geoscience.doc

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



August 25, 2008

Mr. John Klein, P.E.  
California American Water  
PO Box 951  
Monterey CA 93942-0951

see revised  
8/27/08

Re: Coastal Water Project EIR - Revised Scopes for WRIME and Geoscience

Dear John:

The purpose of this letter is to follow up on my letter to you of March 26, 2008, regarding final Scopes of Work (SOWs) for Geoscience and WRIME to complete additional services related to the previous SOW by RMC in coordination with the MCWD, the Monterey County Water Resources Agency (MCWRA), and California American Water (Cal Am). We have now received the final Scopes of Work (attached) that address the additional modeling efforts required to fully evaluate the groundwater basin effects of our current approach to the CWP and its alternatives.

We have reviewed the Scopes of Work prepared by Geoscience and WRIME, and we believe that the efforts contemplated in those SOWs will complete the data gaps that remain outstanding from our Data Request No. 2 and our subsequent identification of additional required analyses. These additional modeling efforts and analyses will provide us with the data and information we need to complete our Draft EIR for the Coastal Water Project. The additional analysis to address the modeling efforts required for a proper groundwater basin analysis related to the CWP is critical to our EIR analysis efforts – and we urge Cal Am to proceed fully with the efforts outlined in the attached SOWs. The data and information that will result from the attached SOWs are absolutely required for the Commission to complete its evaluation of the Coastal Water Project.

California American Water Company should proceed fully with the efforts outlined in the SOWs as quickly as possible -- the prompt implementation of the effort contemplated in the attached SOWs would allow us to integrate the resulting analyses into our current EIR schedule without any further delay. We also request that the CPUC be included in any distribution of draft and final technical reports, memoranda, or project descriptions resulting from the modeling efforts – especially any technical memoranda, graphs, and charts that result from the SOWs.

Thank you once again for your efforts to coordinate with other interested parties in Monterey County regarding potential approaches and projects that would resolve some of the water supply issues facing the region. We are encouraged by Cal Am's efforts and participation in the regional process related to the CWP, and we look forward to any potential opportunities to develop stable sources of water supply at the least cost and with the least environmental impact. Please contact ESA directly with questions and to coordinate your approach to the data collection effort, the schedule, and the delivery of these data. If you have any questions, please contact me directly at 415-703-3221 or via e-mail at [bca@cpuc.ca.gov](mailto:bca@cpuc.ca.gov).

Sincerely,

Andrew Barnsdale  
CPUC Energy Division

cc: Michelle Cooke, Administrative Law Judge  
Jean Vieth, Administrative Law Judge  
Lester Wong, Advisor to President Peavey  
Laura Krannawitter, Advisor to Commissioner Bohn  
Ken Lewis, Acting Director -- CPUC Energy Division  
Jason Reiger, CPUC Legal Division  
Tom Bunosky, Cal Am  
Kent Turner, Cal Am  
Tim Miller, Cal Am Counsel  
Sara Leeper, Counsel to Cal Am  
Lyndell Melton, RMC  
Eric Zigas, ESA

**TASK ORDER  
AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
GEOSCIENCE SUPPORT SERVICES, INC.  
FOR  
MONTEREY REGIONAL WATER SUPPLY PROGRAM  
NORTH MARINA GROUND WATER MODELING  
ADDITIONAL SCOPE AND COST**

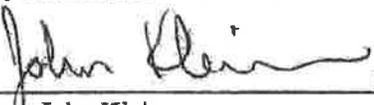
Article II - Scope of Services shall be modified as set forth in the attached proposal from GeoScience regarding the On-Call Geohydrologic Consulting Services including the attached Scope of Work and the attached Budget (collectively, "ATTACHMENT 1"), all of which are incorporated by this reference as if fully set forth in this Task Order.

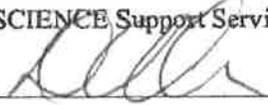
Article IV - Schedule for performance and completion of this Task Order shall be May 1, 2009 through March 31, 2010, which corresponds to the CPUC schedule for the CPUC approval of the Coastal Water Project FEIR and CPCN.

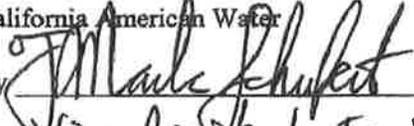
Article VIII - Payment shall be amended to include completion of all work covered by this Task Order in an amount not to exceed \$20,000.00 as set forth in Attachment 1. CONSULTANT shall subdivide invoices by each of the subtasks as identified in Attachment 1.

All other articles of the November 1, 2007 AGREEMENT FOR LIMITED PROFESSIONAL SERVICES remain the same.

OWNER and CONSULTANT have caused this Agreement to be amended by representatives duly authorized to act, all as of the effective date shown by approval signature.

PREPARED BY:  Date: 5/13/09  
John Klein

CONSULTANT  
GEOSCIENCE Support Services, Inc.  
By   
Title President  
Date 04-Jun-09

OWNER  
California American Water  
By   
Title Vice President - Engineering  
Date 5/28/09

# GEOSCIENCE



April 6, 2009

California American Water  
Attn: John Klein W/B A05ENG09  
P.O. Box 5623  
Cherry Hill, NJ 08034

Email: john.klein@amwater.com

**Re: Re: Task Order MO750 –  
Monterey Regional Water Supply Program – North Marina Ground Water  
Modeling – Additional Scope and Cost**

Dear John:

As per your request, GEOSCIENCE has prepared this letter outlining a brief scope and is providing our current fee schedule to provide geohydrologic consulting services for On Call Services related to the Monterey Regional Water Supply Program – North Marina Ground Water Modeling. Any work to be performed under this contract will not commence without the express written request from a California American Water representative.

### **On-Call Geohydrologic Consulting Services**

GEOSCIENCE will provide geohydrologic consulting services to the California American Water on an as-needed basis. Consulting services will be provided on a time and materials basis upon request of the California American Water representative but will not exceed \$20,000 without prior approval. Possible types of work to be performed under this contract could include the following:

- General Consulting on Slant Well Technology for Desalination Feedwater Supply
- Provide Written Testimony to PUC
- Other Services as Needed

GEOSCIENCE SUPPORT SERVICES INCORPORATED

*Ground Water Resources Development*

P.O. Box 220, Claremont, CA 91711

T: 909-451-6650

F: 909-451-6638

All work to be performed under this contract will be billed on a time and materials basis, as per the attached Table.

Respectfully submitted,



Dennis E. Williams, Ph.D.  
President

Copy to:

California American Water  
Attn: John Klein  
P.O. Box 951  
Monterey, CA 93942-0951

**Cost Estimate for Professional Geohydrological Services  
 On Call Services**

HOURS							Labor	Reimbursable Expenses	Total Cost
Task Description	Principal Hydrologist	Senior Ground Water Modeler	Project Geohydrologist	Graphics	Clerical				
Hourly Rate:	\$270	\$165	\$125	\$85	\$65				
1 Provide General Consulting on Slant Well Technology for Desalination Feedwater Supply; Provide Written Testimony to PUC; Other Services as Needed	40	40	10	12	4	\$ 19,930	\$ 70	\$ 20,000	
<b>Total Hours and Cost</b>	<b>40</b>	<b>40</b>	<b>10</b>	<b>12</b>	<b>4</b>	<b>\$ 19,930</b>	<b>\$ 70</b>	<b>\$ 20,000</b>	

**AGREEMENT FOR CONSULTING SERVICES BETWEEN  
CALIFORNIA-AMERICAN WATER COMPANY AND GEOSCIENCE SUPPORT  
SERVICES, INC. FOR PEARCE AND BEGONIA WELL EVALUATION SERVICES**

**THIS AGREEMENT FOR CONSULTING SERVICES** ("Agreement") is entered into by and between California-American Water Company, a California corporation ("Owner"), and Geoscience Support Services, Inc., a California corporation, ("Consultant"), as of the date it has been executed by Owner ("Effective Date").

**RECITALS**

**WHEREAS**, Owner desires to obtain professional consulting services Pearce and Begonia Well Evaluation Services. ("Project").

**WHEREAS**, Consultant has the expertise, experience, and personnel necessary to provide professional consulting services for the Project; and,

**WHEREAS**, Owner and Consultant (collectively, "the Parties") desire to enter into an Agreement whereby Owner will retain the Consultant to provide, and the Consultant shall provide, professional consulting services for the Project.

**NOW, THEREFORE**, in consideration of the above Recitals, which are true and correct and incorporated herein by this reference, and of the mutual covenants and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

**AGREEMENT**

**1. TERM**

This Agreement shall commence on the Effective Date and shall remain in effect until December 31, 2015.

**2. SERVICES**

Consultant agrees to provide the professional consulting services described in Exhibit A, Scope of Services ("Services"). The term "Services" shall include any reports, recommendations, software, hardware, or other deliverable required by the Scope of Services. All Services shall be performed in accordance with the time schedule set forth in Exhibit A.

**3. COMPENSATION**

Owner shall compensate Consultant for all Services performed in accordance with this Agreement on a "time and materials, not to exceed" basis in an amount not to exceed \$8,886 ("Contract Price").

If Owner requires additional Services beyond those specified in the Scope of Services ("Additional Services"), Consultant will be paid an additional fee. Owner and Consultant

must agree in a written amendment to this Agreement upon the fee prior to Consultant beginning the Additional Services.

#### **4. INVOICING**

4.1 Manner of Invoicing. Consultant's Schedule of Charges and Budget for Services ("Schedule") is set forth in Attachment 1. On each invoice submitted to Owner, Consultant shall itemize the actual costs and expenses or units of Services performed based on the Schedule. When Services performed have reached fifty percent (50%) of the Contract Price, Consultant shall provide to Owner a list of remaining Services and the estimated cost for performing those Services. Consultant shall immediately notify Owner in writing if at any time Consultant anticipates the cost for performing the Services will exceed the Contract Price. Consultant and Owner must agree in a written amendment to this Agreement to any increase in the Contract Price.]

Consultant must mail all invoices via U.S. Postal Service, postage prepaid, to the following address:

California American Water  
P.O. Box 5623  
Cherry Hill, NJ 08034

Consultant must include Purchase Order number and project manager's email address on each invoice.

4.2 Undisputed Invoices. All undisputed invoices shall be due and payable within forty-five (45) calendar days of receipt by Owner. Owner shall remit payments to Consultant's notice address as specified in accordance with Section 10, Notices.

4.3 Disputed Invoices. If Owner disputes any invoice or a portion thereof, Owner shall not pay the disputed portion of such invoice until the Parties have resolved the dispute in accordance with the dispute resolution process delineated in Section 23 of this Agreement. If any disputed fees remain unpaid sixty (60) calendar days after Owner's receipt of an invoice, Consultant shall so notify Owner in writing and the Parties shall promptly thereafter begin the dispute resolution procedures delineated in Section 23 to resolve payment of such fees. If the dispute remains unresolved following completion of the dispute resolution process, then the Parties may resolve such dispute through litigation.

#### **5. PROTECTION OF PROPRIETARY INTERESTS; CONFIDENTIALITY**

5.1 Ownership Rights. Nothing in this Agreement will change either party's ownership rights in any property or intellectual property, including rights to Owner's data; provided, however, Owner shall be granted by Consultant a perpetual, world-wide, non-exclusive, fully-paid license to use any of the Services, subject to any third party end-user licenses incorporated by Consultant into any Services.

5.2 Confidential Information. The Parties agree that Consultant's plans, data, trade secrets, pricing schedules, proprietary tools, basic forms, and computer programs that have been disclosed by Consultant to Owner, as well as any information that Consultant learns about Owner while performing Services under this Agreement, is confidential in

nature ("Confidential Information"), and the Parties agree they shall not: (i) use Confidential Information in a manner inconsistent with the purpose of this Agreement; or (ii) disclose Confidential Information to third parties or individuals within their respective organizations who do not have a strict need to know such information. All disclosed information shall qualify as confidential unless it is disclosed in writing and labeled as not confidential. Any information that is disclosed orally must be confirmed in writing as not confidential to qualify for the exclusion of protection set forth in this Section 5.2.

The nondisclosure obligations herein shall not apply to information that: (i) is or becomes publicly known through no fault or breach of this Agreement by the receiving party; (ii) is independently developed by the receiving party without using the disclosing party's Confidential Information; (iii) is rightfully obtained from a third party without restriction on use or disclosure; or (iv) is already in the possession of the receiving party at the time of the disclosure without the obligation of confidentiality. Notwithstanding anything to the contrary contained in this Agreement, the terms and conditions of this Agreement shall be considered Confidential Information.

Except as may be required by law or regulatory process, if either party receives a summons, subpoena, regulatory order, court order or other demand to disclose any information referred to in this Agreement, each party agrees to first notify the other party of such demand in writing, and shall provide an opportunity for such other party to lawfully object and defend any rights it may have to the information. No rights or licenses under patents, trademarks, or copyrights are granted or implied by any disclosure of Confidential Information. Owner's Confidential Information shall remain the property of Owner and shall be destroyed or returned to Owner following the completion of the Services.

5.3 Non-Disclosure Agreements. Contractors and consultants of Owner shall be permitted to access and use the Confidential Information, provided the contractor or consultant signs a non-disclosure agreement with Owner that is substantially consistent with this Section 5. Such access shall only be permitted for such contractor or consultant to carry out the business purposes of Owner, and shall at all times be in accordance with the terms of this Agreement.

5.4 Remedies. Consultant agrees that, in addition to any other remedies that Owner may be entitled to at law or in equity, Owner shall be entitled to injunctive relief (without the posting of any bond and without proof of actual damages) and/or specific performance for any threatened or actual breach of this Agreement.

5.5 Survival. All of the provisions set forth in this Section 5 shall survive any termination of this Agreement.

## **6. ASSIGNMENT**

Except as otherwise provided herein, neither party will have a right to assign this Agreement, in whole or in part, whether by operation of law or otherwise, without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided that Owner may assign this Agreement to an affiliate located within the United States without such written consent. Except as otherwise provided herein, any attempt by a party to assign this Agreement without written consent shall be void for

any and all purposes. Subject to the foregoing, this Agreement shall inure to the benefit of the Parties' permitted successors and permitted assigns.

## 7. FORCE MAJUERE

If delays in the performance of the Services are caused by unforeseen events beyond the control of both Parties, such delay may entitle Consultant to a reasonable extension of time, but such delay shall not entitle Consultant to damages or additional compensation. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the Consultant's work; inability to obtain materials, equipment or labor; required additional Services; or other specific reasons agreed to between Owner and Consultant. Notwithstanding the foregoing, this provision shall not apply and Consultant shall not be entitled to an extension of time for a delay caused by the acts or omissions of Consultant. Further, a delay caused by Consultant's inability to obtain materials, equipment, or labor shall not entitle Consultant to an extension of time unless Consultant timely furnishes Owner documentary proof of Consultant's inability to obtain materials, equipment or labor.

## 8. REPRESENTATIONS AND WARRANTIES

Consultant represents and warrants to Owner all of the following:

8.1 Infringement. That the Services do not and will not infringe upon or otherwise violate any rights, patents, trademarks, copyrights or trade secrets of any third party. If Owner's use of the Services is enjoined, impaired, or otherwise restricted by reason of any claim of infringement of patent, trademark, copyright, trade secret or infringement of any other rights, Consultant shall, at its option, either: (1) modify such deliverable so that it becomes non-infringing, but still in conformance with Owner's requirements; or (2) procure for Owner the right to use such deliverable with equivalent capabilities. This Section 8.1 shall survive any termination of this Agreement.

8.2 Liens and Defects. That the Services will be free from liens and defects and will conform with the requirements of this Agreement. Consultant shall promptly correct any Services not conforming to these requirements after receipt of a written notice to correct from Owner. Consultant further represents and warrants that no part of any Services violate any right of privacy of any third parties and that the Services shall substantially comply with all written descriptive materials furnished to Owner by Consultant.

8.3 Industry Standards. That all Services performed by Consultant or its employees, agents, subconsultants or subcontractors shall be performed by appropriately skilled and qualified personnel in a timely, professional, work person-like manner using the degree of care and skill ordinarily exercised by reputable professionals practicing in the same field of service in the State of , and shall be performed in compliance with all applicable laws, rules, regulations, and ordinances.

8.4 Capability to Perform. That: (i) it is capable in all respects of providing all Services in accordance with the requirements of this Agreement; (ii) it understands the nature, location, and scope of Services to be performed hereunder; (iii) as of the Effective Date, there is no pending or threatened outstanding litigation, arbitrated matter, or other dispute to which Consultant is a party, that, if decided unfavorably to Consultant,

could reasonably be expected to have a potential or actual material adverse effect on Consultant's ability to fulfill its obligations hereunder, and that Consultant knows of no basis that might give rise to any such litigation, arbitration, or other dispute in the foreseeable future. Upon becoming aware of any such basis, Consultant shall promptly notify Owner.

8.5 Authority to Perform. That: (i) it is duly qualified to transact business in the state of California; and (ii) the representative signing on behalf of Consultant has the authority required to enter into this Agreement.

8.6 Compliance with Laws. That, in providing the Services and in otherwise performing its obligations under this Agreement, Consultant shall comply, and, to the extent within Consultant's control, shall not prevent Owner or its affiliates from complying or materially impede them in complying, with all applicable laws, regulations, and ordinances of any relevant jurisdiction, and all applicable policies of Owner and its affiliates, including but not limited to those pertaining to personnel and security. Consultant further represents and warrants that it will, whenever on the premises of Owner or any of its affiliates, obey all reasonable instructions and directions issued by Owner and observe all reasonable working rules and procedures in force on those premises.

8.7 Personal Property. That it shall return to Owner any personal property of Owner made available for the use of Consultant in the same condition that it was made available, reasonable wear and tear excepted.

8.8 Equal Employment Opportunity. That it will comply with all of the following Equal Employment Opportunity provisions:

(a) Executive Order 11246 and abide by the provisions of the "Equal Opportunity Clause" at 41 CFR § 60-1.4, which is incorporated herein by reference, unless exempt pursuant to 41 CFR § 60-1.5;

(b) The Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended, Executive Order 11701 (Employment of Veterans by Federal Agencies and Government Contractors and Subcontractors), and the provisions of the "Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era Clause" at 41 CFR §60-250.5, which is incorporated herein by reference, unless exempt pursuant to 41 CFR §60-250.4.

(c) The Rehabilitation Act of 1973, Executive Order 11758 (Authority Under Rehabilitation Act of 1973), and the provisions of the "Affirmative Action for Workers With Disabilities Clause" at 41 CFR 60-741.5, which is incorporated herein by reference, unless exempt pursuant to 41 CFR §60-741.4;

(d) Executive Order 13201 (Notice of Employee Rights Concerning Payment of Union Dues or Fees) and abide by the provisions of the clause at 29 CFR § 470.2, which is incorporated herein by reference, unless exempt pursuant to 29 CFR §§ 470.3-4;

(e) Where applicable, with the policies set forth in Executive Order 11625 (National Program for Minority Business Enterprises) and Executive Order 12138 (National Program for Women's Business Enterprise), the Small Business Act, 15 U.S.C. § 631, et seq., and with the "Utilization of Small Business Concerns" and "Small Business Subcontracting Plan" clauses at 48 CFR § 52.219-8 and 9, respecting subcontracting with small disadvantaged, female-owned, veteran-owned, service-disabled veteran-owned, HUBZone, and other small businesses.

## 9. OWNER'S REPRESENTATIVE

Owner appoints Douglas A. Fraser as Owner's Representative. Consultant shall provide all Services under the direction of Owner's Representative or his or her designee. Owner's Representative will communicate with Consultant on all matters related to the administration of this Agreement and Consultant's performance of the Services rendered hereunder. When this Agreement refers to communications to or with Owner, those communications shall be with Owner's representative, unless Owner or this Agreement specifies otherwise.

## 10. NOTICES

All notices required or permitted under this Agreement from one party to another shall be in writing, and shall be delivered to Owner and Consultant at the addresses specified below. Notice must be given either by: (i) personal delivery; (ii) U.S. Postal Service certified mail, return receipt requested; (iii) U.S. Postal Service Express Mail, Federal Express, or other overnight courier; or (iv) facsimile transmission with confirmation sheet. Notices shall be deemed received as follows: (i) if by personal delivery, on the date of delivery; (ii) if by certified mail, three days after deposit with the U.S. Postal Service; (iii) if by overnight courier, on the date delivered; and (iv) if by facsimile, on the date transmitted as shown on the confirmation sheet. Either party may change its address for notices under this Agreement by giving written notice to the other party by the means specified in this Section 10.

The respective addresses for giving notices hereunder are as follows:

If to Consultant:

Geoscience Support Services, Inc.  
Ground Water Resources Development  
P.O. Box 220  
Claremont, CA 91711  
FAX: 909-451-6638

If to Owner:

California American Water  
511 Forest Lodge Road, Suite 100  
Pacific Grove, CA 93050  
Attn: Douglas A. Fraser (douglas.fraser@amwater.com)  
FAX: 831-646-3204

## 11. INDEPENDENT CONTRACTOR

Consultant is an independent contractor and is not and shall not be deemed to be an employee, agent, servant, partner, or joint venturer of Owner. Consultant shall have the exclusive supervision, direction, and control of all of its employees, subconsultants, subcontractors, suppliers, materials, equipment, and facilities employed, contracted with or used by Consultant in performing or furnishing the Services.

## **12. SUBCONSULTANTS**

Consultant must receive the prior written approval of Owner prior to hiring or retaining any third parties [Subconsultants] to perform services related to the Project. If Consultant identifies a need for Subconsultant services, Consultant shall give written notice to Owner at least thirty (30) days before entering into a contract for any Subconsultant Services. The notice shall include a justification, a description of the scope of services, and an estimate of all costs for the Subconsultant's services. Consultant may request that Owner reduce the thirty-day notice period. Owner agrees to consider such requests in good faith. As a condition of approval, Owner may require that Consultant require any Subconsultant sign a nondisclosure agreement substantially consistent with Section 5 of this Agreement. Owner's approval of any Subconsultant shall not relieve Consultant of its obligations or liability with respect to the services to be performed by it or the Subconsultant, or of Consultant's liability for any property damage or personal injury caused by the Subconsultant or its employees. Consultant shall at all times be liable and responsible as a principal for the performance of all of the duties and obligations of Consultant hereunder that Consultant may elect to subcontract to any of its Subconsultants.

## **13. INDEMNIFICATION**

To the fullest extent permitted by law, Consultant shall defend, indemnify, and hold harmless Owner, its parent, subsidiaries, affiliates, and their respective officers, directors, employees, and agents from and against any and all claims asserted or liability established for any damages, costs, losses, and expenses (including attorneys' fees) caused by, arising out of, or related to: (i) the active or passive negligent acts or omissions of Consultant, its partners, officers, employees, agents or Subconsultants in the performance or furnishing of Services under this Agreement; or (ii) a breach of any representation or warranty set forth in this Agreement. Consultant's duty to indemnify and hold harmless shall not include any claims or liability arising from the established negligence or willful misconduct of Owner, its agents, officers or employees. Owner may, at its own election, conduct its defense or participate in the defense of any claim related in any way to this Agreement.

## **14. OWNERSHIP OF WORK PRODUCT**

14.1 Intellectual Property. Except as set forth in Section 5, each party retains all right, title and interest (including all patents, copyrights, trade secrets, trade marks or other intellectual property rights) in their respective pre-existing materials (and any materials developed by such party) that it provides to the other party, and this Agreement does not grant any rights or licenses except as expressly set forth herein, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the Parties. This Agreement shall not be construed in any manner as a grant

from Owner to Consultant of any rights held by any third party, including those held by J.D. Edwards, Orcom, or EDIS in their respective software systems.

14.2 Work Product. Upon payment for the Services that produced the Work Product, Owner and each affiliate to whom Owner assigns its rights as provided hereunder, shall own all Work Product originally developed by Consultant individually or jointly with Owner, in the course of Consultant's performance of its obligations under this Agreement. For the purposes of this Agreement, "Work Product" includes all reports, drawings, plans, specifications, calculations, submittals, and any other documents or records related to the Project and this Agreement. Work Product does not include Consultant's working notes and internal documents.

14.3 Competitive Materials. In no event shall either party be precluded from developing for itself, or for others, materials that are competitive with the Work Product, regardless of how similar the materials are to the Work Product. In addition, Consultant may use its general knowledge, skills and experience, and any ideas, concepts, know-how, and techniques within the scope of its consulting practice that are used in the course of providing the Services hereunder.

## 15. USE OF LOGO

Consultant shall not, without Owner's express written permission: (i) use Owner's name, trade name, logo, trademark, or service mark, whether registered or not, or the name, assumed business name, trade name, logo, trademark, or service mark, whether registered or not, of any Owner affiliate, in connection with publicity, advertisements, promotion or in any other connection; or (ii) identify Owner in any manner on customer or vendor lists or on a web site (or on any third party web site) or in any web site metatags; or (iii) disclose to any third party the monetary value of any goods or services purchased hereunder. Consultant shall indemnify Owner for reasonable costs and expenses incurred in connection with enforcing the provisions of this Section 15. All of the restrictions and obligations set forth in this Section 15 shall survive any termination of this Agreement.

## 16. GOVERNING LAW; SEVERABILITY

16.1 Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of California, without reference to or application of conflict of laws provisions.

16.2 Severability. If any one or more of the provisions contained within this Agreement is deemed invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the provision of the Agreement will be enforced to the maximum extent permissible and the remainder of the provisions of this Agreement will remain in full force and effect. Consultant and Owner mutually agree to substitute any invalid, illegal or unenforceable provision of this Agreement with a valid, legal, or enforceable provision which comes as close as possible to the reasonably inferred intent of the invalid, illegal, or unenforceable provision.

## 17. SUSPENSION OF WORK

Owner may at its sole option and for its convenience, suspend all or any portion of Consultant's performance of the Services, for a reasonable period of time not to exceed six months. Owner will give written notice to Consultant of such suspension specifying the date of suspension. Owner shall pay Consultant a sum equivalent to the reasonable value of the Services Consultant has performed up to the date of suspension. Thereafter, Owner may rescind the suspension by giving written notice to Consultant and requiring Consultant to resume performance of the Services in compliance with the terms and conditions of this Agreement. Consultant shall be entitled to an extension of time equal to the length of the suspension, unless otherwise agreed to in writing by the Parties.

## 18. TERMINATION

18.1 Termination for Convenience. Owner may terminate this Agreement or any portion of the Services to be performed under this Agreement for any reason with advance written notice to Consultant specifying the date of termination. Upon receipt of the notice of termination, Consultant shall cease all work by the termination date and may expend a reasonable amount of time to assemble work in progress for the purpose of proper filing of documents and closing of the Services, not to exceed five percent (5%) of the total time expended on the Project up to the date of the notice of termination unless otherwise agreed to by Owner in writing. If termination of the Services occurs at the completion of a specific phase of the Services, Consultant shall not be entitled to time for assembly of work in progress unless otherwise agreed to in writing by Owner. Consultant shall be entitled to fair and reasonable compensation for Services performed by Consultant prior to the effective date of termination and for assembling work in progress, if applicable. After the filing of documents and closing of the Services, Consultant shall deliver all Work Product to Owner. By accepting payment for filing, closing, and delivering of Work Product, Consultant discharges Owner from all of Owner's payment obligations and liabilities under this Agreement.

18.2 Continuity of Services. Except as provided in Section 18.3, so long as Owner continues to make all undisputed payments, Consultant shall not interrupt, suspend, or terminate the provision of Services to Owner, even if a dispute arises between the Parties, unless: (i) authority to do so is granted by Owner or ordered by a court of competent jurisdiction; or (ii) the term of this Agreement has expired or the Agreement has been terminated in accordance with its terms

18.3 Termination for Bankruptcy or General Assignment. Either party may terminate this Agreement immediately if: (a) the other party commences a voluntary case or other proceeding under any bankruptcy or insolvency law, or seeks the appointment of a trustee, receiver, liquidator, custodian, or similar official of all or any substantial part of its property; (b) any involuntary case or other proceeding under any bankruptcy or insolvency law, seeking the appointment of a trustee, receiver, liquidator, custodian, or similar official for all or any substantial part of the other party's property, is commenced against the other party, and the other party consents to any relief requested, or if such proceeding is not stayed or discharged within thirty (30) calendar days; or (c) the other party makes a general assignment for the benefit of creditors or fails generally to pay its debts as they become due, or otherwise suffers or otherwise permits an attachment of execution levied upon any material portion of its property connected with its performance hereunder. If any of the above events occur, the party shall immediately notify the other party of the occurrence in writing.

**18.4 Termination for Default.** If Consultant fails to perform or adequately perform any obligation required by this Agreement, Consultant's failure constitutes a Default. If Consultant fails to satisfactorily cure a Default within ten calendar days of receiving written notice from Owner specifying the nature of the Default, Owner may immediately terminate this Agreement, and terminate each and every right of Consultant, and any person claiming any rights by or through Consultant under this Agreement. The rights and remedies of Owner enumerated in this Section 18.4 are cumulative and shall not limit, waive or deny any of Owner's rights under any other provision of this Agreement. Further, this Section does not waive or deny any right or remedy, at law or in equity, existing as of the date of this Agreement, or hereinafter enacted or established, that may be available to Owner against Consultant.

## **19. INSURANCE**

**19.1 Minimum Coverage Requirements.** At no expense to Owner, Consultant shall obtain and keep in force during the term of this Agreement, including any renewals or extensions, and require its Subconsultants to obtain and keep in force during the terms of their respective contracts, the minimum insurance limits and coverage set forth in Exhibit B. The insurance coverage limits set forth in Exhibit B are minimum coverage requirements, not limitations of liability, and shall not be construed in any way as Owner's acceptance of the responsibility of Consultant. Owner may approve in its sole discretion reduced coverages for Subconsultants upon written request by Consultant. Owner's approval of any such reduced coverages must be in writing.

**19.2 Failure to Procure.** If Consultant fails to procure and maintain the required insurance, upon written notice Owner may, but shall not be required to, procure and maintain the required insurance at the expense of Consultant. In the alternative, Owner may declare a default hereunder and, unless such default is timely cured, terminate the Agreement. Unless and until the default is cured, Consultant and its servants, employees, or agents shall not be allowed to enter upon Owner's premises.

## **20. HEADINGS**

Headings in this Agreement are for convenience only and are not to be used in the construction or interpretation of this Agreement.

## **21. COUNTERPARTS**

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which taken together shall constitute one instrument.

## **22. MANDATORY ASSISTANCE**

If a third party dispute or litigation, or both, arises out of, or relates in any way to the Services provided under this Agreement, upon Owner's request, Consultant, including its agents, officers, and employees, agrees to assist in resolving the dispute or litigation ("Mandatory Assistance"). Mandatory Assistance includes, but is not limited to, providing professional consultations, attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation. Owner will reimburse Consultant for any fees and expenses incurred for required Mandatory Assistance as Additional

Services. Notwithstanding the foregoing, Owner, in its sole discretion, shall determine whether these fees and expenses were necessary due to Consultant's, including its agents', officers', and employees', act or failure to act. If Owner determines that the necessity for the fees and expenses were necessary as a result of the Consultant's or its agents', officers', or employees' conduct, in part or in whole, Consultant shall not be entitled to reimbursement and Owner shall be entitled to be reimbursed for any payments made for those fees and expenses. Reimbursement may be through any legal means necessary, including Owner's withholding of payment to Consultant.

### 23. DISPUTE RESOLUTION

23.1 Dispute Resolution. The intent of the Parties is to identify and resolve disputes promptly after any dispute arises. Before attempting to exercise any legal or equitable remedy, each party agrees to follow the dispute resolution procedure described below.

23.2 Escalation of Dispute. If there is a dispute between the Parties arising out of this Agreement, each party agrees to engage in good faith negotiations between progressively more senior representatives of each party, as follows.

<b>Level</b>	<b>Representatives of the Parties</b>	<b>Maximum Duration of Negotiations Prior to Escalation to Next Level</b>
One	<b>OWNER:</b> Douglas A. Fraser <b>SUPPLIER:</b> [INSERT NAME AND/OR TITLE]	5 business days
Two	<b>OWNER:</b> Director of Supply Chain Department <b>SUPPLIER:</b> [INSERT NAME AND/OR TITLE]	5 business days
Three	<b>OWNER:</b> COO or Owner's designee <b>SUPPLIER:</b> [INSERT NAME AND/OR TITLE]	7 business days

Either party may at any time change its representative party designated above by providing written notice to the other party.

If the dispute remains unresolved following the negotiations and the expiration of the periods specified above, each party may immediately exercise or pursue any other rights or remedies available hereunder or at law or in equity, and it is acknowledged by the Parties that nothing herein shall preclude, limit, or otherwise restrict any legal or equitable remedies available to either party for failure of the other party to perform its obligations under this Agreement.

### 24. ENTIRE AGREEMENT

This Agreement constitutes the entire understanding between Consultant and Owner relating to the subject matter herein, and supersedes any and all prior or contemporaneous agreements or understandings, whether oral or written, relating to the

subject matter herein. Any waiver, modification or amendment of any provision of this Agreement will be effective only if in writing and signed by duly authorized representatives of the Parties.

#### **25. TIME**

Time is of the essence for this Agreement.

#### **26. NO WAIVER**

No failure of either Owner or Consultant to insist upon the strict performance by the other of any covenant, term or condition of this Agreement, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Agreement, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Agreement, and each and every covenant, condition, and term hereof shall continue in full force and effect to any existing or subsequent breach.

#### **27. DRAFTING AMBIGUITIES**

The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms and conditions of this Agreement, and the decision of whether or not to seek advice of counsel with respect to this Agreement is a decision which is the sole responsibility of each party. This Agreement shall not be construed in favor of or against either party by reason of the extent to which each party participated in the drafting of the Agreement.

#### **28. EXHIBITS INCORPORATED**

All Exhibits and Attachments referenced in this Agreement are attached hereto and incorporated into the Agreement by this reference.

#### **29. CONFLICTS BETWEEN TERMS**

If an apparent conflict or inconsistency exists between the main body of this Agreement and the Exhibits, the main body of this Agreement shall control. If a conflict exists between an applicable federal, state, or local law, rule, regulation, order, or code and this Agreement, the law, rule, regulation, order, or code shall control. Varying degrees of stringency among the main body of this Agreement, the Exhibits, and laws, rules, regulations, orders, or codes are not deemed conflicts, and the most stringent requirement shall control. Each Party shall notify the other immediately upon the identification of any apparent conflict or inconsistency concerning this Agreement.

#### **30. SURVIVAL**

Any provisions of this Agreement that impose continuing obligations upon a party or, by their nature or terms, would be reasonably understood to have been intended to survive and continue in force and effect after expiration, termination, or cancellation of this Agreement, shall remain in full force and effect.

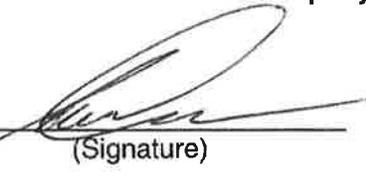
#### **31. COVENANTS AND CONDITIONS**

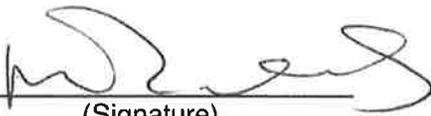
All provisions of this Agreement expressed as either covenants or conditions on the part of Owner or Consultant shall be deemed to be both covenants and conditions.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

**California American Water Company**

**Geoscience Support Services, Inc.**

BY:   
(Signature)

BY:   
(Signature)

NAME: Ian Crooks  
(Print)

NAME: Mark Williams  
(Print)

TITLE: Eng. Mgr.

TITLE: Vice President

DATE: 6/17/15

DATE: 2-Jun-15

**EXHIBIT A**  
**SCOPE OF WORK**

Refer to Consultant's proposal dated May 29, 2015

## EXHIBIT B

### INSURANCE COVERAGE

1. Commercial General liability
  - \$1,000,000 per occurrence Combined Single Limits
  - \$1,000,000 General Aggregate
  - \$1,000,000 Products and Completed Operations Aggregate
  - CGL ISO 1996 or later Occurrence form including Premises and Operations Coverage, Products and Completed Operations, Coverage for Independent Contractors, Personal Injury Coverage and Blanket Contractual Liability, and Contractors Protective Liability if the Consultant subcontracts to another all or any portion of the Services. Completed Operations shall be maintained for a period of three (3) years following Final Completion for any construction, renovation, repair, and/or maintenance service.
  
2. Workers' Compensation
  - Applicable Federal or State Requirements: Statutory Minimum
  - Employer's Liability                   \$1,000,000
  - Each Accident                           \$1,000,000
  - Each Employee – Disease           \$1,000,000
  - Voluntary workers compensation insurance coverage is required for all employees not subject to applicable workers compensation act or acts
  
3. Automotive Liability (including owned, hired, borrowed and non-ownership liability)
  - Bodily Injury and Property Damage \$1,000,000 each occurrence Combined Single Limits
  
4. Umbrella Liability
  - \$1,000,000 each occurrence and annual aggregate in excess of Employer's Liability,
  - General Liability and Automotive Liability (no more restrictive than underlying insurance)
  
5. Professional Liability. Professional Liability or Errors and Omissions insurance acceptable to Owner covering Consultant's liabilities for loss due to error, omission, negligence, mistakes, or failure to take appropriate action in the performance of business or professional duties of their employees in the amount of at least \$2,000,000 per claim and in the aggregate shall be procured and maintained during the Agreement term and for a period of at least one (1) year after completion of the Agreement evidenced either by renewal of the policy for one year or by endorsement or addition of an Extended Reporting (or Discovery) Period for at least one year following the policy expiration date. Policy shall also be endorsed to provide contingent bodily injury and property damage liability coverage.
  
6. Liability Limits. The minimum liability limits required herein may be satisfied through the combination of the primary General Liability, Employers' Liability, and Automotive Liability limits with an Umbrella Liability policy (with coverage no more restrictive than the underlying insurance) providing excess limits at least equal to or greater than the combined primary limits.

7. Additional Insured. All Commercial General Liability including completed operations-products liability coverage and Automotive liability insurance shall designate California-American Water Company, its parent, affiliates, and subsidiaries (collectively "California American Water"), and their respective directors, officers, and employees as Additional Insured. All such insurance shall be primary and non-contributory, and is required to respond and pay prior to any other insurance or self-insurance available to California American Water. In addition to the liability limits available, such insurance will pay on behalf of or will indemnify California American Water for defense costs. Any other coverage available to California American Water applies on a contingent and excess basis. Such insurance shall include appropriate clauses pursuant to which the insurance companies shall waive their rights of subrogation against California American Water.
8. Certificates and Endorsements. California American Water shall be the certificate holder and the certificate shall include the following phrase in the "Description of Operations" section: "Policy shall include the interests of California-American Water Company, its parent, affiliates, and subsidiaries (collectively, "California American Water"), and their respective directors, officers and employees as additional insured with respect to any and all operations performed by the named insured on behalf of California American Water." Consultant shall require its Subconsultants, if any, to furnish, prior to the start of work, certificates or adequate proof of the required insurance including, if specifically requested by Owner, copies of the endorsements and insurance policies naming California American Water as Additional Insured. Consultant shall provide current certificates of insurance to Owner prior to the commencement of work and the required insurance shall be maintained until completion of the Agreement. Waiver of Subrogation endorsement must accompany the certificate of insurance and must include Workers' Compensation policies.
9. Excess Policy. Excess policy shall follow the form for Employers Liability, General Liability and Auto Liability Policies without exception and shall be indicated as such with an endorsement from the insurer.
10. Change in Policies. Consultant shall notify Owner in writing at least thirty (30) days prior to cancellation of or a material change in a policy. Any cancellation or material alteration of a policy shall not relieve Consultant of its continuing obligation to maintain insurance coverage in accordance with this Agreement.
11. Rating of Carriers. Carriers providing coverage shall be rated by A.M. Best with at least an "A" rating and a financial size category of at least Class VII. Carriers shall be licensed in state(s) where the work will be performed.

## **ATTACHMENT 1**

**Consultant's Schedule of Charges and Budget for Services**

**Refer to Consultant's proposal dated May 29, 2015**

# GEOSCIENCE

A decorative graphic consisting of a horizontal line with a downward-pointing curve or 'V' shape below it, centered under the word 'GEOSCIENCE'.

May 29, 2015

Mr. Douglas Fraser  
Senior Project Manager  
California American Water, Central Division  
511 Forest Lodge Road Suite 100  
Pacific Grove, CA 93950

**Subject: Proposal to Provide Professional Services Related to Evaluation of Current Well Capacity and Pump Design Recommendations for the Pearce No. 1 Well and Begonia No.2 Well**

Dear Douglas:

We are pleased to provide California American Water (CalAm) with this proposal to provide professional services for evaluation of current well capacity and pump design recommendations for your Pearce No. 1 Well and Begonia No. 2 Well. Based on our understanding, after recently equipping of the Pearce No. 1 well in 2014, the new pump produced excessive sound from vibration and/or other causes, and ultimately failed in late 2014/early 2015. Based on the provided analysis of the failed pump and motor, the cause of the excessive noise from the submersible pump and reason for failure is not completely clear, however, it may be related to setting the pump in a portion of the well with excess curvature, which led to mechanical bearing damage, and ultimately to complete failure. Premature submersible pump failure was also seen in Begonia No. 2 well after the well was equipped following minor rehabilitation in 2014. The cause of premature pump failure in the Begonia No. 2 well is not completely clear, however, may be related to over throttling the pump for an extended period, pumping high levels of sand and other formation material entering through holes in the screen, or a combination of both.

GEOSCIENCE SUPPORT SERVICES INCORPORATED

*Ground Water Resources Development*

P.O. Box 220, Claremont, CA 91711

T 909-451-6650

F 909-451-6638

Our detailed scope of work to review the recommended pump design and to recommend a strategy to mitigate the other issues seen in the Pearce and Begonia well is as follows:

## **1.0 PROJECT MEETING**

GEOSCIENCE will attend one meeting with CalAm personnel at project commencement to visit well sites and identify all available data.

## **2.0 HISTORICAL PRODUCTION DATA REVIEW AND REVIEW OF PUMP DESIGN RECOMMENDATION**

GEOSCIENCE will review all historical data available for Pearce No. 1 Well and Begonia No. 2 Well. Data will include historical pump tests, production data, ground water elevations, and available interference in the nearby monitoring well. Data of interest will include, but not necessarily be limited to:

- Production rates,
- Available pump test data,
- Static and pumping water levels,
- Duty cycles,
- Specific capacity data,
- Previous equipping (i.e., pump specifications, pump controls, etc.),
- Well Completion reports and logs, and
- Ground water level data of any nearby wells.

Previous pump test data will be used along with historical ground water elevations, and interference in nearby wells to establish aquifer properties including transmissivity, storativity, and the respective well and aquifer loss coefficients. Aquifer parameters will then be used to develop a recommended pumping rate and the resulting short- and long-term drawdowns, which will be used as a basis for evaluating the pump design recommendation. Evaluation of the recommended discharge design rate and pump design for the Pearce No. 1 Well and Begonia No. 2 Well will consider the current and historic ground water elevations along with additional NPSH requirements in wells that have air entrainment from cascading water.

### 3.0 PREPARATION OF SUMMARY REPORT

GEOSCIENCE will prepare a letter report in 100% final format that summarizes the findings and recommendations of the previous tasks. The report will, at a minimum, include the following:

- Results of the Data review,
- Aquifer Parameter Calculations,
- Well efficiency calculations,
- Estimated sustainable pumping rate, and short- and long-term drawdown,
- Recommended pump design, and
- Specific recommendations for well repair, re-development, and pump testing for both the Pierce No. 1 Well and Begonia No. 2 Well.

Our cost proposal for this scope of work to evaluate the pump design, based on existing information, for the Pearce No. 1 Well and Begonia No. 2, is \$8,886 as detailed in the attached table. Thank you for the opportunity to submit this proposal. Should you have any questions, please do not hesitate to call me at (909) 451-6650.

Sincerely,



Mark. Williams, Ph.D., P.E.  
Vice President  
Geoscience Support Services, Inc.

**Cost Proposal for Professional Geohydrologic Services  
Well Capacity Evaluation and Pump Design Recommendation - CalAm Pearce No. 1 Well and Begonia No.2 Well**

Task Description		GEOSCIENCE SUPPORT SERVICES, INC.					Labor	Reimbursable Expenses <sup>1</sup>	Total Cost
		Senior Engineer	Senior Geohydrologist	Staff Geohydrologist	Technical Illustrator	Clerical			
<i>Hourly Rate:</i>		\$210	\$199	\$128	\$113	\$97			
<b>1.0</b>	<b>MEETINGS</b>								
	Prepare for and Attend One Meeting with Project Team at Well Site	2	2				\$ 818		\$ 818
<i>Subtotal</i>							\$ 818	\$ -	\$ 818
<b>2.0</b>	<b>Data Review</b>								
	Compile and review historical production data, develop aquifer parameters, and recommend pump design based on available data	2	4	32			\$ 5,312	\$ -	\$ 5,312
<i>Subtotal</i>							\$ 5,312	\$ -	\$ 5,312
<b>3.0</b>	<b>PREPARATION OF SUMMARY REPORT</b>								
	4.1 Prepare Letter Report Summarizing the Results of Tasks 2 a, Including Analysis of Aquifer Pumping Test Data and Recommendations Regarding Sustainable Discharge Rate, Well Efficiency, Estimated Drawdown Conditions, and design of new permanent pump (assumes submittal in electronic format)	4	6	4	1	1	\$ 2,756	\$ -	\$ 2,756
<i>Subtotal</i>							\$ 2,756	\$ -	\$ 2,756
<b>TOTAL HOURS AND COST:</b>		<b>8</b>	<b>12</b>	<b>36</b>	<b>1</b>	<b>1</b>	<b>\$ 8,886</b>	<b>\$ -</b>	<b>\$ 8,886</b>

**Notes:**

<sup>1</sup> Reimbursable expenses include report reproduction, mailing charges, field equipment, and mileage. Contractor fees and water quality analyses are not included. It should be noted that additional costs, which cannot be foreseen at this time, are sometimes incurred due to equipment breakdowns. Additional inspection hours for such field-related problems are not included in the above costs.