

Exhibit CAW-032C

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**BEFORE THE PUBLIC UTILITIES COMMISSION**

**OF THE STATE OF CALIFORNIA**

In the Matter of the Application of  
California-American Water Company (U  
210 W) for a Certificate of Public  
Convenience and Necessity to Construct  
and Operate its Coastal Water Project to  
Resolve the Long-Term Water Supply  
Deficit in its Monterey District and to  
Recover All Present and Future Costs in  
Connection Therewith in Rates

Application No. 04-09-019

**STEEFEL, LEVITT & WEISS**  
A PROFESSIONAL CORPORATION  
ONE EMBARCADERO CENTER · 30TH FLOOR · SAN FRANCISCO, CA 94111-3719  
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**DIRECT TESTIMONY OF LAWRENCE GALLERY, P.E.**

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**CALIFORNIA-AMERICAN WATER  
COMPANY**

Date: March 30, 2007

17677-6569438 9

**EXHIBIT F**

Exhibit CAW 032C

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Application No. 04-09-019

**DIRECT TESTIMONY OF LAWRENCE GALLERY, P.E.**

Q1. Please state your name, business address and telephone number.

A1. My name is Lawrence E. Gallery. P.E. My business address is RBF Consulting, 3180  
Imjin Rd., Suite 110, Marina, CA 93933. My telephone number is (831) 883-8187.

Q2. By whom are you employed and in what capacity?

A2. I have been employed with RBF Consulting (RBF) since 1984. I am Senior Vice  
President of RBF's Water Resources Department and am the Office Manager of the RBF  
Monterey Bay office.

Q3. Please briefly outline your responsibilities at RBF.

A3. I serve as Department Head of the Major Facilities Design Division in the Water  
Resources Department and am the Office Manager for the RBF Monterey Bay office.  
Since March 2004, I have been RBF's Program Manager for the Coastal Water Project.

Q4. Describe for the Commission your education.

A4. I have a Bachelor of Science in Civil Engineering from California State University, Los  
Angeles, dated 1976.

1 Q5. Please describe your professional experience.

2 A5. I am a registered civil engineer with extensive experience in water resources engineering.

3 I am a member of the following professional organizations: American Water Works  
4 Association, American Society of Civil Engineers, San Diego Water Works Group,  
5 Orange County Water Association, and the National Engineering Honor Fraternity of Chi  
6 Epsilon. My professional engineering registrations are:

7 > 1977, Civil Engineer, CA, 27870

8 > 2000, Civil Engineer, AZ, 34419

9 I have been responsible for the preparation of plans of works, engineering reports,  
10 preliminary and final designs, including preparation of plans, specifications and  
11 construction administration for major water and wastewater projects. In the past few  
12 years alone, I have been actively involved in the design of domestic water treatment  
13 plants, ocean desalination plants, and hundreds of miles of pipelines, over 35 reservoirs,  
14 and 30 pumping facilities. The pipelines ranged in size from 4-inch to over 100-inch  
15 diameter and included domestic water, sewer, and recycled water pipelines. The pumping  
16 station facilities have been as large as 70 cfs and over 3,000 horsepower.

17  
18 Q6. Have you been employed by any other professional engineering firms?

19 A6. Yes, from 1976 to 1984 I was employed by Boyle Engineering as a Water Resource  
20 Project Engineer and Project Manager.

21  
22 Q7. Have you previously testified before utility regulatory commissions? If so, please identify  
23 which commissions in which states and the subject of your testimony.

24 A7. Yes. I have testified before the California Public Utilities Commission ("Commission") in  
25 this proceeding.

26

27

28

- 1 Q8. What is the purpose of your testimony?
- 2 A8. The purpose of my testimony is to address the scope of work performed by RBF
- 3 Consulting (“RBF”) in connection with the Coastal Water Project in 2006 and to describe
- 4 the fees charged by RBF to California American Water for work on the Coastal Water
- 5 Project in 2006.
- 6
- 7 Q9. Please provide an overview of the services performed by RBF in 2006.
- 8 A9. California American Water submitted an amended application for a Certificate of Public
- 9 Convenience and Necessity (CPCN) for the Coastal Water Project, including the required
- 10 Proponents Environmental Assessment (PEA), to the California Public Utilities
- 11 Commission (CPUC) on July 14, 2005. California American Water retained RBF to
- 12 continue to provide services on the Coastal Water Project for a variety of tasks. In 2006,
- 13 work performed on the Coastal Water Project was still part of the pre-construction phase
- 14 of the project. In September 2005 (after the PEA was submitted), California American
- 15 Water retained RBF to perform additional services (see the “Post-Proponent’s
- 16 Environmental Assessment Phase of Miscellaneous Additional Environmental and
- 17 Engineering Services” attached hereto as Attachment 1). The term of this one-year
- 18 contract expired in September 2006, and RBF’s contract was extended for additional work
- 19 pertaining to the environmental and permitting work for the Coastal Water Project. RBF
- 20 subsequently entered into a “Work Order Addendum Coastal Water Project” with
- 21 California American Water, which authorized RBF to perform additional program
- 22 management services for the remainder of the year and for other continued environmental
- 23 and engineering tasks with carry over budget into 2007 (attached hereto as Attachment 2).
- 24
- 25 Environmental and engineering work on the Coastal Water Project includes activities that
- 26 are project-wide as well as specific to each of the three primary components of the Coastal
- 27 Water Project: (1) desalination, (2) conveyance, and (3) ASR. Key environmental
- 28 activities during 2006 included coordination and preparing responses to CPUC’s Request

1 for Information (RFIs) in coordination with preparation of the Environmental Impact  
2 Report (EIR); environmental studies such as the watershed sanitary survey and focused  
3 biological surveys; and permitting activities, primarily for the Pilot Plant Facility (PPF).  
4 Engineering activities included PPF engineering, oversight of equipment fabrication, and  
5 construction planning; ASR coordination with the Monterey Peninsula Water  
6 Management District (MPWMD); and additional conceptual design analysis of various  
7 components of the Coastal Water Project based on new information and developments  
8 since the PEA submittal. In 2006, RBF also provided overall program management  
9 support services for the Coastal Water Project in addition to providing engineering and  
10 environmental services.

11  
12 I will now further summarize 2006 activities, with additional details provided in  
13 Attachment 3. Attachment 3 describes work performed by month and task. My testimony  
14 also describes RBF tasks as defined in our contractual agreement with California  
15 American Water and their associated budgets. A description of the charges are detailed in  
16 a spreadsheet summarizing RBF's monthly invoices charged to the Coastal Water Project,  
17 attached to my testimony as Attachment 4. The RBF entries on this spreadsheet refer to  
18 numbered tasks performed by RBF.

19  
20 Under the California Environmental Quality Act (CEQA), the CPUC must prepare an  
21 independent environmental review of the PEA document and address any additional issues  
22 raised during their preparation of the EIR. The CPUC retained Environmental Science  
23 Associates (ESA) as the EIR consultant in June 2006, one year after California American  
24 Water submitted its PEA. As part of RBF's scope of work, RBF has coordinated with  
25 ESA and CPUC staff on both formal and informal requests for data and information  
26 regarding the proposed project and project alternatives. Meetings with the CPUC EIR  
27 team were initially held in June 2006 and continued throughout the rest of the year on a  
28 semi-monthly basis, and resulted in a total of two formal data requests with multiple

1 queries. In the fourth quarter of 2006, the CPUC EIR consultant issued the Notice of  
2 Preparation and held the required public scoping meetings, and is now preparing the Draft  
3 EIR.

4  
5 RBF worked on additional environmental studies during 2006, which included the  
6 Watershed Sanitary Survey, required as part of the Drinking Water Permit application to  
7 the California Department of Health Services (CDHS), and focused Biological Surveys  
8 required by the U.S. Fish and Wildlife Service (USFWS) and the California Department  
9 of Fish and Game (CDFG) for species protected by the Endangered Species Act. These  
10 studies are considered long-lead items for permits that will be obtained subsequent to the  
11 certification of the EIR, but that are necessary to perform well in advance in order to  
12 maintain the project schedule and achieve the most efficient implementation of the  
13 Coastal Water Project to completion.

14  
15 Similarly, RBF initiated appraisal and right-of-way easement/acquisition evaluations and  
16 negotiations in 2006, which are also long-lead activities. An appraisal was conducted for  
17 the Transportation Agency of Monterey County (TAMC) railroad right-of-way which  
18 corresponds with a significant portion of the conveyance facility alignment from just  
19 south of Castroville to the City of Seaside. Several meetings were held with TAMC staff  
20 after the appraisal report was prepared in the second quarter to identify the process for  
21 negotiating an easement within the railroad right-of-way. RBF retained two appraisers as  
22 sub-consultants to work on the project, Universal Field Services for the southern project  
23 area and Arthur Gimmy International for the TAMC right-of-way and the northern project  
24 area.

25  
26 Preparation and planning for installation of the pilot plant facility (PPF) were also an  
27 important project activity during 2006. The PPF was designed and fabricated in the last  
28 quarter of 2005 and first quarter of 2006, and shipped from Spain to California in the

1 second quarter of 2006. Construction coordination was delayed due to the permits, though  
2 it was initiated during the summer of 2006 after the equipment was delivered. During the  
3 third quarter, detailed construction drawings were developed and submitted to Monterey  
4 County for a Building Permit, after the Coastal Development Permit had been approved.

5  
6 Permit application preparation and coordination occurred throughout the first half of 2006,  
7 resulting in PPF permits that were obtained from the Regional Water Quality Control  
8 Board (RWQCB) and Monterey County in the third quarter of 2006 and then from the  
9 California Coastal Commission (CCC) in the fourth quarter of 2006. Regarding the  
10 Monterey County Coastal Development Permit, resolution of condition compliance issues  
11 between the Moss Landing Power Plant (MLPP) and Monterey County created an  
12 unanticipated delay to approval, but this was resolved in 2006 independently of California  
13 American Water. Two appeals were made. First, the Monterey County Zoning  
14 Administrator's July 14, 2006 decision was appealed to the Monterey County Board of  
15 Supervisors and heard on August 29, 2006. The Monterey County Board of Supervisors  
16 denied the appeal and approved the project, which was then appealed again to the CCC.  
17 The CCC determined that the appeal addressed a substantial issue at their October hearing  
18 and then heard the appeal on December 14, 2006. The CCC also denied the appeal and  
19 approved the project at that hearing.

20  
21 In addition to environmental and permitting services, several engineering support  
22 activities were performed during 2006. RBF provided support to California American  
23 Water by coordinating the ASR component of the Coastal Water Project with the  
24 MPWMD's ASR project. RBF also provided engineering analysis to support the  
25 MPWMD project as an interim phase of ASR until the Coastal Water Project is  
26 implemented. Also, as a result of discussions with the land-owner, likely mitigation  
27 requirements for biological resources, and other system constraints, additional engineering  
28 analysis was performed to identify alternatives to the Segunda Pipeline alignment



1 identified in the PEA. This analysis has been transmitted to the CPUC EIR team. These  
2 types of engineering tasks primarily fell into the portion of our scope referred to as Task  
3 12 - "Unidentified Scope of Services," which accounted for program management  
4 activities that were not previously anticipated.

5  
6 Throughout 2006, RBF provided program management support to California American  
7 Water. In the first quarter of 2006, RBF assisted California American Water in  
8 conducting an overall implementation analysis for the Coastal Water Project, including  
9 identifying the scope of tasks through construction, desalination procurement approach  
10 options, project organization and structure, schedule and task management and project  
11 budgeting. This resulted in a draft of an overall project plan to identify how California  
12 American Water can proceed with the design, construction and operation of the Coastal  
13 Water Project once the CPUC certifies the Final EIR and authorizes a Certificate Public  
14 Convenience and Necessity (CPCN). In the second quarter of 2006, a more detailed  
15 schedule analysis was performed to identify key project milestones and track the critical  
16 path activities for the project schedule.

17  
18 As a result of the project schedule analysis, RBF also assisted in the development of a  
19 Contingency Plan to provide California American Water with information regarding  
20 project alternatives and the impact on the overall project schedule should the proposed  
21 project at the Moss Landing Power Plant become infeasible. In the spring of 2006, the  
22 State Lands Commission (SLC) and the Ocean Protection Commission held public  
23 hearings to address policy issues and concerns regarding coastal power plants that use  
24 once-through cooling water systems. As a result of these hearings, these state bodies  
25 passed resolutions regarding leases for these facilities and overarching concerns about the  
26 potential environmental effects of these facilities. Also, LS Power became the new owner  
27 of the MLPP in May 2006. Further ownership and management changes are anticipated at  
28 MLPP due to a merger of LS Power and Dynergy. RBF prepared a Contingency Plan as a

1 response to these developments, in order to determine what steps would be required if it  
2 became necessary to modify the desalination plant portion of the proposed project to  
3 utilize a different type of seawater intake. However, this has not resulted in a change to  
4 the proposed project.

5  
6 As part of the project planning and management activities, in the third and fourth quarters  
7 of 2006, RBF assisted California American Water to prepare and issue three Requests For  
8 Proposals for additional work tasks on the Coastal Water Project ASR component, the  
9 Coastal Water Project conveyance facilities, and for project-wide geotechnical services.  
10 This assistance included advertising and identification of interested consultants, holding  
11 the pre-proposal meetings, a site tour, and technical review assistance for the proposals  
12 submitted.

13  
14 Lastly, the CPUC Administrative Law Judge (Bertram Patrick) held evidentiary hearings  
15 in July 2006 for the Interim Rate Case for pre-construction cost recovery. RBF provided  
16 testimony and data request support to this proceeding, as well as participation in the  
17 evidentiary hearings. The CPUC made its Interim Rate Case final decision on December  
18 14, 2006.

19  
20 Q10. Please describe the RBF scope of work and budget for the September 2005 contract for  
21 Post-PEA Phase Engineering and Environmental Services, and provide a brief overview  
22 of the work performed in 2006 in connection with each of the tasks identified.

23 A10. As previously stated, California American Water retained RBF in September 2005 to  
24 perform additional services entitled the "Post-Proponent's Environmental Assessment  
25 Phase of Miscellaneous Additional Environmental and Engineering Services" (attached as  
26 Attachment 1). The term of this one-year contract expired in September 2006. I will now  
27 provide a summary of the scope of work authorized and a description of the actual work  
28 performed during 2006 by task for this contract. Attachment 3 provides detail of the

1 charges and work performed for each monthly invoice, and for each task, in order to  
2 supplement the summary discussion here.

### 3 4 **Task 1 - Additional Services During PEA Phase**

5 Services provided under Task 1 were performed during the PEA Phase (March 2004 –  
6 August 2005) and were billed in the last quarter 2005. In April 2006, \$37,094 was billed  
7 to this task number. However, this was inadvertent and was intended to be charged to  
8 Task 9 – Receiving Water Modeling and Flow Science Modeling, and the charge was  
9 subsequently moved to be shown under Task 9 in RBF's project accounting. This charge  
10 was for work performed by FlowScience, a sub-consultant to RBF who performed the  
11 receiving water brine discharge analysis during the PEA Phase.

### 12 13 **Task 2 - Pilot Plant Laboratory Office Project**

14 In the fourth quarter of 2005, RBF initiated work on the Pilot Plant Laboratory Office  
15 Project, in anticipation that the PPF permits would be obtained in early 2006 and that  
16 construction of the PPF would be completed by the end of the year. Although the PPF  
17 was not installed in 2006, all required activities for the laboratory office, up to that point,  
18 have been completed.

19 Task 2 scope and work performed in 2006 included activities such as the following:

- 20 • Coordination with MLPP throughout the design and installation process.
- 21 • Identification of laboratory analysis to be conducted.
- 22 • Cost analysis of laboratory analysis approach, considering capital  
23 equipment, reagents, waste disposal, any required certification of  
24 laboratory technicians, and effective use of on-site labor.
- 25 • Identification of pilot plant personnel requirements and a corresponding  
26 estimate of office and equipment needs.
- 27 • Coordination with mobile modular office/laboratory suppliers to obtain  
28 facility combined laboratory and pilot plant office.

- 1                   •     Space plan and interior layout drawings, water and waste storage  
2                             requirements and design of required facilities.  
3                   •     Site plan for the initial laboratory/office, considering entire PPF.  
4                   •     Coordination with PG&E to obtain electrical power service to the site and  
5                             design on-site electrical facilities to the laboratory/office and PPF.  
6                   •     Procurement and installation plan for the laboratory/office facilities,  
7                             equipment, services and initial supplies.  
8                   •     Coordination and oversight of the laboratory/office installation.

### 10           **Task 3 - Pilot Plant Program Management Services**

11           In addition to assisting California American Water with the Pilot Plant Laboratory and  
12           Office, RBF provided Pilot Plant Program Management services. The following is a  
13           summary of the sub-tasks identified in September 2005. The activities performed in 2006  
14           include:

#### 16           *Sub-Task 1 - Pilot Plant Study Plan*

17           A draft of the Pilot Plant Study Plan was prepared that included the following:

18           Identified testing protocol for use in operating the Pilot Plant

- 19                   •     Defined the objectives of the testing program  
20                   •     Outlined the operating strategies and operating parameters to be tested and  
21                             the data to be collected.  
22                   •     Developed protocol for sampling and routine monitoring schedules  
23                   •     Defined the water quality parameters to be tested and the frequency of the  
24                             tests.

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*Sub-Task 2 - Preliminary Site Design of Pilot Plant Facility (PPF)*

The following tasks were completed in the first two quarters of 2006.

- Preliminary design of site facilities necessary for integrating the PPF with the MLPP cooling water system.
- Preliminary design of the equalization tank and associated pumps and piping systems that will be used in conjunction with the PPF.

*Sub-Task 3 - Design of PPF Equalization Facilities*

These tasks were completed in the third quarter of 2006 and were included the Building Permit application that was submitted to Monterey County in September 2006.

- Final design of the equalization tanks and associated pumps and piping systems.
- Technical specifications and full size drawings for all associated civil, structural, mechanical, electrical and instrumentation components

*Sub-Task 4 - Coordination with PPF Suppliers and Contractors*

This coordination occurred in early 2006 and was incorporated into the PPF design and study plan efforts.

- Engineering review and comment on documentation for the PPF
- RBF met with American Water Pridesa in Tampa, Florida on two separate occasions to collect relevant information from American Water Pridesa's operating pilot plant at that seawater desalination facility.
- RBF provided a recommendation to California American Water regarding the selection of a second pretreatment membrane system vendor for incorporation into the PPF.

1            *Sub-Task 5 - Pilot Plant Permitting and Coordination with Duke*

2            As discussed under Task 10, Permitting, the required permits for the PPF were delayed  
3            due to a variety of external factors. Much of the effort towards addressing the permitting  
4            was expended under Task 10. However, in addition to direct permitting activities, some  
5            engineering support has been required for the PPF permitting and was allocated to this  
6            task. All work performed for the Monterey County Building Permit Application  
7            submitted in September 2006 was charged under this subtask.

8  
9            The following subtasks have not yet been performed due to delays in construction and  
10           start-up operations of the PPF.

- 11           •        Sub-Task 6 - Pilot Plant Study Supervision and Report
- 12           •        Sub-Task 7- Water Quality Monitoring
- 13           •        Sub-Task 8 - Demobilization Planning Assistance

14  
15           **Task 4 - Meetings and Presentations**

16           In the September 2005 scope of work the following assumptions were made regarding the  
17           number of meetings and presentations that RBF would provide:

- 18           •        Monthly Team Meetings (17 months) involving up to four RBF staff.
- 19           •        Miscellaneous meetings (twice per month for 17 months).

20  
21           **Task 5 - Right-of-Way Acquisition Services**

22           Right-of-way acquisition services are required for the Coastal Water Project conveyance  
23           and ASR facilities, including coordination, approvals and negotiations. In 2006, RBF  
24           subcontracted for a "Market Rate" appraisal of a 20-foot wide permanent pipeline  
25           easement and a 50 to 100 foot temporary construction easement from the proposed  
26           desalination plant adjacent to the Moss Landing Power Plant through Castroville and  
27           terminating in Seaside, CA (via the TAMC) rail branch line. RBF utilized the services of  
28

1 Arthur Gimmy International for this portion of the Coastal Water Project right-of-way  
2 acquisition services.

3  
4 **Task 6 - CPUC Coordination, Clarification and Technical Support**

5 RBF was retained to provide coordination with the CPUC and their environmental  
6 consultant(s) in conjunction with and on behalf of California American Water. Activities  
7 identified for this effort included:

- 8 • Meetings with CPUC and their consultants.
- 9 • Attendance by up to four RBF staff at two public meetings in the Monterey  
10 area.
- 11 • Preparation of responses to CPUC Data Requests, assuming a maximum  
12 budget of 400 hours for this effort, including revisions, supplements, and  
13 technical responses from sub-consultants to RBF.
- 14 • Review of the Draft EIR and the Final EIR responses to comments, and  
15 related items assuming a maximum budget of 200 hours.

16  
17 The CPUC EIR consultant, ESA, was not retained by the CPUC until June 2006. A  
18 kickoff meeting was held in San Francisco with the CPUC and the EIR consultant. RBF  
19 staff also attended the Notice of Preparation hearings. In the second half of 2006, a  
20 number of meetings at RBF's offices were held to discuss the CPUC EIR team's questions  
21 and potential information requests, some of which resulted in formal data requests. RBF  
22 then prepared the required responses.

23  
24 **Task 7 - Amended Application Data Requests**

25 RBF provided technical assistance and support in the preparation of testimony for the  
26 CPCN application, first submitted to the CPUC in September 2004 and amended in July,  
27 2005, concurrent with submittal of the PEA. RBF has also provided support in the  
28 preparation of responses to data requests from the Division of Ratepayer Advocates

1 (DRA). These activities are separately tracked from activities related to the CPUC EIR  
2 process under Task 7 – Amended Application Data Requests. In September, 2005, 300  
3 hours were budgeted for tasks related to the Coastal Water Project CPCN application. In  
4 2006, as a result of the CPUC decision to implement an interim rate case proceeding, RBF  
5 provided support in the preparation of additional testimony. I served as a witness for the  
6 evidentiary hearings, held primarily in July 2006, and will continue to provide testimony  
7 such as this to meet the requirements of the final decision issued by the CPUC on interim  
8 rate relief in December 2006 (D.06-12-040).

#### 9 10 **Task 8 - Watershed Sanitary Survey**

11 During the PEA phase of the project, a Preliminary Source Water Assessment was  
12 prepared and summarized in the PEA. In the first quarter of 2006, several meetings were  
13 held with the CDHS to review the proposed scope of work and the water quality-sampling  
14 plan. The CDHS requested several changes to the scope of work for this task from the  
15 September 2005 scope. As a result, the approach was formally refined in the September  
16 2006 Work Order Addendum. I will discuss the revised scope in a subsequent question.

#### 17 18 **Task 9 - Receiving Water Modeling**

19 In August, 2005, the MLPP provided additional data that had not been available during  
20 the PEA. Further, Jeff Paduan, modeling consultant to MLPP, prepared a peer review of  
21 the Flow Science PEA analysis of the receiving water modeling of the brine discharge to  
22 determine the potential environmental effects of use of the MLPP outfall in conjunction  
23 with the desalination plant. Task 9 was determined to be required to supplement the PEA  
24 analysis and to respond to comments provided by Mr. Paduan and the EIR consultant  
25 during the EIR process.

26  
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1 The scope of this task was based on the identified data gaps and requests from Jeff Paduan  
2 subsequent to the PEA submittal, and additional data and revised modeling may be needed  
3 during the Watershed Sanitary Survey.  
4

#### 5 **Task 10 - Permitting Coordination**

6 The primary permitting activities for the Coastal Water Project in 2006 pertained to the  
7 PPF. Permits for the Pilot Plant were submitted to Monterey County, the CCC, and the  
8 RWQCB in 2005. Additional work and coordination with the permitting agencies was  
9 required to complete these permit approvals and all three agency permits were obtained in  
10 2006. As stated under the Task 3 discussion above, unforeseen permit complications  
11 involving a dispute between Monterey County and Duke Energy created significant delays  
12 to the PPF Coastal Development Permit process at the local level in the first half of 2006.  
13 In July 2006, the Monterey County Zoning Administrator approved the project, and this  
14 decision was appealed to the Monterey County Board of Supervisors. The Board denied  
15 the appeal and approved the project in August 2006, and the RWQCB approved the Low-  
16 Threat Discharge in September 2006. A second appeal was made to the CCC, and was  
17 heard in December 2006. The CCC also denied the appeal and approved the Coastal  
18 Development Permit for the PPF.  
19

20 This task applies to long-lead permit application requirements from key regulatory  
21 agencies that are recommended to be initiated during the CPUC environmental review  
22 process in order to maintain the project schedule. Construction-related permitting  
23 activities (such as easements, encroachment permits, leases, Drinking Water Permit,  
24 permits to construct/operate) are deferred to the final design phase and are not included in  
25 this task. Although long-lead permits can be initiated during the EIR phase, preliminary  
26 engineering details are required in order to complete applications and file them with the  
27 regulatory agencies (precise pipeline alignments and facility locations, grading estimates,  
28 haul routes, staging areas, and specific proposals for arterial/drainage crossings such as

1 jack/bore pit locations). These long-lead permitting activities were coordinated with the  
2 tasks to be performed by the Conveyance consultant team and the ASR consultant team  
3 during 2007.

4  
5 In 2006, RBF maintained ongoing informal discussions to identify permit/approval issues  
6 and potential project design/mitigation requirements from the agencies listed in Table 3-7  
7 of the PEA, including:

- 8
- 9 • CCC
- 10 • Monterey Bay National Marine Sanctuary (MBNMS)
- 11 • National Oceanic & Atmospheric Administration (NOAA) Fisheries
- 12 • Fort Ord Reuse Authority/Army (FORA)
- 13 • U.S. Coast Guard
- 14 • State Water Resources Control Board (SWRCB)
- 15 • SLC
- 16 • California Energy Commission
- 17 • CDHS
- 18 • Caltrans
- 19 • Monterey County Water Resources Agency (MCWRA)
- 20 • MPWMD
- 21 • County and Cities
- 22 • Monterey Bay Unified Air Pollution Control District (APCD)
- 23 • TAMC
- 24

#### 25 Task 11 - Focused Surveys

26 Focused biological surveys are required to meet the requirements of the United States Fish  
27 and Wildlife Service (USFWS) and the Department of Fish Game (CDFG), as identified  
28 in PEA Section 5.8, Terrestrial Biological Resources. Some of the probable mitigation

1 measures identified in the PEA and likely in the CPUC certified Final EIR would include  
2 the following activities, which should be performed during the EIR phase to keep the  
3 project on the most efficient schedule:

- 4 • Formal assessment of riparian habitat impacts to satisfy the requirements of  
5 the California Department of Fish and Game 1601 (Streambed Alteration  
6 Agreement) requirements.
- 7 • Floristic surveys of all suitable habitat for special-status plants shall be  
8 conducted prior to the permitting phase of the Project. Maps depicting the  
9 results of these surveys shall be prepared for use in final siting design.
- 10 • Formal consultation with the USFWS and CDFG on listed plant and  
11 animal species.

12  
13 Based on the PEA recommendations and the scope for this task that was identified in  
14 September, RBF retained Denise Duffy and Associates to perform biological surveys and  
15 related services. As a result, the scope for this task was refined as specified in the  
16 September 2006 Work Order Addendum. I will discuss the revised scope in a subsequent  
17 question.

#### 18 19 **Task 12 – Continued As-Needed Services**

20 Tasks performed from September 2005 through August 2006 by RBF were expended  
21 under the category of as-needed services. However, the type of activities performed under  
22 this task fall can also be considered within the overall scope of Program Management  
23 Services. Prior to September 2006, RBF was not clearly tasked with program  
24 management support, so work of this nature was generally charged as Continued As-  
25 Needed Services. In the September 2006 Work Order Addendum, RBF identified the  
26 following activities that had been performed under Task 12:  
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**A. Project Comparison Matrix for Monterey Peninsula Water Management District (August – September 2005)**

- Preparation of Matrix Update for Coastal Water Project
- Preparation of presentation
- Coastal Water Project display booth and meeting handout materials
- Assistance with Coastal Water Project display booth & staffing for public communication

**B. Public Outreach Support**

- International Desalination Institute (1 day)
- Presentation on Coastal Water Project to UCSC Proposition 50 Grant Staff (1 meeting)
- Website updates
- SLC Once-Through Cooling (OTC) resolution (written materials & testimony at public hearings)
- Independent Advisory Committee strategy
- Prepared Presentation for Association of California Water Agencies (ACWA) Regional Meeting on Desalination
- Prepared Presentation for Kent Turner for Seminar Group Desalination Conference
- Provided overview of Coastal Water Project & requested materials in Coastal Water Project library to MPWMD Consultants (Bookman Edmunson/GEI)

**C. Seaside Basin Adjudication (December 2005)**

- Compiled Coastal Water Project Monthly Meeting Minutes and other materials to respond to RBF subpoena
- Prepared declarations (3) to respond to subpoena
- Review of Seaside Basin Adjudication Ruling for Coastal Water Project impacts

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**D. Monterey Peninsula Water Management District ASR Review**

- Prepared comparison of MPWMD ASR proposal & Coastal Water Project ASR proposal (January 2006)
- Prepared comments for EIR Notice of Preparation as well as project engineering comments
- Reviewed Draft EIR and prepared comments
- Prepared ASR Supply Technical Memorandum (2)

**E. Miscellaneous Engineering Support**

- Coordination with United State Department of Defense Base Realignment And Closure (BRAC) & City of Seaside for ASR test and monitoring well siting

**F. Project Activity Oversight**

- Weekly task update with John Klein
- Action items implementation follow-up

**G. Project Budgets**

- 2006 Work Plan Budget and Reforecast
- Budget Forecasting and Updates
- Capital Cost trends analysis

**H. Project Scheduling**

- Facilitated program scheduling meetings with American Water staff (February and March 2006)
- Prepare schedule updates and identify critical path decision items (May 2006, on-going)

**I. Document Control**

- Monthly Status Reports (Monthly)
- 2005 Status Report (December 2005)
- Project File Maintenance (on-going)

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**J. Preparation of Permitting Design Scope of Work (November 2005)**

- Identification of long-lead permits and focused areas for additional engineering,
- Developed RFP & Scope
- Document production

**K. Conveyance Consulting Acquisition Support**

- Prepared Letter of Interest
- Prepared Conveyance Statements of Qualifications (SOQ)
- Prepare Conveyance RFP and consultant selection approach/ criteria
- Consultant contact and distribution of materials
- Pre-proposal meeting (presentation preparation)

**L. ASR Consulting Acquisition Support**

- Prepared Request for Letter of Interest
- Prepared RFP and consultant selection approach/criteria
- Consultant contact and distribution of materials
- Pre-proposal meeting (presentation preparation)

**M. California American Water Management Support**

- Executive Committee Coastal Water Project presentations (October 2005, February 2006)

**N. Review and Comment on Poseidon Patent**

**O. Review of Pajaro Sunny Mesa (PSM) Pilot Plant Permit Application including attendance at LUAC and CCC meetings**

**P. Program Geotechnical Consultant Acquisition Support**

- Prepare Request for Letter of Interest and RFP
- Prepare Pre-proposal Meeting Presentation
- Assist California American Water with selection, contract development, and contract management

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- Q. On-Site Inspection of Pilot Plant Equipment (in Spain)
- R. Research / Meetings in Preparation for Implementation of Contingency Plan
- S. Future Unidentified Scope of Services

Q11. Please describe task scopes that were amended in the September 2006 Work Order Addendum, how each task was changed or extended, and describe any tasks were added the scope of work performed by RBF in 2006.

A11. RBF's contract was extended for additional work pertaining to the environmental and permitting work for the Coastal Water Project. RBF subsequently entered into a "Work Order Addendum Coastal Water Project" with California American Water, which authorized RBF to perform additional program management services for the remainder of the year and for other environmental and engineering tasks with carry over budget into 2007 (attached here to as Attachment 2).

**Task 3 – Pilot Plant Program Management Services**

The original scope of work for pilot plant program management anticipated a straightforward permitting process resulting in installation and startup of the pilot plant in late 2005. Due to unforeseen permit complications, and the unforeseen sale by Duke Energy of the MLPP to LS Power, the installation and startup of the pilot plant has been delayed to 2007.

RBF has assisted California American Water with pilot plant issues continuously since September of 2005, and maintained technical and administrative coordination with Duke Energy, LS Power, Pridesa, Granite Construction, Monterey County, CCC, CDHS, CPUC's EIR consultant (ESA), the public (non-governmental agencies and the press) and California American Water staff regarding planning, permitting, design, installation, and operation of the pilot plant facility and pilot study program during this period of delay. Coordination efforts will continue to be required throughout the entire pilot plant program.

1 At the time of the September 2006 Work Order Addendum, the pilot plant was expected  
2 to extend until 2008. Additional budget for Task 3 was added in the September, 2006  
3 Work Order Addendum to perform this type of work through the conclusion of the PPF  
4 program in early 2008. At the time of the September 2006 Work Order Addendum,  
5 approximately \$290,000 had been expended under the original September 2005 scope  
6 (\$150,000 in 2006). The additional budget added in September 2006 was approximately  
7 \$156,000. During the remainder of 2006 (September through December), approximately  
8 \$50,000 was expended under this amended task.

9  
10 **Task 4 – Meetings and Presentations**

11 By September 2006, the number of internal and external meetings had exceeded the 51  
12 meetings that were anticipated under the scope prepared in August, 2005. Therefore  
13 additional budget was requested in the September 2006 Work Order Addendum for future  
14 meetings through the end of 2006.

15  
16 **Task 5 – Right-of-Way Acquisition Services**

17 In September 2006, additional scope was added to Task 5 to prepare a market rate  
18 appraisal for a twenty-five foot right-of-way for the Coastal Water Project facilities in  
19 Seaside, Del Rey Oaks and unincorporated areas of Monterey County south of Fort Ord  
20 from General Jim Moore to the Segunda Tank site. For the additional work, RBF retained  
21 Universal Field Services to complete the market rate appraisal. No work was performed  
22 on this additional scope in 2006.

23  
24 **Task 8 – Watershed Sanitary Survey**

25 CDHS requested several changes to the scope of work for this task from the September,  
26 2005 scope. As a result, the approach was formally refined in the September 2006 Work  
27 Order Addendum.



1 California American Water has agreed to provide maximum log removal and inactivation  
2 of *Cryptosporidium* (4 log), *Giardia* (5 log), and viruses (6 log) at the proposed MLPP.  
3 The CDHS has agreed that hydrodynamic modeling and detailed characterization of  
4 pathogen and indicator organism densities is not needed if there is agreement that this  
5 maximum level of removal and/or inactivation will be provided. The revised task list for  
6 the Watershed Sanitary Survey is:

- 7
- 8 • Task A. Describe the Proposed Desalination Plant
- 9 • Task B. Define the Watershed for the Proposed Moss Landing  
10 Desalination Plant
- 11 • Task C. Describe the Hydrologic Setting
- 12 • Task D. Review Existing Water Quality Data
- 13 • Task E. Design Source Water Monitoring Program
- 14 • Task F. Analyze Source Water Monitoring Data
- 15 • Task G. Conduct Analysis of Potential Contaminant Sources at the MLPP  
16 Site
- 17 • Task H. Identify and Evaluate Potential Contaminant Sources in the  
18 Watershed
- 19 • Task I. Develop Strategies for Tracking and Influencing Activities in the  
20 Watershed
- 21 • Task J. Prepare Sanitary Survey Report and Source Water Assessment  
22 Documents
- 23 • Task K. Project Management
- 24

25 At the time of the September 2006 Work Order Addendum, approximately \$48,000 had  
26 been expended under the original September 2005 scope (approximately \$31,000 in  
27 2006). The additional budget of \$96,000 was authorized to meet new CDHS requirements  
28

1 not foreseen in the original scope. During the remainder of 2006 (September through  
2 December), approximately \$4,000 was expended under this amended task.

#### 3 4 **Task 11 – Focused Surveys**

5 Subsequent to the scope for this task that was identified in September, 2005 based in the  
6 PEA recommendations, RBF retained Denise Duffy and Associates (DDA) to perform  
7 biological surveys and related services. As a result, the scope for this task was refined as  
8 specified in the September 2006 Work Order Addendum. Biological surveys required for  
9 the long lead permits for Coastal Water Project facilities by USFWS, NOAA Fisheries  
10 and CDFG are on the critical path of the overall Coastal Water Project schedule including  
11 necessary research and field surveys to accurately document and map, using GIS overlays,  
12 all relevant biological resources within, and potentially affected by, the proposed project  
13 implementation. The exact level of survey effort and documentation necessary to facilitate  
14 project permitting and environmental documentation will be a result of coordination with  
15 USFWS, NOAA Fisheries and CDFG. This is especially true for the California Tiger  
16 Salamander, which requires a two-year survey effort.

17  
18 The DDA the following subtasks:

- 19
- 20 • Task A. Meetings
- 21 • Task B. Site Assessment Report
- 22 • Task C. Protocol Level Wildlife Surveys
- 23 • Task D. Floristic Survey
- 24 • Task E. Wetland Delineation
- 25

26 In 2006, protocol-level surveys for the Red-Legged Frog and California Tiger Salamander  
27 were performed in the southern project area during the second and third quarters, and a  
28 Site Assessment report was submitted to the USFWS in the fourth quarter. Continued

1 data collection of listed plant surveys and other similar long-lead tasks are anticipated  
2 throughout 2007.

3 **Task 12 – Continued As-Needed Services:**

4 Subsequent to September 2006, many of the activities identified above were shifted to a  
5 new task number, Task 15 – Program Management Support Services. Work performed  
6 under Task 12 from September to December 2006 was limited to special engineering  
7 studies and engineering tasks. This specifically included analysis of the Monterey  
8 Pipeline Alternative to the Segunda Pipeline, prepared in response to landowner concerns,  
9 potential difficulties in obtained easements for that alignment, as well as potential  
10 mitigation measures requiring avoidance of sensitive biological resources, and analysis of  
11 ASR support facilities required the MPWMD Phase 1 ASR project. The work effort to  
12 support the MPWMD Phase 1 ASR project resulted in the identification of the ASR  
13 Pipeline Extension project. In October and November of 2006, this effort was charged to  
14 Task 12. In December 2006, California American Water prepared a separate Project Need  
15 Identification (PNI) for the ASR pipeline extension and improvements to the Segunda  
16 Pump Station to support the Phase 1 ASR project, and subsequent charges to the ASR  
17 Pipeline extension project are separately reported.

18  
19 In addition to the amendments that were made to the tasks identified in RBF's initial Post-  
20 PEA scope of services, the following tasks were added in the September 2006 Work Order  
21 Addendum:

22  
23 **Task 13 – Contingency Planning White Paper**

24 RBF prepared a White Paper with a Contingency Plan for the proposed Coastal Water  
25 Project to address what would be the best alternative to the proposed project should it  
26 become infeasible to locate the Coastal Water Project at the MLPP. The Contingency  
27 Plan was prepared in advance and in conjunction with the Project Plan described under  
28 Task 14 to provide California American Water management with a short, concise

1 decision-making tool for decision-making on the Coastal Water Project. The White Paper  
2 focused on decision issues regarding potential project alternatives that should be further  
3 investigated to keep the Coastal Water Project on schedule and to maintain the overall  
4 project costs within planned budgets.

#### 6 **Task 14 – Project Plan Preparation**

7 RBF prepared a Draft Project Plan to assist California American Water and American  
8 Water with implementation of the Coastal Water Project. The Project Plan provides a  
9 recommended approach to implementation of the Coastal Water Project. The Draft  
10 Project Plan identified the full scope of the tasks required to implement the Coastal Water  
11 Project and in developing the organizational structure to achieve final design and  
12 construction and is intended as a tool for the Coastal Water Project team to use to respond  
13 to data requests from the CPUC during the CPCN application review and approval  
14 process. The draft Project Plan is a living document to be used by California American  
15 Water throughout the duration of the project as a tool for monitoring project tasks and  
16 staying on schedule.

17  
18 The draft Project Plan provides details on the proposed facilities, the project schedule,  
19 implementation approaches, evaluation of risks associated with approval of the Coastal  
20 Water Project, develops risk management strategies, and includes contingency plans for  
21 the pursuit of alternatives to the project as proposed in the PEA.

22  
23 RBF's activities that provided input into development of the draft Project Plan included:

#### 24 25 **A. Project Scheduling**

- 26 • Facilitated program scheduling meetings with American Water staff  
27 (February & March 2006)

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- Prepare schedule updates & identify critical path decision items (May 2006, on-going)
- Prepare Contingency Plan schedules (May 2006)

**B. Coastal Water Project Plan**

- Facilitated Coastal Water Project Team Risk Management meetings
- Review & update to AW March 2006 Draft Coastal Water Project schedule to develop Coastal Water Project Work Breakdown Structure
- Coastal Water Project Organizational Structure & staffing needs analysis

**Task 15 – Program Management Support**

As discussed under Task 12, in September 2006, a new task was added to RBF's scope to more appropriately qualify miscellaneous on-going support to California American Water on overall Coastal Water Project Program Management. Activities under this task that had not previously been clearly articulated under a specific task as part of RBF's responsibilities on the Coastal Water Project include:

- Monthly Report
- California American Water internal cost data preparation
- Public Outreach / Special Presentation Coordination
- CPUC Application Support
- Coordination with other California American Water consultants
- Coordination with MPWMD and other agencies
- CPUC / DRA and others Data Requests
- Risk Analysis Reviews
- SLC, Ocean Protection Plan coordination, and other similar agency statement reviews
- California American Water System Integration Support
- Project Implementation Plan

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- Test / Monitoring Well CEQA coordination
- Document Controls
- Project Planning and Control
- CADD Development and Drafting Standards
- Survey/Controls/Photogrammatic Standards
- Cost Estimating Guidelines
- Corrosion Control Guidelines
- QA/QC Program Guidelines
- Value Engineering

The budget for Task 15 assumed that my services as well as the services of Sarah Hardgrave and two other engineers would continue at half-time or about 86 hours per month, per person, or 344 hours per month, representing a budget of approximately \$57,000 per month. Charges to this Task through the last quarter of 2006 were well below that estimate, and the budget was carried over into 2007.

Q12. What sub-consultants has RBF retained for its Coastal Water Project for the tasks as described above and what was the contract amount for each sub-consultant?

A12. RBF has retained the following sub-consultants as part of its Coastal Water Project team:

Project Name / Sub-consultant	Task #	Amount Approved	RBF PO#
DTN Engineers	3	\$10,460	4109
DTN Engineers (Addendum 1)	3	\$20,000	4109
DTN Engineers (Addendum 2)	3	\$10,000	4109
Kleinfelder	3	\$800	4878
RosTek Associates	3	\$30,000	4756
Arthur Gimmy International	5	\$20,000	4412
Universal Field Services	5	\$94,000	4877
Kinnetic Laboratories	6	\$25,000	4858
Archibald Consulting	8	\$12,000	4540
Archibald Consulting	8	\$111,900	4540
Denise Duffy & Associates	11	\$149,690	4413

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Attachments 5 - 13 include the sub-consultant agreements for each of the technical consultants listed above.

Q13. Did RBF have any additional work orders for the Coastal Water Project in addition to the Post-PEA Continued Engineering and Environmental services and subsequent addendums already discussed?

A13. Yes. In addition to the services I have already discussed, RBF was selected by California American Water to perform Pilot Plant Facility Installation services (see Attachment 14). RBF was selected for this separate contract through a competitive proposal process and was retained by California American Water for these services in September, 2005. This scope was for the original design and engineering of the civil, structural, and electrical facilities required for installation of the pilot plant. This contract was for an amount not-to-exceed \$129,253, and in 2006, \$77,655 was expended under this contract. The remainder of this contract had been performed in 2005. Sub-consultants on this scope included DTN Engineers and RosTek Associates, identified above in Answer 12.

Q14. Does this complete your direct testimony?

A14. Yes, it does.

Dated: March 30, 2007

**ATTACHMENT 1**



70-100045



RECEIVED

SEP 26 2005

RBF-Monterey Bay

LETTER OF TRANSMITTAL

DATE: September 30, 2005  
To: Lawrence E. Gallery, P.E.  
RBF Consulting  
3180 Omjin Road, Room 104  
Marina, CA 93933

THE FOLLOWING ITEMS ARE ENCLOSED:

No. Of COPIES	DESCRIPTION
1	Task Order (M0529) Coastal Water Project Post PEA Services

*If items are not received as listed, please notify sender.*

REMARKS:

The Task Order attached is a final copy with all required signatures for your records.

If you have any questions once you receive this please feel free to contact me at (916) 568-4215.

Thank you,

Christy Kennedy  
Engineering Coordinator – Engineering

ENGINEERING DEPARTMENT  
4701 BELOIT DRIVE  
SACRAMENTO, CA 95838  
916-568-4215 | FAX 916-568-4286  
[Christy.Kennedy@amwater.com](mailto:Christy.Kennedy@amwater.com)



**TASK ORDER  
AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
RBF CONSULTING  
FOR  
COASTAL WATER PROJECT POST PEA SERVICES**

Article II - Scope of Services shall be modified as follows:

Professional engineering services more specifically described by ATTACHMENT No. 1 to this Task Order, RBF Consulting dated August 15, 2005.

Article IV - Schedule for completion of this Task Order as described per the attached Contract Proposal dated August 15, 2005.

Article VIII - Payment shall be amended to include the payment for this Task Order by a not to exceed amount of \$1,639,220.00, per the attached Contract Proposal dated August 15, 2005. Consultant shall subdivide invoices by each of the subtasks as identified in the proposal.

All other articles of the March 19, 2004 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 Aug 29, 2005  
John Klein

CONSULTANT  
RBF Consulting

By Lauren C. Gilroy

Title SR Vice President

Date 9-5-05

OWNER  
California American Water Company

By Fredrick K. Salas

Title Director, Engineering

Date 9/16/05

## Memorandum

Date: August 22, 2005  
From: John Klein *JK*  
To: Fred Feizollahi  
Cc: Fred Schneider  
Subject: Contract Task Directive Recommendation, Scope of Work for RBF Coastal Water Project Post PEA Services, IP Numbers 05400410, 05400411, 05400412

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**Summary:** RBF's current contract with CAW is to provide engineering services to produce the Proponents Environmental Assessment (PEA) and conceptual design report for the Coastal Water Project. This work was completed in July, 2005. Additional work is needed pertaining to the environmental and permitting work for the Coastal Water Project.

This memo is to provide the information on the scope and budget that are necessary to pursue the following post PEA activities for the subject IP Numbers:

- Additional Items During PEA Phase
- Pilot Plant Laboratory/Office
- Pilot Plant Program Management Services
- Meetings and Presentations
- Right-of-Way Acquisition Services
- CPUC Coordination and Clarifications
- Amended Application Data Requests
- Watershed Sanitary Survey
- Receiving Water Modeling and Flow Science Modeling
- Permitting Coordination (not including Coastal Commission)
- Focused Surveys

This work is within the scope of the contract awarded to RBF in 2004, and this amendment is to authorize the budget to perform this work.

**Recommendation:** The recommendation is to award the scope of work and budget to RBF in order support and coordinate the PEA, rate case reviews with CPUC, pilot plant work, right-of-way work, additional modeling studies, and permitting coordination with the various permitting agencies.

**Discussion:** The attached letter from RBF provides the details on the additional the additional scope of work and budget for these additional tasks in support of the Coastal Water Project.

The tasks and a brief description of the scope are listed below.

1. **Additional Items During PEA Phase.** Additional services during the PEA phase of the CWP were performed that will result in exceeding the initial approved budgets. We are therefore requesting additional budget. Also please note that during May, June, and July of 2005, an extraordinary amount of effort was required to answer data requests from the CPUC, Office of Rate Payer Advocate, and Administrative Law Judge. In addition, preparation of the amended CPUC application testimonies was also required.
2. **Pilot Plant Laboratory Office Project.** RBF will coordinate with Monterey County and other agencies and will coordinate with Duke Energy throughout the design and installation process; develop a list of laboratory analyses required for the pilot plant program to be performed in the lab and those to be contract out; determine the layout for the laboratory and pilot plant office; prepare drawings and specifications for the required offices, conference room and laboratory; prepare a site plan for the laboratory/office, considering future pilot plant facilities; and coordinate the installation of the laboratory/office at the project site. This will include reviewing and approving submittals from suppliers/contractors, coordinating the deliveries of materials, and overseeing construction activity by contractor(s).
3. **Pilot Plant Program Management Services.** RBF will prepare a pilot plant study plan in cooperation with AWP, a site plan for the pilot plant facilities, pilot plant equalization tank design, review pilot plant submittals and coordinate with AWP on the installation of the pilot plant, continue coordinating pilot plant permits with Monterey County and Duke Energy, install a water quality monitoring station on the Duke Energy site, and review and interpret pilot plant data.
4. **Meetings and Presentations.** RBF will continue to host monthly CWP team meetings, make community presentations requested by CAW, and attend various other meetings requested by CAW.
5. **Right-of-Way Acquisition Services.** It is anticipated that ongoing right-of-way acquisition services will be required for the conveyance and aquifer storage and recovery facilities. The services will include coordination, approvals and negotiations. As previously directed by CAW, RBF will be using the following subconsultants for a portion of this work, Appraiser – Arthur Gimmy International and Negotiations – Brian Rianda, Inc. Real Estate Services.
6. **CPUC Coordination and Clarifications.** It is anticipated that during the Environmental Impact Report (EIR) phase of the project (which we assume at 12

months), coordination with the CPUC and their environmental consultant(s) will be required.

7. Amended Application Data Requests. In the past, RBF has provided technical assistance on numerous occasions, including preparation of CPUC Office of Rate Payer Advocate data request responses. It is anticipated that for the CWP amended application filed on July 14, 2005, that additional data requests will be forthcoming and our assistance will be requested.
8. Watershed Sanitary Survey. During the PEA phase of the project, a Preliminary Source Water Assessment was prepared and summarized in the PEA. Only limited water quality has been available during the PEA process as a result in coordination delays with Duke Energy. RBF has prepared a water quality monitoring sample station and will install at the Duke site in August 2005. In addition, the proposed pilot plant will also provide water quality data. It is now proposed to finish the Watershed Sanitary Survey using the Preliminary Source Water Assessment as a base.
9. Receiving Water Modeling and Flow Science Modeling. Flow Science is preparing an additional report in response to comments provided by Jeff Paduan during peer review. Additional receiving water model runs will be prepared in response to new MLPP data provided by Duke Energy in August, 2005. New data will also be developed during the Watershed Sanitary Survey that may also require revised modeling.
10. Permitting Coordination. RBF has been coordinating with numerous permitting agencies throughout the PEA portion of the project. In addition, RBF set up and coordinated the Permit Coordination Center. At least one meeting with the PCC is recommended as a follow-up action to the PEA submittal to the CPUC, to ensure that all permitting agencies understand the CPUC CEQA process and subsequent permitting activities.
11. Focused Surveys. Focused biological surveys will be required, as identified in PEA Section 5.8, Terrestrial Biological Resources.
12. Unidentified Scope of Services. This item is to provide budget is for items currently unforeseen in this scope. CAW will authorize individual tasks as required.

The attached letter from RBF provides the details on the scope of work and budget for these tasks in support of the Coastal Water Project.

Cost: The cost to perform the scope of work is:

<u>Labor</u>	<u>Subs</u>	<u>ODCs</u>	<u>Total</u>
\$1,236,090	\$295,000	\$108,130	\$1,639,220

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**Deliverables:**

1. Additional Items During PEA Phase.
  - Prepare modeling report of existing CAW distribution system
  - Prepare report for Santa Margarita Well ASR
  - Prepare responses to CPUC data requests for CWP
  - Prepare CPUC Application Amendment Testimonies for CWP
  - Prepare NOAA Fisheries status report
  - Prepare CAW internal white paper
  - Prepare CAW technology expo presentation board
  - Prepare presentation for CWP town hall meetings.
2. Pilot Plant Laboratory Office Project.
  - Plans and specifications for PPF lab/office, including a site plan for the PPF.
3. Pilot Plant Program Management Services.
  - PPF Pilot Study Plan
  - PPF Equalization Tank design
  - PPF monthly reports
  - PPF draft and final technical report
4. Meetings and Presentations
  - Meeting Reports for each meeting
  - Powerpoint Presentations
5. Right-of-way Acquisition Services
  - Appraisals
  - Negotiation records
6. CPUC Coordination, Clarification and Technical Support
  - Responses to data requests required by CPUC staff and consultants reviewing PEA
7. Amended Data Requests
  - Responses to data requests required by CPUC ORA
8. Watershed Sanitary Survey
  - Draft and final Watershed Sanitary Survey Report
9. Receiving Water Modeling and Flow Science Modeling
  - Draft, second draft and final reports
10. Permitting Coordination
  - Long-lead permit applications

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11. Focused Surveys

- Draft and final survey reports

12. Unidentified Scope of Services

- As identified in the scope by CAW

The deliverables are described in the attached proposal from RBF.

**Schedule:** Complete scope of work to provide deliverables by December 31, 2006.

**Attachments:**

1. RBF letter dated August 15, 2005



August 15, 2005

JN 70-100045.999

John Klein, P.E.  
Senior Operations Engineer  
California American Water  
50 Ragsdale Dr., Ste. 100  
Monterey, CA 93940

**SUBJECT PROPOSAL FOR THE COASTAL WATER PROJECT (CWP) POST PROPONENTS ENVIRONMENTAL ASSESSMENT (PEA) MISCELLANEOUS ENVIRONMENTAL AND ENGINEERING SERVICES**

Dear John,

Attached for your processing per our recent discussions and meetings, is our proposed scope and budget for the CWP Post-PEA Miscellaneous Environmental and Engineering Services.

Attachment A includes the scope of work, and attachment B is the proposed budget, which can be summarized as follows:

I. Additional Items During PEA Phase	\$ 195,000
II. Pilot Plant Laboratory Office Project	46,180
III. Pilot Plant Program Management Services	342,140
IV. Meetings and Presentations	163,000
V. Right-of-Way Acquisition Services	88,750
VI. CPUC Coordination and Clarifications	203,500
VII. Amended Application Data Requests	53,000
VIII. Watershed Sanitary Survey	138,800
IX. Receiving Water Modeling and Flow Science Modeling	99,800
X. Permitting Coordination (not including Coastal Commission)	99,250
XI. Focused Surveys	106,800
XII. Unidentified Scope of Services	103,000
	<u>103,000</u>
	\$ 1,639,220

We look forward to continuing work with California American Water on the Coastal Water Project. Please call if you have any questions.

Sincerely,

Lawrence E. Gallery, P.E.  
Senior Vice President



## SCOPE OF WORK

### COASTAL WATER PROJECT (CWP) POST PROPONENTS ENVIRONMENTAL ASSESSMENT (PEA) MISCELLANEOUS ENVIRONMENTAL AND ENGINEERING SERVICES

#### I. Additional Services During PEA Phase

Additional services during the PEA phase of the CWP were performed that will result in exceeding the initial approved budgets. We are therefore requesting additional budget. Also please note that during May, June, and July of 2005, an extraordinary amount of effort was required to answer data requests from the CPUC, Office of Rate Payer Advocate, and Administrative Law Judge. In addition, preparation of the amended application testimonies was also required. The following summarizes additional tasks conducted during the preliminary engineering and PEA phase of the project:

1. Modeling of new California American Water (CAW) well into network
2. Field water quality measurements and equipment
3. Fire hydrant pressure testings
4. Right-of-way acquisition services
5. Administrative Law Judge response to questions
6. Office of Rate Payer Advocates data requests
7. Application Amendment Testimonies
  - i. Lawrence Gallery testimony
  - ii. Review and coordinate others testimonies
8. Santa Margarita Well ASR DSWAP
9. NOAA Fishery / Status Report
10. Internal CAW White Paper
11. CAW technology expo presentation board
12. Evaluation of Additional Alternatives in PEA
13. Expedited PEA submittal and two intensive "PEA Review Workshops"
14. Regional Project/Town Hall Meetings and Presentations

#### II. Pilot Plant Laboratory Office Project

1. RBF will coordinate with Monterey County and other agencies and will coordinate with DENA-MLPP throughout the design and installation process.
2. RBF will develop a list of laboratory analyses required for the pilot plant program, including analyses required before and after delivery of pilot plant equipment, and will estimate the frequency and total number of each laboratory analysis to be conducted.
3. RBF will estimate the cost to do each type of laboratory analysis on-site versus having the analysis done off-site, and will develop a list of recommended list of analysis to be done on-site. Cost of on-site analysis will consider capital equipment, reagents, waste disposal, any required certification of laboratory technicians, and effective use of on-site labor (pilot plant operating personnel.)

4. RBF will develop an estimate of the number of pilot plant personnel, including laboratory technicians and a corresponding estimate of office requirements, including desk space, file storage, lavatory, and work/meeting areas.

RBF will contact mobile modular office/laboratory suppliers to determine available configurations for combined laboratory and pilot plant office. Prepare space plan and interior layout drawings to accommodate required offices, lavatory, laboratory bench space, ventilation hoods, sinks, and storage (corrosive, flammable, cold, etc.). Determine water requirements (utility, potable, distilled) and design required facilities. Determine waste storage requirements and design-required facilities.

5. Prepare a site plan for the initial laboratory/office, considering future pilot plant facilities. Site plan will include provisions for utility service (electrical, water), walkways, and parking. Prepare details for access ramps and walkways, and structural support of laboratory/office, if required.
6. Coordinate with PG&E to obtain electrical power service to the site sufficient for initial laboratory/office facilities as well as the future pilot plant facilities. Design on-site electrical facilities to receive and distribute electrical power to the laboratory/office and future pilot plant facility.
7. RBF will coordinate and oversee installation of the laboratory/office at the project site. This will include reviewing and approving submittals from suppliers/contractors, coordinating the deliveries of materials, and overseeing construction activity by contractor(s).
8. Items not included:
  - Laboratory startup
  - Laboratory certification
  - Analyses or testing of water samples
  - Permit Fees
  - Expenses associated with Materials or supplies that will be incorporated into the laboratory/office.
  - Laboratory operating expenses

### III. Pilot Plant Program Management Services

#### Sub-Task 1 - Pilot Plant Study Plan

RBF will develop a complete testing protocol for use in operating the pilot plant, including comparison runs with multiple processes, conditions and materials. The protocol will define the objective of the testing program, and will outline the operating strategies and operating parameters to be tested and the data to be collected. The protocol will define the sampling and routine monitoring schedules to be followed during the testing. The protocol will define the water quality parameters that are to be tested and the frequency of the tests.

#### Sub-Task 2 - Preliminary Site Design of Pilot Plant Facility (PPF)

RBF shall coordinate with Duke Energy to investigate the proposed location of the PPF on the MLPP site. RBF will prepare a preliminary design of site facilities necessary for

integrating the PPF with the MLPP cooling water system. RBF will perform preliminary design of the equalization tank and associated pumps and piping systems that will be used in conjunction with the PPF.

#### **Sub-Task 3 - Design of PPF Equalization Facilities**

Following review of the Preliminary Design (Task 1) by CAW and Duke MLPP staff, RBF will prepare a final design of the equalization tanks and associated pumps and piping systems. The design will include technical specifications and full size drawings, for all associated civil, structural, mechanical, electrical and instrumentation components; but will not include any bid forms, contract forms, or special conditions since it is assumed that these specifications and drawings will be included in a larger bid set for the overall PPF installation, which will be prepared under separate contract.

#### **Sub-Task 4 - Coordination with PPF Suppliers and Contractors**

American Water-Pridesa (AWP) will prepare and provide engineering documentation for the PPF for CAW's approval. RBF will provide review and comment on these submittals and will coordinate and meet with AWP throughout the preparation of their engineering documentation. However, any installation design services for AWP's pilot equipment are not included here, but may be provided as additional services.

RBF will meet with AWP in Tampa, Florida on two separate occasions to collect relevant information from AWP's operating pilot plant at that seawater desalination facility.

RBF will provide a recommendation to CAW regarding the selection of a second pretreatment membrane system vendor for incorporation into the PPF. Following CAW's selection of the vendor, RBF will coordinate with the selected vendor in similar fashion as with AWP. However, any installation design services for the selected vendor's pilot equipment are not included here, but may be provided as additional services.

RBF will make three trips to the PPF site during the course of PPF installation, and will participate in three PPF installation coordination meetings, to be held at RBF's Marina Office.

#### **Sub-Task 5 - Pilot Plant Permitting and Coordination with Duke**

RBF will coordinate with Monterey County to obtain necessary permits for pilot plant installation at DENA-MLPP, and will coordinate with DENA-MLPP throughout the installation process.

#### **Sub-Task 6 - Pilot Plant Study Supervision and Report**

RBF will analyze the data collected by the PPF operator and will evaluate the processes as tested, offering guidance for further development or large-scale feasibility. RBF will analyze the monthly data reports provided by the PPF operator and will provide monthly analysis of pilot test results and pilot test progress summary.

During the course of PPF operation, RBF will attend 15 progress meetings, to be held at RBF's Marina Office.

RBF will prepare and present a draft and final technical report to document all aspects of the pretreatment and desalination pilot plant operating results and water quality information.

### **Sub-Task 7- Water Quality Monitoring**

RBF will design, build and install a water quality monitoring station at the proposed diversion point to the proposed PPF. The purpose of this monitoring station is to measure pH, turbidity, temperature, and conductivity (salinity) on a continuous basis prior to the installation of the PPF. Until the PPF is operational (assumed 6 month period), RBF will check the status and operation of the Water Quality monitoring station on a weekly basis and download data from the monitoring instrumentation. The monitoring station will also be utilized to obtain necessary additional water quality data for incorporation into the Watershed Sanitary Survey and additional brine modeling (see Tasks VIII and IX below). RBF will prepare a monthly report summarizing the data.

RBF will coordinate with DENA-MLPP Plant staff on all aspects of water quality station installation and data collection.

### **IV. Meetings and Presentations**

During the PEA phase of the CWP, monthly team meetings, over 50 community presentations, and numerous individual meetings with elected officials was required. We anticipate that this will continue and are therefore proposing a budget as follows:

1. Monthly Team Meetings through December 2006 (17 months) for up to four RBF staff.
2. Monthly (17 assumed) community presentations, including preparation of PowerPoint presentations, attendance, and presentation.
3. Miscellaneous meetings as directed, assuming 17 total.
4. This excludes specific meetings identified in other tasks, such as PCC meetings and CPUC meetings.

### **V. Right-of-Way Acquisition Services**

It is anticipated that ongoing right-of-way acquisition services will be required for the conveyance and aquifer storage and recovery facilities. The services will include coordination, approvals and negotiations. As previously directed by CAW, RBF will be using the following subconsultants for a portion of this work, including:

- Appraiser – Arthur Gimmy International
- Negotiations – Brian Rianda, Inc. Real Estate Services

#### **Appraiser**

"Market Rate" appraisal for a 20-foot wide permanent pipeline easement and a 50 to 100 foot temporary construction easement from the proposed desalination plant adjacent to the Duke Energy Power Plant in Moss Landing, California (CA), through Castroville, CA, onto Seaside, CA (via the Transportation Agency for Monterey County (TAMC) branchline.

#### **Negotiations**

Property negotiation services for pipeline easement between the proposed California American Water desalination plant in Moss Landing, California, to Castroville, CA. Services include negotiation between California American Water and the property owners to put in place a construction easement and an approximately 20-foot wide permanent easement over the planned pipeline alignment and assessing or valuing the easement.

## **VI. CPUC Coordination, Clarification and Technical Support**

It is anticipated that during the Environmental Impact Report (EIR) phase of the project (which we assume at 12 months), coordination with the CPUC and their environmental consultant(s) will be required. The following is anticipated:

1. Assistance to CAW and/or CPUC through the current RFQ process, including responding to RFQ questions and one pre-proposal meeting.
2. Meetings with CPUC and their consultants. For this item we have assumed up to six meetings in San Francisco for three RBF staff.
3. Assistance at public meetings, including attendance by up to four RBF staff. It is anticipated that the CPUC will have two public meetings in the Monterey area.
4. Preparation of responses to CPUC Data Requests. This task assumes a maximum budget of 400 hours for this effort, including revisions, supplements, and technical responses from our subconsultant team.
5. CPUC EIR Assistance. In addition to Data Requests, RBF will provide assistance to CAW and/or CPUC, with respect to Draft EIR distribution, Final EIR responses to comments, and related items. This task assumes a maximum budget of 200 hours.

## **VII. Amended Application Data Requests**

In the past, RBF has provided technical assistance on numerous occasions, including preparation of CPUC Office of Rate Payer Advocate data request responses. It is anticipated that for the CWP amended application filed on July 14, 2005, that additional data requests will be forthcoming and our assistance will be requested.

It is not known how many or how detailed these requests will be. We have therefore budgeted 300 hours at this time.

## **VIII. Watershed Sanitary Survey**

During the PEA phase of the project, a Preliminary Source Water Assessment was prepared and summarized in the PEA. Only limited water quality has been available during the PEA process as a result in coordination delays with Duke Energy. RBF has prepared a water quality monitoring sample station and will install at the Duke site in August 2005. In addition, the proposed pilot plant will also provide water quality data.

It is now proposed to finish the Watershed Sanitary Survey using the Preliminary Source Water Assessment as a base, with the following tasks:

- a. **Define the Watershed for the Moss Landing Desalination Plant**  
The watershed for the desalination plant must be defined based on the hydrodynamic modeling of the sources of water at the intake to the power plant. Potential sources of water include Elkhorn Slough, Moro Cojo Slough, the Salinas River, the Pajaro River, and the discharge from the power plant.
- b. **Review Existing Water Quality Data**  
The data will be supplemented by additional water quality data obtained from the MLPP monitoring station and the PPF. The data will be summarized for presentation to DHS and to determine the need for additional monitoring.
- c. **Complete Source Water Assessment Checklist and Meet with DHS**

The DHS source water assessment checklist will be completed for all potential sources of contamination in the watershed based on one day of field work in the watershed. It is important to note that the source water assessment only requires that potential contaminating activities be identified. It does not require any additional information such as the precise location in the watershed, the volume of the discharge or water quality of the discharge.

*NOTE: This task requires site access to MLPP and interviews with MLPP staff.*

After completing the checklist, we propose to meet with DHS staff to reach agreement on the scope of work for the sanitary survey. Based on past experience on sanitary surveys for desalination plants and other surface water sources, we believe the level of effort proposed will be adequate to address all DHS' concerns, unless the watershed is expanded as a result of the modeling task. We also propose keeping DHS staff involved in the sanitary survey work as it progresses so that we all have a common understanding of the watershed and the potential risks it poses to the Moss Landing Desalination Plant.

**d. Describe the Water Supply System and Treatment Plant**

The water supply system and hydrology of the watershed will be described for the sanitary survey report. The water supply system description is necessary to evaluate contaminant source impacts, Surface Water Treatment Rule compliance, and the ability of the treatment plant to satisfy existing and anticipated future drinking water quality regulations. This task is based on the following assumptions:

- The hydrology of the area and the sources of water to the treatment plant will be provided by modeling consultant.
- The water treatment plant description will be provided by Cal-Am.

**e. Identify and Evaluate Potential Contaminant Sources in the Watershed**

The existing watershed condition and available data will be updated from that described in the Preliminary Source Water Assessment, including obtaining any additional relevant data from RWQCB or local entities. As part of this task, the "Source Water Modeling" report (described under Task IX) will be reviewed to determine potential contaminant sources of the intake water.

- We will then spend one to two days driving through the watershed noting information on activities and discharges on the maps and on field survey forms. The purpose of this task is to relate activities in the vicinity of the intake to raw water conditions at the intake.

**f. Evaluate Expanded Water Quality Data**

Upon completion of the monitoring program, the water quality data will be evaluated to characterize intake water quality conditions for compliance with maximum contaminant levels (MCLs) and to determine the recommended log removals for *Giardia* and viruses. Based on a preliminary review of existing water quality data it appears that the primary constituents to address in the sanitary survey are microbial contaminants, nitrate, turbidity, and total dissolved solids (TDS). Conductivity or TDS data will be used to evaluate the mix of seawater and freshwater present at the intake when other water quality constituents are measured. Due to the extensive agricultural activities in the watershed, pesticides will also be evaluated, although it is unlikely that they will be found at levels exceeding MCLs or at levels that would pose problems for RO membranes. Based on our experience with a proposed desalination plant in Long Beach and a preliminary review of data on Elkhorn Slough, the log removal

requirements will likely be based on storm event (worst case conditions). We will work with CAW to determine if desalination plant operations can be ceased during storm events to allow for lesser log removal requirements if the plant only operates during dry weather conditions.

**g. Develop Strategies for Tracking and Influencing Activities in the Watershed**

Best management practices and watershed management activities will be identified that CAW can implement or track to ensure that degradation in intake water quality does not occur. It will be particularly important to identify operations at the Moss Landing Power Plant that must be coordinated with the operation of the desalination plant, such as the scheduling of heat treatments or unusual discharges to the cooling water system. The Elkhorn Slough Foundation (ESF) currently owns or controls over 2000 acres of watershed land and has plans to acquire a total of 4000 acres in the next several years. It will be important to work with ESF to identify water quality concerns that are unique to drinking water (e.g. organic carbon) so that drinking water constituents can be factored into their management activities.

**h. Prepare Sanitary Survey Report and Source Water Assessment and Participate in Meetings**

The sanitary survey information will be included in a concise report that clearly describes the findings of the survey. The report will also contain all of the forms and information needed to satisfy the DWSAP source water assessment requirements. This task is based on the following assumptions:

- A preliminary draft will be submitted to CAW for review
- A draft report will be submitted to DHS
- A final report will be prepared, incorporating DHS comments
- One hard copy and an electronic copy of each version of the report will be submitted to CAW
- Three meetings will be held with CAW and DHS

**i. Continued Water Quality Monitoring Program**

In the event adequate data is not available for preparation of the Watershed Sanitary Survey, a minimum of one year's worth of monitoring data is to be collected for inclusion in the Watershed Sanitary Survey. Such data will be gathered from the MLPP monitoring station (initially) and the PPF (as soon as the PPF is operational). Data will also be gathered throughout the year to reflect seasonal weather variations, during storm events, light rain events, and during the dry season. This task is limited to eight (8) separate samplings throughout the entire year (one storm event, two light rain events, one tidal cycle, and four dry season samplings). Sampling for storm and light rain events would occur over an extended period of time. Precise sampling locations will be determined subsequent to study of the power plant's cooling system diagrams. However, it is anticipated that the vast majority of sampling would occur at the plant's intake well. Samples will be analyzed for contaminants such as total dissolved solids (TDS), fecal coliform bacteria, radiological constituents, metals, organics, *Enterococcus*, and *E. Coli*. It should be noted that not all constituents will be analyzed during every sampling (certain constituents will only be analyzed during certain times of the year).

**IX. Receiving Water Modeling and Flow Science Modeling**

Flow Science is preparing an additional report in response to comments provided by Jeff Paduan during peer review. Additional receiving water model runs will be prepared in response to new MLPP data provided by Lee Genz at DENA in August, 2005. New data will also be developed during the Watershed Sanitary Survey that may

also require revised modeling. This task assumes that no further modeling will be conducted until RBF is in receipt of Independent Advisory Group (IAP) comments and comments from the CPUC and their EIR consultant, with the intent of producing one revised modeling report rather than multiple iterations. Based on currently identified data gaps and requests from Jeff Paduan, we have established a maximum budget for this task of 300 hours.

### Source Water Modeling

During the PEA phase, the focus of ocean modeling was on the "Receiving Water" or brine modeling. However, in order to support the Watershed Sanitary Survey, it will also be necessary to conduct a "Source Water Modeling" report to identify oceanographic influences in the vicinity of the MLPP intakes, to identify potential contaminant sources of the MLPP intake water. A hydrodynamic analysis of the mixing of the flows will be performed within the domain used in the Receiving Water Analysis.

In particular, the following specific model runs will be performed.

- A wet weather El Niño winter condition to determine the quantity of ocean water and storm water from surrounding rivers and streams reaching the intake.
- A summer El Niño condition when net transport by waves and currents is northward to determine if the modeled flows will reach the intakes.

For each model run, the following tasks will be performed:

1. Assemble the current and wave records, in conjunction with the tide data, to generate the boundary conditions for the hydrodynamic model.
2. Use the results from Task 1 above (data collection) to establish the boundary conditions for the three-dimensional stratified flow model ELCOM.
3. Set-up the ELCOM model.
4. Run the model for the specified conditions.
5. Tabulate and plot the data for the modeled parameters (temperature, salinity, coliforms, effluent tracer).

This will incorporate the results of the watershed sanitary survey in the source modeling. The work product will include plan views of the coliforms, dilution, and temperature distribution contours (in color) of the stream (and/or other significant discharges) in the computational domain for each of the modeled conditions at three different elevations. We will also determine the percentage of the plant's influent attributable to each of the streams and/or other significant sources.

The results of the work will be incorporated in a detailed report that discusses the data used and details the modeling approach. A description of the software used will be provided. Also, the modeling results and their interpretation will be presented and discussed as outlined above. The following tasks will be performed:

1. Produce five copies of a draft report as well as a version in PDF format.
2. Provide a second draft of the report based on the comments of the client. Five copies of the report will be produced.



3. Provide a final copy of the report based on the comments of the client and/or regulators. Five copies of the report will be produced.
4. Attend up to four meetings related to these tasks. PowerPoint presentations of the salient results and issues will be prepared to present at the meetings.

#### X. Permitting Coordination

RBF has been coordinating with numerous permitting agencies throughout the PEA portion of the project. In addition, RBF set up and coordinated the Permit Coordination Center. At least one meeting with the PCC is recommended as a follow-up action to the PEA submittal to the CPUC, to ensure that all permitting agencies understand the CPUC CEQA process and subsequent permitting activities.

Permits for the Pilot Plant have been completed and submitted to Monterey County, the California Coastal Commission, and the Regional Water Quality Control Board. Some additional work and coordination with the permitting agencies may be required to complete these permit approvals.

Long-lead permit applications from key regulatory agencies are recommended to be initiated during the CPUC environmental review process, while construction-related permitting activities (such as easements, encroachment permits, leases, Drinking Water Permit, permits to construct/operate) would be deferred to the final design phase. *It is important to note that, although these long-lead permits can be initiated now, preliminary engineering details will be required in order to complete the applications and file them with the regulatory agencies (precise pipeline alignments and facility locations, grading estimates, haul routes, staging areas, and specific proposals for arterial/drainage crossings such as jack/bore pit locations).* These long-lead permitting activities include:

- Formal Jurisdictional Delineation and Report Preparation
- Pre-Application Field Meetings
- CA Department of Fish and Game Streambed Alteration Agreement
- Army Corp of Engineers 404 Permit Application (Salinas River Crossing) – including USFWS Section 7 Consultation and SHPO Section 106 Consultation
- Regional Water Quality Control Board Section 401 Water Quality Certification
- Regional Water Quality Control Board NPDES Permit (brine discharge)
- Regional Water Quality Control Board WDR (ASR)

It should be noted that the long-lead permit activities identified above does not include the California Coastal Commission Coastal Development Permit, which would occur after completion of the CPUC Final EIR.

However, this task will include ongoing informal discussions to identify permit/approval issues and potential project design/mitigation requirements from the agencies listed in Table 3-7 of the PEA, particularly:

- Coastal Commission
- MBNMS
- NOAA Fisheries
- FOR A
- U.S. Coast Guard
- SWRCB

- CA State Lands Commission
- CA Energy Commission
- CA DOHS
- Caltrans
- MCWRA
- MPWMD
- County and Cities
- Monterey Bay APCD
- TAMC

#### XI. Focused Surveys

Focused biological surveys will be required, as identified in PEA Section 5.8, Terrestrial Biological Resources. Activities that will need to be completed prior to a CPUC certified FEIR would include the following (*NOTE – in order to initiate a portion of these surveys, additional preliminary engineering may be required to more precisely define facility locations such as ASR sites, Terminal Reservoir and stream crossings*):

- A Habitat Restoration Plan shall be developed in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and submitted to the California Public Utilities Commission (CPUC) and the resource agencies. The Plan shall include the following elements: specific location of restoration site, details on soil preparation, seed collection, planting, maintenance, and monitoring, and quantitative success criteria.
- A wetland delineation per the USACE *Wetland Delineation Manual*, and using the one-parameter approach in areas within the Coastal Zone, shall be conducted prior to construction. A delineation report shall be prepared and submitted to the USACE and CCC for verification.
- Formal assessment of riparian habitat impacts to satisfy the requirements of the California Department of Fish and Game (CDFG) 1601 (Streambed Alteration Agreement) requirements.
- Comprehensive survey to identify, measure, and map trees subject to County tree removal ordinances (oak trees greater than 6 inches in diameter) and *North County Area Plan* and *Carmel Valley Master Plan* ordinances (all native trees greater than 6 inches in diameter), as well as landmark trees.
- Floristic surveys of all suitable habitat for special-status plants shall be conducted prior to the permitting phase of the Project. Maps depicting the results of these surveys shall be prepared for use in final siting design.
- Formal consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) on listed plants species, including Seaside bird's-beak, Yadon's wallflower, sand gilia, Monterey spineflower, and Yadon's rein orchid and listed animal species, including Smith's Blue Butterflies and in aquatic habitat for California red-legged frogs, California tiger salamanders, or Santa Cruz long-toed salamanders, Burrowing Owls, and other Special-Status Birds.

#### XII. Unidentified Scope of Services

This task item budget is \$103,000 for items currently unforeseen in this scope. Client will authorize individual sub-tasks as required.

**EXCLUSIONS**

1. Preparation and processing of a NEPA document, if required. RBF will continue to coordinate with FORA through Task X, and work with FORA and Seaside in expediting the transfer of affected parcels into the City.
2. Preliminary Engineering, Construction Bid Packages, Construction Management and related services will be addressed in a separate scope and fee if directed by CAW.
3. Any services not expressly identified above.

Attachment B  
Coastal Water Project  
Post-PEA Miscellaneous Environmental and Engineering Services  
Proposed Budget and Estimated Hours

Item	Description	Princ	PM	E-7	E-5	E-51	E-4	E-1/2	Sr Tech	Tech	Labor Total	Subs	Travel Expenses	Other Expenses	Total
	Hourly Rate														
I.	Additional Items during PEA Phase	\$200,000	\$175,000	\$160,000	\$145,000	\$135,000	\$100,000	\$90,000	\$20,000	\$70,000	1200				\$195,000
		300	300	100	100	200								\$5,000	
II.	Pilot Plant Lab Office Project	\$50,000	\$57,500	\$16,000	\$14,500	\$27,000	\$0	\$0	\$20,000	\$0	240				\$195,000
		32	66	18	8	68	8	68	48					\$2,000	
III.	Pilot Plant Program Mgmt	\$5,400	\$3,550	\$2,850	\$0	\$0	\$800	\$5,120	\$4,800	\$0	2170		\$1,430	\$2,000	\$46,180
		342	568	8	48	80	80	840	64	120					
IV.	Meetings & Presentations	\$68,400	\$97,800	\$1,280	\$6,560	\$0	\$9,200	\$8,000	\$75,600	\$8,400	285,640	\$38,000	\$18,500		\$342,140
		300	500	300							900				
V.	Right-of-Way Acquisition Services	\$10,000	\$7,500	\$8,000	\$7,250	\$0	\$0	\$0	\$0	\$0	250			\$10,000	\$163,000
		50	100	50	50										
VI.	CPUC Coordination and Clarification	\$40,000	\$7,500	\$48,000	\$13,500	\$0	\$0	\$0	\$10,000	\$0	1100	\$45,000		\$1,000	\$88,750
		200	300	300	100				100						
VII.	Amended Application Data Requests	\$20,000	\$0	\$0	\$13,500	\$0	\$0	\$0	\$0	\$0	300	\$20,000		\$5,000	\$203,500
		100		100	100										
VIII.	Watershed Sanitary Survey	\$4,800	\$7,000	\$0	\$27,000	\$0	\$0	\$0	\$0	\$0	264	\$50,000		\$50,000	\$138,800
		40	80	80							200				
IX.	Receiving Water Modeling and Flow Science Modeling	\$8,000	\$2,000	\$12,800	\$0	\$0	\$0	\$0	\$0	\$0	640	\$60,000		\$5,000	\$99,800
		40	50	150	100				100						
X.	Permitting Coordination	\$8,000	\$2,500	\$24,000	\$14,500	\$0	\$11,500	\$0	\$10,000	\$0	94,250	\$60,000		\$5,000	\$99,250
		40	80	80							200				
XI.	Focused Surveys	\$8,000	\$4,000	\$12,800	\$0	\$0	\$0	\$0	\$0	\$0	200	\$70,000		\$2,000	\$106,800
		100	200	100	100						700				
XII.	Unidentified Scope of Services	\$20,000	\$5,000	\$16,000	\$13,500	\$13,500	\$10,000	\$10,000	\$0	\$0	103,000	\$20,000			\$103,000
		1388	554	398	900	88	908	432	120		6624				
	Total	\$313,600	\$267,000	\$141,760	\$135,000	\$32,200	\$48,800	\$81,720	\$53,200	\$8,400	\$1,236,090	\$795,000	\$19,930	\$88,700	\$1,639,220
											\$1,236,090				

Attachment B1  
 Proposed Budget  
 Coastal Water Project Pilot Plant Laboratory / Office Project

Item	Description	Hourly Rate	Price	E-7	E-6	E-5	E-5	E-4	St. Tech	Total	Subs	Travel Expenses	Other Expenses	Total
1	Permit Coordination	Hrs	\$200											
				\$160		\$135	\$115	\$100	\$100	\$100				
2	Determine Pilot Plant Analytical Requirements	Hrs	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0				
3	Determine On-Site Analytical Requirements	Hrs	\$1,600	\$640	\$0	\$0	\$0	\$0	\$0	\$0				
4	Design Modular Office/Laboratory Unit	Hrs	\$2,400	\$320	\$0	\$0	\$0	\$0	\$0	\$0				
5	Site Design	Hrs	\$400	\$540	\$0	\$0	\$0	\$0	\$0	\$0				
6	Design Electrical Supply System to Site	Hrs	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7	Construction/Installation Services	Hrs	\$0	\$540	\$0	\$0	\$0	\$0	\$0	\$0				
Total		Hrs	\$6,400	\$2,880	\$0	\$0	\$0	\$800	\$4,800	\$4,800	\$12,000	\$1,430	\$200	\$16,130



# **ATTACHMENT 2**

**TASK ORDER**

**AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
RBF CONSULTING  
FOR  
MISCELLANEOUS ADDITIONAL ENVIRONMENTAL AND ENGINEERING  
SERVICES**

Article II - Scope of Services shall be modified as follows:

Professional consulting services more specifically described by the ATTACHMENT No. 1 to this Task Order, "Work Order Addendum *Coastal Water Project*" Proposal dated August 17, 2006.

Article IV - Schedule for completion of this Task Order as described per the attached Contract Proposal dated August 17, 2006.

Article VIII - Payment shall be amended to include the payment for this Task Order by a not to exceed amount of \$1,329,790.00, per the attached Contract Proposal dated August 17, 2006. Consultant shall subdivide invoices by each of the subtasks as identified in the proposal.

All other articles of the March 9, 2004 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  
John Klein

Date 8-18-06

CONSULTANT  
RBF Consulting

By Lawrence E. Gilly

Title SE. V. P.

Date 8-25-06

OWNER  
California American Water

By [Signature]

Title Engineering Director

Date 7<sup>th</sup> September 2006



**Work Order Addendum  
Coastal Water Project**

**Miscellaneous Additional Environmental and Engineering Services  
July 11, 2006  
(Revised 8/17/06)**

**Proposed Scope of Work**

In September 2005, California American Water (CAW) authorized RBF Consulting (RBF) to perform additional services entitled "Post PEA Miscellaneous Environmental and Engineering Services." In the past several months, many additional tasks have been completed, are underway, or are anticipated as additional work.

**TASK 4 – CONTINUED MEETINGS AND PRESENTATIONS**

The CWP meetings budget for internal monthly team meetings and one-on-one meetings with California American Water staff and external CWP meetings with the MPWMD and others has exceeded the number anticipated under the scope prepared in August, 2005. Therefore additional budget is requested for future meetings through the end of 2006.

**TASK 12 – CONTINUED AS-NEEDED SERVICES**

Numerous tasks since September 2005 through June 2006 have been performed or are currently underway by RBF under the category of as-needed services. We are requesting additional budget above the previously authorized amount for services performed through June, 2006 plus anticipated budget for the remainder of the year.

- A. Project Comparison Matrix for Monterey Peninsula Water Management District (August – September 2005)**
  - Preparation of Matrix Update for CWP
  - Preparation of presentation
  - CWP display booth and meeting handout materials
  - Assistance with CWP display booth & staffing for public communication
- B. Public Outreach Support**
  - International Desalination Institute (1 day)
  - Presentation on CWP to UCSC Proposition 50 Grant Staff (1 meeting)
  - Website updates
  - State Lands Commission OTC resolution (written materials & testimony at public hearings)
  - Independent Advisory Committee strategy
  - Prepared Presentation for ACWA Regional Meeting on Desalination
  - Prepared Presentation for Kent Turner for Seminar Group Desalination Conference
  - Provided overview of CWP & requested materials in CWP library to MPWMD Consultants (Bookman Edmunson/GEI)

- C. **Seaside Basin Adjudication (December 2005)**
  - Compiled CWP Monthly Meeting Minutes and other materials to respond to RBF Consulting subpoena
  - Prepared declarations (3) to respond to subpoena
  - Review of Seaside Basin Adjudication Ruling for CWP impacts
- D. **Monterey Peninsula Water Management District ASR Review**
  - Prepared comparison of MPWMD ASR proposal & CWP ASR proposal (January 2006)
  - Prepared comments for EIR Notice of Preparation as well as project engineering comments
  - Reviewed Draft EIR and prepared comments
  - Prepared ASR Supply Technical Memorandum (2)
- E. **Miscellaneous Engineering Support**
  - Coordination with BRAC & City of Seaside for ASR test and monitoring well siting
- F. **Project Activity Oversight**
  - Weekly task update with John Klein
  - Action items implementation follow-up
- G. **Project Budgets**
  - 2006 Work Plan Budget and Reforecast
  - Budget Forecasting and Updates
  - Capital Cost trends analysis
- H. **Project Scheduling**
  - Facilitated program scheduling meetings with American Water staff (February and March 2006)
  - Prepare schedule updates and identify critical path decision items (May 2006, on-going)
- I. **Document Control**
  - Monthly Status Reports (Monthly)
  - 2005 Status Report (December 2005)
  - Project File Maintenance (on-going)
- J. **Preparation of Permitting Design Scope of Work (November 2005)**
  - Identification of long-lead permits and focused areas for additional engineering,
  - Developed RFP & Scope
  - Document production
- K. **Conveyance Consulting Acquisition Support**
  - Prepared Letter of Interest
  - Prepared Conveyance SOQ
  - Prepare Conveyance RFP and consultant selection approach/ criteria
  - Consultant contact and distribution of materials
  - Pre-proposal meeting (presentation preparation)

- L. ASR Consulting Acquisition Support**
  - Prepared Request for Letter of Interest
  - Prepared RFP and consultant selection approach/criteria
  - Consultant contact and distribution of materials
  - Pre-proposal meeting (presentation preparation)
- M. California American Water Management Support**
  - Executive Committee CWP presentations (October 2005, February 2006)
- N. Review and Comment on Poseidon Patent**
- O. Review of Pajaro Sunny Mesa (PSM) Pilot Plant Permit Application including attendance at LUAC and Coastal Commission meetings**
- P. Program Geotechnical Consultant Acquisition Support**
  - Prepare Request for Letter of Interest and RFP
  - Prepare Pre-proposal Meeting Presentation
  - Assist CAW with selection, contract development, and contract management
- Q. On-Site Inspection of Pilot Plant Equipment (in Spain)**
- R. Research / Meetings in Preparation for Implementation of Contingency Plan**
- S. Future Unidentified Scope of Services**

#### **TASK 13 – CONTINGENCY PLANNING WHITE PAPER**

RBF has prepared a White Paper with a Contingency Plan for the proposed Coastal Water Project, should it become infeasible to locate the CWP at the Moss Landing Power Plant (MLPP). The Contingency Plan was prepared in advance and in conjunction with the CWP Project Plan to provide California American Water management with a short, concise decision-making tool for near-term investment decisions on the CWP. This White Paper focuses on decision issues regarding potential project alternatives that should be further investigated at this time to keep the CWP on schedule and to maintain the overall project costs within planned budgets.

#### **TASK 14 – PROJECT PLAN PREPARATION**

As requested, RBF has prepared a Draft CWP Project Plan to assist California American Water and American Water with implementation of the CWP. The Project Plan will serve as a road map for implementation of the CWP, and builds upon the Near-Term Project Plan prepared by the company in early 2004. The CWP Project Plan is intended to serve several purposes. First, it can guide American Water Management in understanding the full scope of the tasks required to implement the CWP and in developing the organizational structure to achieve final design and construction. Second, the CWP Project Plan will aid the CWP team in responding to data requests from the California Public Utilities Commission during the Certificate of Public Convenience and Necessity process. Third, the CWP Project Plan will serve as a living document throughout the duration of the project as a tool for monitoring project tasks and staying on schedule.

The CWP Project Plan provides details on the proposed facilities, the project schedule, implementation approaches, evaluation of risks associated with approval of the CWP, develops

risk management strategies, and includes contingency plans for the pursuit of alternatives to the project as proposed in the PEA. The CWP Project Plan contains the following sections:

- Project Background
- Project Description
- Project Implementation Plan
- Risk Management
- Organizational Structure
- Community Outreach
- Project Budget
- Contingency Plan
- Workbreakdown Structures
- Appendices of Supporting Documents

Other activities that provided input into the CWP Project Plan:

**A. Project Scheduling**

- Facilitated program scheduling meetings with American Water staff (February & March 2006)
- Prepare schedule updates & identify critical path decision items (May 2006, on-going)
- Prepare Contingency Plan schedules (May 2006)

**B. CWP Plan**

- Facilitated CWP Team Risk Management meetings
- Review & update to AW March 2006 Draft CWP schedule to develop CWP Work Breakdown Structure
- CWP Organizational Structure & staffing needs analysis

Please note that the requested budget includes \$35,000 for revisions to the Draft CWP Project Management Plan and Contingency Plan since the June 19, 2006 submittal.

**TASK 15 – PROGRAM MANAGEMENT SUPPORT**

This task item includes miscellaneous tasks to support CAW Program Management staff. Future task items, which are not currently authorized or included herein could include:

- Monthly Report
- CAW internal cost data preparation
- Public Outreach / Special Presentation Coordination
- CPUC Application Support
- Coordination with other CAW consultants
- Coordination with MPWMD and other agencies
- CPUC / DRA and others Data Requests
- Risk Analysis Reviews

- State Lands Commission, Ocean Protection Plan coordination, and other similar agency statement reviews
- CAW System Integration Support
- Project Implementation Plan
- Test / Monitoring Well CEQA coordination
- Document Controls
- Project Planning and Control
- CADD Development and Drafting Standards
- Survey/Controls/Photogrammatic Standards
- Cost Estimating Guidelines
- Corrosion Control Guidelines
- QA/QC Program Guidelines
- Value Engineering

For the purposes of these task items, we have assumed that the services of Larry Gailery, Sarah Hardgrave, and two other engineers will continue at half-time of effort or about 86 hours per month, per person, or 344 hours per month. This represents a budget of approximately \$57,000 per month.

#### **TASK 16 – ADDITIONAL RIGHT-OF-WAY ACQUISITION SERVICES**

The existing scope of work for the Right-of-Way acquisition services for the conveyance facilities from the proposed seawater desalination site included appraisals and negotiations for property acquisitions along Dolan Road to southern edge of the Transportation Agency for Monterey County (TAMC) right-of-way. RBF is utilizing the services of Arthur Gimmy International for this portion of the CWP right-of-way acquisition services.

As requested, RBF has coordinated a proposal with Universal Appraisal and has reviewed a proposal from them, which is attached to complete the right-of-way acquisition services for the remainder of the project area. This request for additional budget for right-of-way acquisition services for a twenty-five foot right-of-way for the CWP facilities in Seaside, Del Rey Oaks and unincorporated areas of Monterey County south of Fort Ord. Universal Appraisals scope includes the area from General Jim Moore to the Segunda Tanksite.

#### **TASK 17 – ADDITIONAL WATERSHED SANITARY SURVEY SERVICES**

RBF Consulting, in conjunction with Elaine Archibald from Archibald Consulting, initiated work on the CWP Watershed Sanitary Survey in December, 2005. Several meetings have been held with the Department of Health Services to review the proposed scope of work and the water quality sampling plan. Some work tasks for the Watershed Sanitary Survey have been put on hold due to the delays in the Pilot Plant, and as requested by the Department of Health Services, several changes have occurred to the scope of work for this task. The following is a revised scope to complete the Watershed Sanitary Survey. Currently there are \$90,000 available from the previously approved task order. The proposed budget on Attachment A is the additional budget required to meet new DHS requirements.

California American Water (Cal-Am) has agreed to provide maximum log removal and inactivation of *Cryptosporidium* (4 log), *Giardia* (5 log), and viruses (6 log) at the proposed Moss Landing Desalination Plant. The California Department of Health Services (CDHS) staff has not yet determined if the recently promulgated Long Term 2 Enhanced Surface Water Treatment Rule will require greater log removal of *Cryptosporidium*. CDHS has agreed that hydrodynamic modeling and detailed characterization of pathogen and indicator organism densities is not needed if there is agreement that maximum log removal will be provided.

#### **Task A. Describe the Proposed Desalination Plant**

The objective of this task is to develop the treatment plant description and performance monitoring program in sufficient detail to allow CDHS staff to reach a decision on whether the desalination plant will be able to provide the maximum log removals of pathogens. The following information will be provided:

- Intake – Description of the proposed desalination plant intake at MLPP and the method of delivering water from MLPP to the proposed desalination plant.
- Treatment Plant Processes – Description of the proposed water treatment plant processes and the virus, *Giardia*, and *Cryptosporidium* log removals to be achieved through each process.
- Distribution System Issues – Description of corrosion control and the potential for formation of disinfection byproducts in the distribution system.
- Performance Monitoring – Description of proposed monitoring of the performance of the treatment plant processes.
- Treatment Plant Schematic – A schematic showing the treatment processes will be prepared.

Some of this information is available in a Technical Memorandum prepared for the Proponent's Environmental Assessment (PEA), "Desalination Plant at the Duke Energy East Site" and in Section 5.1 Potable Water Quality of the PEA. This information will be compiled in a memorandum and submitted to CDHS for review. A meeting or conference call will be scheduled to reach agreement that the desalination plant will be able to achieve the maximum log removals for pathogens and to reach resolution on the maximum *Cryptosporidium* log removal. This is a critical first step because if CDHS does not agree that maximum log removal can be provided at the desalination plant, the scope of work for the sanitary survey will have to be revised to include a more detailed analysis of pathogen and indicator organism data and it is possible that CDHS will require hydrodynamic modeling of the source waters.

#### **Task B. Define the Watershed for the Proposed Moss Landing Desalination Plant**

The objective of this task is to delineate the watershed that drains to the proposed desalination plant intake and identify zones of influence. Potential sources of water to the desalination plant intake include:

- MLPP Site
  - Waste streams discharged to the Duke cooling water system
- Lower Watershed
  - Moss Landing Harbor
  - Elkhorn Slough
  - Moro Cojo Slough
  - Old Salinas River Channel and Tembladero Slough

- o Monterey Bay within 2500 feet of entrance to Moss Landing Harbor
- Upper Watershed
  - o Salinas River
  - o Pajaro River
  - o Monterey Bay

Each of these potential sources is referred to as a subwatershed in this scope of work. The potential sources of water have been preliminarily assigned to zones of influence: the MLPP site, the lower watershed and the upper watershed. The rationale is that contaminant sources at the MLPP site and in the lower watershed have a greater potential for affecting water quality at the proposed desalination plant intake so greater emphasis is placed in this scope of work on understanding and characterizing these contaminant sources. More general information will be obtained on the upper watershed. Maps will be prepared showing the zones of influence and a brief memorandum will be prepared on the rationale for defining the zones of influence. The zones of influence will be discussed with CDHS staff to ensure they are in agreement with the level of detail that will be provided in the sanitary survey report on each of the zones of influence.

#### **Task C. Describe the Hydrologic Setting**

The objective of this task is to understand the factors that affect the mix of waters from each of the subwatersheds that drain to the power plant intake that will provide water for the proposed desalination plant. This information will be useful in determining which of the subwatersheds contribute contaminants to the power plant intake and the seasonality or event-driven impacts of each of the subwatersheds. The information will also be used to delineate the zones of influence and to determine the level of effort to place in each of the subwatersheds. The following data and information will be obtained to the extent it is available:

- Flow data for Elkhorn Slough, Moro Cojo Slough, Old Salinas River Channel, Tembladero Slough, the Pajaro River, and the Salinas River for the period from 1996 to 2005.
- Other factors affecting the mix of waters at the desalination plant intake such as tides, rainfall, operation of tidal gates, releases of water from upstream reservoirs.
- Real-time electrical conductivity and turbidity data that can be used to distinguish fresh water influences from ocean influences.
- Impacts of the Salinas Valley Water Project on future flows.

This information will be analyzed to determine, to the extent possible without hydrodynamic modeling, which of the subwatersheds is likely to contribute significant amounts of water and possible contaminants to the power plant intake. The information from this task will be documented in a memorandum that will later be incorporated into the draft watershed sanitary survey report.

#### **Task D. Review Existing Water Quality Data**

The objective of this task is to analyze the existing water quality data to determine what is currently known about drinking water contaminants in each of the subwatersheds, at the MLPP intake, and at the proposed desalination plant intake. Existing water quality data collected by RBF and Duke at the MLPP, the volunteer monitoring data and data collected on Elkhorn Slough, Moro Cojo Slough, and the Old Salinas River by the Elkhorn Slough National Estuarine

Research Reserve System (ESNERR), and the ESNERR continuous monitoring data on Elkhorn Slough will be reviewed, along with data collected by Cal-Am and any additional data that are identified. Some data and reports have already been collected by RBF and other data still needs to be collected. All relevant data will be entered into Excel spreadsheets for analysis. The data will be compared to drinking water maximum contaminant levels, notification levels, and public health goals and analyzed to determine if there are any seasonal or other trends in the data. The data will also be used to establish the range of water quality conditions that the proposed desalination plant will need to be designed to treat. The data will be summarized for presentation to CDHS to determine the need for additional source water monitoring.

#### **Task E. Design Source Water Monitoring Program**

The objective of this task is to reach agreement with CDHS on the additional source water monitoring that is required and to develop a monitoring plan to obtain the data. When plans are finalized for installing the pilot plant at the MLPP site, a meeting will be held with CDHS staff to discuss the evaluation of existing water quality data (Task 4) and to identify any additional source water monitoring that they will require for approval of the sanitary survey. The monitoring plan will be developed and submitted to CDHS and discussed in a meeting or conference call. A cost estimate for conducting the source water monitoring will be submitted to Cal Am, along with the cost estimate for the pilot plant monitoring.

#### **Task F. Analyze Source Water Monitoring Data**

The objective of this task is to update the discussion of water quality data by including the additional data collected during the source water monitoring program and any data collected by other agencies between the date that Task 4 is completed and the source water monitoring program is completed. The updated data set will be compared to drinking water maximum contaminant levels, notification levels, and public health goals and analyzed to determine if there are any seasonal or other trends in the data.

#### **Task G. Conduct Analysis of Potential Contaminant Sources at the MLPP Site**

The objective of this task is to evaluate the potential contaminant sources at the MLPP, including contaminants that are discharged to the cooling water system and contaminants that could accidentally be released into the cooling water system upstream of the desalination plant intake. The following information will be needed to complete the sanitary survey:

- *Cooling Water System* - Detailed description of the cooling water system with documentation that only Units 1/2 intake contributes cooling water to the proposed desalination plant intake. Information on each waste stream that enters the cooling water system upstream of the proposed desalination plant intake. Volumes of each waste stream and chemicals likely to be present in each waste stream will be needed.
- *Storm Water* - Description of any storm water discharges that enter the cooling water system or are discharged to receiving waters in the vicinity of the power plant. Information on the area draining to each discharge, including drainage area, types of power plant activities, and any storm water monitoring data.
- *Hazardous Materials Storage* - Information on chemical and oil storage areas, storage tank volumes, types of containment, history of spills, management measures taken to prevent and clean up spills.



- *Fuel Oil Storage and Transport* - Description of procedures for receiving and transferring fuel oil and other chemicals at the MLPP.
- *Heat Treatment and Other Operations* - Verify that heat treatment is not used for Units 1 and 2 and describe any other power plant operations that could affect the quality of the cooling water.
- *Fire and Accident History* - Description of the fire at the MLPP that occurred in 1997 and any other catastrophic events that affected or could potentially affect cooling water quality. Measures taken since the fire to prevent contamination of the cooling water system.

The following documents will be obtained and reviewed:

- Duke NPDES Permit Renewal Application and Current Permit
- MLPP Storm Water Pollution Prevention Plan
- MLPP Spill Prevention Control and Countermeasure Plan
- MLPP Oil Spill Contingency Plan
- MLPP Annual Monitoring Reports
- Office of Emergency Services Spill Reporting Database

After reviewing this information, a memorandum describing what is currently known about the MLPP site and a list of questions and information needs will be developed. A field survey of the MLPP site will be conducted and meetings will be held with power plant staff to obtain the information that was not available from the document review. The section of the report describing the power plant activities and potential contaminant sources will be provided to power plant staff for review. After the consultant team and power plant staff have reached agreement on the information to be provided to CDHS, a field trip to the MLPP site will be set up for CDHS staff.

#### **Task H. Identify and Evaluate Potential Contaminant Sources in the Watershed**

The objective of this task is to obtain information on the potential contaminant sources in the watershed that could affect water quality at the proposed desalination plant intake and to relate watershed activities to water quality at the intake. This task will be accomplished through a review of literature and agency files, interviews with staff knowledgeable about the watershed, and through a driving survey of the lower part of the watershed. The first step will be to gather general information on the land uses and types of activities in the watershed through review of Elkhorn Slough Foundation reports, storm water program reports, general plans, the Basin Plan and other California Regional Water Quality Control Board (Regional Board) reports and files. The objective will be to provide an overall description of the watershed and the types of discharges that could affect intake water quality. We will then spend two days driving through the portion of the watershed that is near the intake noting information on activities and discharges on the maps and on field survey forms.

- *Municipal Wastewater* - Describe wastewater collection, treatment, and disposal methods in the lower watershed. Maps will be prepared showing key interceptors, pumping stations, wastewater treatment facilities, and areas where septic tanks are used. Obtain effluent and receiving water monitoring data for the major dischargers in the lower watershed. Document major discharge violations and wastewater spills from 2000 to 2005. For the upper watershed, provide information from Regional Board files

on the locations, capacity, current flows, and treatment processes for wastewater treatment plants located in the watershed.

- *Recycled Water* – Describe the areas where recycled water is used in the lower watershed.
- *Industrial Wastewater* – Describe industrial wastewater discharges to lower watershed. Provide information on locations, flow volumes, and types of discharge. Document past enforcement problems. Interview Regional Board staff to determine if there are any major industrial dischargers in the upper watershed.
- *Recirculation of Power Plant and Proposed Desalination Plant Discharges* – Describe the modeling study results on the potential for the discharge to be drawn back into the cooling water system of the power plant.
- *Urban and Industrial Runoff* – Provide maps showing the locations of all major urban and industrial runoff discharges to the lower watershed. Provide any data that are available on the quantity and quality of urban runoff discharged in the vicinity of the power plant intake. For the remainder of the watershed, describe the storm water management programs for the major cities.
- *Agricultural Activities* – Describe the agricultural activities in the lower watershed and obtain information from the Department of Pesticide Regulation on pesticides used in the lower watershed. Interview Regional Board staff to obtain information on the agricultural waiver program and water quality monitoring reports.
- *Dairies and Other Confined Animal Facilities* – Obtain information from the Regional Board on dairies and other confined animal facilities in the lower watershed. To the extent information is available, discuss management practices that have been implemented to reduce the impact of confined animal operations on water quality.
- *Domestic and Wild animals* – Describe the potential for domestic and wild animals to contribute pathogens to the water.
- *Harbor Dredging* – Describe the schedule and process for harbor dredging. Identify any water quality data that are available to document harbor dredging activities.
- *Commercial and Private Boat Operations* – Document the potential impacts on water quality due to commercial and private boating in the lower watershed. Include activities such as discharge of wastewater from boats, fueling operations, fish cleaning operations in Moss Landing Harbor, and use of antifouling chemicals. Describe history of spills in the vicinity of the MLPP intake. Discuss harbor management practices and enforcement.
- *Recreation* – Describe recreational use of the lower watershed, including fishing, swimming, and boating. Review beach monitoring data and discuss beach postings and closures in the vicinity of the MLPP intake. Obtain information on cruise ships entering Monterey Bay and regulations that are enforced to limit their impact on water quality.
- *Hazardous Materials Spills* – Discuss the history of hazardous materials spills in the lower watershed and any plans that are in place to respond to spills.
- *Solid and Hazardous Waste Disposal* – Review General Plans and the Integrated Waste Management Board's SWIS database for information on municipal and hazardous waste landfills in the watershed.
- *Hazardous Materials Sites* – Provide information on hazardous materials sites in the lower watershed.
- *Unauthorized Activities* – Provide information on areas that are problematic for illegal dumping and homeless encampments in the lower watershed.

- *Tidal erosion within Elkhorn Slough* – Describe potential impacts tidal erosion within the slough has on turbidity (and possibly other contaminants) at the intake to the proposed desalination plant.
- *Algal Blooms* – To the extent information is available, provide data on the history of algal blooms in the vicinity of the power plant intake. Discuss the potential impacts of non-toxin producing algae (filter clogging, membrane fouling). Provide information on harmful algal blooms in the vicinity of the intake, shellfish monitoring for algal toxins, and any research on algal toxins in the water. Discuss research conducted on removal of algal toxins by RO membranes.
- *Projected Changes in the Watershed* – Obtain information on population trends and any major anticipated changes in land use.

#### **Task I. Develop Strategies for Tracking and Influencing Activities in the Watershed**

The objective of this task is to identify operations at the MLPP that must be coordinated with the operation of the desalination plant, and management practices and watershed management activities that Cal-Am can implement or track to ensure that degradation of intake water quality does not occur. The Elkhorn Slough Foundation (ESF) currently owns or controls over 2000 acres of watershed land and has plans to acquire a total of 4000 acres in the next several years. It will be important to work with ESF to identify water quality concerns that are unique to drinking water (e.g. organic carbon) so that drinking water constituents can be factored into their management activities.

#### **Task J. Prepare Sanitary Survey Report and Source Water Assessment Documents**

The objective of this task is to document the findings in a watershed sanitary survey report and source water assessment that will be accepted by CDHS. This task is based on the following assumptions:

- A preliminary draft will be submitted to Cal-Am for review
- We will meet with Cal-Am to discuss comments on the report
- We will respond to comments and prepare a revised draft report
- The revised draft report will be submitted to CDHS
- We will meet with CDHS to discuss their comments on the report
- We will respond to comments from CDHS and prepare a final report
- One hard copy and an electronic copy of each version of the report will be submitted to Cal-Am

#### **Task K. Project Management**

This project will be a collaborative effort of Archibald Consulting and RBF Consultants. A consultant team conference call will be scheduled every two weeks to make sure that the work is proceeding and that team members are kept up-to-date on all activities. This task also includes a meeting with CDHS to discuss the scope of work and reach agreement on how to proceed.

## **TASK 18 – AUGMENTATION OF FOCUSED SURVEYS**

Biological surveys required for the long lead permits for CWP facilities by the U.S. Fish and Wildlife Service (USFWS), NOAA Fisheries and the California Department of Fish and Game are on the critical path of the overall CWP schedule. The scope's goal is to identify and document sensitive biological resources that have the potential to be impacted by the proposed project and facilitate the informal consultation process with USFWS, NOAA Fisheries, and CDFG. This scope does not include tasks associated with formal Section 7 consultation, such as the preparation of a Biological Assessment.

The approach to meeting the stated goal is to conduct the necessary research and field surveys to accurately document and map, using GIS overlays, all relevant biological resources within, and potentially affected by, the proposed project implementation. DD&A has reviewed the programmatic level biological document prepared for the project by H.T. Harvey and Associates, as well as, conducted a site visit of the proposed alignment. DD&A has a comprehensive understanding of the special-status species potentially affected by the project and the applicable species specific presence/absence survey protocols.

The scope and budget presented below is the anticipated survey effort required by regulatory agency staff. While this estimate is generated by a thorough analysis of existing documentation, regulatory standards, and specific habitat resources, the exact level of survey effort and documentation necessary to facilitate project permitting and environmental documentation will be a result of coordination with USFWS, NOAA Fisheries and CDFG. This is especially true for the California Tiger Salamander which requires a two year survey effort. DD&A has assumed that a limited survey effort will satisfy USFWS for this project and that the assumption of presence in the northern and southern portions of the project alignment will be the appropriate and accepted approach for this species. The scope and budget presented below reflects this limited effort for this species. Specifically, it is assumed that the USFWS will require that one site in the northern portion of the project alignment will require a full protocol effort. If the USFWS requires additional surveys, it will be considered out-of-scope work and require an amendment to our contract.

The following work plan to be performed by DD&A is based on our review of the materials provided by RBF Consulting, DD&A's understanding of existing local biological resources and the regulatory process, and a site visit of the proposed alignment. Although not included as separate tasks, all deliverables will be prepared in draft form and submitted to the client, appropriate agency, or stakeholder for one round of coordinated comments. Final draft documents will then be prepared.

### **Task A. Meetings**

The task consists of early and frequent coordination with the regulatory agencies, relevant responsible agencies, and stakeholders. Meetings will facilitate informal consultation with the agencies early in the process to assure that all the issues are addressed and that needed data is identified and is collected under approved protocol. It is essential that biological studies needed to support the project are well-coordinated to support not only the preparation of required documentation for the formal consultation process, but also, all other regulatory and entitlement permitting processes in addition to CEQA and NEPA.

### **Task B. Site Assessment Report**

This task consists of conducting research and field work sufficient to prepare a multi-species Site Assessment Report according to USFWS and NOAA Fisheries guidelines that would be submitted in solicitation of guidance as to the necessity for protocol surveys to establish presence/absence for the relevant species in the vicinity of the project. The report would include an assessment of listed species locality records and potential habitat in and around the project area. Based on the information provided in the Site Assessment Report, the Service will provide recommendations as to the appropriateness of field surveys. Federal protocol recommends that surveys should not be initiated until recommended by the USFWS and NOAA Fisheries and that surveyors consult with the USFWS biologists on their study design before beginning work. This coordination is critical to ensure that the results of the Site Assessment and field surveys will be considered valid by the regulatory agencies and are sufficient to facilitate subsequent formal consultation.

### **Task C. Protocol Level Wildlife Surveys**

The goal of this task is to determine if any state or federally listed species would be affected by any given project element. To accomplish this goal, surveys will be conducted at the specific project site (following standard USFWS, NOAA Fisheries, and CDFG protocols) if potential habitat for any listed species could be affected by project implementation. If it is determined that any state or federally listed species are present, formal consultation with the USFWS, NOAA Fisheries, and CDFG may be necessary. DD&A was not specifically requested to prepare any additional permits or facilitate the formal consultation process with the relevant resource agencies and, therefore, this task does not include the acquisition of a 1602 Streambed Alteration Agreement from CDFG, a Section 404 Individual Permit from USACE, a Section 401 Certification from the RWQCB, or the preparation of a Biological Assessment for the federal consultation process.

Please note that the exact scope of wildlife surveys that will be required as a result of the regulatory review and evaluation of the Site Assessment Report is not known at this time. The description of surveys to be performed within this scope and budget are based on existing project documents, our understanding and experience with the regional regulatory environment, and one preliminary field visit of the proposed project alignment. If any of the relevant regulatory agencies determines that additional surveys are required, an amendment to the contract would be required.

### **Task D. Floristic Survey**

This task consists of conducting floristic surveys of all suitable habitats for special-status plants and their required habitat constituent elements. The survey effort would consist of multiple site visits as necessary to allow for species identification during appropriate blooming periods for relevant species. The survey effort would cover all upland vegetative communities within the project area and a 50-foot buffer. All special-status plant species identified will be mapped using GIS.

### **Task E. Wetland Delineation**

This task consists of preparing a wetland delineation using the USACE Wetland Delineation Manual (USACE 1987), and the one-parameter approach in areas within the Coastal Zone. A delineation report shall be prepared and submitted to the USACE and CCC for verification.

Through this process, final calculations of wetland area present in the project area will be obtained for project permitting. The delineation effort would cover the project area and a 50-foot buffer. All potential jurisdictional areas identified will be mapped using GIS.

#### **TASK 19 -- ADDITIONAL PILOT PLANT MANAGEMENT SUPPORT SERVICES**

The original scope of work for pilot plant program management anticipated a straightforward permitting process resulting in installation and startup of the pilot plant in late 2005. Due to unforeseen permit complications involving a dispute between Monterey County and Duke Energy, and the unforeseen sale by Duke Energy of the Moss Landing Power Plant to LS Power, the installation and startup of the pilot plant is now expected to occur in late 2006, a delay of approximately one year. Additional effort is also required to coordinate the pilot plant study plan with California Department of Health Services as a result of the newly promulgated (January 2006) Long Term Enhanced Surface Water Treatment Rule. RBF Consulting has been coordinating and assisting CAWC with pilot plant issues continuously since September of 2005, and has maintained technical and administrative coordination with Duke Energy, LS Power, Pridesa, Granite Construction, Monterey County, California State Coastal Commission, the California Department of Health Services, CPUC's EIR consultant (ESA), the public (non-governmental agencies and the press) and CAWC staff regarding planning, permitting, design, installation, and operation of the pilot plant facility and pilot study program during this period of delay. On behalf of CAWC, RBF Consulting is also monitoring the permitting and possible installation of a similar pilot plant facility by PSM/Poseidon at the former National Marine Refractory Site. Coordination efforts will continue to be required throughout the entire pilot plant program, which is now expected to extend until early 2008.

At CAWC request, RBF Consulting attended two pilot plant coordination meetings in Tampa, Florida with representatives of American Water, Thames Water, and Pridesa. In a shared effort with the factory inspection work included in Task 12, RBF Consulting sent two representatives to Pridesa's offices in Barcelona, Spain to discuss pilot plant study approach and procedures. RBF also is assisting CAWC with the acquisition of a parallel pretreatment train from General Electric (formerly Zenon)

Under separate contract, RBF is providing design of the PPF site infrastructure, and field and office support during the delivery, construction, installation and startup of the pilot plant facility at the MLPP. However, due to the above-mentioned delays, and associated increases in design and contractor coordination costs, the budget available in this separate contract is now insufficient for field and office support. The additional field and office support required will be provided under this task.



# **ATTACHMENT 3**



**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
<b>January Invoice #6011541</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 83,464	<p>* Followed up on Monterey County Pilot Plant Facility (PPF) permit. Held meeting with Lew Bauman, Wayne Tanda and Planning Dept staff on 1/11/06. CAW and Duke submitted documentation to the County indicating the Duke permit was previously cleared by the County.</p> <p>* Held meeting with Pridesa to finalize PPF design and discuss PPF test plan.</p> <p>* RBF Consulting met with Pridesa in Tampa Bay in December to coordinate on implementation of the Pilot Plant and to work on the Pilot Plant Study Plan, resulting in a number of action items followed up on during the month of January.</p> <p>* RBF Consulting, California American Water and Granite Construction met the last week of January to discuss status of Final Pilot Plant Construction Plans and to coordinate with Granite Construction (contractor).</p> <p>* Ordered pumps for pilot plant</p>
4	Meetings & Presentations	\$ 44,325	<p>* Meetings regarding right-of-way acquisitions, focusing on ASR, terminal reservoir.</p> <p>* Monthly CWP team meeting, including agenda, pre-read and action item preparation</p> <p>* Weekly meetings with John Klein, including 2006 CWP budget update</p>
5	Right-of-Way Acquisition Services	\$ -	
6	CPUC Coordination and Clarification	\$ -	
7	Amended Application Data Requests	\$ -	
8	Watershed Sanitary Survey	\$ -	
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ -	

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
11	Focused Surveys	\$ -	
12	Unidentified Scope of Services	\$ 39,135	<ul style="list-style-type: none"> <li>* California American Water Community Relations staff reviewed the CWP website with RBF develop updates</li> <li>* Prepare package on Terminal Reservoir for Seaside City Managers office</li> <li>Prepare 2006 CWP Work Plan &amp; Update Project Budgets for 2006 - 2008</li> <li>* Prepared Monthly Report</li> <li>* Prepared comparison of MPWMD ASR proposal &amp; Coastal Water Project ASR proposal</li> <li>* Project File Maintenance</li> </ul>
900	Reimbursable	\$ 2,868	
	<b>TOTAL</b>	<b>\$ 169,792</b>	
<b>February Invoice # 6021473</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 4,740	<ul style="list-style-type: none"> <li>* Staffing plan for Pilot Plant operations developed as part of the Pridesa Pilot Plant Study Plan coordination.</li> <li>* The applications to PG&amp;E for both temporary and permanent power supply to the Pilot Plant were submitted to PG&amp;E.</li> </ul>
4	Meetings & Presentations	\$ 4,043	<ul style="list-style-type: none"> <li>* Prepared and gave presentation to the City of Seaside City Council on proposed Coastal Water Project facilities in the City of Seaside, and prepared a draft proposal on property acquisitions and/or easement negotiations.</li> <li>* Monthly CWP team meeting, including agenda, pre-read and action item preparation</li> <li>* Weekly task &amp; action items update with John Klein</li> </ul>

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
5	Right-of-Way Acquisition Services	\$ 3,608	* Coordination with Transportation Agency of Monterey County (TAMC) staff from the regarding the pipeline alignment and easement proposal along the TAMC owned rail right-of-way. Continued work on appraisal under preparation by Arthur Gimmy International.
6	CPUC Coordination and Clarification	\$ -	
7	Amended Application Data Requests	\$ -	
8	Watershed Sanitary Survey	\$ 12,194	Coordination with MLPP on installation of data logger water quality monitoring device.  Development of draft water quality sampling plan, including DHS meeting and comment.
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 3,705	Follow-up with Monterey County staff on PPF permit application and pending resolution of issues between Monterey County and MLPP
11	Focused Surveys	\$ 500	* Coordination with Denise Duffy and Associates on protocol-level survey work plan.
12	Unidentified Scope of Services	\$ 79,736	* Prepared a request for letters of interest to be sent to the distribution list provided by American Water, to identify consultants interested in receiving a request for proposals on the ASR and conveyance portion of the CWP .  * Coordination with the Monterey Peninsula Water Management District on their Draft EIR for the Phase I ASR project, including review of the Administrative Draft EIR and operations analysis to integrate the MPWMD ASR proposal into the California American Water system operations.  * Prepared Monthly Report  * Weekly meetings with John Klein, including 2006 CWP  * Assisted with development of CWP implementation strategy (Desal, ASR, pipeline procurement and construction)  * Project File Maintenance

**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
900	Reimbursable	\$ 7,667	* Facilitated first round of meetings on project implementation and scheduling with American Water staff
<b>TOTAL</b>		<b>\$ 116,193</b>	
<b>March Invoice # 6031644</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 20,163	* Coordination of Pilot Plant shipment from Pridesa in Spain and planning for unit storage until permits obtained.  * Work on PPF Construction Plans
4	Meetings & Presentations	\$ 18,223	* RBF hosted a coordination meeting on the operations analysis to integrate the MPWMD ASR proposal into the California American Water system, with CAW operations staff, MPWMD staff, RBF staff, and MPWMD consultants attending. Significant improvements and enhancements to the CAW system are needed to support the WMD ASR project.  * The CWP team met with MPWMD and their consultants, Bookman Edmonson/GEI, regarding their desalination projects comparison study. The group met with RBF and visited the CWP library at RBF's offices.  * Monthly CWP team meeting, including agenda, pre-read and action item preparation  * Weekly task & action items update with John Klein
5	Right-of-Way Acquisition Services	\$ 2,349	Coordinated with Arthur Gimmy Associates on draft appraisal
6	CPUC Coordination and Clarification	\$ 14,358	* Attended meeting with CPUC legal and environmental staff to address CWP EIR project status and schedule.
7	Amended Application Data Requests	\$ 1,500	* Preliminary discussions regarding Interim Rate Case proceedings and work tasks

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
8	Watershed Sanitary Survey	\$ 4,380	* Continued coordination with Elaine Archibald on development of draft water quality sampling plan, including DHS meeting and comment.
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 17,905	* Continued effort to push MLPP and Monterey Co. to resolution of a condition compliance agreement
11	Focused Surveys	\$ 1,560	* Focused biological survey work for aquatic and riparian species has been underway. A site assessment report has been prepared which will further refine the scope of the protocol level biological surveys required by the Endangered Species Act.
12	Unidentified Scope of Services	\$ 68,866	* Facilitated second round of meetings on project implementation and scheduling with American Water staff and developed draft work breakdown structure through final construction of the CWP  * Continued coordination with the Monterey Peninsula Water Management District on their Draft EIR for the Phase I ASR project and prepared comments on DEIR.  * Followed-up with Letter of Interested contacts for conveyance and ASR RFPs  * Analyzed impact of State Land Commission resolution on OTC and attended public hearings  * Updated the CWP website  * Prepared Monthly Report  * Project File Maintenance
900	Reimbursable	\$ 13,466	
	<b>TOTAL</b>	<b>\$ 162,768</b>	
<b>April Invoice # 6051709</b>			
1	Additional items during PEA Phase	\$ 37,094	* Payment to Flow Science for 2005 brine discharge modeling analysis mistakenly billed to this task (corrected & moved to Task 9 in May invoice)
2	Pilot Plant Lab Office Project	\$ -	

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
3	Pilot Plant Program Mgmt	\$ 14,538	* Continued coordination with Pridesa for Pilot Plant shipment from Spain  * Coordination with LS Power on items required by Monterey County for the PPF permit.
4	Meetings & Presentations	\$ 9,405	* Monthly CWP team meeting, including agenda, pre-read and action item preparation  * CWP team meeting focus session on risk management  * Weekly task & action items update with John Klein
5	Right-of-Way Acquisition Services	\$ 7,810	* Met with Transportation Agency of Monterey County (TAMC) staff from the regarding the pipeline alignment and easement proposal along the TAMC owned rail right-of-way, and prepared presentation for May.  Met with Alan Rosenberg & Carrie Gleason (CAW ROW/Easement staff) to coordinate appraisals and related
6	CPUC Coordination and Clarification	\$ 10,280	* Initiated coordination between CAW and RBF with CPUC environmental staff and ESA, and their consultants, including library and document information sharing.
7	Amended Application Data Requests	\$ 10,405	* Prepared testimony for CWP interim rate case and responded to data requests.
8	Watershed Sanitary Survey	\$ 3,295	* Data collection from data logger water quality monitoring device.
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 13,000	* Coordination with Monterey County and MLPP on condition compliance resolution  * Coordination with Monterey County staff on PPF application  * Prepared permitting schedule analysis for project planning efforts
11	Focused Surveys	\$ 960	* Meeting with DDA on project status and planning for field survey work

**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
12	Unidentified Scope of Services	\$ 18,778	* Continued coordination with MPWMD on Phase I ASR Project and EIR, including preparation of two Technical Memorandum regarding ASR supply & system requirements  * Quarterly update of 2006 CWP budget  * At CAW request, RBF Consulting prepared administrative draft CWP Project Plan to identify CWP organizational structure, services and equipment procurement strategies, and development of overall project work breakdown structure  * Prepared Monthly Report  * Project File Maintenance
13	Contingency Plan White Paper	\$ 38,160	* At CAW request, RBF Consulting prepared contingency plan analysis and examined potential schedule impacts that could result from selection of desalination component alternatives.
900	Reimbursable	\$ 5,252	
	<b>TOTAL</b>	<b>\$ 168,977</b>	
<b>May Invoice # 6051719</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 1,773	* Continued coordination with MLPP on PPF shipping and delivery to MLPP site
4	Meetings & Presentations	\$ 17,164	* Facilitated two CWP team meetings on CWP risk management  * Weekly task & action items update with John Klein  * Monthly CWP team meeting, including agenda, pre-read and action item preparation
5	Right-of-Way Acquisition Services	\$ 1,000	* Follow-up with TAMC staff.
6	CPUC Coordination and Clarification	\$ 14,070	* Preparation of Data Request 1 response and coordination between brine modeling teams
7	Amended Application Data	\$ -	

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
	Requests		
8	Watershed Sanitary Survey	\$ 2,043	* Data collection from data logger water quality monitoring device and servicing of monitoring device.
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 15,540	* Coordination with Monterey County staff on PPF permit application, including response to questions from the Environmental Health Department on water treatment
11	Focused Surveys	\$ -	
12	Unidentified Scope of Services	\$ 25,008	<ul style="list-style-type: none"> <li>* Finalized and distributed RFP for engineering services for ASR facilities.</li> <li>* Reviewed project plan draft materials and incorporated comments.</li> <li>* Coordination of responses to letters of interest from conveyance consultants and preparation of SOQ</li> <li>* Prepared Monthly Report</li> <li>* Project File Maintenance</li> <li>* Review of Seaside Basin Adjudication Ruling for Coastal Water Project impacts</li> <li>* Prepared Capital Cost trends analysis and 2006 Budget Reforecast</li> <li>* Prepared Presentation for Kent Turner for Seminar Group Desalination Conference</li> </ul>
13	Contingency Plan White Paper	\$ 78,065	<ul style="list-style-type: none"> <li>* Prepared Microsoft project schedules for contingency planning scenarios and work breakdown structure for project alternatives</li> <li>* Prepared and presented Contingency Plan report and scheduling analysis to CAW.</li> </ul>
900	Reimbursable	\$ 11,693	
	<b>TOTAL</b>	<b>\$ 166,354</b>	
<b>June Invoice # 6061752</b>			
1	Additional items during PEA	\$ -	



**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
	Phase		
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 10,804	* Inspected Pilot Plant Facility (PPF) equipment at time of delivery to MLPP.
4	Meetings & Presentations	\$ 7,600	* Monthly CWP team meeting, including agenda, pre-read and action item preparation  * Weekly task & action items update with John Klein  * Prepared California American Water Executive Committee Coastal Water Project presentation
5	Right-of-Way Acquisition Services	\$ 23,944	* Completion of Arthur Gimmy appraisal report of TAMC rail right-of-way acquisition and easements through northern project area properties.  * Coordination with TAMC staff and presentation to TAMC Rail Committee
6	CPUC Coordination and Clarification	\$ 22,001	* Meetings with CPUC EIR consultant specifically regarding modeling of brine discharge. FlowScience participated, in addition to CPUC team's modeling consultants.  * Finalized Data Request 1 response, including transmission of existing water quality data & comparison of other similar project studies
7	Amended Application Data Requests	\$ 2,240	* Review of final testimony and other parties materials for Interim Rate Case
8	Watershed Sanitary Survey	\$ 615	* Conference call with Elaine Archibald (subconsultant on WSS)
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 3,306	* Coordination with Monterey Planning staff on PPF permit application and additional information requests
11	Focused Surveys	\$ 54,724	Completed protocol-level field surveys for Red-legged frog and California Tiger Salamander in the southern project area and prepared site assessment report.
12	Unidentified Scope of Services	\$ 32,113	* Finalized and distributed the RFP for engineering services for the conveyance facilities.

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
			<ul style="list-style-type: none"> <li>* Prepared comments on the MPWMD on Phase I ASR Project Draft EIR.</li> <li>* Met with City of Seaside &amp; FORA regarding ASR facility siting &amp; permit process</li> <li>* Prepared Monthly Report</li> <li>* Capital Cost O&amp;M trends analysis</li> <li>* Project File Maintenance</li> <li>* Monitored and supported ASR consultant selection process.</li> </ul>
13	Contingency Plan White Paper	\$ 18,458	* Incorporated CWP team input and prepared for distribution to CAW management.
900	Reimbursable	\$ 10,980	
	<b>TOTAL</b>	<b>\$ 186,784</b>	
<b>July Invoice # 6071609</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 2,405	* PPF hearing - permit approved by Monterey County Zoning
4	Meetings & Presentations	\$ 7,180	<ul style="list-style-type: none"> <li>* Meetings were held with CPUC EIR consultant on Regional Alternative and other issues.</li> <li>* Monthly CWP team meeting, including agenda, pre-read and action item preparation</li> <li>* Weekly task &amp; action items update with John Klein</li> </ul>
5	Right-of-Way Acquisition Services	\$ 2,800	Met with Carmel Development Company regarding Segunda Pipeline Alignment and easements.
6	CPUC Coordination and Clarification	\$ 9,510	<ul style="list-style-type: none"> <li>* Continued coordination with the CPUC EIR team.</li> <li>* Meetings were held with CPUC EIR consultant on Regional Alternative and other issues.</li> </ul>

**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
7	Amended Application Data Requests	\$ 25,994	* Participated in Interim Rate Case evidentiary hearings at CPUC in San Francisco, including Larry Gallery as witness and support during the proceedings.  * Attended CPUC Interim Rate Case public hearings held in Monterey.
8	Watershed Sanitary Survey	\$ 6,225	* Revised scope of work for WSS based on increased DHS monitoring requirements, PPF delays and data availability
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 5,998	* Coordinated permit application review with RWQCB staff.  * Presented PPF permit application to Monterey County Zoning Administrator, who approved the Coastal Development Permit for the PPF on July 13.
11	Focused Surveys	\$ 9,568	* Finalized Protocol-level survey site assessment report and initiated review with USFWS.
12	Unidentified Scope of Services	\$ 32,000	* Continued coordination with MPWMD on Phase I ASR Project & EIR.  * Monitored and supported ASR consultant selection process.  * Prepared Monthly Report  * Project File Maintenance  * Attended SWRCB public workshop on 316(b) regulations  * Finalized Geotechnical services Request For Proposals  * At CAW request, RBF Consulting prepared a final draft CWP Project Plan which is being reviewed by the CWP team. Comments will be incorporated and the CWP Project Plan should be issued in August.  * Received three proposals in response to the RFP sent out for engineering services for the conveyance facilities.
13	Contingency Plan White Paper	\$ -	
900	Reimbursable	\$ 5,720	

**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
	<b>TOTAL</b>	<b>\$ 107,399</b>	
<b>August Invoice# 6080511</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 2,070	* Draft PPF study plan submitted by RBF for review.
4	Meetings & Presentations	\$ 11,940	* Met with MLPP to discuss coordination of PPF construction with power plant operations.  * Monthly CWP team meeting, including agenda, pre-read and action item preparation  * Weekly task & action items update with John Klein
5	Right-of-Way Acquisition Services	\$ -	
6	CPUC Coordination and Clarification	\$ 4,340	* Continued coordination with the CPUC EIR team, including meetings on existing and future system operations and project alternatives to be evaluated in the EIR.
7	Amended Application Data Requests	\$ 9,255	* Assisted with reply briefs for the Interim Rate Case Proceedings.
8	Watershed Sanitary Survey	\$ 1,650	* Conference call with Elaine Archibald (subconsultant on WSS)
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 6,960	* Coordinated on October Coastal Commission Meeting on appeal of the PPF permit.  * Coordination with RWQCB staff on PPF Notice of Intent for Low-threat discharge
11	Focused Surveys	\$ -	
12	Unidentified Scope of Services	\$ 42,045	* Coordination with ASR engineering services consultant, including kick-off meeting  * Continue coordination with MPWMD on ASR Phase 1 support facilities.

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
			<ul style="list-style-type: none"> <li>* Amended and sent out RFP for geotechnical services.</li> <li>* Initiated analysis of alternatives to Segunda Pipeline (Alternatives during PEA phase summary)</li> <li>* Prepared comments on MPWMD Bookman-Edmonston/GEI Report Seawater Desalination Projects Evaluation</li> <li>* Prepared Monthly Report</li> <li>* Prepared Presentation for ACWA Regional Meeting on Desalination</li> <li>* Capital Cost trends analysis</li> <li>* Project File Maintenance</li> </ul>
13	Contingency Plan White Paper	\$ -	
900	Reimbursable	\$ 5,725	
	<b>TOTAL</b>	<b>\$ 83,985</b>	
<b>September Invoice #6091830</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 10,600	<ul style="list-style-type: none"> <li>* Finalized PPF construction drawings and submitted Building Permit application to Monterey County.</li> <li>Prepared detail work breakdown for next few months of work on the PPF. Permits, Contract for Granite, Schedule for construction from Granite, Safety Plan &amp; Haz-Mat Business</li> </ul>
4	Meetings & Presentations	\$ 6,880	* Monthly CWP team meeting, including agenda, pre-read and action item preparation
5	Right-of-Way Acquisition Services	\$ 3,345	* Coordination on right-of-way appraisals and acquisitions for the southern portion of the CWP (ASR, storage and conveyance facilities).

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
6	CPUC Coordination and Clarification	\$ 3,310	* Continued coordination with the CPUC EIR team, including meetings on existing and future system operations and project alternatives to be evaluated in the EIR. Discussions included future data requests regarding pipeline alignments, subsurface intakes, and other potential engineering analysis to support the EIR process.
7	Amended Application Data Requests	\$ 1,000	* Coordination and follow-up on interim rate case proceedings.
8	Watershed Sanitary Survey	\$ 1,110	* Compiled available existing water quality data
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 10,995	* RWQCB Hearing on PPF Notice of Intent for Low-threat discharge - staff coordination, review of staff report and hearing presentation
11	Focused Surveys	\$ 2,010	* Meeting with DDA to review results of RLF and CTS surveys
12	Unidentified Scope of Services	\$ 39,788	* Met with U.S. Army & Clark Realty regarding site agreement/option for Bayonet Drive site for ASR test and monitoring wells, possible long-term use  * Coordination with the MPWMD on ASR component of CWP and Phase 1 ASR  * Provided comments to MPWMD on 2006 Water Supply Projects Matrix Update  * Continued analysis of alternatives to Segunda pipeline  * Met with Carollo Engineers to analyze CPUC Marina Coast Water District/CWP "wheeling" concept  * Presentation on Coastal Water Project to UCSC Proposition 50 Grant Staff
13	Contingency Plan White Paper	\$ -	
14	Project Plan Preparation	\$ -	
15	Program Management Support	\$ 15,015	* Prepared Monthly Report  * Project File Maintenance

**Exhibit 3  
California American Water  
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RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
900	Reimbursable	\$ 9,855	* Weekly task & action items update with John Klein
	<b>TOTAL</b>	<b>\$ 103,907</b>	

**Exhibit 3**  
**California American Water**  
**Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
<b>October Invoice #6100518</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 1,950	* Prepared response to comments on PPF Building Permit application
4	Meetings & Presentations	\$ 10,215	* Monthly CWP team meeting, including agenda, pre-read and action item preparation  * Kick-off meeting with ASR Consultant team
5	Right-of-Way Acquisition Services	\$ -	
6	CPUC Coordination and Clarification	\$ 17,375	* Held CPUC EIR coordination meeting regarding systems operations issues and existing infrastructure constraints  * Prepared memo to CPUC EIR team regarding MCWD
7	Amended Application Data Requests	\$ -	
8	Watershed Sanitary Survey	\$ 1,405	* Review of existing water quality data
9	Receiving Water Modeling and Flow Science Modeling	\$ 13,166	Payment to FlowScience for June meetings on Data Request 1 (brine discharge modeling)
10	Permitting Coordination	\$ 1,190	* Coordination with CCC staff (Tom Luster) on December PPF hearing
11	Focused Surveys	\$ 1,745	* Meeting with DDA to review site assessment and RLF/CTS survey reports
12	Unidentified Scope of Services	\$ 21,690	* Continued evaluation of alternatives to Segunda Pipeline  * Met with Presidio of Monterey developer Clark Realty regarding ASR test and monitoring well siting  * Provide comments/feedback on Petition for Change to Permits 7130B and 20808 for ASR  * Prepared white paper issues summary related to seawater desal vessel concept  * Prepared ASR pipeline extension analysis
13	Contingency Plan White	\$ -	



**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
	Paper		
14	Project Plan Preparation	\$ -	
15	Program Management Support	\$ 12,745	* Prepared Monthly Report * Weekly task & action items update with John Klein * Project File Maintenance
900	Reimbursable	\$ 8,622	
	<b>TOTAL</b>	<b>\$ 90,103</b>	
<b>November Invoice #6111215</b>			
1	Additional items during PEA Phase	\$ -	
2	Pilot Plant Lab Office Project	\$ -	
3	Pilot Plant Program Mgmt	\$ 13,397	* Prepared Geotechnical Report, tank specifications & other information for PPF Building Permit
4	Meetings & Presentations	\$ 10,005	* Meetings to prepare for December Coastal Commission hearing on the PPF appeal of the Coastal Development Permit  * Monthly CWP team meeting, including agenda, pre-read and action item preparation
5	Right-of-Way Acquisition Services	\$ 1,200	* Right-of-way appraisals and acquisitions are being initiated for the southern portion of the CWP (ASR, storage and conveyance facilities).
6	CPUC Coordination and Clarification	\$ 3,420	* Finalized October CPUC EIR team meeting minutes
7	Amended Application Data Requests	\$ -	
8	Watershed Sanitary Survey	\$ 450	* Conference call with Elaine Archibald (subconsultant on WSS)
9	Receiving Water Modeling and Flow Science Modeling	\$ -	
10	Permitting Coordination	\$ 5,000	* Preparation for December CCC hearing
11	Focused Surveys	\$ 2,705	* Meeting with USFWS on Site Assessment and RLF/CTS Survey reports  * DDA attendance of CPUC EIR coordination meeting

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

<b>Task #</b>	<b>Task Description</b>	<b>Monthly Expenditure</b>	<b>Work performed</b>
12	Unidentified Scope of Services	\$ 21,684	* Finalized Segunda Pipeline Contingency Plan and summary of Monterey pipeline alternative pros & cons  * Met with Army/Presidio of Monterey to discuss Right-of-Entry requirements for the Bayonet Dr. for ASR test and monitoring wells.
13	Contingency Plan White Paper	\$ -	
14	Project Plan Preparation	\$ -	
15	Program Management Support	\$ 33,892	* Prepared Monthly Report  * Weekly task & action items update with John Klein  * Project File Maintenance  * Met with ASR Consultant team to review ASR site selection criteria and data collection  * Met with Clark Realty on potential Bayonet Drive ASR site and initiated negotiations for property acquisition or easements  * Issued addendum to the Geotechnical RFP
900	Reimbursable	\$ 6,250	
	<b>TOTAL</b>	<b>\$ 98,003</b>	
<b>December Invoice #6121583</b>			
1	Additional items during PEA Phase		
2	Pilot Plant Lab Office Project		
3	Pilot Plant Program Mgmt	\$19,274.65	* Pilot Plant Facility (PPF) construction and installation coordination with MLPP, Monterey Co., and construction contractors  * Preparation of PPF construction schedule
4	Meetings & Presentations	\$10,400	* Meetings were held to prepare for the February Coastal Commission meeting regarding the CCC findings on the appeal of the Coastal Development Permit for the PPF.

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
			<p>* Held a meeting with ASR Systems to discuss Technical Memos 1 and 2 concerning the location and design of ASR test and monitoring wells.</p> <p>* Met with City of Seaside regarding the location of the test and monitoring wells at Bayonet Drive and development of ASR project.</p> <p>* Monthly CWP team meeting, including agenda, pre-read and action item preparation</p>
5	Right-of-Way Acquisition Services	\$376.50	* Coordination with Universal Field Services for southern project area appraisals
6	CPUC Coordination and Clarification	\$20,804.00	<p>* Prepared responses to Data Request 2 from the CPUC EIR team regarding pipeline alignments, subsurface intakes, and other potential engineering analysis to support the EIR process</p> <p>* Held CPUC EIR coordination meeting regarding biological resources and Data Request 2.</p> <p>* Finalized technical memorandum regarding Segunda Pipeline Alignment Contingency Alternatives analysis for discussion with management and submission to CPUC EIR</p>
7	Amended Application Data Requests		
8	Watershed Sanitary Survey	\$1,080.00	<p>* Conference call with Elaine Archibald (subconsultant on WSS)</p> <p>* Coordination with DHS to finalize Water Sampling and Monitoring Plan requirements</p>
9	Receiving Water Modeling and Flow Science Modeling	\$3,465.00	Preparation of Data Request 2 response on MRWPCA outfall modeling
10	Permitting Coordination	\$31,155.00	* Preparation for and attendance of Coastal Commission Appeal of Pilot Plant facility, including preparation of the administrative record and correspondence with the CCC
11	Focused Surveys	\$26,051.25	* Invoice from DDA for Site Assessment and survey reports
12	Unidentified Scope of Services	\$14,622.50	* Submitted Right of Entry letter to US Army requesting access to install ASR test and monitoring wells on Bayonet

**Exhibit 3  
California American Water  
Coastal Water Project**

RBF Consulting  
2006 Summary of Work Performed by Monthly Invoice

Task #	Task Description	Monthly Expenditure	Work performed
			* Met with City of Seaside regarding the location of the test and monitoring wells at Bayonet Drive and development of ASR project.
13	Contingency Plan White Paper		
14	Project Plan Preparation		
15	Program Management Support	\$27,210.00	<ul style="list-style-type: none"> <li>* Updated 2007 schedule and budget for January accruals.</li> <li>* Capital Cost O&amp;M trends analysis</li> <li>* Weekly task &amp; action items update with John Klein</li> <li>* Prepared Monthly Report</li> <li>* Held kickoff meeting with conveyance consultant (Parsons).</li> <li>* Reviewed Draft ASR Tech Memos 1 &amp; 2</li> <li>* Project File Maintenance</li> </ul>
900	Reimbursable	\$ 6,800.42	
	<b>TOTAL</b>	<b>\$ 161,239.32</b>	

# **ATTACHMENT 4**

Iting  
 Project  
 January - 2005/2006  
 2007

2006											
February	March	April	May	June	July	August	September	October	November	December	
# 6021473	Inv# 6051644	Inv# 6051709	Inv# 6051719	Inv# 6061752	Inv# 6071609	Inv# 6080511	Inv# 6091430	Inv# 6100518	Inv# 6111216	Inv# 6121583	2006 billed
-	\$ -	37094 35*	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4,740	\$ 20,163	\$ 14,538	\$ 17,773	\$ 10,804	\$ 2,495	\$ 2,070	\$ 10,606	\$ 1,950	\$ 13,498	\$ 19,275	\$ 185,177
4,043	\$ 18,223	\$ 9,405	\$ 17,161	\$ 7,600	\$ 7,150	\$ 11,940	\$ 8,880	\$ 10,215	\$ 10,085	\$ 10,400	\$ 157,375
3,608	\$ 2,349	\$ 7,810	\$ 1,000	\$ 23,944	\$ 2,899	\$ -	\$ 3,345	\$ -	\$ 1,600	\$ 377	\$ 46,432
-	\$ 14,358	\$ 10,280	\$ 14,070	\$ 22,001	\$ 9,510	\$ 4,340	\$ 9,310	\$ 17,375	\$ 3,420	\$ 20,804	\$ 119,468
-	\$ 1,500	\$ 10,405	\$ -	\$ 2,240	\$ 25,694	\$ 9,255	\$ 1,000	\$ -	\$ -	\$ -	\$ 50,494
12,194	\$ 4,880	\$ 3,295	\$ 2,043	\$ 615	\$ 6,225	\$ 1,650	\$ 1,110	\$ 1,405	\$ 1,450	\$ 1,080	\$ 34,242
-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,166	\$ 3,465	\$ -	\$ 16,631
3,705	\$ 12,905	\$ 13,000	\$ 15,340	\$ 3,306	\$ 5,988	\$ 6,960	\$ 10,995	\$ 1,190	\$ 15,000	\$ 31,155	\$ 114,754
500	\$ 1,580	\$ 960	\$ -	\$ 54,724	\$ 9,598	\$ -	\$ 2,010	\$ 1,745	\$ 2,065	\$ 26,051	\$ 99,622
79,736	\$ 68,268	\$ 18,778	\$ 25,903	\$ 32,113	\$ 27,000	\$ 42,045	\$ 19,788	\$ 21,690	\$ 21,684	\$ 14,623	\$ 435,165
-	\$ -	\$ 38,160	\$ 74,965	\$ 18,458	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,633
-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,015	\$ 12,745	\$ 23,893	\$ 27,210	\$ 88,863
7,667	\$ 18,466	\$ 5,252	\$ 11,693	\$ 10,980	\$ 5,720	\$ 5,725	\$ 9,825	\$ 8,622	\$ 6,250	\$ 6,800	\$ 114,898
116,193	\$ 162,766	\$ 131,883	\$ 166,354	\$ 186,784	\$ 107,399	\$ 83,985	\$ 103,907	\$ 90,103	\$ 98,004	\$ 161,239	\$ 1,578,412

# **ATTACHMENT 5**



Consulting Engineers and Land Surveyors of California

**AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT**

AGREEMENT ENTERED INTO AT Marina, California, on this date of August 3, 2005, by and between RBF Consulting ("Consultant") and DTN Engineers, Inc. ("Subconsultant").

Attention: Lawrence E. Gallery, Senior Vice President

Project: Coastal Water Project

Description of Subconsultant's Services: Power Supply/Service Design. Design for automatic power transfer, review of power requirements for pilot plant, and specifications (see attached April 5, 2005, memo).

Subconsultant Fee: \$10,460 which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

**RBF CONSULTING**

By: Lawrence E. Gallery  
(Signature)

Lawrence E. Gallery  
(Type/Print Name)

Senior Vice President  
(Title)

Date: \_\_\_\_\_

RBF Job No: 10-103579  
70-10045

**DTN Engineers, Inc.**

**SUBCONSULTANT**  
By: Diep Nguyen  
(Signature)

Diep Nguyen  
(Type/Print Name)

Principal  
(Title)

Date: 8/5/05

P.O. No: 180





## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials

Consultant Initials:

*[Handwritten signatures]*

# INTEROFFICE MEMO

Memo to: Paul Findley, PE, RBF Consulting  
Memo from: Diep Nguyen, DTN Engineers, Inc.  
Date: April 5, 2005  
Subject: California American Water Company  
Desalination Pilot Plant- Moss Landing Duke Energy

Hi Paul,

Here is my estimate for your consideration:

Tasks	Design (hrs)	Support (hrs)	Notes
1.Kickoff meeting on site	10		
2.Power Supply/Service Design	20	20	(1)
3.Field visits during const. (3)	18		
4.Coordination with RBF	8		
Total	56	20	

Fee estimate:  $56 \times \$160/\text{hr} + 20 \times \$75/\text{hr} = \$10,460$  (2)

(1) includes:

- A. Design for automatic power transfer to a rental standby generator.
- B. Review of power requirements for the pilot plant
- C. Documents signed and sealed by a registered professional engineer.
- D. Short form specs

(2) does not include:

- A. An optional SCADA design (16 hrs ) for remote monitoring
- B. ODCs such as mileage, meals, printing



## ENGINEERS, INC.

Oakland, San Francisco, Orange County, CA

### FIRMVIEW

As a certified DBE/WBE firm (Cities of Oakland, San Francisco, Caltrans, Port of Oakland), DTN Engineers, Inc., has been founded by *Diep T. Nguyen, PE, President & CEO* in California with main office in Oakland and branch offices in San Francisco and Orange County. We offer professional services in facility planning and engineering design, project feasibility studies, project management and construction support engineering. Clients served include mostly public agencies and private companies. Project types have covered the design, planning and development, wastewater and water treatment plants, water resource, transportation, industrial and commercial facilities.

Presently, DTN Engineers, Inc. offers consulting services primarily in electrical engineering. Our in-house licensed professionals include electrical, mechanical, fire protection, control system engineers and registered architects. Other disciplines can be supplemented from affiliated engineering firms as needed. Our experience and present scope of services include:

#### **Electrical engineering**

- Building electrical systems
- Power system design and studies
- Emergency and standby power engineering
- Motor controls and variable frequency drives
- Site and roadway lighting
- Communications and security systems
- Control systems and SCADA design
- Instrumentation
- Industrial automation
- Cogeneration systems
- Fire alarm and extinguishing systems, Security Systems

Supported by experienced drafting staff with both AutoCAD and MicroStation capabilities, our highly experienced design staff individually or together have done the following typical projects: EBMUD wastewater and water facilities, power generation plant, OPNET, Contra Costa Water District SCADA, Brentwood SWTF, San Francisco Harry Tracy Water Plant Improvement Projects, South-East Water Pollution Control Plant, Santa Cruz Water Pollution Control Facilities, San Jose WPCP, SFO In/Outbound VMS system, SFO Runways Expansion Study, Navy Facilities Electrical Assessment at Hunter's Point, Treasure Island, Yerba Buena Island, Richmond Point Molate, Golden Gate Bridge Electronic Toll Collection System.

Presently, our firm is working on the following projects: EBMUD Recycled Water System, San Jose Recycled Water Project, Pittsburg Reclaimed Water Project, SFPUC North Point, Pulgas Chloramination Facility, STPUD Pump Stations, Zone 7 Portable Generator Connectivity, Lawrence Livermore National Laboratory Facility Improvements, Mountain View Sailing Lake Water Supply, Concord Naval Weapon Facilities Standby Generators for cranes and several other environmental projects.

*"The Mission of our firm is to be best in client satisfaction."*, Diep Nguyen, PE, President & CEO

#### **Main office**

DTN Engineers, Inc.  
1611 Telegraph Ave, Suite 809  
Oakland, California 94612  
Tel: (510) 267-0441  
Fax: (510) 267-0443  
[www.dtnengrs.com](http://www.dtnengrs.com)

# MEMORANDUM

To: John Peters  
From: Larry Gallery  
Date: January 30, 2006  
Subject: Addendum to PO #4109

JN 70-100045

Please increase PO #4109 to \$20,000 for DTN Engineers, Inc., for continued services to assist in the CWP Pilot Plant installation design.

Thank you.

Encls.

 **ENGINEERS, INC.**  
Oakland, San Francisco, Orange County, CA  
1611 Telegraph Ave., Suite 809  
Oakland, CA 94612  
Phone: (510) 267-0441 - Fax: (510) 267-0443

Feb 2, 2006

Mr. Lawrence E. Gallery, Sr. Vice-President  
RBF Consulting Engineers  
3180 Imjin Road, Suite 104  
Marina, California 93933

Subject: CAW Desalination Pilot Plant  
Progress Report

Hi Larry,

It was nice to have met you in your office couple days ago. And thank you for the advanced additional fee approval.

This is to summarize our progress of the project for the month of January. For this month, we have done the following tasks:

Accounts

OK

To Pay

70-10045

Task

3

Done Invoices

by PO

to

\$20,000

L. Gallery



**ENGINEERS, INC.**

Oakland, San Francisco, Orange County, CA

1611 Telegraph Ave., Suite 809

Oakland, CA 94612

Phone: (510) 267-0441 - Fax: (510) 267-0443

Account

OK

To Pay

70-10045

Task

3

DLN Invoice

to PO

to

DLN

Feb 2, 2006

Mr. Lawrence E. Gallery, Sr. Vice-President  
RBF Consulting Engineers  
3180 Imjin Road, Suite 104  
Marina, California 93933

Subject: CAW Desalination Pilot Plant  
Progress Report

Hi Larry,

It was nice to have met you in your office couple days ago. And thank you for the advanced additional fee approval.

This is to summarize our progress of the project for the month of January. For this month, we have done the following tasks:

1. Revised the PG&E Power Supply design drawing set (5 drawings) as per Duke's comments, the Client's comment and the pilot plant changes made by RBF staff.
2. Completed 6 drawings for the design-build portion of the project. These drawings includes two P&ID drawings for the cooling water and waste sump process, pilot plant cable and conduit plan, and the control schematic diagrams for various motorized equipment.
3. Continued to assist RBF staff (Sarp) in communicating with equipment supplier (Pridesa) and any other needed tasks.

The above two sets of drawings have been issued to Sarp for his use.

Please let us know if there are any questions

Sincerely yours,

Diep Nguyen, Principal

enclosure

CAW Desalination Pilot Plant  
Progress Report 5



## MEMORANDUM

**To:** John Peters  
**From:** Paul Findley  
**Date:** April 12, 2006  
**Subject:** Addendum to PO #4109 – DTN Engineers, Inc. (JN 70-100045)

---

Please increase PO #4109 by \$10,000 to a total of \$30,000, for continued services to assist in the CWP Pilot Plant installation design.

Thank you.

# **ATTACHMENT 6**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, CA, on this date of November 27, 2006 by and between RBF Consulting ("Consultant") and Kleinfelder ("Subconsultant").

Attention: Nathan Stoores

Project: Coastal Water Project; Post-PEA Engineering & Environmental

Description of Subconsultant's Services: Review "Construction Plans for California American Water Coastal Water Project Pilot Plant," and the project calculations "Structural Calculations for Intake System at Coastal Water Project, Pilot Plant," per attached Scope of Work. Provide plan review letter. Three (3) copies of the plan review letter will be provided.

Subconsultant Fee: \$800 on an not-to-exceed basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work. All invoices shall itemize tasks, staff and hourly billing rates as agreed to by RBF and California American Water Company.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

Kleinfelder, Inc.

By: [Signature] (Signature)

SUBCONSULTANT
By: [Signature] (Signature)

Lawrence E. Gallery Paul L. Findley (Type/Print Name)

Karin S. Ryttingen (Type/Print Name)

Senior Vice President (Title)

SVP (Title)

Date: 11-27-06

Date: 2/16/07

RBF Job No: 70-100045.002, Task 3

P.O. No:





### GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client but in no event later than 60 days after receipt of a valid invoice. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against any claims, losses, demands, damages or costs, including reasonable attorneys' fees, but only to the extent arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement. In no event will Subconsultant be liable for consequential, indirect, special, exemplary or punitive damages.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials \_\_\_\_\_  
Consultant Initials .....

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**REQUEST FOR AUTHORIZATION (PROPOSAL) TO PERFORM  
GEOTECHNICAL PLANS AND CALCULATIONS REVIEW SERVICES**

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Proposal No.: SAL6P075

Project Name: California American Water Pilot Plant Facility

Project Location: Moss Landing, California

Client: RBF Consulting

Client Address: 3180 Imjin Road, Suite 110

(Street) (Suite)

Marina, California 93933

(City) (State/Zip)

SCOPE OF WORK: Review "Construction Plans for California American Water Coastal Water Project Pilot Plant," Sheets 1 of 23 through 23 of 23, by RBF Consulting, RWE Group, and California American Water, dated September 2006, and Sheets F1 through F3, by Williams Scotsman, dated October 10, 2006; and the project calculations "Structural Calculations for Intake System at Coastal Water Project, Pilot Plant," by RBF Consulting, dated June 20, 2006, and "Design Calculations for 24' x 60' Commercial Coach Complex Pad/Pier/Anchor System (Temporary Foundation System)," by Williams Scotsman, Inc., dated October 10, 2006. Provide plan review letter. Three (3) copies of the plan review letter will be provided.

ESTIMATED FEES: A Time-And-Materials basis per the Basis of Charges in our 2006 Bay Area Fee Schedule, with an estimated amount of \$800.00.

KLEINFELDER, INC. is authorized to proceed with the work listed above. The scope of work proposed above will be conducted in accordance with our general conditions (attached). Please note that the general conditions including the limitations clauses are an integral part of this Request for Authorization (proposal). If this proposal is acceptable to you, please complete, sign and return this proposal in its entirety to our office.

Acceptance of this proposal will indicate that an authorized agent of the client has reviewed the Scope of Services and determined that they do not need or want more services than are being proposed at this time. Any exceptions should be noted and may result in adjustments to our fees.

All terms and conditions indicated in this proposal will be considered by both parties to be in effect from the effective date of the signed contract through completion of the project. The proposal will remain in effect for 60 days from the date shown on the proposal and thereafter shall be null and void unless our agreement has been signed for the work performed.

THIS CLIENT agrees to pay for services rendered on this project on a time-and-expense basis in accordance with KLEINFELDER's current 2006 Fee Schedule. Payment is due 30 days of the date of invoice.

CLIENT ACCEPTANCE:

By: *Paul L. Finley* Date: 7-7-07  
(Signature)  
Name: Paul L. Finley Title: Vice President  
(Please Print Name)

# **ATTACHMENT 7**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT San Diego, California, on this date of 23 October 2006 by and between RBF Consulting ("Consultant") and RosTek Associates, Inc. ("Subconsultant"), P. O. Box 47567, Tampa, FL 33647.

Attention: Ian C. Watson, PE

Project: Pilot Plant Lab Office Project, California American Water R&T JOB NO. 70-100045

Description of Subconsultant's Services: Provide consultation and engineering services relative to desalination engineering design

Subconsultant Fee: \$30,000, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

RosTek Associates, Inc.

SUBCONSULTANT

By: Paul Findley (Signature)

By: Ian C. Watson (Signature)

Paul Findley, P.E. (Type/Print Name)

IAN C. WATSON (Type/Print Name)

Vice President, Water Resources (Title)

PRESIDENT (Title)

Date: 11-20-06

Date: 11-1-06

RBF Job No: 70-100045

P.O. No: 4756



## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of ~~\$1,000,000~~ <sup>\$500,000 GED</sup> combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials Jaw

Consultant Initials: RF

# **ATTACHMENT 8**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, California, on this date of 10/17/05 by and between RBF Consulting ("Consultant") and Arthur Gimmy International ("Subconsultant").

Attention: Larry Gallery, Senior Vice President

Project: California American Water "Coastal Water Project"

Description of Subconsultant's Services: "Market Rate" Appraisal for a 20-foot wide permanent pipeline easement and a 50~100 foot temporary construction easement from the Proposed Desalination Plant adjacent to the Duke Energy Power Plant in Moss Landing, CA thru Castroville, CA onto Seaside, CA (via the TAMC Branchline).

Subconsultant Fee: \$20,000 on a hourly not-to-exceed basis which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: [Signature] (Signature)

Larry Gallery (Type/Print Name)

Senior Vice President (Title)

Date: 10-17-05

RBF Job No: 70-160045

Arthur Gimmy International

SUBCONSULTANT

By: [Signature] (Signature)

Arthur E. Gimmy (Type/Print Name)

President (Title)

Date: April 14, 2005

P.O. No:





## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials

Consultant Initials: 

FILE



April 7, 2005

Arthur E. Gimmy  
Arthur Gimmy International  
40 Koch Road, Suite C  
Corte Madera, CA 94925

**SUBJECT: California American Water – Coastal Water Project  
Contract for Appraisal of Pipeline Easement**

Dear Mr. Gimmy:

We are forwarding the enclosed duplicate copies of a subconsultant agreement to engage your firm to prepare the "market rental value" for two sections of the conveyance pipeline for California American Water's proposed Coastal Water Project.

Your Scope of Work is as presented in our November 29, 2004 "Request for Proposals" and your December 15, 2004 response. The scope is to determine the "market rental value" for permanent and temporary construction easements for the following two pipeline sections:

First Section: This section is that portion of pipeline north of Castroville from Dolan Road to SR 156. We plan on locating the 36-inch diameter conveyance pipeline on private property along the west side of the Southern Pacific Railroad line. The scope of work includes the market value of a 20-foot wide permanent easement and a 100-foot wide temporary construction easement (two year period).

Second Section: A significant portion of the 36-inch diameter conveyance pipeline will be constructed along the former Southern Pacific Railroad alignment that was acquired by the Transportation Agency for Monterey County (TAMC) in 2003. The preliminary plans are to enter the former railroad right-of-way at or near the intersection of Merritt Avenue (SR 183)/Del Monte Avenue in Castroville and leave that right-of-way in Seaside near the intersection of Del Monte Blvd/Auto Center Parkway. This section is approximately 12 miles long and the project will require a 20-foot wide permanent easement and a 50-foot wide temporary construction easement (two year period).

Your services will be performed on an hourly basis for the not-to-exceed contract amount of \$20,000.

PLANNING ■ DESIGN ■ CONSTRUCTION

3180 Imjin Road, Room 104, Marina, CA 93933 ■ 831.883.8187 ■ Fax 831.883.9967

Offices located throughout California, Arizona & Nevada ■ [www.RBF.com](http://www.RBF.com)

printed on recycled paper

Coastal Water Project  
April 7, 2005  
Page 2 of 2

Please review the enclosed subconsultant agreement, confirm that your firm has the specified insurance coverage, sign both duplicate copies and return them to me. After Larry Gallery signs the agreement on behalf of RBF, we will return one fully executed agreement to you as your authorization to begin work.

I can be reached at (831) 884-2427 or via e-mail at PDobbins@RBF.com should you have any questions regarding this matter.

Sincerely,

PATRICK DOBBINS

Patrick Dobbins  
Senior Project Manager

Project File

# **ATTACHMENT 9**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, CA, on this date of November 15, 2006 by and between RBF Consulting ("Consultant") and Universal Field Services, Inc. ("Subconsultant").

Attention: James Finnegan

Project: Coastal Water Project; Post-PEA Engineering & Environmental

Description of Subconsultant's Services: Right-of-way appraisal and acquisition services based on the attached scope of services and budget.

Subconsultant Fee: \$94,000 on an not-to-exceed basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work. All invoices shall itemize tasks, staff and hourly billing rates as agreed to by RBF and California American Water Company.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

Universal Field Services, Inc.

SUBCONSULTANT

By: [Signature] (Signature)

By: [Signature] (Signature)

Lawrence E. Gallery (Type/Print Name)

James Finnegan (Type/Print Name)

Senior Vice President (Title)

(Title)

Date: 1-30-07

Date:

RBF Job No: 70-100045.002, Task 15

P.O. No: 4877



## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials: JHJ

Consultant Initials: JL



## *Scope of Services*

This scope of services is provided to RBF Consulting in reference to their request for appraisal and acquisition services for the proposed Coastal Water Project. The project requires the acquisition of easement rights for a twenty foot right of way from Moss Landing through the cities of Castroville, Marina, Seaside, Del Rey Oaks and unincorporated areas of Monterey County. It is assumed that approximately fifty (50) parcels of either private or public land will be required for the entire pipeline. Most of the alignment is within the TAMC railroad corridor and public rights of way. Our scope only includes the area from General Jim Moore Road to the Secunda Tank Site; an estimated twelve (12) parcels.

### PRELIMINARY PROJECT ACTIVITIES

#### Project Initiation Meeting

- Meet with RBF and others, as appropriate, to review project scope, scheduling and other issues specific to the project

#### Land Acquisition Procedures and Forms

- Review land acquisition procedures needed for the project
- Prepare forms and documents to be utilized for the required services
- Prepare Acquisition brochures summarizing the land acquisition process. The brochure is to be given to all persons affected by the project

### PERMITTING (Optional Task)

#### Encroachment Permits

Provide assistance to Project Manager in obtaining and permits:

- Coordinate with design firm to obtain drawings and specifications
- Prepare permit and submit to appropriate agencies
- Conduct extensive follow-up with permitting agencies to obtain permits per program schedule
- Maintain permit tracking database
- Supply supplementary information to permitting agencies
- Develop a permit condition and responsibility matrix for contractors, construction management, program management and RBF
- Prepare and supply permit condition information to permitting agencies
- Track permit conditions and responsibilities
- Attend meetings and provide periodic reports, as needed

#### Power Supply Encroachment Permits

Service permits for pump stations may be required. Coordination with the County, and other public agencies is required for the permits.



## APPRAISAL SERVICES

Appraisals will be performed by the Schmidt-Prescott Group and Hansen and Company under sub-contract with Universal.

### Appraisal

All appraisals will fully meet accepted professional appraisal standards. The appraisals will conform to the requirements of the Office of Real Estate Appraisers of the State of California.

- Complete an appraisal of each property in accordance with Federal and State policy. Each property owner shall be contacted and offered the opportunity to accompany the appraiser during the inspection of the property.
- An appraisal report shall be prepared for each parcel and shall include, at the minimum, the following information:
  - ✓ The purpose and function of the appraisal, including limiting factors and conditions.
  - ✓ Description of the physical characteristics of the property being acquired in addition to the highest and best use of property.
  - ✓ A discussion of all relevant and reliable approaches to value. In most cases this will necessitate the use of the sales comparison approach only.
  - ✓ A description of comparable sales relied on in the determination of value.
  - ✓ A statement of the value of the property rights to be acquired, including damages to the remainder.
  - ✓ A signed certification of the appraiser, and the effective date of the valuation.

## ACQUISITION PROCESS

Acquisition services include all contacts with the property owner for the purpose of negotiating for the purchase of the real property interest. Services to be provided include:

- Prepare the offer letter and other related documents based upon the review appraiser's accepted fair market value.
- Prepare purchase agreement and conveyance documents.
- Meet with property owners to discuss the project in general, review right-of-way maps and legal descriptions confirm information about occupants/owners and make the official first written offer.
- Explain the offer; maintain follow up contacts and to secure the necessary documentation upon acceptance of the offer for closing.
- Respond to property owner inquiries verbally and in writing.
- Maintain contact reports for each parcel with all pertinent information and contacts concerning the parcel.
- Maintain parcel files of original documentation related to the purchase of the real property.
- Provide recommendation and supporting documentation for consideration during the administrative review process.





- Continue personal negotiations with property owner until agreement is reached with the owner, or impasse is reached. Negotiations shall consist of a minimum of three personal contacts.
- Signed purchase agreements shall be transmitted to RBF promptly for acceptance and processing.

#### **TITLE AND CLOSING SERVICES**

Our Project Manager will insure that all closings are accomplished in a timely manner through continued coordination with the title company handling the escrows. Universal will work closely with the chosen title companies to make sure that good title is obtained. These services include:

- Reviewing updated title
- Open escrow, deposit funds and documents, prepare escrow instructions, and monitor closing of escrows.
- Assist Title Company in obtaining releases of liens, mortgages and encumbrances of record.
- Prepare warrant requests to RBF with proper supporting documentation including recommended resolution of title issues.
- Verify and coordinate the clearing or prorating of taxes and assessments.
- Coordinate closings and attend to all meetings.
- Review the final title policy to make sure that it reflects only those title exceptions that RBF had agreed to accept.
- Submit a completed property acquisition report for each property, including transfer of all pertinent correspondence and files to RBF.

#### **CONDEMNATION SUPPORT (Optional Task)**

When impasse is reached and condemnation is being pursued, Universal shall provide RBF or its legal counsel with a complete parcel file including the appraisal, negotiation records and all other correspondence for each condemnation parcel. Services provided to the condemnation attorneys include:

- Appearing as an expert witness in eminent domain proceedings as directed by RBF and the assigned legal counsel.
- Delivery of the complete parcel file, including the title report, legal description, appraisal, negotiation records and all correspondence.
- Assist the attorney with locating property owners and other interest holders.

Following impasse, any court preparation or testimony work performed by Universal shall be authorized by RBF as extra work and paid for at Universal's hourly rates.



### PROJECT MANAGEMENT/QUALITY ASSURANCE

This is one of Universal's major strengths. We have extensive experience in managing projects of all sizes. Our list of references includes projects for several clients for whom Universal was the prime consultant. Universal's project management service will be available throughout the Project with full time project support to all phases of the program. Universal recognizes the importance of keeping RBF informed of all progress made and will do so through the use of weekly and monthly status reports.

As demonstrated in our Proposal, Universal has the ability to provide the requested services to RBF. A unique aspect that Universal offers to RBF is the ability to deal with situations that occur on every project that cannot be foreseen at this time.

Our commitment of a proven Project Manager and project staff is an important part of providing RBF with the know-how to get the job done.

On a regular basis, we provide a narrative progress report identifying the previous week's status of the project. This report includes a summary of all activities, the status of each parcel, a description of problems encountered and possible solutions, a comparison of actual versus scheduled progress, and a projected completion date based upon current progress.

In addition to the status report, our Project Manager meets with RBF, at its convenience, once a month to discuss the status of the acquisition activities.



## Cost Proposal (revised 4/17/06)

Appraisal (lump sum) – (billed at \$2500/parcel)	\$30,000.00
Subcontractor Mark-up (10%)	\$ 3,000.00
Project Manager – (billed at \$115/hour) (James Finnegan)	\$ 6,000.00
Acquisition Specialist – (billed at \$85/hour) (George Novacek, Ray Guenther, Jamie Formico)	\$51,000.00
Other indirect costs (mileage @ \$0.445 or current IRS rate at the time the mileage is incurred; copying; notary; long distance telephone and miscellaneous related costs) – at cost	\$ <u>4,000.00</u>
<b>TOTAL (not to exceed)</b>	<b>\$94,000.00</b>

### Assumption:

- RBF will provide title reports, plats and legal descriptions.
- There are an estimated twelve (12) properties to be appraised and acquired for only the southern portion of the project which extends from the ASR wells near General Jim Moore Road to the Secunda Tank Site.
- Hansen & Company bills at \$275 per hour for Court Preparation and Testimony, Schmidt-Prescott Group bill at \$290 per hour for research & analysis and \$315 per hour for pre-trial preparation, deposition and testimony, Universal bills at \$150 per hour for Acquisition Agents and is considered extra work.

# **ATTACHMENT 10**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, CA, on this date of January 31, 2007 by and between RBF Consulting ("Consultant") and Kinnetic Laboratories Inc. ("Subconsultant").

Attention: Jonathan Toal

Project: Coastal Water Project; Post-PEA Engineering & Environmental

Description of Subconsultant's Services: Provide services to support data request responses to the California Public Utilities Commission Environmental Review process, including attendance at meetings, review and comment of CPUC materials, and additional marine biological studies, if required, to address both source water and receiving water quality issues and impacts.

Subconsultant Fee: \$25,000 on a not-to-exceed basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work. All invoices shall itemize tasks, staff and hourly billing rates as agreed to by RBF and California American Water Company.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

Kinnetic Laboratories Inc.

By:

*Paul L. Findley*  
(Signature)

By:

*Patrick Kinney*  
(Signature)

Lawrence E. Gallery

Paul L. Findley  
(Type/Print Name)

Patrick Kinney  
(Type/Print Name)

Senior Vice President

(Title)

Principal  
(Title)

Date:

2/6/07

Date:

5 Feb 2007

RBF Job No: 70-100045.002 , Task 6

P.O. No:



## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms  
Subconsultant Initials  
Consultant Initials:

Handwritten initials for the Subconsultant and Consultant, written in black ink over a horizontal line.

# **ATTACHMENT 11**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, CA, on this date of January 3, 2006 by and between RBF Consulting ("Consultant") and Archibald Consulting ("Subconsultant").

Attention: Elaine M. Archibald

EMA

Project: Coastal Water Project; Post-PEA Engineering & Environmental

Description of Subconsultant's Services: This is an authorization to assist RBF staff in developing and preparing the Watershed Sanitary Survey, including the following tasks: Define the Watershed for the Moss Landing Desalination Plant; Review Existing Water Quality Data; Complete Source Water Assessment Checklist and Meet with DHS; Describe the Water Supply System and Treatment Plant; Identify and Evaluate Potential Contaminant Sources in the Watershed; Evaluate Expanded Water Quality Data; Develop Strategies for Tracking and Influencing Activities in the Watershed; and Prepare the Sanitary Survey Report and Source Water Assessment and Participate in Meetings. scope of work & the monitoring plan & participate in meetings with DHS

Subconsultant Fee: \$12,000 on an hourly not-to-exceed basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work. All invoices shall itemize tasks, staff and hourly billing rates as agreed to by RBF and California American Water Company.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

Archibald Consulting

SUBCONSULTANT

By: Lawrence E. Gallery (Signature)

By: Elaine M. Archibald (Signature)

Lawrence E. Gallery (Type/Print Name)

Elaine M. Archibald (Type/Print Name)

Senior Vice President (Title)

Owner (Title)

Date:

Date: 5/25/06

RBF Job No: 70-100045, Task 8

P.O. No:





## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials

Consultant Initials:

*[Handwritten Signature]*  
*[Handwritten Signature]*

# **ATTACHMENT 12**



Consulting Engineers and Land Surveyors of California

**AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT**

AGREEMENT ENTERED INTO AT Marina, CA, on this date of January 10, 2007 by and between RBF Consulting ("Consultant") and Archibald Consulting ("Subconsultant").

Attention: Elaine M. Archibald

Project: Coastal Water Project; Task 8 - Watershed Sanitary Survey

Description of Subconsultant's Services: This is an authorization to assist RBF staff in developing the treatment plant description and performance monitoring program in sufficient detail to allow CDHS staff to reach a decision on whether the desalination plant will be able to provide the maximum log removals of pathogens, per attached Scope of Work.

Subconsultant Fee: \$111,900 on an hourly not-to-exceed basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work. All invoices shall itemize tasks, staff and hourly billing rates as agreed to by RBF and California American Water Company.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

**RBF CONSULTING**

**Archibald Consulting**

**SUBCONSULTANT**

By: Lawrence E. Gallery  
(Signature)

By: Elaine M. Archibald  
(Signature)

Lawrence E. Gallery  
(Type/Print Name)

Elaine M. Archibald  
(Type/Print Name)

Senior Vice President  
(Title)

Owner  
(Title)

Date: 1-10-07

Date: 1/10/07

RBF Job No: 70-100045, Task 8

P.O. No: \_\_\_\_\_



## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below
  - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials

Consultant Initials:

gmk  
200

**COASTAL WATER PROJECT  
WATERSHED SANITARY SURVEY AND SOURCE WATER ASSESSMENT  
SCOPE OF WORK**

California American Water (Cal-Am) has agreed to provide maximum log removal and inactivation of *Cryptosporidium* (4 log), *Giardia* (5 log), and viruses (6 log) at the proposed Moss Landing Desalination Plant. The California Department of Health Services (CDHS) staff has not yet determined if the recently promulgated Long Term 2 Enhanced Surface Water Treatment Rule will require greater log removal of *Cryptosporidium*. CDHS has agreed that hydrodynamic modeling and detailed characterization of pathogen and indicator organism densities is not needed if there is agreement that maximum log removal will be provided.

**Task 1. Describe the Proposed Desalination Plant**

The objective of this task is to develop the treatment plant description and performance monitoring program in sufficient detail to allow CDHS staff to reach a decision on whether the desalination plant will be able to provide the maximum log removals of pathogens. The following information will be provided:

- Intake – Description of the proposed desalination plant intake at MLPP and the method of delivering water from MLPP to the proposed desalination plant.
- Treatment Plant Processes – Description of the proposed water treatment plant processes and the virus, *Giardia*, and *Cryptosporidium* log removals to be achieved through each process.
- Distribution System Issues – Description of corrosion control and the potential for formation of disinfection byproducts in the distribution system.
- Performance Monitoring – Description of proposed monitoring of the performance of the treatment plant processes.
- Treatment Plant Schematic – A schematic showing the treatment processes will be prepared.

Some of this information is available in a Technical Memorandum prepared for the Proponent's Environmental Assessment (PEA), "Desalination Plant at the Duke Energy East Site" and in Section 5.1 Potable Water Quality of the PEA. This information will be compiled in a memorandum and submitted to CDHS for review. A meeting or conference call will be scheduled to reach agreement that the desalination plant will be able to achieve the maximum log removals for pathogens and to reach resolution on the maximum *Cryptosporidium* log removal. This is a critical first step because if CDHS does not agree that maximum log removal can be provided at the desalination plant, the scope of work for the sanitary survey will have to be revised to include a more detailed analysis of pathogen and indicator organism data and it is possible that CDHS will require hydrodynamic modeling of the source waters.

## **Task 2. Define the Watershed for the Proposed Moss Landing Desalination Plant**

The objective of this task is to delineate the watershed that drains to the proposed desalination plant intake and identify zones of influence. Potential sources of water to the desalination plant intake include:

- MLPP Site
  - Waste streams discharged to the Duke cooling water system
- Lower Watershed
  - Moss Landing Harbor
  - Elkhorn Slough
  - Moro Cojo Slough
  - Old Salinas River Channel and Tembladero Slough
  - Monterey Bay within 2500 feet of entrance to Moss Landing Harbor
- Upper Watershed
  - Salinas River
  - Pajaro River
  - Monterey Bay

Each of these potential sources is referred to as a subwatershed in this scope of work. The potential sources of water have been preliminarily assigned to zones of influence: the MLPP site, the lower watershed and the upper watershed. The rationale is that contaminant sources at the MLPP site and in the lower watershed have a greater potential for affecting water quality at the proposed desalination plant intake so greater emphasis is placed in this scope of work on understanding and characterizing these contaminant sources. More general information will be obtained on the upper watershed. Maps will be prepared showing the zones of influence and a brief memorandum will be prepared on the rationale for defining the zones of influence. The zones of influence will be discussed with CDHS staff to ensure they are in agreement with the level of detail that will be provided in the sanitary survey report on each of the zones of influence.

## **Task 3. Describe the Hydrologic Setting**

The objective of this task is to understand the factors that affect the mix of waters from each of the subwatersheds that drain to the power plant intake that will provide water for the proposed desalination plant. This information will be useful in determining which of the subwatersheds contribute contaminants to the power plant intake and the seasonality or event-driven impacts of each of the subwatersheds. The information will also be used to delineate the zones of influence and to determine the level of effort to place in each of the subwatersheds. The following data and information will be obtained to the extent it is available:

- Flow data for Elkhorn Slough, Moro Cojo Slough, Old Salinas River Channel, Tembladero Slough, the Pajaro River, and the Salinas River for the period from 1996 to 2005.

- Other factors affecting the mix of waters at the desalination plant intake such as tides, rainfall, operation of tidal gates, releases of water from upstream reservoirs.
- Real-time electrical conductivity and turbidity data that can be used to distinguish fresh water influences from ocean influences.
- Impacts of the Salinas Valley Water Project on future flows.

This information will be analyzed to determine, to the extent possible without hydrodynamic modeling, which of the subwatersheds is likely to contribute significant amounts of water and possible contaminants to the power plant intake. The information from this task will be documented in a memorandum that will later be incorporated into the draft watershed sanitary survey report.

#### **Task 4. Review Existing Water Quality Data**

The objective of this task is to analyze the existing water quality data to determine what is currently known about drinking water contaminants in each of the subwatersheds, at the MLPP intake, and at the proposed desalination plant intake. Existing water quality data collected by RBF and Duke at the MLPP, the volunteer monitoring data and data collected on Elkhorn Slough, Moro Cojo Slough, and the Old Salinas River by the Elkhorn Slough National Estuarine Research Reserve System (ESNERR), and the ESNERR continuous monitoring data on Elkhorn Slough will be reviewed, along with data collected by Cal-Am and any additional data that are identified. Some data and reports have already been collected by RBF and other data still needs to be collected. All relevant data will be entered into Excel spreadsheets for analysis. The data will be compared to drinking water maximum contaminant levels, notification levels, and public health goals and analyzed to determine if there are any seasonal or other trends in the data. The data will also be used to establish the range of water quality conditions that the proposed desalination plant will need to be designed to treat. The data will be summarized for presentation to CDHS to determine the need for additional source water monitoring.

#### **Task 5. Design Source Water Monitoring Program**

The objective of this task is to reach agreement with CDHS on the additional source water monitoring that is required and to develop a monitoring plan to obtain the data. When plans are finalized for installing the pilot plant at the MLPP site, a meeting will be held with CDHS staff to discuss the evaluation of existing water quality data (Task 4) and to identify any additional source water monitoring that they will require for approval of the sanitary survey. The monitoring plan will be developed and submitted to CDHS and discussed in a meeting or conference call. A cost estimate for conducting the source water monitoring will be submitted to Cal Am, along with the cost estimate for the pilot plant monitoring.

#### **Task 6. Analyze Source Water Monitoring Data**

The objective of this task is to update the discussion of water quality data by including the additional data collected during the source water monitoring program and any data collected by other agencies between the date that Task 4 is completed and the source water monitoring program is completed. The updated data set will be compared to drinking water maximum contaminant levels, notification levels, and public health goals and analyzed to determine if there are any seasonal or other trends in the data.

#### **Task 7. Conduct Analysis of Potential Contaminant Sources at the MLPP Site**

The objective of this task is to evaluate the potential contaminant sources at the MLPP, including contaminants that are discharged to the cooling water system and contaminants that could accidentally be released into the cooling water system upstream of the desalination plant intake. The following information will be needed to complete the sanitary survey:

- Cooling Water System - Detailed description of the cooling water system with documentation that only Units 1/2 intake contributes cooling water to the proposed desalination plant intake. Information on each waste stream that enters the cooling water system upstream of the proposed desalination plant intake. Volumes of each waste stream and chemicals likely to be present in each waste stream will be needed.
- Storm Water - Description of any storm water discharges that enter the cooling water system or are discharged to receiving waters in the vicinity of the power plant. Information on the area draining to each discharge, including drainage area, types of power plant activities, and any storm water monitoring data.
- Hazardous Materials Storage - Information on chemical and oil storage areas, storage tank volumes, types of containment, history of spills, management measures taken to prevent and clean up spills.
- Fuel Oil Storage and Transport - Description of procedures for receiving and transferring fuel oil and other chemicals at the MLPP.
- Heat Treatment and Other Operations - Verify that heat treatment is not used for Units 1 and 2 and describe any other power plant operations that could affect the quality of the cooling water.
- Fire and Accident History - Description of the fire at the MLPP that occurred in 1997 and any other catastrophic events that affected or could potentially affect cooling water quality. Measures taken since the fire to prevent contamination of the cooling water system.

The following documents will be obtained and reviewed:

- Duke NPDES Permit Renewal Application and Current Permit
- MLPP Storm Water Pollution Prevention Plan
- MLPP Spill Prevention Control and Countermeasure Plan
- MLPP Oil Spill Contingency Plan



- MLPP Annual Monitoring Reports
- Office of Emergency Services Spill Reporting Database

After reviewing this information, a memorandum describing what is currently known about the MLPP site and a list of questions and information needs will be developed. A field survey of the MLPP site will be conducted and meetings will be held with power plant staff to obtain the information that was not available from the document review. The section of the report describing the power plant activities and potential contaminant sources will be provided to power plant staff for review. After the consultant team and power plant staff have reached agreement on the information to be provided to CDHS, a field trip to the MLPP site will be set up for CDHS staff.

### **Task 8. Identify and Evaluate Potential Contaminant Sources in the Watershed**

The objective of this task is to obtain information on the potential contaminant sources in the watershed that could affect water quality at the proposed desalination plant intake and to relate watershed activities to water quality at the intake. This task will be accomplished through a review of literature and agency files, interviews with staff knowledgeable about the watershed, and through a driving survey of the lower part of the watershed. The first step will be to gather general information on the land uses and types of activities in the watershed through review of Elkhorn Slough Foundation reports, storm water program reports, general plans, the Basin Plan and other California Regional Water Quality Control Board (Regional Board) reports and files. The objective will be to provide an overall description of the watershed and the types of discharges that could affect intake water quality. We will then spend two days driving through the portion of the watershed that is near the intake noting information on activities and discharges on the maps and on field survey forms.

- Municipal Wastewater – Describe wastewater collection, treatment, and disposal methods in the lower watershed. Maps will be prepared showing key interceptors, pumping stations, wastewater treatment facilities, and areas where septic tanks are used. Obtain effluent and receiving water monitoring data for the major dischargers in the lower watershed. Document major discharge violations and wastewater spills from 2000 to 2005. For the upper watershed, provide information from Regional Board files on the locations, capacity, current flows, and treatment processes for wastewater treatment plants located in the watershed.
- Recycled Water – Describe the areas where recycled water is used in the lower watershed.
- Industrial Wastewater – Describe industrial wastewater discharges to lower watershed. Provide information on locations, flow volumes, and types of discharge. Document past enforcement problems. Interview Regional Board staff to determine if there are any major industrial dischargers in the upper watershed.
- Recirculation of Power Plant and Proposed Desalination Plant Discharges – Describe the modeling study results on the potential for the discharge to be drawn back into the cooling water system of the power plant.

- Urban and Industrial Runoff – Provide maps showing the locations of all major urban and industrial runoff discharges to the lower watershed. Provide any data that are available on the quantity and quality of urban runoff discharged in the vicinity of the power plant intake. For the remainder of the watershed, describe the storm water management programs for the major cities.
- Agricultural Activities – Describe the agricultural activities in the lower watershed and obtain information from the Department of Pesticide Regulation on pesticides used in the lower watershed. Interview Regional Board staff to obtain information on the agricultural waiver program and water quality monitoring reports.
- Dairies and Other Confined Animal Facilities – Obtain information from the Regional Board on dairies and other confined animal facilities in the lower watershed. To the extent information is available, discuss management practices that have been implemented to reduce the impact of confined animal operations on water quality.
- Domestic and Wild animals – Describe the potential for domestic and wild animals to contribute pathogens to the water.
- Harbor Dredging – Describe the schedule and process for harbor dredging. Identify any water quality data that are available to document harbor dredging activities.
- Commerical and Private Boat Operations – Document the potential impacts on water quality due to commercial and private boating in the lower watershed. Include activities such as discharge of wastewater from boats, fueling operations, fish cleaning operations in Moss Landing Harbor, and use of antifouling chemicals. Describe history of spills in the vicinity of the MLPP intake. Discuss harbor management practices and enforcement.
- Recreation – Describe recreational use of the lower watershed, including fishing, swimming, and boating. Review beach monitoring data and discuss beach postings and closures in the vicinity of the MLPP intake. Obtain information on cruise ships entering Monterey Bay and regulations that are enforced to limit their impact on water quality.
- Hazardous Materials Spills – Discuss the history of hazardous materials spills in the lower watershed and any plans that are in place to respond to spills.
- Solid and Hazardous Waste Disposal- Review General Plans and the Integrated Waste Management Board's SWIS database for information on municipal and hazardous waste landfills in the watershed.
- Hazardous Materials Sites – Provide information on hazardous materials sites in the lower watershed.
- Unauthorized Activities – Provide information on areas that are problematic for illegal dumping and homeless encampments in the lower watershed.
- Tidal erosion within Elkhorn Slough – Describe potential impacts tidal erosion within the slough has on turbidity (and possibly other contaminants) at the intake to the proposed desalination plant.
- Algal Blooms – To the extent information is available, provide data on the history of algal blooms in the vicinity of the power plant intake. Discuss the potential impacts of non-toxin producing algae (filter clogging, membranc fouling).

Provide information on harmful algal blooms in the vicinity of the intake, shellfish monitoring for algal toxins, and any research on algal toxins in the water. Discuss research conducted on removal of algal toxins by RO membranes.

- Projected Changes in the Watershed – Obtain information on population trends and any major anticipated changes in land use.

#### **Task 9. Develop Strategies for Tracking and Influencing Activities in the Watershed**

The objective of this task is to identify operations at the MLPP that must be coordinated with the operation of the desalination plant, and management practices and watershed management activities that Cal-Am can implement or track to ensure that degradation of intake water quality does not occur. The Elkhorn Slough Foundation (ESF) currently owns or controls over 2000 acres of watershed land and has plans to acquire a total of 4000 acres in the next several years. It will be important to work with ESF to identify water quality concerns that are unique to drinking water (e.g. organic carbon) so that drinking water constituents can be factored into their management activities.

#### **Task 10. Prepare Sanitary Survey Report and Source Water Assessment Documents**

The objective of this task is to document the findings in a watershed sanitary survey report and source water assessment that will be accepted by CDHS. This task is based on the following assumptions:

- A preliminary draft will be submitted to Cal-Am for review
- We will meet with Cal-Am to discuss comments on the report
- We will respond to comments and prepare a revised draft report
- The revised draft report will be submitted to CDHS
- We will meet with CDHS to discuss their comments on the report
- We will respond to comments from CDHS and prepare a final report
- One hard copy and an electronic copy of each version of the report will be submitted to Cal-Am

#### **Task 11. Project Management**

This project will be a collaborative effort of Archibald Consulting and RBF Consultants. A consultant team conference call will be scheduled every two weeks to make sure that the work is proceeding and that team members are kept up-to-date on all activities. This task also includes a meeting with CDHS to discuss the scope of work and reach agreement on how to proceed.

Task	E Archibald	RBF Staff	RBF Graphics	RBF Word Processing
<b>Phase 1</b>				
<b>1. Describe Desal Plant</b>				
Treatment Plant Description		4	16	4
Meeting with CDHS		8	4	
Subtotal Task 1		12	20	4
<b>2. Delineate Watershed</b>				
Prepare Maps		4	8	8
Prepare Memo		4		
Meeting with CDHS		8	4	
Subtotal Task 2		16	12	8
<b>3. Hydrologic Setting</b>				
Obtain Flow Data		8	40	
Analyze Data		16	40	
Discuss with Local Experts		8	8	
Prepare Memo		16	4	8
Subtotal Task 3		48	92	8
<b>4. Review Water Quality Data</b>				
Identify Data & Review Reports		12	8	
Obtain Data		4	16	
Enter Data in Excel		4	16	
Analyze Data		24	8	
Subtotal Task 4		44	48	0
<b>5. Design Source Water Monitoring</b>				
Meeting with CDHS		8	4	
Develop Monitoring Plan & Costs		8	24	
Meeting with CDHS		8	4	
Subtotal Task 5		24	32	
<b>6. Analyze Source Water Data</b>				
Review Data and Enter into Excel		24	48	
Analyze Data		40	40	
Subtotal Task 6		64	88	
<b>7. Analysis of MLPP</b>				
Obtain Documents/Information		4	16	
Review Documents		32		
Prepare Memo		16		
Prepare Information Needs		8		
Conduct Field Survey		16	16	
Prepare Report Section		24	4	8
Respond to MLPP Staff Comments		12	4	
Field Survey with CDHS Staff		8	8	
Subtotal Task 7		120	16	0
<b>8. Contaminant Sources</b>				

Wastewater	40	40	8	
Recycled Water	4	8	4	
Industrial Wastewater	16	32	8	
Recirculation of MLPP Discharge	8			
Urban & Industrial Runoff	32	40	8	
Agricultural Activities	40	40	8	
Dairies, Confined Animal Facilities	8	16	4	
Domestic & Wild Animals	8			
Harbor Dredging	6	12		
Boat Operations	16	24		
Recreation	8	24	4	
Hazardous Materials Spills	8	16	4	
Solid & Hazardous Waste Disposal	8	16	4	
Hazardous Materials Sites	12	24	4	
Unauthorized Activities	4	12	4	
Tidal Erosion	4	12	2	
Algal Blooms	16	4	2	
Other Misc. Sources	12	24	4	
Subtotal Task 8	250	344	68	
9. Watershed Strategies				
Identify Strategies	12	8		
Subtotal Task 9	12	8	0	
10. Prepare Report				
Preliminary Draft	60	20	16	24
Meet with Cal-Am	8	4		
Revised Draft	40	16	8	24
Meet with CDHS	12	8		
Final Report	40	16	8	16
Subtotal Task 10	160	64	24	48
11 Project Management				
Team Meetings and Calls	60	60		
CDHS Meeting	8	4		
Subtotal Task 11	68	64	0	0
Total Hours	730	668	112	48
Hourly Rate	150			
Cost	109500			

Direct Costs, \$  
Archibald  
Consulting RBF

Travel	2,400	
Report Reproduction		400

# **ATTACHMENT 13**



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, California, on this date of March 7, 2006 by and between RBF Consulting ("Consultant") and Denise Duffy & Associates, Inc. ("Subconsultant").

Attention: Larry Gallery, Senior Vice President

Project: Coastal Water Project - Focused Survey

Description of Subconsultant's Services: Environmental services based on the attached scope of services and budget, including the following:

Meetings; Habitat Assessment Report; Protocol Level Surveys for State and Federally Listed Wildlife Species; Floristic Survey; and Wetland Delineation.

Subconsultant Fee: Not-to-Exceed total of \$149,690, to be billed on a time-and-materials basis, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: [Signature] (Signature)

Lawrence E. Gallery (Type/Print Name)

Senior Vice President (Title)

Date: 4-5-06

RBF Job No: 70-100045, Task 11

Denise Duffy & Associates, Inc.

SUBCONSULTANT By: [Signature] (Signature)

Denise Duffy Josh Harway (Type/Print Name)

Associate Environmental Scientist (Title)

Date: 4/5/06

P.O. No: # 21027 4413

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## GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
  - (a) Workers' Compensation and Employer's Liability as required by the laws of the State of California.
  - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
  - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
  - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
  - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials

Consultant Initials

Handwritten initials in black ink, appearing to be "JH" or similar, written over a horizontal line.



**Denise Duffy & Associates, Inc.**

PLANNING AND ENVIRONMENTAL CONSULTING

February 24, 2006

Jim Brezack  
RBF Consulting  
3180 Imjin Road  
Marina, CA 93933

*Subject:* Coastal Water Project Biological Resources Inventory Surveys Scope of Work, Budget, and Schedule

Dear Mr. Brezack:

Thank you for providing Denise Duffy & Associates, Inc. (DD&A) with the opportunity to provide environmental services for the Coastal Water Project. Attached please find a scope of work and budget that includes the following services which are based on materials provided by RBF, a review of the CNDDDB, and one preliminary site visit:

- Meetings
- Habitat Assessment Report
- Protocol Level Surveys for State and Federally Listed Wildlife Species
- Floristic Survey
- Wetland Delineation

DD&A has extensive expertise with the biological resources of the Monterey Bay Region and has an excellent working relationship with local representatives of relevant regulatory agencies. Denise Duffy & Associates is, therefore, especially qualified for this project.

#### **Overview of DD&A Advantages**

DD&A has been involved with projects in the Monterey Bay Region for over 22 years. As a result, DD&A is already extremely knowledgeable of the regulatory issues and constraints in the area. DD&A understands the purpose and need for the project and recognizes the requirements of the resource agencies that need to be addressed. Utilizing our local project experience and extensive background with the numerous special-status plants and wildlife species involved in the project, DD&A can provide the biological services required to complete the environmental review process.

- ❖ DD&A's office is located in *Monterey* which is highly beneficial to the project. Assistance by Natural Resources Division staff is only a few minutes away, and can be available for meetings or field work at a *moment's notice*, saving time and money.
- ❖ DD&A has been involved with numerous *water supply and distribution projects*, as well as the *redevelopment of the former Fort Ord*, for the last *20 years* and is politically astute.
- ❖ DD&A team members hold all of the requisite state and federal permits to conduct the necessary protocol level surveys for the project.
  - Federal Recovery Permit TE-091857-0 for California tiger salamander
  - Federal Recovery Permit TE-768251-9 for California red-legged frog and Santa Cruz long-toed salamander
  - State Scientific Collection permit 801129-04 for:
    - Mammals
    - Reptiles
    - Amphibians
    - Freshwater fishes
    - Freshwater/terrestrial invertebrates
- ❖ DD&A has competent, experienced staff *immediately available* to begin and complete the species-specific surveys that may be required to successfully complete the project.
- ❖ DD&A's *Natural Resources Division* has an extensive background with the *flora and fauna of the Monterey Bay region* and has experience with every special-status species identified within the background documents for the project.
- ❖ DD&A maintains *excellent relationships* with USFWS, CDFG, and other resource agencies.
- ❖ DD&A is highly knowledgeable of the *complex regulatory process* associated with the project and ESA compliance.
- ❖ DD&A has worked well with *RBF Consulting* on numerous projects in the past.

DD&A provides a variety of biological services from conducting protocol level surveys for special-status species to the preparation and acquisition of and state incidental take permits. The following list of projects exemplifies DD&A's local, comprehensive experience with biological resources in the region:

- **Biological Assessment for the MCWD Regional Water Augmentation Project EIR.** This biological analysis was conducted at a programmatic and project level for the proposed Recycled Water Pipeline and expansion of the existing MCWD Desalination Plant. The proposed pipeline alignments are very similar to those proposed for the CWP Project. Biological resources analyzed included many special-status coastal dune plant species, wetlands, California tiger salamander, black legless lizards, Smith's blue butterfly, and western snowy plover.

- **RSC Protocol Level California Tiger Salamander and California Red-legged Frog Surveys and Section 10 Consultation.** DD&A is currently engaged in the fourth year of an on-going study to document the distribution of CTS and CRLF throughout the 20,000 acre Santa Lucia Preserve in Carmel Valley, CA. Drift fence studies have been conducted at 9 ponds and aquatic surveys at 26 ponds. The results of this study will be used as baseline documentation for Habitat Conservation Plan efforts underway in satisfaction of Section 10 of the Endangered Species Act. DD&A's project manager, Josh Harwayne, has acted as staff contact and biological liaison with the permit applicant and the Ventura office of U.S. Fish and Wildlife Service (USFWS) during this process.
- **Marina Heights CDFG 2081 Incidental Take Permit.** DD&A worked with the project proponent to successfully obtain an incidental take permit in compliance with the state Endangered Species Act for sand gilia. DD&A's Project Manager, Erin Harwayne, was the primary biology consultant facilitating the formal consultation process with the California Department of Fish and Game (CDFG) that resulted in the issuance of the permit. Mitigation included the preparation of a comprehensive restoration plan that detailed the creation of 23 acres of new habitat for the state and federally listed species.
- **National Refractory Wetland Delineation Project.** DD&A conducted a wetland delineation of the 200-acre Refractories site in Moss Landing, CA. The delineation was performed according to the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE 1987), and using the one-parameter approach in areas within the Coastal Zone. A delineation report was prepared and submitted to the project proponent. Calculations of wetland area present in the project area were provided.
- **Biological Assessment for the First Tee Project, City of Seaside.** This project proposed a golf course within the former Fort Ord. DD&A provided a comprehensive habitat map for the 120-acre site, as well as focused botanical surveys for sand gilia, Monterey spineflower, and other special-status plant species.
- **EIR and EIS for the Fort Ord Habitat Conservation Plan.** DD&A is currently contracted by FORA and the USFWS to complete the environmental documentation for the base-wide incidental take of and state listed plant and wildlife species, including California tiger salamander, western snowy plover, sand gilia, Seaside bird's beak, and Smith's blue butterfly.
- **Biological Assessment for the Marina Station Project.** DD&A is currently contracted with the City of Marina to prepare an EIR for this project, as well as a biological impact assessment. DD&A is conducting protocol level surveys for California tiger salamander in coordination with the USFWS, project applicant, and property owner.
- **MCWD Tanks Design and Improvements Project.** DD&A is working with RBF and the MCWD to prepare the environmental documentation (EA/IS) and biological assessment for this project. Biological resources include California tiger salamander and Monterey spineflower.

DD&A provides full-service environmental services and employs technical staff with expertise in all fields of permitting, including biological assessments, permitting for ESA issues, and restoration. The Natural Resources Division (NRD) of DD&A consists of Environmental Scientists, Botanists, and Wildlife Biologists with over 30 combined years of experience specializing in biological assessments, wetland and riparian evaluations and delineations, mitigation monitoring, riparian restoration and enhancement, coastal and marine ecology, rare plant surveys, hydrologic assessments, and water quality sampling and analyses.

The NRD is adept at permit application preparation and the permit acquisition process, with a proven track record of effective and timely coordination with regulatory agencies. The NRD has an established rapport with regulatory agencies, including the USFWS, National Marine Fisheries Service (NOAA Fisheries), USCOE, CDFG, and the Regional Water Quality Control Board (RWQCB).

Please note that DD&A's preferred approach in regard to coordination with the relevant regulatory agencies will be to assume presence for a number of wildlife species and thereby reduce the need for field surveys and associated costs. However, in the case that specific surveys are required, DD&A has assemble a team that is qualified to conduct all wildlife surveys that may be required. DD&A contracts with local experts for specialized services needed on a project by project basis. DD&A is proposing to team with Biosearch Associates, Central Coast Bat Research Group, and Hagar Environmental Science for protocol wildlife surveys that may be required by the relevant regulatory agencies. Below is a brief description of these subconsultants.

**Biosearch Associates**, formerly Biosearch Wildlife Surveys, was established in 1990 by David Laabs and Mark Allaback to study rare and endangered species for clients that require assistance with federal, state and local environmental regulations. Both principals have over 18 years of experience as professional wildlife biologists and environmental consultants in California. They are familiar with the natural history, behavior and habitat associations of special-status amphibians, reptiles, birds and mammals throughout California. They follow current survey protocols and employ standardized methodologies endorsed by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) to detect special-status species and identify potential habitat. They analyze habitat suitability, perform impact assessments, and design and implement mitigation and monitoring plans. Federal and state resource agency personnel are consulted during all phases of project planning and implementation.

**Central Coast Bat Research Group** has worked with California bats for nine years. The group has worked on numerous projects across the state. Paul Heady began the bat ecology consulting business in 1998, which became the Central Coast Bat Research Group in 2000. Heady has extensive experience working with all aspects of bat research, including structure surveys, bat capture and handling (including wing-punching and banding), acoustic sampling and analysis, and radio tracking. He has performed a number of diverse projects, including numerous bridge and structure surveys requiring mitigation recommendations and action, as well as sensitive species surveys and multi-year bat inventory surveys. Paul Heady holds a level 3 Memorandum of Understanding with the California Department of Fish and Game, which permits him to live-capture, identify, mark, equip with wing bands, or apply radio-transmitters to California bat species. Winifred Frick is authorized on Heady's MOU to work unsupervised in the above capacities.

**Hagar Environmental Science** provides information, analysis, and research services to water resource agencies, utilities, public agencies, environmental organizations, and private clients. Our primary areas of activity are consulting on fisheries and aquatic issues as they relate to water resource development and

Coastal Water Project

February 24, 2006

Page 5

management. Jeff Hagar has worked since 1985 as a fisheries consultant in California. Services include biological surveys such as population abundance and habitat characterization, fish passage assessment and remediation, special studies in fisheries, development of resource management and restoration plans, permitting of habitat restoration and passage improvement projects, preparation of NEPA and CEQA documentation, and endangered species act compliance. Mr. Hagar is permitted to by the U.S. Fish & Wildlife Service under an Endangered Species Act recovery permit (permit TE-089980-1) to conduct scientific studies involving tidewater goby (*Eucyclogobius newberryi*) throughout its range. Mr. Hagar has conducted studies to document occurrence and distribution of tidewater goby in the project vicinity including the Salinas River, San Lorenzo River, and Laguna Creek.

Based on demonstrated expertise with the local resources and regulatory environment, DD&A is especially qualified for this project.

Sincerely,

Josh Harwayne, Associate Environmental Scientist/Project Manager  
DENISE DUFFY & ASSOCIATES, INC.

## INTRODUCTION

Denise Duffy & Associates, Inc. (DD&A) is pleased to submit this work scope, budget, and schedule for the Coastal Water Project. The goal of the proposed scope is to identify and document sensitive biological resources that have the potential to be impacted by the proposed project and facilitate the informal consultation process with USFWS, NOAA Fisheries, and CDFG. This scope does not include tasks associated with formal Section 7 consultation, such as the preparation of a Biological Assessment.

The approach to meeting the stated goal is to conduct the necessary research and field surveys to accurately document and map, using GIS overlays, all relevant biological resources within, and potentially affected by, the proposed project implementation. DD&A has reviewed the programmatic level biological document prepared for the project by H.T. Harvey and Associates, as well as, conducted a site visit of the proposed alignment. DD&A has a comprehensive understanding of the special-status species potentially affected by the project and the applicable species specific presence/absence survey protocols. However, because of the accelerated timeline for the preparation of this proposal and the survey work which needs to begin this season, no coordination has been conducted with any of the relevant regulatory agencies at this time. As a result, the scope and budget presented below is the anticipated survey effort required by regulatory agency staff. While this estimate is generated by a thorough analysis of existing documentation, regulatory standards, and specific habitat resources, the exact level of survey effort and documentation necessary to facilitate project permitting and environmental documentation will be a result of coordination with USFWS, NOAA Fisheries and CDFG. This is especially true for the California Tiger Salamander which requires a two year survey effort. DD&A has assumed that a limited survey effort will satisfy USFWS for this project and that the assumption of presence in the northern and southern portions of the project alignment will be the appropriate and accepted approach for this species. The scope and budget presented below reflects this limited effort for this species. Specifically, it is assumed that the USFWS will require that one site in the northern portion of the project alignment will require a full protocol effort. If the USFWS requires additional surveys, it will be considered out-of-scope work and require an amendment to our contract.

The following work plan to be performed by DD&A is based on our review of the materials provided by RBF Consulting, DD&A's understanding of existing local biological resources and the regulatory process, and a site visit of the proposed alignment. Although not included as separate tasks, all deliverables will be prepared in draft form and submitted to the client, appropriate agency, or stakeholder for one round of coordinated comments. Final draft documents will then be prepared.

### Task 1. Meetings

The task consists of early and frequent coordination with the regulatory agencies, relevant responsible agencies, and stakeholders. Meetings will facilitate informal consultation with the agencies early in the process to assure that all the issues are addressed and that needed data is identified and is collected under approved protocol. It is essential that biological studies needed to support the project are well-coordinated to support not only the preparation of required documentation for the formal consultation process, but also, all other regulatory and entitlement permitting processes in addition to CEQA and NEPA.

### Task 2. Site Assessment Report

This task consists of conducting research and field work sufficient to prepare a multi-species Site Assessment Report according to USFWS and NOAA Fisheries guidelines that would be submitted in solicitation of guidance as to the necessity for protocol surveys to establish presence/absence for the relevant species in the

vicinity of the project. The report would include an assessment of listed species locality records and potential habitat in and around the project area. Based on the information provided in the Site Assessment Report, the Service will provide recommendations as to the appropriateness of field surveys. Federal protocol recommends that surveys should not be initiated until recommended by the USFWS and NOAA Fisheries and that surveyors consult with the USFWS biologists on their study design before beginning work. This coordination is critical to ensure that the results of the Site Assessment and field surveys will be considered valid by the regulatory agencies and are sufficient to facilitate subsequent formal consultation.

**Task 3. Protocol Level wildlife Surveys**

The goal of this task is to determine if any state or federally listed species would be affected by any given project element. To accomplish this goal, surveys will be conducted at the specific project site (following standard USFWS, NOAA Fisheries, and CDFG protocols) if potential habitat for any listed species could be affected by project implementation. If it is determined that any state or federally listed species are present, formal consultation with the USFWS, NOAA fisheries, and CDFG may be necessary. DD&A was not specifically requested to prepare any additional permits or facilitate the formal consultation process with the relevant resource agencies and, therefore, this task does not include the acquisition of a 1602 Streambed Alteration Agreement from CDFG, a Section 404 Individual Permit from USACE, a Section 401 Certification from the RWQCB, or the preparation of a Biological Assessment for the federal consultation process.

Please note that the exact scope of wildlife surveys that will be required as a result of the regulatory review and evaluation of the Site Assessment Report is not known at this time. The description of surveys to be performed within this scope and budget are based on existing project documents, our understanding and experience with the regional regulatory environment, and one preliminary field visit of the proposed project alignment. If any of the relevant regulatory agencies determines that additional surveys are required, an amendment to the contract would be required.

**Task 4. Floristic Survey**

This task consists of conducting floristic surveys of all suitable habitats for special-status plants and their required habitat constituent elements. The survey effort would consist of multiple site visits as necessary to allow for species identification during appropriate blooming periods for relevant species. The survey effort would cover all upland vegetative communities within the project area and a 50-foot buffer. All special-status plant species identified will be mapped using GIS.

**Task 5. Wetland Delineation**

This task consists of preparing a wetland delineation using the USACE Wetland Delineation Manual (USACE 1987), and the one-parameter approach in areas within the Coastal Zone. A delineation report shall be prepared and submitted to the USACE and CCC for verification. Through this process, final calculations of wetland area present in the project area will be obtained for project permitting. The delineation effort would cover the project area and a 50-foot buffer. All potential jurisdictional areas identified will be mapped using GIS.



*Coastal Water Project Biological Resources Inventory and  
Informal Consultation Scope and Budget*

**BUDGET**

The costs per task to provide the described services are detailed in the attached spreadsheet. The total budget of \$149,690. is a not-to-exceed total and is to be billed on a time-and-materials basis.

General Assumptions: The budget is based on completing only the Tasks identified in tasks 1 through 5, and will require an amendment if out-of-scope work is requested.

**SCHEDULE**

DD&A will initiate the preparation of deliverables within seven days of authorization to proceed. It is critical to note that the schedule for individual tasks is sometimes dependent on the review and response time of the USFWS, NOAA Fisheries, and CDFG. The table below assumes a two week turn-a-round review period for all deliverables from responsible agencies and a start date of March 1, 2006.

	<b>Task</b>	<b>Duration</b>	<b>Date</b>
1	Meetings	On-going	
2	Site Assessment Report	15 days	March 15 2006
3	Protocol level Surveys	24 months	March 2006 - April 2008
4	Floristic Survey	6 months	April 2006 - October 2006
5	Wetland Delineation	45 days	May 2006 - June 2006

Budget for Coastal Water Project Biological Inventory and Informal Consultation

DENISE DUFFY & ASSOCIATES										
TASKS #	Task Description	Denise Duffy, Principle	Josh Harwayne, Project Manager	Associate Environmental Scientist	Assistant Environmental Scientist	Graphics	Clerical	Task Total		
		Rate								
1	Meetings	\$175	\$115	\$85	\$75	\$85	\$65			
2	Site Assessment Report	10	75	15			10	\$12,200		
3	Protocol Level Wildlife Surveys		10	20	140	10	10	\$14,750		
4	Floristic Survey		75	150	150	40	20	\$37,125		
5	Wetland Delineation		10	20	150	50	10	\$18,900		
	Project Management	12	35	10	130	50	10	\$17,700		
	Total DDA hours by person	22	225	215	570	150	60	\$6,125		
	Total DDA cost by person	\$ 3,850	\$ 25,875	\$ 18,275	\$ 42,750	\$ 12,750	\$ 3,300	\$ 106,800		

Subconsultants and Expenses	
Expenses	
Mileage	\$1,650
Reproduction	\$750
Equipment	\$3,500
Phone, fax, postage	\$250
Subconsultants	
Biosearch Associates	\$21,000
*Central Coast Bat Research Group	\$2,650
*Hagar Environmental Science	\$1,750
Study Installation Labor	\$8,000
10% Administrative fee for subconsultants	\$3,340
Total Expenses	\$42,890

TOTAL COST \$149,690.00

\* These are estimates made based on the assumed level of survey effort that will be required by the relevant regulatory agencies. The actual survey effort required may be greater. If so, an amendment to the contract will be necessary.

**ATTACHMENT 14**

2 - 101919  
Doc 10.14.2005

~~70 160829~~



LETTER OF TRANSMITTAL

RECEIVED  
SEP 20 2005  
RBF-Monterey

DATE: September 20, 2005  
To: Lawrence E. Gallery, P.E.  
RBF Consulting  
3180 Omjin Road, Room 104  
Marina, CA 93933

THE FOLLOWING ITEMS ARE ENCLOSED:

NO. OF COPIES	DESCRIPTION
1	Task Order (M0530) Coastal Water Project Pilot Plant Facility Installation

*If items are not received as listed, please notify sender*

REMARKS:

The Task Order attached is a final copy with all required signatures for your records.  
If you have any questions once you receive this please feel free to contact me at (916) 568-4215.

Thank you,

Christy Kennedy  
Engineering Coordinator – Engineering

ENGINEERING DEPARTMENT  
4701 BELOIT DRIVE  
SACRAMENTO, CA 95838  
916-568-4215 | FAX 916-568-4286  
[Christy.Kennedy@amwater.com](mailto:Christy.Kennedy@amwater.com)



**TASK ORDER  
AGREEMENT FOR LIMITED PROFESSIONAL SERVICES BETWEEN  
CALIFORNIA AMERICAN WATER  
AND  
RBF CONSULTING  
FOR  
COASTER WATER PROJECT PILOT PLANT FACILITY INSTALLATION**

Article II - Scope of Services shall be modified as follows:

Professional engineering services more specifically described by ATTACHMENT No. 1 to this Task Order, RBF Consulting dated July 20, 2005.

Article IV - Schedule for completion of this Task Order as described per the attached Contract Proposal dated July 20, 2005.

Article VIII - Payment shall be amended to include the payment for this Task Order by a not to exceed amount of \$129,253.00, per the attached Contract Proposal dated July 20, 2005. Consultant shall subdivide invoices by each of the subtasks as identified in the proposal.

All other articles of the March 19, 2004 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 Aug 29, 2005  
John Klein

CONSULTANT  
RBF Consulting

By Laraine E. Dley  
Title se vice president  
Date 9-5-05

OWNER  
California American Water Company

By Judith A. Schmidt  
Title Director, Engineering  
Date 9/16/05

**Memorandum**

Date: August 23, 2005  
From: John Klein *JK*  
To: Fred Feizollahi  
Cc: Fred Schneider  
Subject: Contract Task Directive Recommendation, Scope of Work for RBF Coastal Water Project Pilot Plant Facility Installation, IP Numbers 05400410, 05400411, 05400412

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**Summary:** This memo is to award the contract to provide engineering services for the installation of the CWP pilot plant facility (PPF) at the Duke Energy Moss Landing Power Plant (MLPP).

**Recommendation:** The recommendation is to award the contract for the PPF installation to RBF.

**Discussion:** CAW solicited proposals from four engineering firms to provide services to support the installation of the CWP pilot plant facility (PPF) at the Duke Energy Moss Landing Power Plant (MLPP). The work included in the scope:

1. Prepare PPF design installation package
  - Prepare plans and specifications for installing the PPF on Duke Energy MLPP site.
  - Includes civil/mechanical/electrical
  - Coordination with Duke
2. PPF installation support
  - Supervise PPF installation at MLPP
  - Provide 3 personnel with the following skills: Project Manager, mechanic, electrical/instrumentation.

All four firms responded and the proposals were evaluated and ranked for the technical and commercial criteria according to CAW Guidelines for Evaluation of Proposals. The results of the overall scoring are:

<u>Firm</u>	<u>Overall Score, %</u>
• Bestor Engineers, Inc:	59
• HDR	85
• RBF Consulting	88
• American Water Pridesa	No Bid

---

Overall, the proposal submitted by RBF represents the best value to the company and the ratepayers.

**Cost:** The cost for RBF to perform the scope of work is:

<u>Task</u>	<u>Labor, Subs. and ODCs</u>
PPF Design Package	\$50,342
PPF Installation Support	\$78,911
<b>Total</b>	<b>\$129,253</b>

**Deliverables:**

<u>Task</u>	<u>Deliverable</u>
PPF Design Package	Design Package
PPF Installation Support	Daily reports

**Schedule:** Complete scope of work to provide deliverables by December 31, 2005.

**Attachments:**

1. RBF technical and commercial proposals dated July 20, 2005



July 20, 2005

JN 70-100029.999

John Klein, P.E.  
 Senior Operations Engineer  
 California American Water  
 50 Ragsdale Dr., Ste. 100  
 Monterey, CA 93940

**SUBJECT      PROPOSAL FOR THE COASTAL WATER PROJECT (CWP) PILOT PLANT FACILITY  
 INSTALLATION DESIGN, CONSTRUCTION SUPERVISION, OPERATION AND  
 MAINTENANCE**

Dear John,

As this project will be designed, installed, and operated concurrently with the CPUC EIR process as well as other ongoing Coastal Water Project activities, we see great advantages to CAW to utilizing RBF for this important project:

- The RBF team has specific Coastal Water Project experience and is familiar with all of the background and vital importance of the Pilot program;
- RBF is currently working closely with CAW on several other aspects of the PPF. Having RBF take on PPF installation and operation will maximize efficient and timely prosecution of the Pilot Plant program;
- RBF has consistently demonstrated timely completion of CWP assignments and deliverables, and is a "team player" on every aspect of the CWP;
- RBF is very conscious of the need for CAW to maintain competition for future equipment procurement activities. Retaining RBF for this assignment will maintain an arms-length relationship with potential equipment suppliers.

On behalf of the Project Team, we appreciate the opportunity to submit this proposal to CAW and are available to begin this priority work effort immediately. Please do not hesitate to contact me at (831) 883-8187, or our Project Manager, Mr. Paul Findley, P.E., at (858) 614-5005, if you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Lawrence E. Gallery'. The signature is written in a cursive, flowing style.

Lawrence E. Gallery, P.E.  
 Senior Vice President

cc: Paul Findley

H:\Pdata\70100029\Cover letter.doc





## Section 1: Experience and Qualifications

### Firm Overview

RBF is celebrating our 61<sup>st</sup> anniversary of continuous operation. We are a multi-disciplined firm offering Cal-Am a wide range of services and state of the art resources to perform the required work tasks.

**RBF has Extensive Experience in Monterey County.** We are currently working on a variety of projects in Monterey County, including the PEA for the Coastal Water Project. In terms of additional water related projects, RBF has worked closely with the Marina Coast Water District, providing a broad range of engineering and

feasibility studies including evaluating water supply alternatives including a 3.0 mgd ocean desalination plant, investigating water conservation Best Management Practices (BMP) options, and providing recycled water to the former Fort Ord Army Base, the City of Marina, and surrounding communities. In addition to having evaluated alternative recycled water pipeline alignments at the former Fort Ord Army Base, RBF is currently providing professional environmental services to evaluate the reuse plans for the East Garrison Project.

RBF Employees:	900
Offices:	13 throughout CA, AZ, and NV
ENR Ranking:	Ranked No. 69 Nationwide
Financial Stability:	Strong; nearly 10% growth rate each year for the last five years.
Number of Water Treatment Projects	Over 40
Large Scale Project Deliveries:	Over ten \$100,000,000 projects in the last five years.

### Representative Projects Summary

RBF is a leader in the field of water resources engineering and provides the full range of professional services from analysis, concept through design, and construction support services. RBF has proven experience in developing practical and cost effective solutions to water resources design challenges, and is an innovator of creative ideas in the planning, financing, design, and construction of water treatment facilities.

RBF's water quality and treatment design experts utilize the latest technology for treatment design including pressure filters, nanofiltration, reverse osmosis and other alternatives. Services include evaluation of water sources, development of alternative unit processes, plant siting, and preliminary design. Final design of new or upgraded water filtration facilities (including membranes), and process control and instrumentation can also be provided. RBF can provide planning and design solutions for water and wastewater treatment, and water reclamation projects. Initial studies can include process and facility feasibility studies and master plans, identification of regulatory constraints, and environmental impacts. Preliminary and final design of unit processes, site selection, permit processing, and assistance in regulatory issues can also be provided.

The RBF Team has extensive relevant experience in the implementation of large-scale water resources projects involving multiple agencies and complex environmental and design issues. Our experience is extensive for water treatment pilot plants and includes:

- ❖ California American Water Arsenic Well Head Treatment Facilities \*
- ❖ Manganese Treatment Facility, California Rehabilitation Center; Norco \*
- ❖ El Segundo Treatment Plant \*





- ❖ Arlington Desalter Enhancements Project; Riverside County \*
- ❖ Chino I Desalter Expansion and Chino II Desalter Projects; Riverside & San Bernardino Counties \*
- ❖ Beverly Hills - Reverse Osmosis Water Treatment Plant
- ❖ Big Creek and Second Garrote Water Treatment Facilities
- ❖ Chiquita Wastewater Treatment Plant
- ❖ Harding Canyon Filtration Plant \*

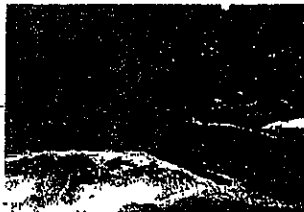
\* includes pilot plant operation and/or coordination

For the Chino I/II Desalters and the Arlington Desalter, RBF was involved in the preparation of preliminary design plans and CEQA documents on extremely aggressive schedules in order to meet strict Proposition 13 funding deadlines (over \$100 million for the two projects). This required creativity, flexibility, and the resources, experience and staff commitment to rapidly respond to numerous issues throughout the process.

### Detailed Project Experience

RBF believes that client satisfaction and repeat client base can measure demonstrated excellence of a firm. We are proud of our record of 85 percent repeat clients, which increases year after year. Our clients themselves provide a more visible testimony of our demonstrated competence. As requested in the RFP, we are providing three similar reference projects that RBF has performed in the last five years. We invite you to contact our past clients as outlined in the following table:

PROJECT NAME / DESCRIPTION	SIZE / FEATURES	REFERENCE / COST / FEE
<p><b>PROJECT #1</b>  <b>Coastal Water Project</b>            Monterey County, CA</p> <p>California American Water (CAW) is required to replace 10,730 acre-feet/year pumped from the Carmel Valley Aquifer with a new water supply source as a result of State Water Resources Control Board Order 95-10. To accomplish this, CAW is moving forward in the planning, permitting and engineering of a seawater desalination project called the Coastal Water Project (CWP). RBF Consulting is preparing the Proponent's Environmental Assessment (PEA) and providing permitting and preliminary engineering for the CWP.</p> <p>The CWP consists of an 18 million-gallon per day Desalination Plant near the Duke Energy Moss Landing Power Plant, conveyance pipelines, aquifer storage and recovery facilities, and related facilities. This \$250 million project will include two booster stations, 24 miles of pipelines, and two reservoirs. A significant portion of the 36-inch diameter conveyance pipeline will be constructed along the former Southern Pacific Railroad alignment that was acquired by the Transportation Agency for Monterey County last year.</p>	<ul style="list-style-type: none"> <li>&gt; 18 million-gallon per day Desalination Plant</li> <li>&gt; Conveyance pipelines, aquifer storage and recovery facilities, and related facilities.</li> <li>&gt; Two booster stations, 24 miles of pipelines, and two reservoirs.</li> <li>&gt; Extensive community involvement process.</li> <li>&gt; Proponent's Environmental Assessment (PEA) and providing permitting and preliminary engineering for the CWP.</li> </ul>	<p>California American Water Company            50 Ragsdale Drive            Suite 100            Monterey, CA 92942            Mr. Steve Leonard            831/646-3214</p> <p><b>Cost:</b>            \$250,000,000  <b>Fee:</b>            \$4,000,000  <b>Completion Date:</b>            Ongoing</p>



The PEA is envisioned to serve as the project's EIR and will address all Impacts for compliance with CEQA requirements. The PEA includes a comprehensive range of engineering and technical studies. The preliminary design tasks will define the CWP's processes, systems,





PROJECT NAME / DESCRIPTION	SIZE / FEATURES	REFERENCE / COST / FEE
----------------------------	-----------------	------------------------

facilities, structures and transmission lines to a level that can be used to quantify and qualify the information needed for the environmental assessment, cost estimates, and detailed design phase. The CWP includes an extensive community involvement process. Over 50 public meetings have been held during the initial phase of the project and community outreach will occur for the duration.

**PROJECT #2**  
**Arlington Desalter Enhancements Project**  
 Riverside County, CA

RBF provided engineering services to the Santa Ana Watershed Project Authority (SAWPA) for the Arlington Desalter Enhancements Project. Services included: expansion and upgrade of an existing desalter facility; and design of water distribution facilities, including pump stations and pipelines.

The Arlington Groundwater Basin is degraded by high concentrations of nitrate and salts, and has the potential for impacts to structures due to rising groundwater. The Arlington Desalter, which was originally constructed in 1990 to produce non-potable water for the purpose of groundwater cleanup, will be upgraded to provide potable water service to multiple communities in the basin, including the City of Norco.

- > Expand the existing Arlington Desalter in the City of Riverside from 5.0 mgd to 10.0 mgd by expanding the existing reverse osmosis system.
- > 20 miles of 36-inch pipe
- > Reservoir

Santa Ana Watershed  
 Project Authority  
 11615 Sterling Avenue  
 Riverside, CA 92503  
 Mr. Eldon Horst  
 951/785-6478

**Cost:**  
 \$20,000,000

**Fee:**  
 \$2,000,000

**Completion Date:**  
 2004



**PROJECT #3**  
**Chino I Desalter Expansion and Chino II Desalter Projects**  
 Riverside and San Bernardino Counties, CA

RBF provided engineering services to the Chino Basin Desalter Authority (CDA) for the Chino I Desalter Expansion and Chino II Desalter Projects. Services include: design of a new desalter facility; expansion and upgrade of an existing desalter facility; design of groundwater wells; and design of water distribution facilities, including pump stations, and pipelines. The new and expanded desalters, which include the Chino I Desalter and the Chino II Desalter, will remove nitrate and salts from the degraded groundwater basin and provide potable water to cities and agencies in the southwesterly region of the Inland Empire, including Jurupa Community Services District, City of Chino, City of Chino Hills, City of Ontario, Santa Ana River Water Company, and the City of Norco.



- > Expand the Chino I Desalter from an 8-mgd facility to a 11-mgd facility by adding a new Ion Exchange treatment facility in parallel with the existing Reverse Osmosis treatment facility;
- > Construct a new 10-mgd Chino II Desalter using Reverse Osmosis and Ion Exchange treatment in parallel;
- > Construct 13 additional source wells and a raw water conveyance system to deliver untreated groundwater from the Chino Basin to both the Chino I and Chino II Desalters; and
- > Construct product water storage, pumping, piping, and turn-out metering facilities required to deliver product water to contracted purchasers and water users.

Chino Basin Desalter  
 Authority  
 11201 Harrel Street  
 Mira Loma, CA 91752  
 Mr. Craig Parker  
 909/993-1695

**Cost:**  
 \$60,000,000

**Fee:**  
 \$8,000,000

**Completion Date:**  
 2005





## Section 2: Technical Approach

### Project Understanding

California American Water (CAW) operates a potable water system that currently serves approximately 13 to 14 mgd of water to the Monterey Peninsula. The current sources of supply for this system are wells in the Carmel Valley Aquifer and in the Seaside Aquifer. However, approximately 9.6 mgd from the Carmel Valley Aquifer must be replaced, under Order 95-10. Additionally, CAW desires to reduce its take from the Seaside Aquifer by approximately 0.9 mgd. Years of studies have led to the proposal that this replacement supply must be replaced, on an urgent basis, by a seawater desalination plant near the Moss Landing Power Plant (MLPP) and a Aquifer Storage and Recovery system in Seaside.

The proposed Coastal Water Project includes a 10 mgd seawater desalination plant to be located near Moss Landing. This proposed plant will receive approximately 23 mgd of spent cooling water from Duke Energy's MLPP, desalt the water using reverse osmosis, and return approximately 13 mgd of brine to the cooling water system, where it will be combined with the remaining spent cooling water and discharged to Monterey Bay through the MLPP's thermal outfall.

A pilot plant is required to verify the treatability of MLPP cooling water, as well as several engineering assumptions that have been made in the PEA and the conceptual design report (e.g., recovery percentage, operating pressure, etc.) The State Health Department requires 12 months of pilot plant operation to demonstrate that the proposed process will produce water that meets the Safe Drinking Water Act. Furthermore, the pilot plant has become an item of public interest, and it will demonstrate CAW's commitment to the Coastal Water Project as well as strengthen public confidence in this project. It is likely that public officials and non-governmental organizations will want to visit the pilot plant. For all of these reasons, a successful and timely pilot plant program is vital for the successful implementation of the Coastal Water Project.

### Scope of Work

The RFP references two basic items of work for the proposed Pilot Plant Facility (PPF)

- ❖ PPF installation, including design services and support services during installation by a contractor, and
- ❖ PPF operation and maintenance

These two items (Parts) of the Scope of Work are discussed below.

#### Part 1- PPF Installation

The RFP indicates that American Water-Pridessa (AWP) will be furnishing the pilot plant process equipment. Our understanding is that this includes one fine screen facility, one pretreatment process train (submerged media membrane filters by U.S. Filter), two single-pass reverse osmosis trains, a single second-pass reverse osmosis train, and chemical feed equipment. This equipment will arrive at the site in trailers (modules). The installation design work by RBF will include design of the structural supports for the modules, design of access provisions (walkways, stairs, docks, parking lot, etc.), design of service utilities (electric power, utility water), and design of tanks, pumps and piping and systems to store water and to interconnect the facilities. We have assumed that any assembly instructions within the modules





will be the responsibility of AWP, although the actual assembly work may be the responsibility of the installation contractor.

The final installation design will be based on a preliminary site design being prepared by RBF under separate agreement. An important aspect of this site design is to consider the location and height of overhead power lines at the site and associated safety issues during installation and operation of the PPF.

We understand that the following equipment is not going to be provided by AWP:

1. Laboratory/office facility;
2. Raw water equalization facilities (cooling water intake pumps, equalization tanks, equalization pumps, and associated controls);
3. Alternate pretreatment train (parallel);
4. Storage of bulk chemicals;
5. Filter wash water treatment;
6. Storage tanks for filter wash water, spent CIP solution, concentrate, or permeate;
7. Return flow pump station; and
8. Pipe and electrical conduit external to the modules.

This proposal does not include any design or installation services for the PPF laboratory/office facility and this will most likely be installed on a separate schedule (i.e., earlier). These services have been separately proposed (July 18, 2005) by RBF for a separate agreement. Electrical service is required for this laboratory/office, and RBF will be sizing this site power feed to accommodate the full PPF. Thus, electrical design associated with this proposal will be limited to design of the electrical system from a panel that will be provided by the laboratory/office installation contractor.

We have assumed that raw water equalization facilities, including the raw water connections to the cooling water system, will be designed by RBF under separate agreement (per proposal dated July 19, 2005). Thus, the raw water piping to be designed under this proposal will start at the discharge of the equalization pumps.

Although AWP will not be providing a second, parallel, pretreatment system, it is our understanding that they will provide piping connections so that this second process can be added to the facilities that they do provide. RBF strongly recommends that this second pretreatment train be included in the PPF, and this recommendation will be provided in detail if our July 19 proposal is approved by CAW. We have included installation design of this second pretreatment process, and an accompanying fine screen system, in this PPF installation and O&M proposal.

RBF's installation design proposal includes design of storage areas for bulk chemicals; design of storage tanks for filter waste wash water, permeate, concentrate, and spent CIP solution; design of the return flow pumps and piping; and design of all yard piping and electrical conduit. Our proposal does not include design of pilot waste wash water treatment facilities. It is assumed that the amount and nature of solids generated by the pilot facilities is such that they can be discharged back to the cooling water system, and that any testing of treatment strategies for this stream would be bench-scale batch testing in the laboratory.

The RFP requires a bid for 640 hours of labor associated with field assistance during PPF installation. We have provided that bid in our commercial proposal. It appears that the number of engineering assistance hours is more than adequate, assuming a competent contractor and timely delivery of the PPF from AWP and other suppliers. This allowance should also cover startup assistance. Our proposal



would be to reduce overall costs and save time by having the PPF O&M project team heavily involved in this installation and startup phase of the project.

#### Part 2- PPF Operation and Maintenance

The RFP requires a bid for 4400 hours of labor during PPF operation and maintenance. We have provided that bid in our commercial proposal. In evaluating this bid, it should be noted that the RFP scope does not include preparation of a plan of study, analysis of the data and interpretation of the results, and preparation of a final report. We have assumed that these items will be provided either by RBF under separate agreement (see our July 19 proposal), or by Pridessa, or perhaps by both in a collaborative effort.

It is important to recognize some value-added features of the RBF approach to pilot plant operations, which is to reduce overall pilot program costs through full utilization of the pilot plant staff. The RBF pilot staff will be adept at running the experiments according to exact specifications, over long time periods. In addition to being skilled in the continually required "tinkering" of mechanical, piping, and electrical components, the RBF pilot plant staff will be trained in collection and analysis of water samples from the raw water, permeate, and the various process streams. Depending on the analytical equipment and level of certification in the on-site laboratory, this could result in very significant savings in outside analytical costs. Furthermore, the on-site staff furnished by RBF will be capable of analyzing results, preparing reports, and suggesting mid-course corrections to the plan of study. The pilot plant staff will also serve as tour guides for visitors, liaise with MLPP staff, attend project public meetings and meetings with regulatory agencies when requested, and attend progress meetings.

### **Section 3: Deliverables and Schedule**

Table 1 below summarizes proposed deliverables and schedule based on the RFP. Please note that the schedule for completing item 2 is based on receiving complete drawings of PPF equipment from AWP no later than August 5, 2005. The schedule for completing item No. 3 is based on receiving CAW comments on the 'draft' submittal by September 6, 2005.

Table 1

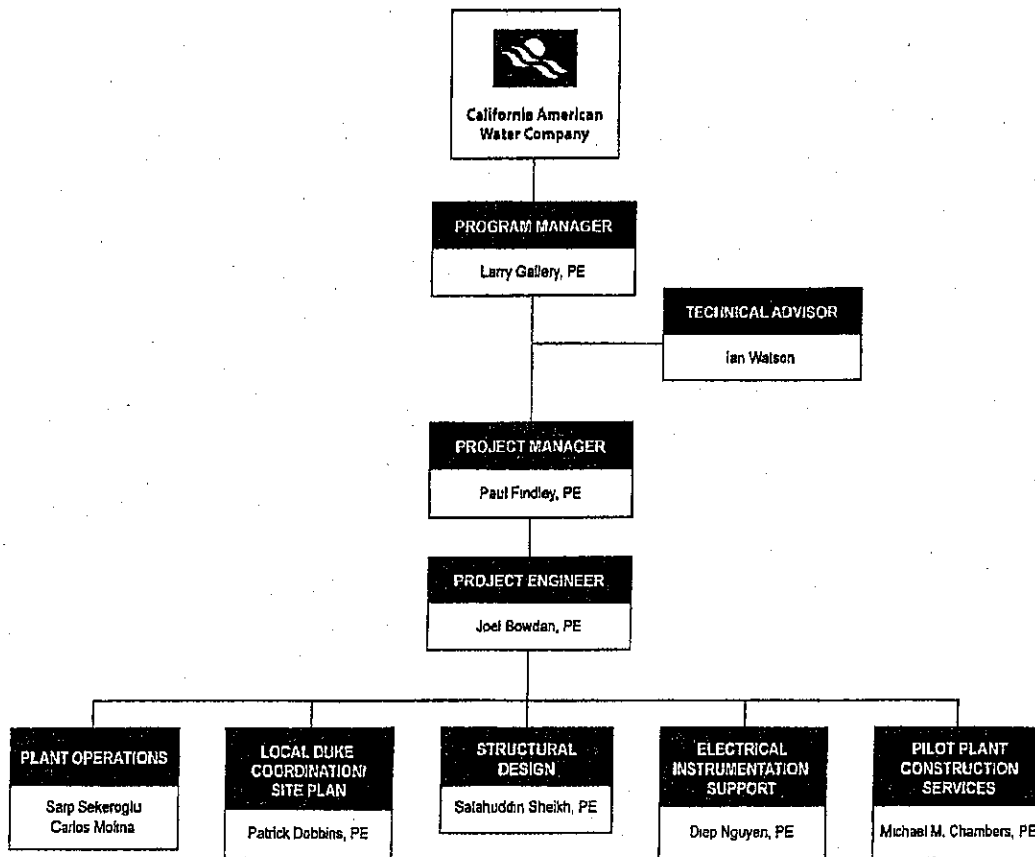
1	Contract Approval	August 1, 2005
2	PPF Design Installation Package DRAFT	August 31, 2005
3	PPF Design Installation Package FINAL	September 15, 2005
4	PPF Installation and Start Up	September - December 2005
5	PPF Operation	January - December 2006
6	PPF Monthly Reports	15 <sup>th</sup> of each month
7	PPF Final Data Report	30 days after completing PPF Operation



## Section 4: Project Team

### The RBF Team Summary

The RBF Team provides hand-picked, highly specialized personnel with a defined work history on previous similar projects. This has allowed the "experts" to establish working relationships and to confidently and thoroughly support this high-profile contract. We will be able to provide the appropriate technical expertise for each task and the depth of staff with the combined Team resources to complete the project within schedule and budget.





## Key Personnel

**Program Manager, Mr. Larry Gallery, P.E.**, has over 27 years of experience in water resources engineering, and has been responsible for the planning, design, and construction of numerous large-scale water resources facilities. Mr. Gallery is highly knowledgeable in large water desalination project facility designs and the environmental process involved. Mr. Gallery is currently serving as Project Manager for the PEA phase of the Coastal Water Project.

As an experienced Program Manager, he understands the complex issues that go beyond the hard engineering aspects of a project when multiple agencies and interests are involved and has proven his ability to effectively deal with these challenges on critical, multi-million dollar projects. Project delivery within the client's budget and schedule is always a priority and he has demonstrated his success in this area with such projects as the \$100 million Chino I Desalter, Chino II Desalter, and Arlington Desalter (Arlington is currently in operation and Chino I and II are under construction); Award-Winning \$100 million South County Pipeline (ten miles of 66- and eight miles of 48-inch diameter pipeline); and the SCC Effluent Disposal Pipeline in Jamestown (ten miles of transmission main) for the State of California.

In addition, Mr. Gallery has been integrally involved in the engineering analysis of the following desalination projects: Poseidon Seawater Desalination Facility; SDCWA Seawater Desalination Project at Encina; MCWD Urban Water Augmentation Project; South Orange County Desalination Facility; and South Orange County Desalination Plant Feasibility Studies at the Capistrano Beach and San Onofre sites.

**Project Manager, Mr. Paul Findley, P.E.** has 31 years of experience in the planning and design of municipal and industrial water, wastewater, and reclaimed water systems. Mr. Findley served as Engineering Manager for the PEA phase of the Coastal Water Project. His design experience includes water and wastewater treatment plants, water reclamation facilities, wastewater and water pumping stations, river water intake facilities, and water and wastewater utility systems for industrial plants. Mr. Findley has program management experience from a \$1.6 billion municipal wastewater program. He has prepared water quality and treatment studies; water, wastewater, and water reclamation master plans; 201 Facility Plans; industrial waste management studies; water treatment predesign and design reports; value engineering studies; and wastewater treatment plant evaluations.

Mr. Findley's recent experience includes Chino I Desalter Enhancement and Chino II Desalter, Advanced Water Treatment Plant, Water Repurification Project in San Diego (Mr. Findley was the Project officer for an 18-mgd advanced water treatment plant (AWTP), using microfiltration and reverse osmosis to treat reclaimed water produced by the City of San Diego's North City Water Reclamation Plant); and he was the primary author of the City of San Diego's Water Reclamation and Reuse Conceptual Master Plan, which developed a plan for reclaiming and reusing 70,000 acre feet per year in the San Diego Metropolitan area.

**Technical Advisor, Mr. Ian Watson** is an internationally recognized expert in the field of desalination and membrane application technology. Prior to starting AEPI/RosTek, Inc., Mr. Watson was Technical Director, Membrane Processes for a major engineering consultant. As the founder and president of AEPI/RosTek, Inc., he offers expertise in plant and pilot plant design and specifications; equipment selection; bid evaluation; trouble-shooting for startups and existing plants; refurbishing and upgrading existing plants; operation and maintenance consultation; and construction management. For the Marina Coast Water District, he participated in a feasibility study to develop process design and costs for increasing the seawater desalting capacity of an existing plant from 0.4 mgd to 2.7 mgd. Responsibilities included sizing the membrane assemblies, developing power, chemical, and maintenance costs, and assisting the prime consultant in developing the input needed for the preliminary environmental assessment.





**Project Engineer, Mr. Joel Bowdan** is an experienced civil engineer with many years of experience in planning and design of water and wastewater infrastructure facilities and treatment systems. Mr. Bowdan is responsible for project management, contract administration, design supervision, client interaction and development, and personnel management. His experience includes: pumping and piping system layout and design, water retention structures, groundwater supply and treatment design, process related design and start-up for water and wastewater systems, and hydraulic system modeling.

**Mr. Carlos Molina** is a mechanical engineer specializing in the planning and design of potable water, recycled water, and wastewater infrastructure facilities and treatment systems. He was responsible for analysis of cogenerative systems and pumping systems during the PEA phase of the Coastal Water Project. Prior to that, he had experience with the City of San Diego, Metropolitan Wastewater Department as a student engineer, where he was responsible for assisting multidisciplinary project teams that included both in-house staff and multiple outside consultants.

**Mr. Sarp Sekeroglu** serves as a staff engineer for the Coastal Water Project and his duties include analyzing the river flows for water availability studies, computer modeling of water distribution systems, estimating future water demands, estimating preliminary costs for project components and preparing preliminary engineering designs for horizontal directionally drilled wells, pipelines, pump stations and reservoirs.

**Mr. Patrick Dobbins** is a Senior Project Manager with extensive public agency experience. He has been responsible for the planning, design and administration of a variety of water systems, storm drainage, roadway, traffic signals and landscaping projects for over 25 different public agencies. His public works experience includes serving as contract Deputy City Engineer for the cities of Moorpark, Malibu, and Westlake Village.

**Mr. Salahuddin Sheikh** has three decades of experience related to water resources, public works, transportation, and environmental engineering for public and private sectors. Projects include bridges, flood control channels, water and wastewater treatment plants, reservoirs, pump stations, lift stations, culverts and encasements, soundwalls and retaining walls. Mr. Sheikh's experience also includes heavy industrial structures related to steel mills, automobile plants, chemical and petrochemical facilities and refineries, mining and material handling installations, including conveyor galleries, transfer towers, underground mine structures, and ship loading facilities.

**Mr. Diep T. Nguyen, PE**, is President and CEO of DTN Engineers, Inc. He holds a BSEE and MSEE both in power system engineering from SFSU and SCU respectively. As a licensed professional engineer (PE) in electrical, control systems and fire protection engineering disciplines, he has over 29 years of practical experience in the electrical power system design and construction of large wastewater and water facilities, airports and terminals, data processing centers, high-rise buildings, hospitals and educational institutions. His specialties are low and medium voltage ( up to 115kV) power distribution, low and medium voltage Variable Frequency Drives, Distributed Control Systems (DCS), Programmable Logic Controllers (PLC) and SCADA ( fiber optic, licensed and non-licensed radios) and software configuration. His representative clients are Contra Costa Water District, EBMUD, San Francisco PUC Wastewater and Water Divisions, Zone 7 Water Agency, South Tahoe Public Utility District, City of Hayward, City of Pleasanton, University of California - Lawrence Livermore National Laboratory etc. He is a senior member of IEEE, ISA, NFPA and is certified as a Cogeneration Professional (CCP) and as a Distributed Generation Certified Professional (DGCP) by the National Association of Energy Engineers (AEE). He also hold California electrical contractor license C-10.

**Mr. Michael M. Chambers** is a registered professional civil engineer with over 13 years experience in the field of water resources, water quality, water and wastewater analysis, hydrology studies, hydraulic modeling and design, storm and sanitary sewer design, construction inspection/management, and water quality analysis.



July 20, 2005

JN 70-100029.999

John Klein, P.E.  
Senior Operations Engineer  
California American Water  
50 Ragsdale Dr., Ste. 100  
Monterey, CA 93940

**SUBJECT      PROPOSAL FOR THE COASTAL WATER PROJECT (CWP) PILOT PLANT FACILITY  
                 INSTALLATION DESIGN, CONSTRUCTION SUPERVISION, OPERATION AND  
                 MAINTENANCE**

Dear John,

As this project will be designed, installed, and operated concurrently with the CPUC EIR process as well as other ongoing Coastal Water Project activities, we see great advantages to CAW to utilizing RBF for this important project:

- The RBF team has specific Coastal Water Project experience and is familiar with all of the background and vital importance of the Pilot program;
- RBF is currently working closely with CAW on several other aspects of the PPF. Having RBF take on PPF installation and operation will maximize efficient and timely prosecution of the Pilot Plant program;
- RBF has consistently demonstrated timely completion of CWP assignments and deliverables, and is a "team player" on every aspect of the CWP;
- RBF is very conscious of the need for CAW to maintain competition for future equipment procurement activities. Retaining RBF for this assignment will maintain an arms-length relationship with potential equipment suppliers.

On behalf of the Project Team, we appreciate the opportunity to submit this proposal to CAW and are available to begin this priority work effort immediately. Please do not hesitate to contact me at (831) 883-8187, or our Project Manager, Mr. Paul Findley, P.E., at (858) 614-5005, if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Lawrence E. Gallery". The signature is written in a cursive style.

Lawrence E. Gallery, P.E.  
Senior Vice President

cc: Paul Findley

H:\pdata\70100029\Cover letter.doc

PLANNING ■ DESIGN ■ CONSTRUCTION

3180 Imjin Road, Room 104, Marina, CA 93933 ■ 831.883.8187 ■ Fax 831.883.9967

Offices located throughout California, Arizona & Nevada ■ www.RBF.com

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## Section 1: Financial Stability and Accounting Resources

### Financial Stability

RBF Consulting is a professional planning, design and construction management consulting firm. The Firm was established in 1944 and has remained profitable. As a privately-held firm, we prefer not to disclose specific financial information regarding our company. Any inquiries as to the credit worthiness or financial condition and stability of RBF may be directed to our banking officer, Ms. Paula Harris, Vice President, Bank of America, 675 Anton Boulevard, 2<sup>nd</sup> Floor, Costa Mesa, CA 92626.

This year marks RBF's 61<sup>st</sup> year of continuous operation. RBF is a strong, financially-stable firm employing over 900 professional and support personnel in thirteen offices located throughout the West and is currently ranked 69 in ENR's Top 500 Design Firms. There are no financial or other situations that would impede RBF's ability to complete this project.

### Accounting / Billing System

RBF's complete Project Control System has evolved over years of application and testing and encompasses:

- ❖ A planned approach;
- ❖ A common database;
- ❖ Accurate and timely reporting of both capital expenditure and progress;
- ❖ Early warning system of cost and schedule deviations;
- ❖ Positive action to correct deviations; and
- ❖ Active participation by all team members

**Accounting System.** RBF utilizes the Advantage Financial Management System that provides detailed cost control reports for engineering and design assignments. This system provides reports that are organized by labor accounts and task codes to show each type of deliverable or activity for a project. In addition, a cost system has been integrated which produces reports for various levels of the engineering and accounting functions. The most detailed report identifies man-hour expenditures, by task, by labor account, and by discipline. More summary-level reports may be produced which identify man-hour and labor dollar expenditure by discipline. This system can be utilized for any type or size of assignment and not all the system must be employed to obtain the desired results.

**Billing System.** RBF captures labor costs through weekly timecard entry and posting. Our accounts payable department enters direct expenses on a daily basis. (Le. vendor invoices, subconsultant invoices, employee expense reports). The Project Manager, on a weekly or monthly basis, dependent upon project size, reviews all project costs. The Project Manager determines if all costs are appropriate for billing and submits a mark-up invoice to his/her project accountant to prepare a monthly invoice to the client.



## Section 2: Price

### Proposed Fee

This section provides RBF's proposed fee (price) for performing the scope of work presented in Section 2 of the Technical Proposal. Included are the proposed fee summary as required by Table 1 of the RFP, as well as detailed breakdowns of hours, labor cost, and other direct costs (ODC's) for each individual staff member and for each category of ODC and for each task/sub-task (Table 2).

Table 1 – Summary of Proposed Fee

Task	Quantity/Unit	Average Unit Cost <sup>1</sup>	Fixed Fee	Price <sup>2</sup>
<b>Part 1 – PPF Installation</b>				
PPF Design Package	Lump Sum	\$44,232	\$6,110	\$50,342
PPF Installation Support	640 hours	\$111.15/hr.	\$7,775	\$78,911
<b>Part 2 – PPF O &amp; M</b>				
PPF O & M Labor	4,400 hours	\$110.67/hr.	\$30,950	\$517,910
PPF Reports	Lump Sum	\$26,762	\$3,264	\$30,026
<b>Part 3 – Allowance for Unforeseen Scope</b>				
	Lump Sum	N/A	N/A	\$34,000

<sup>1</sup> Includes direct labor; fringe/overhead, and other direct costs

<sup>2</sup> (Average Unit Cost) x (Quantity) + Fixed Fee

### Cost Breakdown

RBF understand that CAW wishes to negotiate cost plus fixed fee contract. The fixed fee (profit) component of our proposed fee is as indicated in Table 2. The cost component of our price includes labor costs, subconsultants, and other direct costs (ODC's).

RBF's labor costs are based on a cost multiplier of 2.75 times direct labor, i.e., fringes and overhead are 175% of direct labor. Direct labor is the average salary paid to employees in their applicable standard labor category. RBF has 13 such direct labor categories. The anticipated 2005-2006 direct labor cost for each RBF staff member on the team is shown in Table 2.

Total subconsultant costs to RBF are anticipated to be less than \$25,000 and will be paid to three subconsultants: Michael M. Chambers, P.E., DTN Engineers; and Ian Watson, P.E. (AEPI Rostek). Michael Chambers and Ian Watson are sole proprietors and have no audited overhead rates. The overhead and profit structure for DTN Engineers, a small minority business enterprise, is available upon request.

ODC's include per diem, other travel costs, and miscellaneous expenses. Per diem was estimated for field personnel on the basis of \$150 per work day spent in the field. Per diem covers lodging, meals, incidental expenses, and vehicle mileage, but excludes air travel. Other travel expenses include air travel for all project staff, as well as fair and reasonable travel expenses for non-field personnel. Miscellaneous expenses include reproduction, office supplies that are directly incorporated into the work product, and mail/courier costs.



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## Section 3: Exceptions

RBF takes no exceptions to the proposed Consulting Agreement. We have signed a similar agreement for our Coastal Water Project work as well as our Master Agreement for Water/Wastewater Engineering Services (with American Water).

## Section 4: Alternatives

As indicated in our Technical Proposal, RBF understands that the following items may be considered as alternatives to the Scope proposed in the RFP:

1. Pilot Plant Program Management, including preliminary PPF site design; design of PPF equalization facilities; preparation of Pilot Plant study plan and Pilot Plant Report; installation and operation of temporary water quality sampling stations; and PPF demobilization assistance. The engineering services for these have been separately proposed by RBF (July 19, 2005).
2. Design of PPF Laboratory/Office facility. The engineering services for this facility have been separately proposed by RBF (July 20, 2005).
3. Addition of second, parallel, pretreatment train. Although not included in the RFP, RBF has assumed that a second pretreatment train will be required, and has included installation design of this second train in this proposal.

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