Marina Coast Water District Agenda Transmittal

Agenda Item: 5-E Meeting Date: February 22, 2011

Submitted By: Carl Niizawa Presented By: Jim Heitzman

Reviewed By: Jim Heitzman

Agenda Title: Consider Adoption of Resolution No. 2011-19 to Authorize a Project

Management Agreement with RMC Water and Environment for Program

Management of the Regional Desalination Project

Detailed Description: The Board of Directors is requested to authorize a "Regional Desalination Project Management Agreement" (PMA) with RMC Water and Environment (RMC) for program management of the Monterey Bay Regional Desalination Project (Project).

In April 2010, Marina Coast Water District (MCWD), Monterey County Water Resources Agency (MCWRA), California-American Water (CAW) (collectively known in the PMA as the "WPA Parties) conditionally approved a Water Purchase Agreement (WPA) that describes the roles and responsibilities of the WPA Parties for implementation of the Regional Desalination Project. Each of the conditions precedent set forth in Article 25 of the WPA were satisfied by the WPA Parties on January 11, 2011, thereby making January 11, 2011, the WPA Effective Date.

One of the WPA requirements is that within sixty (60) days of the Effective Date, the WPA Parties shall have jointly selected a Project Manager and shall have entered into an agreement with such Project Manager providing for the Project Manager's services, including the coordination, administration and assistance with respect to each of certain "Project Tasks" as well as those portions of design, engineering, construction, permitting and acceptance testing of each portion of the Project which prudent project management dictates should be performed in common for the Project taken as a whole in order to help avoid and/or mitigate unnecessary costs and to facilitate the coordination and integration of the design, construction, permitting and operation of the Project.

The PMA scope of work consists of fourteen Project Tasks that together encompass the Project Manager's responsibilities. Those tasks are:

• Task 1 Project Management

- Task 2 Funding
- Task 3 Environmental Coordination
- Task 4 Permitting
- Task 5 Project-Wide Engineering
- Task 6 Brackish Source Water Wells
- Task 7 MCWRA Brackish Source Water Pipeline
- Task 8 MCWD Brackish Source Water Pipeline
- Task 9 Desalination Plant
- Task 10 Product Water Pipeline
- Task 11 Coordination with CAW Facilities Manager

- Task 12 MCWD Tie-in Pipeline
- Task 13 Construction Management
- Task 14 Additional Services

Allocation of PMA Costs by Agency:

The costs of the PMA will be allocated among the three Parties in accordance with Article 13 of the PMA Contract. As described in Article 13, PMA costs for tasks or subtasks that are clearly for the benefit of only one of the Parties will be allocated solely to that Party. PMA costs for tasks or subtasks that are shared by more than one of the Parties will be allocated based on the proportional cost of each Party's facilities. At a task level, the anticipated cost allocation among Parties is as follows.

Project Tasks	MCWD Costs	MCWRA Costs	CAW Costs	Total
Task 1 Program Management	\$ 4,701,000	\$ 997,000	\$ 633,000	\$ 6,331,000
Task 2 Funding	\$ 469,000	\$ 100,000	\$ 130,000	\$ 699,000
Task 3 Environmental Coordination	\$ 445,000	\$ 94,000	\$ 79,000	\$ 618,000
Task 4 Permitting	\$ 1,081,000	\$ 265,000	\$ 140,000	\$ 1,486,000
Task 5 System-wide Engineering	\$ 1,055,000	\$ 279,000	\$ 87,000	\$ 1,421,000
Task 6 Brackish Wells		\$ 739,000		\$ 739,000
Task 7 MCWRA Brackish Water Pipeline		\$ 360,000		\$ 360,000
Task 8 MCWD Brackish Water Pipeline	\$ 356,000			\$ 356,000
Task 9 Desalination Plant	\$ 6,135,000			\$ 6,135,000
Task 10 Product Water Pipeline	\$ 699,000			\$ 699,000
Task 11 CAW Coordination			\$ 225,000	\$ 225,000
Task 12 MCWD Tie-in Pipeline	\$ 398,000			\$ 398,000
Task 13 Construction Management	\$ 5,257,000	\$ 1,329,000		\$ 6,586,000
Total PMA Costs	\$ 20,596,000	\$ 4,163,000	\$ 1,294,000	\$ 26,053,000
Task 14 Additional Services Allowance				\$ 2,200,000

The PMA agreement will continue the work done through the current Professional Services Agreement with RMC for Program Management and Engineering Services for the Regional Water Supply Project for the District. With approval of this agreement, RMC work under the existing Professional Services Agreement with the District will terminate.

Schedule:

Services included in the PMA Scope of Work shall be provided from the Project Effective Date through Project Acceptance, anticipated to be approximately a 48 month period.

Budget:

Compensation for services provided under the PMA will be on a Time and Material Basis with a maximum fee of \$28,253,000, as provided in Article 12 of the PMA.

Environmental Review Compliance: None required.

Prior Committee or Board Action: On February 22, 2010, the Board of Directors approved Resolution No. 2010-09. On June 22, 2010, the Board of Directors approved Resolution No. 2010-42. On November 9, 2010, the Board of Directors approved Resolution No. 2010-75. On January 4, 2011, the Board of Directors approved Resolution No. 2011-01. On January 31, 2011 approved Resolution No. 2011-11.

	ed water servic	es to the	District's	- Providing high quality water, expanding communities throughes at reasonable costs.
Financial Impact:	Yes	No		
this Project which will	serve as the initial ately June 2011	al funding with the	source unt	rough the Cal Am line of credit for il sales of Private Activity Bonds, of Task No. 12 in the amount of
Material Included for Management Agreemen		sideration	: Resolutio	n No. 2011-19; and the Project
				otion of Resolution No. 2011-19 to ith RMC Water and Environment.
Action Required: (Roll call vote is require	X Resolutio	n	Motion	Review
		Board Ac	etion	
Resolution No	Motion By	7		Seconded By
Ayes			Abstained	
Noes			Absent	
Reagendized	Dat	e	No	Action Taken

February 22, 2011

Resolution No. 2011 - 19
Resolution of the Board of Directors
Marina Coast Water District
Approving a Joint Project Management Agreement with
Monterey County Water Resources Agency, and California-American Water
for Project Management and Engineering Services by RMC Water and Environment
for the Regional Desalination Project

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("MCWD"), at a special meeting duly called and held on February 22, 2011 at the business office of MCWD, 11 Reservation Road, Marina, California as follows:

WHEREAS, the Directors have been asked to approve a "Regional Desalination Project Management Agreement" ("PMA") with Monterey County Water Resources Agency ("MCWRA"), California-American Water ("CAW") (collectively, the "WPA Parties") and RMC Water and Environment ("RMC") to provide specified services ("PMA Services") for the Project for a regional desalination water supply project in Monterey County ("Project"); and,

WHEREAS, on September 20, 2004, CAW filed Application No. 04-09-019 ("Application 04-09-019") seeking approval of the Coastal Water Project (as defined in Application 04-09-019) from the California Public Utilities Commission ("Commission"), which was amended on July 14, 2005; and

WHEREAS, the WPA Parties were all parties in Application 04-09-019; and,

WHEREAS, on April 7, 2010, the WPA Parties, along with other parties to Application 04-09-019, filed a Settling Parties' Motion to Approve Settlement Agreement ("Settlement Motion") with the Commission to settle many of the issues in Application 04-09-019. The settlement proposed in the Settlement Motion (the "Settlement") would allow the development, construction and operation of the Project, which consists generally of the CAW Facilities, the MCWD Owned Facilities, and the MCWRA Owned Facilities, as more particularly described in Exhibit A to the PMA. In part, the Settlement Motion proposed for approval a Water Purchase Agreement among the WPA Parties under which the Project would be developed; and,

WHEREAS, the WPA Parties are parties to that certain Water Purchase Agreement dated April 6, 2010, as updated by the Parties on August 31, 2010 (the "WPA") pursuant to a filing by MCWD with the Commission entitled "Marina Coast Water District's Notice Of Filing Of Conformed Copy Of Water Purchase Agreement Containing Previously-Announced Revisions Acceptable To The Signatories;" and,

WHEREAS, on December 2, 2010, in Decision No. 10-12-016 (the "Decision"), after considering the Settlement and the entire record in Application 04-09-019, the first ordering paragraph of the Decision sets forth the Commission's approval of the Settlement along with the

implementing agreements as updated by the Parties on August 31, 2010, including the WPA; and,

WHEREAS, in accordance with the terms of the Settlement, the WPA is effective upon the date on which all of the conditions precedent set forth in Article 25 of the WPA are satisfied (the "WPA Effective Date"); and,

WHEREAS, each of the conditions precedent set forth in Article 25 of the WPA were satisfied by the WPA Parties on January 11, 2011, thereby making January 11, 2011 the WPA Effective Date; and,

WHEREAS, pursuant to the terms of the WPA, within sixty (60) days of the Effective Date, the WPA Parties shall enter into an agreement with a "Project Manager" for the Project Manager's services (the "PMA Services") as described more fully in the PMA and in Exhibit B to the PMA, including the coordination and administration of certain "Project Tasks" and those portions of design, engineering, construction, permitting and Acceptance testing of each portion of the Project which prudent project management dictates should be performed in common for the Project taken as a whole in order to help avoid and/or mitigate unnecessary costs and to facilitate the coordination and integration of the design, construction, permitting and operation of the Project; and,

WHEREAS, the WPA Parties intend to enter into PMA for the sharing of costs and expenses of the PMA Services provided by the Project Manager necessary for the tasks of the Project Manager as more particularly set forth on Exhibit A attached to the PMA (the "Project Tasks"); and

WHEREAS, the WPA Parties desire to retain a Project Manager to provide the PMA Services, as more particularly described in the PMA and Exhibit A to the PMA; and,

WHEREAS, the WPA Parties are aware that design, development and construction of the Project shall require the selection and engagement of various consultants, engineers, design professionals, contractors and subcontractors (collectively, the "Contractors") who will then perform services to help construct the Project. Each of the WPA Parties will enter directly into certain separate contracts ("Prime Agreements") with Contractors. Contractors will enter into subcontracts with other Contractors to perform services and work on the Project; and

WHEREAS, RMC is a professional construction manager, duly qualified and capable of providing the PMA Services as Project Manager described in and accordance with the terms of the PMA; and,

WHEREAS, the Directors have previously approved Resolution Nos. 2010-09, 2010-42, 2010-75, 2011-01 and 2011-11 for a professional services agreement with RMC and extensions of the agreement for program management and engineering services for the Regional Desalination Project; and,

WHEREAS, The PMA will continue the work done through the current Professional Services Agreement with RMC for Program Management and Engineering Services for the

Regional Water Supply Project for the District. With execution of the PMA, RMC work under the existing Professional Services Agreement with the District will terminate; and,

WHEREAS, continued project management and engineering services as described in the PMA and Exhibit A to the PMA are needed for planning for the Regional Water Supply Project through the completion of the project;

NOW, THEREFORE, BE IT RESOLVED, that the Directors of the Marina Coast Water District do adopt the foregoing findings and hereby approve execution and implementation, with the Monterey County Water Resource Agency and California American Water Company and RMC Water and Environment, of the PMA substantially in the form presented to the Directors on February 22, 2011, in an amount not to exceed \$28,253,000 in accordance with the terms and conditions of the PMA; and

BE IT FURTHER RESOLVED, that the Directors authorize the General Manager to execute the PMA substantially in the form presented to the Directors on February 22, 2011, and to take all other actions and execute all other documents as may be necessary or appropriate to give effect to this resolution and the PMA.

PASSED AND ADOPTED on February 22, 2011, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

	Ayes:	Directors	
	Noes:	Directors	
	Absent:	Directors	
	Abstained:	Directors	
			William Y. Lee, President
ATTE	ST:		
Jim H	eitzman, Secre	tary	

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2011-19 adopted February 22, 2011.

Jim Heitzman, Sec	cretary

REGIONAL DESALINATION PROJECT MANAGEMENT AGREEMENT

This Regional Desalination Project Management Agreement ("Agreement") is made and entered into effective as of the 11th day of January, 2011 (the "Effective Date") by and among MARINA COAST WATER DISTRICT, a County Water District organized and operating under the County Water District Law, Sections 30000 and following of the California Water Code, having its principal address at 11 Reservation Road, Marina, CA 93933 ("MCWD"), MONTEREY COUNTY WATER RESOURCES AGENCY, a duly constituted Water Resources Agency created pursuant to the Monterey County Water Resources Agency Act, found at California Water Code, Appendix Chapter 52, having its principal address at 893 Blanco Circle, Salinas, CA 93901 ("MCWRA"), CALIFORNIA-AMERICAN WATER, a California corporation and regulated public utility, having its principal address at 1033 B Avenue, Suite 200, Coronado, CA 92118 ("CAW," together with MCWD and MCWRA, the "WPA Parties," and each of MCWD, MCWRA and CAW, individually, a "WPA Party") and RMC WATER AND ENVIRONMENT, a California corporation, having its principal address at 2001 N. Main Street, Suite 400, Walnut Creek, CA 94596 ("Project Manager"). Each of MCWD, MCWRA, CAW and Project Manager are referred to herein individually as a "Party" and shall be collectively known as the "Parties."

RECITALS

- A. On September 20, 2004, CAW filed Application No. 04-09-019 ("Application 04-09-019") seeking approval of the Coastal Water Project (as defined in Application 04-09-019) from the California Public Utilities Commission ("Commission"), which was amended on July 14, 2005.
- B. The WPA Parties were all parties in Application 04-09-019.
- C. On April 7, 2010, the Parties, along with other parties to Application 04-09-019, filed a Settling Parties' Motion to Approve Settlement Agreement ("Settlement Motion") with the Commission to settle many of the issues in Application 04-09-019. The settlement proposed in the Settlement Motion (the "Settlement") would allow the development, construction and operation of a regional desalination water supply project in Monterey County proposed for approval in the Settlement Motion, which consists generally of the CAW Facilities, the MCWD Owned Facilities, and the MCWRA Owned Facilities, as more particularly described in Section 3 of that certain Water Purchase Agreement dated April 6, 2010, as updated by the Parties on August 31, 2010 (the "WPA") pursuant to a filing by MCWD with the Commission entitled "Marina Coast Water District's Notice Of Filing Of Conformed Copy Of Water Purchase Agreement Containing Previously-Announced Revisions Acceptable To The Signatories" (the "Project"). In part, the Settlement Motion proposed for approval a Water Purchase Agreement among the WPA Parties under which the Project would be developed.
- D. Each of the WPA Parties are parties to the WPA.
- E. On December 2, 2010, in Decision No. 10-12-016 (the "<u>Decision</u>"), after considering the Settlement and the entire record in Application 04-09-019, the first ordering paragraph of the Decision sets forth the Commission's approval of the Settlement along with the implementing agreements as updated by the Parties on August 31, 2010, including the WPA;
- F. In accordance with the terms of the Settlement, the WPA is effective upon the date on which all of the conditions precedent set forth in Article 25 of the WPA are satisfied (the "WPA Effective Date");
- G. Each of the conditions precedent set forth in Article 25 of the WPA were satisfied by the WPA Parties on January 11, 2011, thereby making January 11, 2011 the WPA Effective Date.

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H. Pursuant to the terms of the WPA, within sixty (60) days of the Effective Date, the WPA Parties shall have jointly selected a project manager and shall have entered into an agreement with such Project Manager providing for the Project Manager's services (the "PMA Services") as described more fully herein, including the coordination, administration and assistance with respect to each of the Project Tasks as well as those portions of design, engineering, construction, permitting and Acceptance testing of each portion of the Project which

prudent project management dictates should be performed in common for the Project taken as a whole in order to help avoid and/or mitigate unnecessary costs and to facilitate the coordination and integration of the design, construction, permitting and operation of the Project.

- I. The WPA also identifies various duties to be performed by the Parties with assistance from the Project Manager.
- J. The WPA Parties intend to enter into this Agreement for the sharing of costs and expenses of the PMA Services provided by the Project Manager necessary for the tasks of the Project Manager as more particularly set forth on Exhibit A attached hereto (the "Project Tasks").
- K. The WPA Parties desire to retain the Project Manager to provide the PMA Services, as more particularly described in this Agreement and Exhibit A.
- L. The WPA Parties are aware that design, development and construction of the Project shall require the selection and engagement of various consultants, engineers, design professionals, contractors and subcontractors (collectively, the "<u>Contractors</u>") who will then perform services and Work to help construct the Project. Each of the WPA Parties will enter directly into certain separate contracts ("<u>Prime Agreements</u>") with Contractors. Contractors will enter into subcontracts with other Contractors to perform services and work on the Project.
- M. The Project Manager is a professional project manager, duly qualified and capable of providing the PMA Services described herein in accordance with the terms hereof. In order to provide the PMA Services it is anticipated that the Project Manager shall, subject to the approval of the WPA Parties, directly enter into separate contracts (each, a "PM Subcontract") with various Contractors.

NOW, THEREFORE, In consideration of the foregoing recitals and the mutual covenants set forth in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, MCWD, MCWRA, CAW and the Project Manager agree as follows:

AGREEMENT

- 1. <u>Governing Terms</u>.
- 1.1 <u>Recitals</u>. The recitals are hereby incorporated in this Agreement as if fully set forth herein.
 - 1.2 <u>Interpretation</u>. The following rules of interpretation shall apply:
- (a) Capitalized terms used in this Agreement, including the exhibits and appendices hereto, if any, shall have their respective meanings as set forth in Section 2 of this Agreement, unless otherwise specified in this Agreement. Capitalized terms used, but not defined herein, shall have their respective meanings as set forth in the WPA.
- (b) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa; and pronouns having masculine or feminine gender will be deemed to include the other.
- (c) The headings in this Agreement are included for convenience only and shall not be deemed to modify or explain any of the terms of this Agreement.
- (d) This Agreement is the product of negotiation between the Parties, no Party is to be deemed the drafter of this Agreement, and any ambiguities in this Agreement shall not be read against any Party to the Agreement.
- 2. <u>Definitions.</u> The following terms shall, for all purposes of this Agreement, have the following meanings:

"100% Construction Documents" means the final plans, specifications, contracts and related documents necessary for the commencement of construction of any portion of the Project Facilities.

"Acceptance" means demonstration by MCWRA and MCWD that the Project Facilities are ready for operation at the maximum firm capacity of 10 MGD, that the Acceptance Tests for each component of the Project Facilities have been run and such tests have been passed, and that the Project Facilities comply with applicable Legal Requirements, including but not limited to receipt of all necessary permits, including those required by California Department of Public Health.

"Acceptance Date" has the meaning set forth in Section 4.17 of the WPA.

"Acceptance Testing" shall have the meaning set forth in the WPA.

"Additional Service" or "Additional Services" shall have their respective meanings as set forth in Section 11.1.

"Advisory Committee" shall have the meaning set forth in Section 6.1 of the WPA.

"Agency Act" means the Monterey County Water Resources Agency Act as set forth in California Water Code Appendix, Chapter 52.

"Allocable PMA Costs" means costs and expenses with respect to the Project Tasks described in Exhibit A to this Agreement and any Additional Services to be paid to the Project Manager by the applicable WPA Parties.

"Allocable PMA Percentage" has the meaning set forth in Section 13.1 and, for Additional Services, the allocation agreed to by the WPA Parties pursuant to Section 11.2 and indicated in the PMA Task Order for the subject Additional Services.

"Application 04-09-019" has the meaning set forth in Recital A.

"Best Industry Practices" means, subject to clauses (i) and (ii) below, any of the best practices, methods, techniques, acts or standards as established by industry organizations or standard setting bodies, whether governmental or not, such as but not limited to the American Water Works Association (AWWA), the American Society for Testing and Materials (ASTM), the National Sanitation Foundation (NSF), the National Safety Council (NSC), the Occupational Safety and Health Administration (OSHA), or other recognized professional or governmental organizations, as appropriate, which are generally recognized in the water treatment industry as having the subject matter expertise for the practice, method, technique, act or standard at issue provided that the particular practice, method, technique, act or standard that is considered best shall be those that: (i) at the time that such practice, method or action is employed, and in the exercise of reasonable judgment in light of the facts known at such time, would be most effective to accomplish the desired result consistent with applicable law, good business practices, safety, reliability, efficiency and expedition and giving due consideration to the capabilities of the Project and the Project Facilities, the effect on the Project or Project Facilities and the effect on Product Water and the brine and solid material byproducts, and (ii) when engaged in are commonly used or approved by comparable water treatment and/or water utility facilities, regardless of whether or not subject to public utility corporation regulation, operating in the State of California. Best Industry Practices are not to be interpreted, construed as or limited to the optimum industry practices, methods or acts, but rather as a range of acceptable practices, methods or acts consistent with the duties and obligations of a Party.

"Bid" means, all-inclusively, any sort of competitive procurement of goods and services, whether by a public or private entity, including but not limited to competitive procurement using invitations for bids, requests for quotation, requests for proposal, or any sort of advertised or negotiated procurement.

"Bidder" means any Person that submits a Bid.

"Bidding" means the process of obtaining or the submission of Bids.

"Bid Package" shall have the meaning set forth in Section 7.7.

"Bid Project Schedule" has the meaning set forth in Section 7.8.

"Business Day" means every day except Saturday, Sunday and recognized holidays where banks are closed for business in California.

"CAW" has the meaning set forth in the introductory paragraph.

"CAW Allocable PMA Costs" means, for each month during the Term and for each of the Project Tasks or Additional Services, the product of the application of CAW's Allocable PMA Percentage set out in Section 13.1, or for Additional Services as determined pursuant to Section 11.2, to the total Allocable PMA Costs for that month.

"CAW Facilities" has the meaning set forth in Section 3.7 of the WPA and generally includes the water delivery system that will deliver desalinated water into the CAW distribution system.

"Certified Value Engineer" means an engineer experienced in value engineering and licensed as a professional engineer in the State of California.

"Change" means any revisions, additions or alterations to the scope of work originally set forth in a Prime Agreement, which may or may not require a Change Order.

"Change Order" means Work that is added or deleted that results in a change to either the time or cost under a Prime Agreement and approved by the applicable WPA Parties affected by such Change Order.

"Constructability Contractor" has the meaning set forth in Section 7.6.

"Construction Schedules" means the written or graphic description of the scheduling, sequencing and interrelationships of activities necessary to complete each of the Prime Agreements. Construction Schedules are prepared by each of the Contractors for review by the Project Manager and acceptance by the applicable WPA Parties and for incorporation into the Master Project Schedule.

"Contract Documents" means the documents and agreements issued by or on behalf of the WPA Parties under a Prime Agreement for construction of a particular aspect or portion of the Project, including all modifications issued by or on behalf of the applicable WPA Party (or WPA Parties).

"Contractors" has the meaning set forth in Recital L.

"Contract Price" has the meaning in Section 8.2.

"Commission" has the meaning set forth in Recital A.

"Decision" has the meaning set forth in Recital E.

"Desalination Plant" means the water desalination plant to be owned and operated by MCWD and as more particularly described in Section 3.1 of the WPA.

"Design Documents" shall mean, with respect to each of the different components of the Project, each of the Preliminary Design Documents, Procurement Documents, 100% Construction Documents and any other drawings, specifications, calculations or any other design or specification work product prepared for the Project. Design Documents shall also include any surveys, soil reports, and other documents prepared for the Project.

"Dispute" means any disagreement, dispute, claim, cause of action (whether in contract, tort, or otherwise), or any other controversy concerning this Agreement between or among any of the Parties.

"Effective Date" shall have the meaning set forth in the introductory paragraph.

"Estimate of Construction Costs" means estimates of the then forecasted costs of labor, materials, equipment and services plus a reasonable allowance for Contractors' profit, overhead and administrative costs as necessary to complete construction of the Project in accordance with the Design Documents. Estimate of Construction Costs shall include estimating contingencies required to properly forecast Bid results.

"Final Completion" means, with respect to each Prime Agreement and unless otherwise defined in any such Prime Agreement, the point at which all of the Work of a Contractor has been completed and installed (including items noted for correction, repair or modification as part of the applicable Punch List Items) and the Contractor has completed all other obligations to be performed on its part under the Prime Agreement.

"Force Majeure" means an event, including but not limited to, any act, omission or circumstance occasioned by or in consequence of any acts of God, strikes (other than of the workforce of the Party asserting the Force Majeure delay), lockouts (other than of the workforce of the Party asserting the Force Majeure delay), acts of the public enemy, wars, sabotage, terrorism, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, hurricanes, tornadoes, floods, washouts, civil disturbances, inability to access financial markets due to a capital market disruption, explosions, power outages, a defect in any facilities or components of the Project not caused by the Party asserting the Force Majeure delay, the breach of another Party of its obligations under this Agreement or a related agreement (provided, however, that the breach of an obligation by a Party under a related agreement shall not be grounds for such Party to assert a Force Majeure under this Agreement where the breach (under the related agreement) of the Party asserting Force Majeure causes one or more of the other Parties under this Agreement to be unable to meet their obligations hereunder), the acts or omissions of one Party which prevents or delays the ability of another Party to perform any of its obligations hereunder, the enactment or adoption of a Legal Requirement after the date of this Agreement (other than a Legal Requirement enacted by the Party asserting the Force Majeure delay where such Legal Requirement was enacted for the primary purpose of overriding such Party's obligation to comply with this Agreement), the failure or inability to obtain any necessary governmental authorization (other than that of the Party asserting the Force Majeure delay) which has been sought or requested, as the case may be, in good faith by all reasonable legal and political means, and any other cause, whether of the kinds herein enumerated or otherwise, not reasonably within the control of the affected Party that prevents the performance by the affected Party of an obligation hereunder despite the due diligence of the affected Party to overcome such prevention. The foregoing shall in no way excuse any Party from performing its obligations hereunder to monitor, administer and enforce its contracts with third parties relating to such Party's obligations under this Agreement.

"Legal Requirement" means all applicable laws, rules, orders, ordinances, regulations and requirements and conditional permissions, final decision and final judgment now existing or (except to the extent any exemption or so called "grandfathering" provision is available) hereafter enacted, promulgated, made or rendered, of every government, municipality or agency, including MCWD and MCWRA, and of any agency and court thereof having jurisdiction over CAW, MCWD, MCWRA, Project Manager, the Project Facilities, the Product Water or the Project relating to the design, development, construction, ownership, use, occupancy, maintenance or operation of the Project and Project Facilities or equipment thereon or therein, or the quality or use of the Product Water or the streets, sidewalks, vaults, vault spaces, curbs and gutters adjoining the Project or Project Facilities, or the appurtenances to the Project or Project Facilities, or the franchises and privileges connected therewith or the transactions contemplated by this Agreement including, without limitation, the Agency Act, and all applicable building laws, health codes, safety rules, handicapped access, zoning and subdivision laws and regulations.

"Master Project Schedule" has the meaning set forth in Section 8.5(b).

"MCWD" has the meaning set forth in the introductory paragraph.

"MCWD Allocable PMA Costs" means, for each month during the Term and for each of the Project Tasks or Additional Services, the product of the application of MCWD's Allocable PMA Percentage set out in Section 13.1, or for Additional Services as determined pursuant to Section 11.2, to the total Allocable PMA Costs for that month.

"MCWD Owned Facilities" means the Brackish Source Water Receipt Point Meters, MCWD Brackish Source Water Pipeline, the Desalination Plant, the MCWD Meter, the CAW Meter, the MCWD Product Water Pipeline, the MCWD Outfall Facilities and any related facilities, excluding MCWRA Owned Facilities and CAW Facilities, as each of those terms is defined in the WPA.

"MCWRA" has the meaning set forth in the introductory paragraph.

"MCWRA Allocable PMA Costs" means, for each month during the Term and for each of the Project Tasks or Additional Services, the product of the application of MCWRA's Allocable PMA Percentage set out in Section 13.1, or for Additional Services as determined pursuant to Section 11.2, to the total Allocable PMA Costs for that month.

"MCWRA Owned Facilities" each of the Brackish Source Water Wells, each of the Brackish Source Water Well Meters, the MCWRA Brackish Source Water Pipeline and the Inland Water Monitoring Wells, and any related facilities, excluding the MCWD Owned Facilities, as each of those terms is defined in the WPA.

"Milestones" shall have the meaning as set forth in Section 4.9 of the WPA.

"Person" or "Persons" have their respective meanings as set forth in the WPA.

"Phase" and "Phases" shall have the meanings set forth in Section 5.1 of this Agreement.

"PMA Services" has the meaning set forth in Recital H.

"PM Subcontract" has the meaning set forth in Recital M.

"PMA Task Order" means each task order prepared by the Project Manager pursuant to this Agreement in cooperation with and after consultation with the applicable WPA Parties as are necessary for the Project Manager to perform a particular Project Task or portions thereof or any Additional Services.

"PMA Task Order Change" means updates, amendments, changes, substitutions, alterations or revisions to any particular PMA Task Order, whether related to an existing PMA Task Order, Project Tasks or Additional Services, as approved by each of the Project Manager and the applicable WPA Parties.

"Preliminary Design Documents" has the meaning set forth in Section 4.7 of the WPA.

"Prime Agreements" has the meaning set forth in Recital L.

"Procurement Documents" means the documents prepared by the Project Manager, in consultation with the WPA Party that is the owner of the respective portion of the Project addressed in such documents, which represent, as deemed appropriate, either the Preliminary Design Documents or any other level of design, including contract specifications, contract requirements developed by the Parties (as set forth in Section 4.4(c) of the WPA and with the Project Manager's assistance as described in this Agreement) and all other documents necessary for solicitation and selection of a Contractor. Unless otherwise agreed to by the Parties, the Project Manager shall not prepare Procurement Documents for any Contractors other than those subject to Prime Agreements.

"Progress Payment" means a payment authorized and approved by the Project Manager with respect to a Contractor in connection with a Prime Agreement.

"Project Construction Budget" means the total costs allocated by the WPA Parties for Bidding and construction of the Project by the Contractors, inclusive of fees and costs of the Project Manager and other consultants of the Project Manager, which are pursuant to PM Subcontracts.

"Project Manager" has the meaning set forth in the introductory paragraph.

"Project" has the meaning set forth in Recital C.

"Project Facilities" means the MCWRA Owned Facilities and the MCWD Owned Facilities.

"Project Manager Personnel" has the meaning set forth in Section 5.2.

"Project Manager Representative" means the individual representative for the Project appointed by Project Manager and authorized and empowered to act on behalf of Project Manager on all matters concerning or arising under this Agreement.

"Project Tasks" has the meaning set forth in Recital J.

"Punch List Items" means those items of minor work necessary to correct, repair or complete the Work under a particular Prime Agreement provided that all other Work under the subject Prime Agreement has been completed so that subject improvement or installation can be practically and legally used or occupied, as applicable.

"Reimbursable Expenses" means the direct costs incurred by the Project Manager in connection with the following items: (a) rent for the Project Manager's Project office; (b) mileage at the standard IRS reimbursable rate; (c) automobiles for Project use only; (d) travel costs associated with inspection of facilities or equipment constructed by design-build Bidders; (e) specialized safety equipment and training related to safety and environmental monitoring; (f) miscellaneous office expenses; and (g) compensation payable to any Contractors pursuant to a PM Subcontract.

"Settlement" has the meaning set forth in Recital C.

"Settlement Motion" has the meaning set forth in Recital C.

"Site" means any physical location where any portion of the Project is then being constructed.

"Substantial Completion" means, with respect to each Prime Agreement, that the Work of an applicable Contractor has been completed and installed, subject only to the completion of Punch List Items and such Contractor has certified to the applicable WPA Party that (i) "substantial completion" as defined under the applicable Prime Agreement has occurred, (ii) a preliminary or temporary certificate of occupancy has been issued with respect to the particular components or facilities of the Project or Project Facilities, if required by any Legal Requirements, (iii) the relevant WPA Party is authorized under any applicable Legal Requirements to conduct an Acceptance Test in accordance with the provisions of the WPA and to operate its respective facilities, and such authorization has not been withdrawn or revoked, and (iv) the relevant WPA Party has submitted written certification that all of the foregoing conditions have been satisfied.

"Term" has the meaning set forth in Section 3 of this Agreement.

"Value Engineering" means a specialized cost control technique in which, with respect to a particular component of the Project Facilities, the applicable WPA Party meets and confers with a Certified Value Engineer to conduct a systematic and creative analysis of the functions of the Project to determine how best to achieve the necessary function, performance and reliability at the minimum life cycle cost.

"Work" means the work, labor, materials and services to be provided and performed by a Contractor in connection with and related to such Contractor's Prime Agreement.

"WPA" has the meaning set forth in Recital D.

"WPA Effective Date" has the meaning set forth in Recital F.

"WPA Parties" has the meaning set forth in the introductory paragraph.

"WPA Party" has the meaning set forth in the introductory paragraph.

- 3. <u>Term.</u> Subject to the earlier termination of this Agreement pursuant to Article 23, the term of this Agreement ("<u>Term</u>") shall be from the Effective Date until the later of (a) a date mutually and unanimously agreed upon by the Parties, (b) sixty (60) days after the Final Completion of the CAW Facilities or (c) sixty (60) says after the Acceptance Date.
- 4. <u>Appointment of Project Manager</u>. Each of the WPA Parties hereby appoints and retains Project Manager to provide, throughout the Term, the PMA Services on the terms and conditions set forth in this Agreement. Project Manager hereby accepts such appointment and agrees to perform the PMA Services in accordance with the terms and conditions of this Agreement.

5. PMA Services.

- 5.1 <u>Phases of PMA Services</u>. Subject to the conditions set forth herein, the Project Manager shall be fully responsible for the PMA Services, including the day-to-day management and administration of the design, development, engineering, procurement, construction and Acceptance Testing of the Project Facilities and, without limiting the generality of the scope of PMA Services described herein, the specific responsibilities identified in connection with each of the Project Tasks. The PMA Services shall be performed and completed in a series of phases (each, individually, a "<u>Phase</u>" and collectively, the "<u>Phases</u>") generally described as: Pre-Construction, Construction and Post-Construction. The scope of the Project Manager's PMA Services, which will overlap with respect to different components of the Project, shall be as set forth herein. It is intended that the Project Manager shall at all times perform and deliver the PMA Services described hereunder in a cost-effective and coordinated manner which allows the Project to be designed and developed with the intention of minimizing schedule, design, specification or functional conflicts and which will result in the Project functioning as an integrated unit, including coordination of the interconnection of all portions and components of the Project.
- 5.2 Personnel. The Project Manager shall assure that the PMA Services shall be performed or provided by or under the control of a Project Manager Representative employed by the Project Manager who (a) is professionally qualified to provide or oversee the subject PMA Services and (b) shall be licensed and/or registered to do so as may be required under California law. In addition to the Project Manager Representative, the Project Manager shall assign only qualified personnel to perform the PMA Services. At the time of execution of this Agreement, the Parties anticipate that the individuals named on Exhibit B will perform those functions noted next to their names at the hourly rates designated therein (collectively, the "Project Manager Personnel"). The working hours of such Project Manager Personnel and rates of compensation payable for such Project Manager Personnel and all other matters relating to the employment of the Project Manager Personnel and the services they perform under this Agreement shall be determined by the Project Manager in consultation with each of the WPA Parties in a manner consistent with industry standards. Project Manager Personnel shall be charged at the rates set forth in Exhibit B, adjusted annually by the San Francisco Area Consumer Price Index, beginning January 1, 2012, or as may be adjusted upon agreement of the WPA Parties and the Project Manager in a manner consistent with industry standards and the Project Construction Budget. So long as the Project Manager Personnel named on Exhibit B remain actively employed or retained by the Project Manager, they shall perform the functions indicated next to their names. Project Manager shall comply promptly with any request by any WPA Party to replace any member of the Project Manager Personnel performing any service on the Project. Project Manager shall notify the WPA Parties of any changes with respect to the Project Manager Personnel in connection with the Project Tasks for the Project and shall update Exhibit B accordingly.

- 5.3 Relationship of Project Manager to Other Project Participants. Project Manager's delivery of the PMA Services hereunder shall be provided in conjunction with contracts between each of the WPA Parties and the Contractors and any others providing services in connection with design, development, financing, Bidding and/or construction of the Project. Except as expressly set forth herein, neither this Agreement, nor Project Manager's rendition of PMA Services hereunder shall be deemed Project Manager's assumption of responsibility for the adequacy or sufficiency of the Project design or the Design Documents for the Project, which are and remain that of other Contractors. In accordance with the scope of PMA Services described herein, the Project Manager shall be responsible for assisting the WPA Parties in the selection and retention of the Contractors and generally coordinating the services of the Contractors during all phases of the Project and the management and administration of the Work as set forth in the Agreement. The Project Manager is not responsible for the construction means and methods, completeness or accuracy of the Work, work product or services provided by the Contractors. The Project Manager shall not be responsible for the scheduling or coordination of each individual Contractor's services or Work; provided, however, that the Project Manager shall be responsible for maintaining the Master Project Schedule, assisting the WPA Parties in managing the scheduling of their Contractors, and scheduling or coordination of the PMA Services.
- 5.4 <u>Project Manager Standard of Care.</u> The Project Manager shall provide the PMA Services and authorized Additional Services using its best professional skill and judgment, acting with due care and in accordance with professional standards of care. Project Manager's services hereunder shall be provided and completed promptly and in such a manner as to avoid hindrance, interruption or delay to the orderly progress and timely completion of the Project. The Project Manager shall comply with laws that are applicable to the delivery of the Project Manager's services under this Agreement.
- Project Records. All records relating in any manner whatsoever to the Project, the Project Facilities or any portion thereof, which are prepared or produced on or behalf of the Project Manager shall become the property of the applicable WPA Parties and shall made available to the WPA Parties for inspection and copying upon written request of any WPA Party. The Project Manager shall be entitled to retain copies of all such records. Furthermore, said records shall be made available, upon request by a WPA Party, to any state, federal or other regulatory authorities and any such authority may review, inspect and copy such records. Said records include, but are not limited to, all drawings, plans, specifications, submittals, correspondence, minutes, memoranda, tape recordings, photographs, videos, or other writings of things which document the Project, its design, and its construction, but shall not include accounting records. Said records expressly include those documents reflecting the time expended by the Project Manager and the Project Manager Personnel in performing under this Agreement and the records of performance of said Agreement. The Project Manager shall maintain and protect those records for no fewer than four (4) years after the end of the Term, or any longer period of time as may be required by law or by good project management practice.
- 5.6 Accounting Records. The Project Manager shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management of the Project Manager services under this Agreement; the accounting and control systems shall be satisfactory to each of the WPA Parties. Upon written request, each of the WPA Parties and their respective accountants shall be afforded access to the Project Manager's records, books, correspondence, instructions, drawings, receipts, subcontracts, purchase orders, PMA Task Orders, vouchers, memoranda and other data relating to the Project. The Project Manager shall maintain and protect these records for a period of four (4) years after the end of the Term or for such longer period as may be required by law. Such accounting records shall be subject to audit review by the any of the WPA Parties and any disputes related to such audit review shall be subject to resolution pursuant to the dispute resolution procedures set forth in Article 17 of this Agreement.

6. WPA Parties Responsibilities.

6.1 <u>WPA Parties' Information</u>. In consultation with the Project Manager, each of the WPA Parties shall provide full and adequate information regarding the requirements for their respective portions of the Project to the Project Manager, including each WPA Party's objectives, schedule requirements and other constraints or requirements which may affect the Project Construction Budget, time for completion of the Project or Project

scope. Subject to the requirements of the WPA, the WPA Parties shall, in consultation with the Project Manager, jointly prepare, update and provide the Project Manager with an overall Project Construction Budget.

- 6.2 <u>WPA Parties' Contractors</u>. Except to the extent of Contractors retained directly by the Project Manager pursuant to PM Subcontracts (provided the Project Manager has obtained permission of the WPA Parties to directly contract with such Contractors), other Contractors required or desired by the WPA Parties in connection with the Project shall be retained and paid for by the applicable WPA Parties who retain such Contractors. Such other Contractors may include, without limitation, engineers, bond consultants, legal counsel, insurance/surety consultants, insurance consultants and any other professionals required in order to implement the WPA and complete the Project.
- 7. <u>Pre-Construction Phase Duties, Obligations and Responsibilities.</u> The following PMA Services shall be provided in accordance with the scope of services set out in Exhibit A. To the extent there is any conflict between the PMA Services described in this Article 7 and Exhibit A, the terms of Exhibit A shall control over the terms of this Article 7, but shall not control over any other provisions of this Agreement.
- 7.1 Project Bidding and Construction Strategy. The Project Manager shall, in conjunction with each of the WPA Parties and the Advisory Committee, review the current status of completion and approvals for Bidding the Design Documents of the various facilities of the Project to Contractors. The objective of these reviews is the development of an overall strategy for Bidding and constructing the Project in the most cost-effective manner by taking into account issues that may affect time for completion of the Project or the costs of the Project. The Project Manager shall conduct such interviews and participate in meetings and conferences with the Contractors, representatives of the WPA Parties and others and review and provide input on the Design Documents and Procurement Documents for the Project as necessary to develop a Project Bidding and construction strategy consistent with the foregoing objectives. The Project Manager shall submit its written Project Bidding/construction strategy to each of the WPA Parties for their review and acceptance and to the Advisory Committee for its review. The Project Manager shall modify its written Project Bidding/construction strategy as necessary to obtain the WPA Parties' acceptance thereafter.
- 7.2 <u>Consultation during Project Development</u>. The Project Manager shall schedule and attend meetings with the necessary Contractors and, as desired by the applicable WPA Parties, other representatives of the WPA Parties during the development of the Project design in order to advise on selection of materials, building systems, and equipment. The Project Manager shall provide input on construction feasibility, availability of materials and labor, time requirements for installation and construction, and factors related to construction and operational costs and efficiencies, including, but not limited to, costs of alternative designs of materials, preliminary budgets, and possible economies.
- 7.3 Financing. The Project Manager shall advise and consult with each of the WPA Parties in order to prepare, evaluate and employ alternative financing plans that will best utilize the financing and grant opportunities available to MCWD and MCWRA with an objective to obtain the maximum financing of the Project Facilities at the lowest overall total cost given then existing and anticipated market conditions, the anticipated timing (bearing in mind the Construction Schedules) and magnitude of the funding requirements for the design, construction, permitting, start-up of the Project Facilities.
- 7.4 <u>Design Documents</u>. The Project Manager shall regularly review the Design Documents for the Project Facilities. If, at any time during the Project Manager's review of the Design Documents, the Project Manager believes that the Design Documents, construction processes/procedures, specified materials/equipment or other aspects of the Design Documents can be modified to reduce construction costs and/or the time for achieving Substantial Completion and/or Acceptance of the Project without inappropriate diminution in the quality of materials/equipment/workmanship, scope or intended purposes of the Project or to increase the operational functionality and effectiveness of the Project, in a cost-effective manner or to avoid practical construction coordination problems, then the Project Manager shall advise the applicable WPA Parties regarding what modifications to the Design Documents would achieve such improvements or benefits. Modifications to the Design Documents recommended by the Project Manager shall be set forth in writing and submitted to the applicable WPA

Parties for review. As applicable, each of the WPA Parties shall have the sole and exclusive discretion to incorporate some, all or none of the Project Manager's recommendations with respect to Design Documents related to their respective facilities. If such WPA Parties accept any of the Project Manager's recommendations relative to modification(s) to the Design Documents, the Project Manager shall review the Design Documents as modified with the applicable Contractors for confirmation that the such accepted Design Documents modification recommendations are incorporated into the Design Document.

- 7.5 <u>Value Engineering Review.</u> The Project Manager shall assist the WPA Parties in engaging an independent Certified Value Engineer to undertake Value Engineering reviews of the plans of each WPA Party's respective portions of the Project and reviewing such Value Engineering reviews. Value Engineering reviews shall, among other things, consider relative construction feasibility, availability of construction materials and labor, new materials and methods, alternate solutions, time requirements for installation and construction, impact of seasonal construction, and other construction value engineering factors related to the Project and cost of the Project in the Pre-Construction and Construction phases of the Project. Each WPA Party shall conduct Value Engineering for its facilities at least once on the basis of Design Documents that are approximately 30% to 60% complete. In addition, each WPA Party may, in its discretion, require that Value Engineering for its facilities occur at an earlier or later stage.
- 7.6 <u>Constructability Review.</u> The Project Manager, in accordance with the terms of Section 4.6 of the WPA, shall consult with and advise each of the WPA Parties and consult with the Advisory Committee with respect to the appointment and retention of a qualified Contractor who, in accordance with Best Industry Practices, shall review each of the Preliminary Design Documents, Procurement Documents and 100% Construction Documents, as appropriate, in order to provide an effective constructability review (the "<u>Constructability Contractor</u>"). The Constructability Contractor shall be independent from any Person or Persons who have designed any portion of the Project Facilities.
- 7.7 <u>Development of Bid Packages</u>. Based upon its review of the Design Documents (including any recommendations of the Project Manager relating to modification(s) to the Design Documents accepted by the applicable WPA Parties) and in consultation with the applicable WPA Parties and any relevant Contractors, the Project Manager shall develop a package suitable for Bidding by Contractors to construct each portion of the Project Facilities (each, a "<u>Bid Package</u>"). Each Bid Package developed by the Project Manager shall be submitted to the WPA Party who will own the portion of the Project which is the subject of the Bid Package for review and acceptance. The Project Manager shall modify each Bid Package as necessary to obtain the applicable WPA Party's acceptance of the entire Bid Package.
- Parties, the Project Manager shall develop and submit to each of the WPA Parties for review and acceptance a Bid project schedule that reflects all of the Bidding and selection steps for each Bid Package necessary to enter into the Contracts required to complete construction of the Project (the "Bid Project Schedule"). The Bid Project Schedule shall be prepared with the Primavera 6 project management software, version 7, and utilizing a critical path method for scheduling of construction projects. The Bid Project Schedule shall indicate the start/finish dates for the principal activities of the Bidding and selection steps for each Bid Package necessary to enter into the Contracts required to complete construction of the Project. The Project Manager shall sequence, schedule and coordinate each Bid Package in the Bid Project Schedule in a logical, reasonable and orderly manner so that Bidding and Contractor selection is completed as cost-effectively as possible and within the time established by the WPA Parties for the Milestones as set forth under the WPA. If the Project requires phasing elements of Project construction, such phasing shall be set forth in the Bid Project Schedule. The Project Manager acknowledges that the Bid Project Schedule prepared by the Project Manager will be included in the documents submitted along with each Bid Package.
- 7.9 Review and Assembly of Bid Documents. The Project Manager shall review and provide input concerning modifications to each WPA Parties' standard forms of Bid and contract documents, to the extent such standard forms exist, for each Prime Agreement they will enter into, including input on the required contracting terms set forth in Section 4.4(c) of the WPA. The Project Manager shall assist the WPA Parties in assembly of Bid and contract documents for each Bid Package. Each Prime Agreement executed by a WPA Party

with a Contractor shall be coordinated with this Agreement and shall provide that the Project Manager is the representative of the applicable WPA Party, as appropriate. Each such Prime Agreement shall delegate to the Project Manager all authority necessary for the Project Manager to discharge its obligations under this Agreement; provided, however, that the delegation of any such authority shall not in any way impact upon the Project Manager decision making authority with respect to any of the Prime Agreements, which such authority shall at all times be reserved by the applicable WPA Parties.

7.10 <u>Development of Selection Criteria</u>. The Project Manager shall assist MCWD and MCWRA in the development of selection criteria for each Bid Package related to its portions of the Project.

7.11 <u>Bidding</u>.

- (a) <u>Advertisements</u>. The Project Manager shall assist MCWD and MCWRA in development and placement of advertisements of the availability of Bid Packages for Bidding by Contractors. The Project Manager shall also make recommendations to either MCWD or MCWRA, as applicable, for placement of notices and issuance of other communications for the purpose of publicizing the availability of the Bid Packages for Bidding by Contractors. The Project Manager shall assist MCWD and MCWRA in placing such notices and issuing communications for such purposes in a manner designed to maximize the submission of Bids by responsible Bidders at the best cost.
- (b) <u>Contractor Pre-Qualification</u>. The Project Manager shall make recommendations to MCWD and MCWRA relative to engaging in a pre-qualification process for all or some of the Bid Packages. Where the pre-qualification process for any of the Bid Packages is employed, the Project Manager shall assist the MCWD or MCWRA, as applicable, in: (i) developing pre-qualification criteria and the pre-qualification application; (ii) developing and placing an advertisement in a newspaper of general circulation of the availability of pre-qualification applications; (iii) developing and implementing a program to inform potential Bidders for the Bid Packages subject to pre-qualification of the pre-qualification process and to encourage potential Contractors to engage in the pre-qualification process; (iv) reviewing and evaluating responses to the pre-qualification application; and (v) making suggestions to MCWD or MCWRA, as applicable, for selection of Contractors deemed qualified to submit Bid Proposals for Bid Packages subject to the pre-qualification process.
- (c) <u>Dissemination of Bid Documents to Contractors</u>. The Project Manager, in coordination with MCWD and MCWRA, shall establish a system for dissemination of Bid Documents to Contractors and for maintaining records of the identities/addresses telephone-fax numbers/email addresses of the Contractors who have obtained Bid Documents.
- (d) <u>Contractors Campaign</u>. The Project Manager shall, by all appropriate means of communication, advise Contractors of the availability of Bid Packages for Bidding on the Project Facilities by Contractors. The Project Manager shall maintain records of contacts made and communications transmitted to or received from potential Bidders for the Bid Packages. All such records shall be available for review and/or reproduction by the WPA Parties upon reasonable request.
- (e) <u>Review and Evaluation of Bid Proposals</u>. The Project Manager shall assist the WPA Parties in the review and evaluation of Bid Proposals. Upon completing the review and evaluation of Bid Proposals, the Project Manager shall summarize the results of Bidding for each Bid Package; the summary shall include identities of the Bidders, the amount proposed by each Bidder and information regarding all material matters evaluated with respect to such Bid Proposals and shall provide such summary to each of MCWD and MCWRA for Bid Proposals with respect to the Project Facilities.
- (f) Review of Bid Proposals; Input Concerning Award of Prime Agreements. The Project Manager shall provide input to each of MCWD and MCWRA, as applicable, concerning: (i) rejection of a Bid Proposal based upon the identified selection criteria; (ii) rejection of a Bid Proposal for non-responsiveness to material Bidding requirements, including the contracting requirements required pursuant to Section 4.4(c) of the WPA; (iii) rejection of a Bid Proposal for any other reason; (iv) rejection of all Bid Proposals; and (v) award of

Prime Agreements, and, to the extent that the Bidding for a Prime Agreement included alternate bid items, providing input and suggestions for the alternate bid items, if any, to be included in the scope of the Prime Agreements awarded by MCWD or MCWRA, as applicable. The applicable WPA Parties retain sole discretion to accept, reject, or modify any or all of the Bid Proposals.

- Parties shall have solicited Bid Proposals from Bidders for award of the various Prime Agreements and such Bid Proposals are reviewed and evaluated by the WPA Parties, the Project Manager shall, in coordination with the applicable WPA Parties and their representatives, evaluate the costs of each of the Bid Proposals and how such costs fit within the Project Construction Budget. To the extent that it appears such Bid Proposals, either individually or in the aggregate may result in increases in the Project Construction Budget, the Project Manager shall communicate such fact to each of the WPA Parties and advise the WPA Parties regarding: (i) why such Bid Proposals exceed original estimates under the Project Construction Budget; (ii) options with respect to such Bid Proposals, including revising the scope of portion of the Project covered by such Bid Proposal , or reducing or eliminating portions of the Project in order to fall within the Project Construction Budget; or (iii) whether such Bid Proposal should be accepted or potentially re-Bid for the Project.
- Project Construction Budget; Project Manager Estimate of Contractor Costs. The Project Manager shall review the WPA Parties' Project Construction Budget for the Project. Based upon such reviews, the Project Manager shall prepare the Project Manager's Estimate of Construction Costs for the Project at the following intervals: at the pre-design phase and at each major design deliverable throughout the course of the Project. Project Manager shall reconcile the Project estimates contained with in the Project Construction Budget with the prepared estimates by each of the Contractors. If reconciliation is not possible, Project Manager shall notify the WPA Parties of differences between the Estimate of Construction Costs and the Project Construction Budget. The Project Manager's Estimate of Construction Costs shall be based upon forecast market conditions and shall include estimating contingencies required to properly forecast Bid results. If the Project Manager's Estimate of Construction Costs exceeds the Project Construction Budget, the Project Manager shall make recommendations to the WPA Parties for measures to reduce the Estimate of Construction Costs to conform with the Project Construction Budget. The WPA Parties retain sole discretion as to whether to accept, decline or modify such recommendations.
- 8. <u>Construction Phase Duties, Obligations and Responsibilities</u>. The following PMA Services shall be provided in accordance with the scope of services set out in Exhibit A. To the extent there is any conflict between the PMA Services described in this Article 8 and Exhibit A, the terms of Exhibit A shall control over the terms of this Article 8, but shall not control over any other provisions of this Agreement.
- Administration and Coordination of Prime Agreements and Construction. Project 8.1 Manager will provide administrative, oversight, management and related services necessary to administer the Prime Agreements executed by each of MCWD and MCWRA and to coordinate the schedule and sequence of the Work between or among the Contractors during the Construction Phase of the Project Facilities including: (a) receiving, reviewing and forwarding to the MCWD or MCWRA, as applicable, the Contractors' Certificates of Insurance and Bonds along with commentary as to the extent to which the same comply with requirements of the applicable Prime Agreement; (b) providing advice and recommendations to MCWD or MCWRA, as applicable, for issuance of Notice to Proceed directing commencement of work under the Prime Agreements; (c) scheduling, coordinating and conducting pre-construction and construction meetings; recording, maintaining and distributing minutes thereof; (d) developing and implementing procedures for the submittal and processing of submittals required by each Prime Agreement; (e) in consultation with MCWD or MCWRA, as applicable, develop and implement procedures for the handling and disposition of the Contractors' requests for information or clarifications; (f) establishing and implementing procedures for the transmittal and receipt of communications, drawings and other information between Project Manager and the Contractors relating to Project construction; and (g) allocating Site staging and storage areas.
- 8.2 <u>Monitoring of Construction Costs.</u> The Project Manager will monitor on-going Construction Costs and no less frequently than monthly advise MCWD or MCWRA, as applicable, of the financial condition of the Project Facilities by: (a) development of Project cash flow reports, forecasts and other financial reports to MCWD or MCWRA, as applicable, including those reflecting variations between actual Construction

Costs and the Project Construction Budget and estimated costs of unperformed Work; (b) maintaining records reflecting the actual costs for activities completed or in progress, including records relating to work performed on a unit cost basis and additional work performed by the Contractors on a time and materials basis; (c) monitoring and advising MCWD or MCWRA, as applicable, of costs pertaining to potential, pending and completed changes to any Prime Agreement; and (d) advising and making recommendations to MCWD or MCWRA, as applicable, for adjustments to the Project Construction Budget relative to actual or anticipated Construction Costs. The Project Manager shall prepare and submit cost reports to each of the WPA Parties at least monthly or more frequently if so directed by a WPA Party. The information compiled by the Project Manager and reports generated by the Project Manager relating to Construction Costs shall be in such detail and format as required by the applicable WPA Party. In addition the extent of detail and the nature of the format of such reports, the information compiled by the Project Manager and reports generated by the Project Manager shall specifically indicate the original contract price of each Prime Agreement (the "Contract Price"), the extent of adjustment of the Contract Price to each Prime Agreement by MCWD or MCWRA, as applicable, Change Orders and the extent of potential further adjustment of the Contract Price of each Prime Agreement as of the date of the Project Manager's report based upon the Change or potential Changes known at the time of the Project Manager's preparation of a cost report for a Prime Agreement. In addition to updating each of the WPA Parties as required in this Section 8.2, the Project Manager shall deliver or present such updates to the Advisory Committee at or before each periodic Advisory Committee meeting.

Applications for Progress Payments. The Project Manager, along with MCWD or MCWRA, as applicable, will participate in the review, approval and disbursement of Progress Payments to each of the Contractors performing Work on the Project Facilities and in consultation with MCWD or MCWRA, as applicable, make recommendations for the disbursement of Progress Payments to the Contractors as follows: (a) Project Manager will assist in the development of procedures for submittal, review, processing and disbursement of Progress Payments to Contractors, along with associated forms and reporting system; (b) based upon Project Manager's observations and evaluations of each application for Progress Payment, Project Manager will review and certify to MCWD or MCWRA, as applicable, the amount due on each such application for Progress Payment; (c) Project Manager's certifications constitute a representation to MCWD or MCWRA, as applicable, that, based on Project Manager's observations at the Site, the data and information presented in each application for Progress Payment, and to the best of Project Manager's knowledge, information and belief, the Work has progressed to the point indicated in the application for Progress Payment and the quality of the Work is generally in accordance with the Contract Documents for the subject Prime Agreement; and (d) Project Manager's representations relative to applications for Progress Payment are subject to an evaluation of the Work for conformity with the requirements of the applicable Prime Agreement for the Substantial Completion and Final Completion of each Prime Agreement, results of subsequent tests, inspections and other procedures, minor deviations from requirements of the Prime Agreements correctable prior to completion and any specific qualifications expressed by Project Manager in its certification. Project Manager's issuance of a Certificate as set forth in this Section 8.3 shall be a representation that the Contractor(s) is/are to the best of the Project Manager's information and belief entitled to payment in the amount so certified. The Project Manager's review of applications for Progress Payment shall be undertaken and completed in a timely manner so that MCWD or MCWRA, as applicable, can meet obligations to make Progress Payment due each Contractor within the time permitted by contract and applicable law without incurring interest liability or other penalties/liabilities. The issuance of a Certificate for payment shall not be a representation that the Project Manager has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, or (3) ascertained how or for what purpose the Contractor has used money previously paid on account of the Prime Agreement. Notwithstanding anything provided in this Section 8.3, MCWD or MCWRA, as applicable, retain sole discretion to make the final decision with respect to making Progress Payments for the Project Facilities.

8.4 <u>Substantial Completion and Final Completion; Punch List Items.</u> In consultation with MCWD or MCWRA, as applicable, the Project Manager will assist in ascertaining the achievement of Substantial Completion of the Work under each Prime Agreement and identifying all Punch List Items required to be completed for the achievement of Final Completion. If upon inspection of the Work of a Contractor, the Project Manager determines that Substantial Completion has not been achieved, the Project Manager will assist in assessing the conditions of the Work and the measures necessary for the Contractor to achieve Substantial Completion of its portion of Project construction.

8.5 <u>Project Progress</u>.

- (a) Advisory Committee. In addition to the Project Manager's other responsibilities set forth herein, the Project Manager shall, in accordance with the WPA, consult directly with the Advisory Committee regarding the PMA Services in order to help the WPA Parties to coordinate among themselves the design, permitting, construction, operations, maintenance, repairs, and replacements of the components of the Project. The Project Manager shall regularly update the Advisory Committee and each of the WPA Parties in connection with each of the matters set forth in Sections 6.4 and 6.5 of the WPA. The Project Manager shall attend each Advisory Committee meeting.
- Master Project Schedule. Project Manager will, in consultation with the WPA (b) Parties, develop an overall comprehensive Project Schedule for construction of the Project showing the activities of each of the Contractors necessary for completion of Project construction ("Master Project Schedule"). The Master Project Schedule shall also address each of the Milestones associated with the Project and will keep the Advisory Committee and each of the WPA Parties updated with respect to whether such Milestones are completed on a timely basis. The Project Manager will incorporate the Contractors' separate Construction Schedules into the Master Project Schedule. During the course of Project construction and based upon Contractors' updated Construction Schedules, Project Manager shall monitor and update the Master Project Schedule on a monthly basis or more frequently as may be requested from time-to-time by the WPA Parties or the Advisory Committee so that the WPA Parties and the Advisory Committee are kept fully informed at all times of the status and progress of overall Project construction and the status of each Contractors' construction progress. If the actual rate of Project construction progress is behind that indicated by the Master Project Schedule, Project Manager shall advise and make recommendations to the WPA Parties for remedial action. The Project Manager shall keep the Advisory Committee and each of the WPA Parties informed of compliance with or deviation from the Master Project Schedule and shall prepare reports related to such Master Project Schedule for presentation to the Advisory Committee.
- (c) <u>Contractors' Construction Schedules</u>. Project Manager shall review the Contractors' Construction Schedules and updates thereof, advising the WPA Parties of compliance with the terms of the Prime Agreement along with measures appropriate to obtain compliance if necessary.
- (d) <u>Coordination of Construction Activities</u>. Project Manager shall coordinate its own actions, the activities of the Contractors with each other, and those of the WPA Parties in conformity with the Master Project Schedule, including the coordination and sequencing of Contractors' construction activities so that Site space is appropriately allocated and the Master Project Schedule is maintained. A material obligation of the Project Manager under this Agreement is coordination of the scheduling and sequencing by the Contractors of their Work so that Project construction is completed in accordance with the Master Project Schedule and within the Project Construction Budget.
- (e) <u>Progress Records.</u> Project Manager will maintain records of the progress of construction of Project, including written progress reports and photographs reflecting the status of Project construction and percentage completion with respect to each Prime Agreement and each major component of the Project. Project Manager will maintain daily records during Project construction which record weather conditions, Contractors at the Site, work accomplished under each Prime Agreement, problems encountered and other matters materially affecting the Project, the Master Project Schedule and costs of the Project.
- (f) <u>Substantial Completion and Final Completion</u>. Upon request of a Contractor, Project Manager will, in conjunction with the applicable WPA Parties, determine whether Substantial Completion and Final Completion have been achieved under that Contractor's Prime Agreement. Upon determining that Substantial Completion and Final Completion of a Prime Agreement have been achieved, and upon approval of the WPA Parties, the Project Manager shall issue Certificates of Substantial Completion and Final Completion for that Prime Agreement, as applicable.
- (g) <u>Miscellaneous</u>. The Project Manager shall further update the WPA Parties and the Advisory Committee with respect to any other subjects or matters reasonably requested by such persons in connection with the Project.

- 9. <u>Site Observations</u>. The following PMA Services shall be provided in accordance with the scope of services set out in Exhibit A. To the extent there is any conflict between the PMA Services described in this Article 9 and Exhibit A, the terms of Exhibit A shall control over the terms of this Article 9, but shall not control over any other provisions of this Agreement.
- (a) Project Manager On-Site. During construction of the Project Facilities and at substantially all times during which construction activities under the Prime Agreements are occurring, Project Manager's Project Manager Representative or other authorized representative shall be at the Site to observe Site construction activities. Notwithstanding the foregoing, upon prior request of the Project Manager, MCWD or MCWRA, as applicable, may consent to Contractors' performance of Site construction activities without the Project Manager, Project Manager Representative or other authorized representative of the Project Manager present at the Site. The WPA Parties' consent may be granted, denied, limited or conditioned in the sole and absolute discretion of the WPA Parties. Project Manager shall maintain at the Site originals or true and correct copies of each of the WPA, the Prime Agreements, Design Documents, approved Change Orders, and submittals relating to the Project Facilities.
- (b) <u>Construction Quality</u>. The Project Manager will endeavor to guard MCWD and MCWRA against defects and deficiencies in construction and workmanship on the basis of its Site observations, and a quality control program established and implemented hereunder by the Project Manager to monitor the workmanship of the Contractors for conformity with; (a) accepted industry standards; (b) applicable laws, codes, regulations, ordinances or rules; (c) and the requirements of the Prime Agreements.
- (c) Rejection of Work. Should Project Manager discover or observe patent conditions of defective or deficient construction or workmanship which has or may have an adverse impact upon building life-safety systems or operations, structural elements or integrity, or the anticipated successful operation of the Project Facilities, the Project Manager shall take prompt action appropriate under the circumstances, including rejecting the work and thereupon notifying MCWD or MCWRA, as applicable, in writing. In other circumstances where defective or deficient Work is observed by Project Manager, MCWD or MCWRA, as applicable, shall be notified in writing by the Project Manager of such conditions and if directed by MCWD or MCWRA, as applicable,, the Project Manager shall stop such Work or assist MCWD or MCWRA, as applicable, in taking other corrective measures. Project Manager's responsibilities set forth in this Section 9(c) shall be limited to defective or deficient work of an apparent and patent nature.

(d) <u>Project Site Safety</u>.

- (i) MCWD and MCWRA Safety Programs. Prior to any Contractor's performance of Work at the Site, the Project Manager shall review MCWD's and MCWRA's safety programs, and meet and confer with the MCWD or MCWRA, as applicable, to review such safety program and to address measures to be implemented by the Project Manager to coordinate the safety programs of each Contractor with MCWD's or MCWRA's safety program, as applicable.
- (ii) <u>Contractor Safety Programs</u>. Project Manager shall review safety programs of the Contractors for conformity with MCWD's or MCWRA's safety programs, as applicable. The Project Manager shall monitor each Contractor's compliance with safety programs and advise MCWD or MCWRA, as applicable, of measures, if any, necessary or appropriate to obtain the Contractor's compliance. By undertaking the obligations hereunder, Project Manager shall not be deemed to have assumed responsibility for the adequacy or sufficiency of safety programs implemented by Contractors, but the Project Manager is responsible for verifying that each Contractor has established a safety program and that each Contractor has implemented its safety program.
- (iii) <u>Safety Violations; Safety Conditions</u>. The Project Manager shall promptly notify MCWD or MCWRA, as applicable, in writing of all Project Manager-observed instances of a Contractor's failure to comply with applicable safety requirements.

(e) <u>Changes and Claims</u>.

- (i) Processing of Changes and Change Orders. Project Manager will assist MCWD or MCWRA, as applicable, in evaluation of requests by Contractors for issuance of Change Orders, and assist in negotiations with Contractors relative to Change Order proposals or the adjustment of Contract Price or Contract Time under the Prime Agreements. Project Manager will make recommendations to MCWD or MCWRA, as applicable, for handling and disposition the Contractors' proposals or requests relative to Change Orders. If a Change Order to a MCWD or MCWRA Prime Agreement is approved or authorized by MCWD or MCWRA, as applicable, Project Manager will assist MCWD or MCWRA, as applicable, in the preparation of a Change Order reflecting such approved or authorized change to the relevant Prime Agreements. The Project Manager is not authorized, without the prior consent and approval of MCWD or MCWRA, as applicable, to effectuate or authorize any Change Order to any MCWD or MCWRA Prime Agreement. The Project Manager shall be liable to MCWD or MCWRA, as applicable, for all direct and consequential costs, losses or damages resulting from the Project Manager's direction or authorization to effectuate a Change Order to any MCWD or MCWRA Prime Agreement without the prior direction and authorization of the applicable WPA Party.
- (ii) <u>Coordination of Changes</u>. Project Manager will coordinate and disseminate correspondence, drawings and other written materials by and between the Contractors, relating to Change Orders to the Prime Agreements. Project Manager will coordinate the Contractors' performance of Change Orders authorized by MCWD or MCWRA, as applicable,. Project Manager will maintain a log or other written records to monitor the pendency and disposition of Changes and Change Orders to keep MCWD or MCWRA, as applicable, advised of the status of the same and the actual or potential impact of any particular Change or Change Order or the cumulative effects thereof on Construction Costs or time for completion of Project construction.
- (iii) <u>Claims Handling</u>. Project Manager will assist in the review, evaluation and processing of claims asserted by Contractors. Project Manager shall provide input to MCWD or MCWRA, as applicable, as to merit, handling and disposition of Contractors' claims.
- 10. <u>Post-Construction</u>. The following PMA Services shall be provided in accordance with the scope of services set out in Exhibit A. To the extent there is any conflict between the PMA Services described in this Article 10 and Exhibit A, the terms of Exhibit A shall control over the terms of this Article 10, but shall not control over any other provisions of this Agreement.
- 10.1 Review and Transmittal of Contractor Closeout Documents. The Project Manager shall receive from the Contractors performing work on the Project Facilities the closeout documents and items to be submitted by each Contractor under the terms of the Prime Agreement upon completion of its obligations under the Prime Agreement, including a list identifying completed Punch List Items. The Project Manager shall review each such Contractor's closeout submittals to determine conformity with requirements of each Prime Agreement; if the Project Manager determines that any such Contractor's closeout submittals do not conform to requirements of the Prime Agreement, the Project Manager shall make recommendations to either MCWD or MCWRA, as applicable, for measures to secure compliance with the requirements of the Prime Agreement. The Project Manager shall deliver to MCWD or MCWRA, as applicable, all closeout submittals, as-built drawings and other Contractor closeout documents.
- 10.2 <u>Project Manager Delivery of Project Records for each Prime Agreement</u>. Within thirty (30) days of the date of issuance of a certificate of Substantial Completion for a Prime Agreement pertaining to the Project Facilities, the Project Manager shall assemble and deliver to either MCWD or MCWRA, as applicable, all of the Project Facilities records maintained during the Construction phase by the Project Manager relating to such Prime Agreement.
- 10.3 <u>Contractors' Post-Construction Obligations</u>. If any Contractor is obligated under the terms of its Prime Agreement to provide work, labor materials or services after completion of Project Facilities construction, the Project Manager shall monitor such Contractor's post-construction activities for conformity with requirements of the Prime Agreement. The Project Manager shall, as necessary, make recommendations to MCWD or MCWRA, as applicable, for securing Contractors' compliance with post-construction obligations.

10.4 <u>Project Reports.</u> The Project Manager shall monitor the filing of reports and other actions required by applicable laws, codes, regulations or rules to be undertaken by MCWD or MCWRA, as applicable, or Contractors upon completion of Project Facilities construction. If MCWD or MCWRA, as applicable, or any Contractor has not filed reports or taken other actions required upon completion of Project Facilities construction, the Project Manager shall make recommendations to the WPA Parties for measures to secure compliance by either MCWD or MCWRA, as applicable,, or a Contractor with regard to such requirements. The Project Manager will assist MCWD or MCWRA, as applicable, in completion and submission of reports and other actions required to be undertaken by such WPA Party upon completion of Project Facilities construction pursuant to applicable law, rule or regulation.

11. Additional Services.

- 11.1 Additional Services. If the WPA Parties shall request any of the additional services described in this Section 11 or request services by means of a PMA Task Order that describes services not covered under any of the Project Tasks (each, an "Additional Service," collectively the "Additional Services"), Project Manager shall be compensated for the same in accordance with the provisions of this Agreement relating to Additional Services. The Additional Services described in this Section 11 or in a future PMA Task Order that describes services not covered under any of the Project Tasks are not included in the scope of PMA Services hereunder. Any services under a PMA Task Order shall not be treated as an Additional Services, unless specifically identified as such.
- 11.2 <u>Authorizing Additional Services</u>. The Project Manager shall not commence performance of any Additional Services prior to obtaining written authorization from the applicable WPA Parties, including the appropriate Allocable PMA Percentage for each such Additional Service.
 - 11.3 <u>Description of Additional Services</u>. The following constitute Additional Services:
- (a) <u>Material Project Scope Changes</u>. Services required or necessary as a result of significant changes in the Project scope or other requirements of the Project, including Project size, quality or complexity or material changes to the Project Schedule, including those services which are reflected in a Change Order or PMA Task Order Change.
- (b) <u>Termination of Contractor</u>. Any services related to the coordination, consultation, advice and/or administration services as a result of the default or termination of a Contractor, failure of performance of the WPA Parties or a Contractor under any Prime Agreement, or major defects or deficiencies in the Work or quality of Work of a Contractor.
- (c) <u>Damage or Destruction to Project</u>. Except to the extent caused by the Project Manager, services and consultation associated or necessitated by damage to the Project or any component of the Project Facilities prior to Substantial Completion by reason of fire or other casualty.
- (d) <u>Future Systems</u>. Services relative to future systems, facilities or equipment not included within the scope of the Project as reflected in the cumulative Prime Agreements awarded by the WPA Parties for construction of the Project.
- (e) <u>Investigation of Existing Conditions</u>. Services to investigate existing conditions or facilities or to provide measured drawings thereof that were not covered or contemplated in the PMA Services.
- (f) Furniture, Furnishings, Equipment Not in Project Scope. Services in connection with the WPA Parties' selection, procurement or installation of furniture, furnishing or equipment not included within the scope of the Project as reflected in the cumulative Prime Agreements awarded by the WPA Parties for Project construction. If the Project Manager is requested to provide Additional Services in connection with such furniture, furnishing or equipment, the Project Manager shall develop a schedule for Bidding and delivery/installation of such furnishings, equipment and furniture coordinated with Project completion and as otherwise directed by the applicable WPA Parties.

(g) <u>Miscellaneous Other Additional Services</u>. Any other services that are not described in any of the Project Tasks set forth on Exhibit A and are deemed necessary or appropriate by each of the Project Manager and the applicable WPA Parties to complete the construction of the Project.

12. <u>Compensation</u>.

12.1 Requirements for Invoices. Payment for either PMA Services or Additional Services as set forth in each PMA Task Order, or specific executed PMA Task Order Change(s) shall be made by the responsible WPA Party to the Project Manager and shall be considered as full compensation for such services and all personnel, materials, supplies, and equipment used by the Project Manager and costs incurred by the Project Manager in carrying out such PMA Services or Additional Services. In no event shall the amount of compensation for any Project Task as set forth in an applicable PMA Task Order exceed the budgeted amount set forth in such PMA Task Order without approval from the applicable WPA Parties.

(a) Payment for PMA Services or Additional Services performed or furnished under terms of each PMA Task Order and/or PMA Task Order Change(s) shall be on a time and Reimbursable Expenses basis, with a total cost not-to-exceed, compensation as described below:

<u>Project Tasks</u>	MCWD Costs	MCWRA Costs	CAW Costs	Total
Task 1 Program Management	\$ 4,701,000	\$ 997,000	\$ 633,000	\$ 6,331,000
Task 2 Funding	\$ 469,000	\$ 100,000	\$ 130,000	\$ 699,000
Task 3 Environmental Coordination	\$ 445,000	\$ 94,000	\$ 79,000	\$ 618,000
Task 4 Permitting	\$ 1,081,000	\$ 265,000	\$ 140,000	\$ 1,486,000
Task 5 System-wide Engineering	\$ 1,055,000	\$ 279,000	\$ 87,000	\$ 1,421,000
Task 6 Brackish Wells		\$ 739,000		\$ 739,000
Task 7 MCWRA Brackish Water Pipeline		\$ 360,000		\$ 360,000
Task 8 MCWD Brackish Water Pipeline	\$ 356,000			\$ 356,000
Task 9 Desalination Plant	\$ 6,135,000			\$ 6,135,000
Task 10 Product Water Pipeline	\$ 699,000			\$ 699,000
Task 11 CAW Coordination			\$ 225,000	\$ 225,000
Task 12 MCWD Tie-in Pipeline	\$ 398,000			\$ 398,000
Task 13 Construction Management	\$ 5,257,000	\$ 1,329,000		\$ 6,586,000
Total PMA Costs	\$ 20,596,000	\$ 4,163,000	\$ 1,294,000	\$ 26,053,000
Task 14 Additional Services Allowance				\$ 2,200,000

- (b) The Project Manager shall be reimbursed for Reimbursable Expenses at the actual direct costs of the amount incurred by the Project Manager, with the exception of compensation of any Contractor pursuant to a PM Subcontract which shall be reimbursed at the actual direct cost plus five percent (5%).
- (c) Upon receipt of written approval from the WPA Parties, the Project Manager may reallocate the budget between Project Tasks in order to be consistent with the PMA Services actually rendered.
- (d) If the Project Manager determines that a particular Project Task will not be completed within the budgeted amount set forth in the applicable PMA Task Order, then the Project Manager shall advise the applicable WPA Parties of the need for adjustment of such budgeted amount.
- (e) Payments for PMA Services or Additional Services provided by Project Manager on a time and Reimbursable Expense basis shall be made monthly by the WPA Parties based on an

itemized invoices, in a form agreeable to the each of the WPA Parties for the work performed by the Project Manager on the Project (broken down by Project Task) in the immediate preceding month along with the Allocable PMA Percentage for such costs and expenses for each such WPA Party. Such payments shall be for the invoice amount, without retention unless the applicable WPA Parties contest all or part of said invoice in which event only that portion so contested will be retained by WPA Parties pending resolution of the dispute and any uncontested portion will be paid. A dispute by any WPA Party with respect to the Allocable PMA Percentage, rather than for the actual costs of such PMA Services or Additional Services shall not be grounds for retaining that portion of the payments due to Project Manager.

(f) <u>Payment of Invoices</u>. The WPA Parties shall pay the Project Manager within thirty (30) days of receipt of an invoice.

13. <u>Cost Sharing of Allocable PMA Costs.</u>

13.1 <u>Determination of Allocation Responsibility</u>. With respect to the Project Manager's compensation, Project Tasks will be clearly allocated to a particular WPA Party or will be allocated to and be for the benefit of more than one WPA Party. For the purposes of this Agreement, each WPA Party shall, subject to Section 13.3, initially bear a percentage of Allocable PMA Costs ("<u>Allocable PMA Percentage</u>") for the Project Manager's delivery of PMA Services related to Project Tasks as follows:

Project Tasks	MCWD Costs	MCWRA Costs	CAW Costs
Task 1 Program Management	74%	16%	10%
Task 2 Funding	67%	14%	19%
Task 3 Environmental Coordination	72%	15%	13%
Task 4 Permitting	73%	18%	9%
Task 5 System-wide Engineering	74%	20%	6%
Task 6 Brackish Wells	0%	100%	0%
Task 7 MCWRA Brackish Water Pipeline	0%	100%	0%
Task 8 MCWD Brackish Water Pipeline	100%	0%	0%
Task 9 Desalination Plant	100%	0%	0%
Task 10 Product Water Pipeline	100%	0%	0%
Task 11 CAW Coordination	0%	0%	100%
Task 12 MCWD Tie-in Pipeline	100%	0%	0%
Task 13 Construction Management	80%	20%	0%

- 13.2 <u>Payment of Allocable PMA Costs</u>. Each invoice for Project Tasks from the Project Manager shall be provided to the applicable WPA Party and shall contain a detailed breakdown of the Allocable PMA Percentage of costs related to all such Project Tasks. Provided that no event of default has occurred and is continuing under this Agreement, the responsible WPA Party shall remit payment for such invoices in accordance with the provisions of Section 12 of this Agreement.
- 13.3 True-up of Allocable PMA Costs. Although the initial Allocable PMA Percentage for each Project Task shall be determined in accordance with the table set forth in Section 13.1, or for Additional Services as determined pursuant to Section 11.2, within sixty (60) days following the end of each calendar year, the WPA Parties shall, with assistance from and in consultation with the Project Manager, meet and confer in order to review all PMA Services that have been performed and the actual allocation of benefits from such PMA Services for each of the WPA Parties in order to determine whether the Allocable PMA Percentages used for the Project Tasks or for Additional Services for the preceding calendar year need to be reconciled or adjusted to more accurately reflect the actual allocation of benefits received from the Project Manager's PMA Services. To the extent that the WPA Parties agree that such Allocable PMA Percentages are either reconciled or adjusted, the WPA Parties shall true-up

the payment of Allocable PMA Costs for the preceding calendar year. To the extent that the WPA Parties are unable to agree to reconciliation or adjustment of such Allocable PMA Percentages, the WPA Parties shall resolve any such disagreement by using the same procedure as is set forth in Section 6.6 of the WPA.

- 14. <u>No Joint or Several Liability</u>. None of the WPA Parties shall be jointly or severally liable for the payment obligations of the other WPA Parties under this Agreement.
- Indemnification. To the fullest extent provided by law, Project Manager agrees to indemnify and hold harmless each of the WPA Parties, their directors, officers, employees, agents and representatives from and against liability for any and all claims, demands, costs, penalties, fees (including without limitation, expert witness and attorneys' fees), damages, and liabilities whatsoever for, among other things, bodily injury, death, property damage, personal injury, or economic loss asserted by any Person, to the extent caused by or attributable to a negligent, grossly negligent or intentional breach of this Agreement by the Project Manager or the negligent, grossly negligent or intentionally wrongful acts or omissions of the Project Manager or its employees, directors, agents, representatives, subcontractors or consultants arising from or connected with performance under this Agreement by the Project Manager or its employees, directors, agents, representatives, subcontractors or consultants. Project Manager shall have no duty to defend any indemnified party against such allegations, but shall pay as damages an indemnified parties' attorneys' fees and costs to the extent caused by or attributable to the negligent, grossly negligent or intentional breach of this Agreement by the Project Manager or the negligent, grossly negligent or intentionally wrongful acts or omissions of the Project Manager or its employees, directors, agents, representatives, subcontractors or consultants. Project Manager's obligations under this paragraph shall survive the expiration or termination of this Agreement for any reason.
- 16. <u>Insurance</u>. The Project Manager shall purchase and maintain the following insurance in companies properly licensed and satisfactory to each of the WPA Parties. Such insurance shall be written for not less than the following limits:

16.1 <u>Project Manager's Professional Liability Insurance:</u> \$5,000,000 (per claim/aggregate)

16.2 <u>Employer's Liability</u>:

Each accident	\$1,000,000
Diseases – Policy Limit	\$1,000,000
Diseases – Each Employee	\$1,000,000

- Morkers Compensation. Project Manager hereby certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and shall comply with such provisions before commencing the performance of the PMA Services under this Agreement.
- 16.4 <u>Commercial General Liability</u> (policy coverage shall be on an occurrence basis, and shall include coverage for collapse and underground hazards):

General Aggregate:	\$2,000,000
Products and Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000
Fire Damage (any one fire)	\$300,000
Medical Expense (any one person)	\$5,000

The Project Manager shall name each of the WPA Parties as additional insured.

16.5 Automobile Liability (policy coverage shall include any auto, hired autos, and non-owned autos):

Combined Single Limit

\$1,000,000

- Manager shall submit to the WPA Parties valid certificates of insurance, policies of insurance and amendatory riders or endorsements to Project Manager's insurance policies, all in form and substance satisfactory to the WPA Parties. Failure of the WPA Parties to demand certificates of insurance and/or policies shall not constitute a waiver of the Project Manager's responsibility to procure insurance. Nor shall review or approval by the WPA Parties in any way relieve Project Manager of its responsibility for furnishing sufficient amounts and coverage of insurance. Said endorsements and amendatory riders shall indicate that with respect to said additional insureds, there shall be severability of interests under said insurance policies. The certificates and amendatory riders or endorsements shall clearly indicate the specific coverage and shall contain a provision requiring the giving of written notice to the WPA Parties at least thirty (30) days prior to the cancellation, non-renewal or material modification of any such policies, as evidenced by return receipt of U.S. Certified Mail. Further, said certificates shall also contain a statement therein, by the insurer or its agent, that the coverage evidenced in the certificate meets or exceeds the WPA Parties requirements in this Section 16.
- 16.7 <u>Insurance for Additional Matters</u>. If requested by the WPA Parties after the date hereof, the Project Manager shall promptly procure, at the WPA Parties expense, liability insurance in such amounts as the WPA Parties may request insuring against perils not listed above.
- 16.8 <u>Procurement of Policies</u>. If the Project Manager fails to purchase and maintain the liability insurance required herein, the WPA Parties may, but shall not be obligated to, purchase such insurance on the Project Manager's behalf and the WPA Parties shall be entitled to either be reimbursed by the Project Manager or may set off such amounts against current or future invoices of the Project Manager.
- 16.9 <u>Expiration of Insurance</u>. When any insurance required hereunder, due to the attainment of a normal expiration date or renewal date, shall expire or be renewed, the Project Manager shall, not less than thirty (30) days prior to such expiration or renewal date, supply the WPA Parties with updated replacement certificates of insurance and amendatory riders or endorsements that clearly evidence the continuation of coverage in the same manner, limits of protection, and scope of coverage, as was provided by the certificates and amendatory riders or endorsements originally supplied.
- 17. <u>Resolution of Disputes</u>. Any disputes between or among the WPA Parties and the Project Manager in connection with this Agreement shall be resolved in accordance with the procedures set forth in this Section 17 and no dispute shall give rise to an event of default under this Agreement until the dispute resolution procedures of this Section 17 have been completed.
- 17.1 <u>Good Faith Negotiations.</u> Any Party that believes a dispute exists under this Agreement shall notify the other Parties of the dispute in writing. Within five (5) business days of the day upon which written notice is deemed complete under Section 22, the Representatives of each Party will personally meet and confer and attempt in good faith to resolve the dispute. If the Representatives cannot resolve the dispute within ten (10) Business Days after the day upon which written notice is deemed complete under Section 22, the matter will be referred to senior management of the Parties for resolution. If these persons are unable to resolve the dispute within fifteen (15) business days after the day upon which written notice is deemed complete under Section 22, a Party that still believes a dispute requires resolution may avail itself of the provisions of Section 17.2 of this Agreement. If the subject matter of the dispute relates to a very time sensitive issue, the Parties shall reasonably cooperate with one another to expedite the above-described negotiation.
- 17.2 <u>Non-Binding Mediation</u>. If the dispute is not settled or resolved pursuant to Section 17.1, the Parties shall endeavor to settle the dispute in an amicable manner, using non-binding mediation under the rules of JAMS before having recourse in a court of law. Each Party shall be responsible for the expenses of such Party's participants, consultants, experts or representatives and shall be paid by the Party producing such participants,

consultants, experts or representatives. All other expenses of the mediation, including required travel and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the Parties, unless they agree otherwise. Any resultant agreements from mediation shall be documented in writing. All mediation proceedings, results, and documentation shall be inadmissible for any purpose in any legal proceeding (pursuant to California Evidence Codes Sections 1115 through 1128), unless such admission is otherwise agreed upon in writing by all Parties. Mediators shall not be subject to any subpoena or liability, and their actions shall not be subject to discovery. The mediator must have substantial experience with the water utility/treatment industry, including both publicly-owned and privately-owned water utilities. If any of the matters or issues involved in any dispute are outside the scope of expertise of the mediator, the mediator shall have the right to retain and rely on one or more experts with respect to the applicable matter or issue requiring expert advice. Any person selected as an expert shall be knowledgeable and experienced in the matters sought to be mediated and shall have no affiliation with the Parties; provided, however, the expert may have been utilized by any Party as a consultant not more recently than twelve (12) months prior to the time of engagement if the mediator determines that such expert will provide services unbiased by such prior consulting relationship. Mediation shall be completed within 60 days after request for the mediation by either Party, unless the parties to the mediation otherwise agree in writing. If the subject matter of the dispute relates to a very time sensitive issue, the Parties shall reasonably cooperate with one another to expedite the above-described mediation.

- 17.3 <u>Judicial Relief.</u> If mediation pursuant to Section 17 does not resolve a dispute, a Party or the Parties may seek relief in a court of competent jurisdiction. Any action or proceeding regarding this Agreement seeking judicial relief shall be filed in the Superior Court of the State of California, County of Monterey.
- 18. <u>No Waiver by Failure to Act.</u> No failure, delay, forbearance or indulgence on the part of any Party in insisting upon the strict performance of any provision, or in exercising any option, right, power, privilege or remedy hereunder, shall operate or be construed as a waiver or relinquishment thereof, or as an acquiescence in any breach, nor shall any single or partial exercise of any option, right, power, privilege or remedy hereunder preclude any other or further exercise thereof or the exercise of any other option, right, power, privilege or remedy.
- 19. <u>Third Party Beneficiaries</u>. No person shall be a third party beneficiary of any of the terms of this Agreement.
 - 20. Time Is of the Essence. Time is hereby expressly declared to be of the essence of this Agreement.
- 21. <u>Successors and Assigns.</u> The obligations of the Parties shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the Parties; provided, however, that no Party shall be entitled to assign, transfer or delegate any of its rights, obligations or liabilities hereunder without the prior written consent of the other Party.
- 22. Notices. All notifications, notices, demands, requests and other communications herein provided for or made pursuant hereto shall be in writing and shall sent by (i) registered or certified mail, return receipt requested, and the giving of such communication shall be deemed complete on the third (3rd) business day after the same is deposited in a United States Post Office with postage charges prepaid, (ii) reputable overnight delivery service, and the giving of such communication shall be deemed complete on the immediately succeeding business day after the same is deposited with such delivery service or (iii) so long as a Party has notified the other Parties by means of a method described in clauses (i) or (ii) above of such Party's email address for notification purposes, email transmission of notices to such Party are also permitted provided an original is also sent via one of the other permitted means and the giving of such communication shall be complete when such email is received if such email is received before 5:00 pm PST; otherwise, such communication shall be deemed complete the next business day. The date on which notifications, notices, demands, requests and other communications, notices, demands, requests date arising under subsections (i), (ii) or (iii) of this Section 22. All notifications, notices, demands, requests and other communications to (a) CAW shall be addressed to its President with an additional copy to its General Counsel, (b) MCWD shall be addressed to its General Manager with an additional copy to its District Counsel; and (c) MCWRA shall be addressed to its General Manager with an additional copy to its County Counsel,

each at its address set forth in the first paragraph of this Agreement, or at such other address in the continental United States as a Party may furnish to the other Parties in writing.

23. Termination.

- 23.1 Termination for Default. Either the WPA Parties or Project Manager may terminate this Agreement upon seven (7) calendar days advance written notice to the other if there is a material default by the other Party in its performance of its obligations hereunder and such default in performance is not caused by the Party initiating the termination. Such termination shall be deemed effective the seventh (7th) day following the date of the written termination notice, unless during such seven (7) day period, the Party receiving the written termination notice shall commence to cure it default(s) and diligently thereafter prosecute such cure to completion. In addition to the WPA Parties' right to terminate this Agreement pursuant to the foregoing, the WPA Parties may terminate this Agreement upon written notice to Project Manager if: (a) Project Manager becomes bankrupt or insolvent, which shall include without limitation, a general assignment for the benefit of creditors or the filing by Project Manager or a third party of a petition to reorganize debts or for protection under any bankruptcy or similar law or if a trustee or receiver is appointed for Project Manager or any of Project Manager's property on account of Project Manager's insolvency; or (b) if Project Manager disregards applicable laws, codes, regulations, ordinances or rules. If the WPA Parties exercise the right of termination hereunder, the final amount due Project Manager, if any, shall be based upon PMA Services, authorized Additional Services and Reimbursable Expenses incurred or provided prior the effective date of the WPA Parties' termination of this Agreement, reduced by losses, damages, or other costs sustained by the WPA Parties arising out of the termination of this Agreement or the cause(s) for termination of this Agreement. Payment of the final amount due, if any, shall be made by the WPA Parties only after completion of the Construction Phase of the Project. Project Manager shall remain responsible and liable to WPA Parties for all losses, damages or other costs sustained by WPA Parties arising out of termination pursuant to the foregoing or otherwise arising out of Project Manager's default hereunder, to the extent that such losses, damages or other costs exceed any amount due Project Manager hereunder for PMA Services or authorized Additional Services.
- 23.2 <u>WPA Parties' Right to Suspend</u>. The WPA Parties may, in their discretion, suspend all or any part of the construction of the Project, Work under a Prime Agreement or Project Manager's services hereunder.
- 23.3 WPA Parties' Termination of Agreement for Convenience. The WPA Parties may, at any time, upon thirty (30) calendar days advance written notice to Project Manager terminate this Agreement for the WPA Parties' convenience and without fault, neglect or default on the part of Project Manager. In such event, the Agreement shall be deemed terminated thirty (30) calendar days after the date of the WPA Parties' written notice to Project Manager or such other time as the WPA Parties and Project Manager may mutually agree upon. In such event, the WPA Parties shall make payment to Project Manager for services provided through the date of termination. Such payment shall be made within thirty (30) days after the date the Agreement is deemed terminated.
- 23.4 <u>Project Manager Suspension of Services</u>. If a specific WPA Party shall fail to make payment when due to the Project Manager hereunder, Project Manager may, upon thirty (30) calendar days advance written notice to all WPA Parties, suspend further performance of services hereunder solely with respect to such WPA Party's portion of the Project until payment in full is received. In such event, Project Manager shall have no liability for any delays or additional costs of Project construction due to, or arising out of, such suspension.
- 24. <u>California Law Applicable</u>. This Agreement shall be governed by and construed in accordance with the laws of the state of California, without regard to the conflicts of law principles thereof.
- 25. <u>Severability of Provisions</u>. If any provision of this Agreement shall be held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or any other remaining provisions of this Agreement.
- 26. <u>Reimbursable Costs.</u> All WPA Party costs and expenses (including reasonable attorneys' fees) incurred by either in the negotiation, preparation, and enforcement of this Agreement shall be treated as Pre-

Effective Date Costs and Expenses or Project Administration and Oversight Expenses, as applicable in accordance with the terms of the WPA.

27. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, including by facsimile or digital scan delivered by electronic mail, and each such counterpart shall be deemed to be an original, but all of which, when taken together, shall constitute one agreement.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, this Agreement is executed and effective as of the Effective Date.

MARINA COAST WATER DISTRICT, a California County Water District	CALIFORNIA-AMERICAN WATER COMPANY, a California corporation and regulated public utility
By: Title:	By: Title:
MONTEREY COUNTY WATER RESOURCES AGENCY, a California Water Resources Agency	RMC WATER AND ENVIRONMENT, a California corporation
By: Title:	By: Title:

EXHIBIT A

Scope of Services

[PLEASE SEE ATTACHED]

Exhibit A

Regional Desalination Project

Scope of Services for Project Management Services

RMC Water and Environment ("<u>Project Manager"</u>) has been designated by the Project Advisory Committee as the Project Manager for the Regional Desalination Project ("<u>Project"</u>)as called for in the Water Purchase Agreement ("<u>WPA"</u>) among Marina Coast Water District ("<u>MCWD</u>"), Monterey County Water Resources Agency ("<u>MCWRA"</u>) and California American Water Company ("<u>CAW</u>") (collectively known as the "<u>WPA Parties</u>"). For purposes of this Exhibit A, the term "<u>Owner</u>" or "<u>Owners</u>" shall refer to the applicable WPA Party or WPA Parties.

The role of the Project Manager is to assist the WPA Parties, with input from the Advisory Committee, in supervising, administering and coordinating all design, engineering, permitting, and construction and acceptance testing related to the Regional Desalination Project. The roles and responsibilities of the Project Manager are further generally defined in Article 4 of the WPA and the Regional Desalination Project Management Agreement to which this Scope of Services is attached (the "Agreement"). This Scope of Work is based on the Project Management responsibilities set forth in the WPA and the Agreement.

Scope of Work in General

The Project Management scope of work consists of fourteen task categories that together encompass the subject matter of Project Manager's responsibilities relative to assisting the WPA Parties in supervising, administering and coordinating the design, engineering, permitting, construction and acceptance testing relating to their respective portions of the Project. Those task categories are:

- Task 1 Project Management
- Task 2 Funding
- Task 3 Environmental Coordination
- Task 4 Permitting
- Task 5 Project-Wide Engineering
- Task 6 Brackish Source Water Wells
- Task 7 MCWRA Brackish Source Water Pipeline
- Task 8 MCWD Brackish Source Water Pipeline
- Task 9 Desalination Plant
- Task 10 Product Water Pipeline
- Task 11 Coordination with CAW Facilities Manager
- Task 12 MCWD Tie-in Pipeline
- Task 13 Construction Management

• Task 14 Additional Services

Each of these task categories is more fully described in the section entitled "Description of Scope of Work" below.

CAW-Owned Facilities

CAW is conducting its design, engineering, construction, and much of the permitting activities under separate agreement(s) outside the Agreement. Therefore, to avoid duplication of efforts and cost for the CAW-Owned facilities, relative to the CAW Facilities the role of the Project Manager shall primarily consist of coordination with some permitting as shown in the following table.

Project Manager's role for CAW-Owned Facilities

Item	In the Project Manager Scope	Outside the Project Manager scope (being done by CAW)
General Regional Project	X	
administration/management		
Schedule and Budget Management	Partial	X
	(includes only incorporation	(detailed schedule and
	of CAW schedule and	budget controls for CAW
	budget information provided	facilities) with info transfer
	by CAW)	to Project Manager)
Funding – Title XVI application	X	
NEPA	X	
CEQA Addendum to capture project changes	X	
since FEIR certification		
Coastal Commission Permit	X	
All other permits, easements, encroachment		X
permits, etc for CAW facilities.		
Value Engineering (per WPA Section 4.3)	X	
Constructability Reviews (per WPA	X	
Section 4.6)		
Predesign		X
Final Design consultant selection		X
Technical review of Final Design	Partial	X
-	(review only for overall	(detailed technical review)
	coordination with other	
	Regional Project facilities)	
Bidding and contractor selection		X
Construction Management		X
Acceptance Testing		X

Description of Scope of Work

Following are descriptions of the scope of work organized by task categories and subtasks and deliverables associated with each task categories (sometimes referred to herein as "Tasks" or the "Project Tasks").

Non-Project Management Subtasks. Subtasks discussed in italics are for work to be performed by design consultants and contractors under separate contract to the WPA Parties. These subtasks contain no Project Task, scope of work or budget, but are included herein only to reconcile Project Task and subtask numbering used for cost and schedule management of the overall Project. This note does not apply to italicized headings.

1 Project Management

Provide project management of the overall Project by establishing and implementing procedures for the day-to-day management of the Project. This Task includes: Project Administration; Public Outreach; Budget and Schedule Management; Quality, Safety and Risk Management; Financial Analysis; and Contract Procurement and Contract Administration for consulting, construction and design/build contracts for various component facilities owned by MCWD and MCWRA; and institutional coordination for the integrated delivery of CAW and Monterey Regional Water Pollution Control Agency ("MRWPCA") facilities with the Project Facilities, Project management procedures will be developed and implemented in consultation with the Advisory Committee. Subtasks are described below.

1.1 Project Administration

Provide administrative and support services to facilitate effective delivery of the overall Project.

1.1.1 Team Chartering and Project Management Work Plan

Conduct a chartering meeting with the Advisory Committee to confirm project vision and objectives and review key constraints, success criteria, project delivery protocols and other expectations. Develop a project management work plan to provide an effective framework for delivery of project management services. The work plan will address overall team organization and responsibilities, team communication and decision protocols, budget tracking and reporting, baseline project schedule, QA/QC framework, health and safety protocols, change management, and records management.

1.1.2 Coordination & Meetings

Per Section 4.5 of the WPA, attend meetings of and consult with each WPA Party as well as the Advisory Committee on a regular basis or as required by each such WPA Party or the Advisory Committee and provide the WPA Parties with the Project Manager's recommendations on matters related to cost control, design and/or functional processes, schedule and/or coordination problems in the overall design, construction and permitting of the Project. Activities will include preparation of agenda, development of decision logs, and preparation and distribution of meeting minutes.

1.1.3 Document Management

Establish and manage a Document Management System to provide input and retrieval of incoming and outgoing Project correspondence, reports, photographs, CDs, DVDs, and other project materials and documents.

1.1.4 Project Office

Establish and operate a Project Office at a location acceptable to the Advisory Committee for housing key Project staff and providing a meeting and library space for project activities and records.

1.1.5 Subconsultant Management

Contract and manage those subconsultants that will be under direct contract to the Project Manager. It is anticipated that the subconsultants under direct contract to the Project Manger will include various technical specialty firms that would be involved in preparation of predesigns, permitting, or public outreach.

1.1.6 Project Status Reporting

Per Section 4.5 of the WPA, prepare and submit to each WPA Party monthly written progress reports regarding the status of (i) the design, permitting and construction of the Project; (ii) Authorization of Construction for the various portions of the Project; (iii) the Prime Agreements and the contractor's, engineer's or consultant's performance thereunder; (iv) compliance with the Master Project Schedule developed in accordance with Section 1.3.2 and the reasons for any variance; (v) change orders, percentage completion, use of contingency, and variance from the budget for each component of the Project; (vi) progress with respect to the Milestones; and (vii) any other subject reasonably required by the Advisory Committee to be reported on to the WPA Parties by the Project Manager

1.1.7 Invoicing and Reporting for Project Management

Provide monthly invoicing and progress reporting by task versus budget for work performed under the Agreement.

1.1.8 Transition Project at End of Project Management Contract

Prepare a transition plan and execute that plan to transition project activities and files to the Project Owners at the end of the Agreement.

Deliverables

- Project Charter
- Project Management Workplan
- Meeting Agendas and Minutes
- Document Management System (framework and tracking templates)
- Project Office
- Subconsultant Contracts and Tracking System
- Monthly Invoices & Progress Reports
- Closeout Transition Plan and File Archives

1.2 Public Outreach and Support

The Project Manager will assist the Advisory Committee with supervision and coordination with a Community Involvement Forum Facilitator in accordance with Section 6.7 of the WPA, and with supervision and coordination of a Public Support specialist.

The Community Involvement Forum Facilitator will facilitate quarterly public community outreach meetings (or less frequently if allowed by Section 6.7(c) of the WPA) which will serve as a public forum to discuss regional water supply issues and related subjects of interest to the general public. The Public Support specialists will develop and implement a Public education plan for the Project with input from the Advisory Committee.

Deliverables

Public Outreach Plan

1.3 Budget and Schedule Management

Implement and maintain the Schedule and Budget Tracking and Management System for implementation of project controls for the overall Project. Integrate budget and schedule management activities to provide coordinated status reporting.

1.3.1 Budget Management

Coordinate with each WPA Party's accounting staff to establish the appropriate protocol and categories for budget/cost tracking, including compliance with the requirement of the funding sources. Develop specialty interfaces, spreadsheet formats, and other software tools to assure seamless interface between The Project Reporting and the WPA Parties' budgeting and financial management input requirements.

Use budget tracking and management system to monitor expenditures on all Project activities on a monthly basis and provide early identification of any issues associated with budget compliance. Develop and implement strategies for resolution of budget discrepancies.

1.3.2 Schedule Management

The Project Manager will prepare a comprehensive schedule ("Master Project Schedule") for the completion of the major components of the Regional Desalination Project, taking into account risks, constraints, commitment of resources and other issues that require attention. The Project Manager will update the Master Project Schedule and provide the Advisory Committee with updates at least monthly. Primavera 6, version 7, will be utilized for schedule tracking and control.

Deliverables

- Budget tracking and monitoring reports included in monthly progress reports
- Schedule tracking and monitoring reports included in monthly progress reports
- Supplemental budget and schedule reports when requested by the Advisory Committee

1.4 Quality, Safety and Risk Management

Develop and implement a Project-wide, proactive framework to guide and monitor quality assurance/quality control (QA/QC), safety and construction risk management efforts on the various

component projects in a consistent manner and in compliance with the WPA, as well as any California State Revolving Fund (SRF) loan requirements and any Title XVI or other federal funding requirements.

1.4.1 Quality, Safety and Risk Management Plan

Develop a Project-level Quality, Safety and Risk Management Plan to provide a standardized framework and performance requirements for development and implementation of more detailed, project-specific plans by individual design consultants and construction contractors. Coordinate quality and safety requirements with the standards and protocols of MCWD and MCWRA for their respective projects.

1.4.2 Safety and Environmental Awareness Training

Project Manager shall prepare and implement a Safety and Environmental Awareness Training program for its own employees, subconsultants and other project consultants. Safety Training shall include information and procedures for injury and illness protection, hazard communication, confined space operations, lockout/tagout protocols, required use of personal protective equipment while on construction sites, drug and alcohol policy, excavation safety, and traffic safety. Environmental Awareness Training shall include key environmental monitoring requirements and identification of special status species that have been previously identified within the Area of Potential Effect. All employees, subconsultants and other project consultant personnel shall complete the Safety and Environmental Awareness Training Program before engaging in any Project field activities. A Project Safety/Environmental Awareness Training Tag shall be provided to each participant in the Safety and Environmental Awareness Training Program.

Implementation of the Project Manager's Safety Training is intended for the safety and well being of the Project Manager's employees, subconsultants other Project consultants and shall not in any way relieve any Contractor of its obligations, duties, and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending and coordinating the Work in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. The Project Manager and his/her personnel and subconsultants have no authority to exercise any control over any construction contractor or their employees in connection with their work or any health or safety precautions. The WPA Parties agree that each Contractor is solely responsible for jobsite safety, and warrants that this intent shall be carried out in the Owner's agreement with the General Contractors and the Design/Build contractor.

1.4.3 Quality and Safety Compliance Monitoring

Provide administrative oversight of Quality and Safety management efforts by final design consultants and contractors on various projects; such oversight is intended to monitor general compliance with Project-level requirements and does not relieve the individual final design consultants and construction contractors of responsibility for planning, management and implementation of project-specific quality and safety management on their respective projects. Provide clearinghouse/library for project-specific QA/QC and Safety Plans and compliance documentation.

1.4.4 Review of Deliverables

Provide project-level quality review of project deliverables from the perspectives of compliance with project administrative requirements. Technical review of deliverables and general review/response coordination will be provided under the respective Engineering Management subtask under each respective PMA Task.

1.4.5 Risk Management

Establish a Project Risk Management Committee of senior staff from Project Manager to review quality and risk issues and recommend corrective action to the WPA Parties and Advisory Committee. The Project Risk Management Committee will meet and review progress on a quarterly basis, or when issues are referred by the Project Manager.

Deliverables

- Overall, project-level Quality, Safety and Risk Management Plan
- Documentation for Project-Specific Quality and Safety Management Plans
- Comment Forms from Project Administration/Integration Reviews of Deliverables
- Risk Management Issue Tracking Report and Quarterly Update

1.5 Financial Analysis

Conduct financial analyses for the Project on as-needed basis when requested by the WPA Parties or Advisory Committee. Such requests are expected to include cash flow, funding, budget allocation and prioritization analyses.

Deliverables

Memoranda and documentation of financial analyses.

1.6 Contract Procurement and Contract Administration

Manage selection process, contract procurement and administration for various design and construction contracts to be let by MCWRA or MCWD for individual projects included in The Project. This includes subconsultants to the Project Manager authorized by the applicable party or parties, final design consultants and construction contracts for packages delivered using conventional design/bid/build project delivery (Brackish Source Water Wells, Brackish Source Water Pipeline, MCWD Product Water Pipeline and MCWD Tie-in Pipeline), and a design/build (D/B) contractor for the Desalination Plant. Provide administrative management of procurement process, from solicitation through selection and award, and serve as Contract Administrator on behalf of MCWRA and MCWD for administrative management of the final design and/or construction contracts. Legal services are not part of this scope and will be provided by MCWD and MCWRA, respectively, for their portions of the project. The scope and budget for management of the technical work for the various design and construction consultants will occur in the individual Technical Task s (i.e. Tasks 2 through 12)

Procurement and administration activities under this Task will include the following:

- Determine the contracting strategy for delivery of each component project.
- Coordinate with MCWD and MCWRA for their respective legal and administrative requirements for contract procurement and administration, and confirm compliance requirements for contracts with various funding agencies.
- Assist the WPA Parties in developing specific language for consultant requests for proposals and contractor's bid documents.

- Assist in preparing solicitation documents, and manage solicitation, selection and award process.
- Provide input concerning contract award by MCWRA and MCWD.
- Conduct chartering/preconstruction meetings to establish administrative protocols for contract startup, invoicing, statusing, closeout and contract changes.
- Provide administrative review of monthly invoices and status updates, and provide recommendation to MCWRA and MCWD for progress and final payments.
- Provide administrative review and recommendations to MCWRA and MCWD regarding contract change requests.
- Provide timely response to notice of Construction Claims, and provide administrative support when requested by WPA Parties.
- Maintain updated files of contracts, change orders, a tracking log of contract values and change requests, and other contract administration records by contract.
- Closeout and archive contract administration documentation as each project is completed.

The work will be broken down into the following subtasks for tracking and management:

1.6.1 Establish Contract Delivery Methods

Consult with Project Owners and respective facility engineering task manager to review and evaluate delivery options for each facility, including bid packaging, bid alternates, and overall contracting strategy (currently expected to be some form of design/build (D/B) for the Desalination Plant, and conventional design/bid/build (D/B/B) for all other facilities). Prepare Technical Memorandum ("<u>TM"</u>) with recommended contract delivery methods for review and endorsement by the Project Advisory Committee.

1.6.2 MCWD Contracts

Manage procurement and administration of MCWD contracts, currently expected to consist of the following:

- Design consultant and construction contractor for MCWD Brackish Source Water Pipeline
- Design consultant and construction contractor for MCWD Product Water Pipeline
- Design consultant and construction contractor and MCWD Tie-in Facilities
- Design/Build contractor for Desalination Plant

1.6.3 MCWRA Contracts

Manage procurement and administration of MCWRA contracts, currently expected to consist of the following:

- Design consultant and construction contractor for test wells, production wells and monitoring wells
- Design consultant and construction contractor for Production Well and monitoring wells

• Design consultant and construction contractor for Wellhead Facilities and MCWRA Brackish Source Water Pipeline

Deliverables

- TM Recommended Contract Delivery Methods
- Procurement Solicitation, Selection and Award Documents, drafted after consultation with MCWD and MCWRA, as applicable, as well as with the Advisory Committee
- Executed Contracts and Change Orders
- Monthly and Final Invoice Payment Process Paperwork
- Archive of Contract Administration Files upon Project Closeout

2 Funding

Provide support to the Advisory Committee to pursue identified funding opportunities and integrate those funding sources that are secured into project delivery planning and implementation. Identified funding sources may include: Clean Water State Revolving Fund (SRF) Program, Title XVI Funding, Federal Appropriations, and Bonds. Provide ongoing support to the Advisory Committee in identifying and pursuing potential future funding opportunities at both the State and Federal level and in ongoing tracking of the State's Integrated Regional Water Management Program.

Activities and deliverables will be provided on an as-needed basis when requested by the WPA Parties and Advisory Committee, but are expected to generally include the following:

2.1 Clean Water SRF Program

Project Manager will work with the State Water Resources Control Board to identify funding programs for which the Project qualifies. Many of these programs are managed under the Clean Water SRF program, and may include (but are not limited to) the Water Recycling Fund Program, and the Expanded Use Program. As part of this subtask, Project Manager will:

- Identify the appropriate funding subprograms.
- Coordinate and meet with State Water Resources Control Board (SWRCB) to determine funding levels and to coordinate funding applications.
- Place Transmission Pipeline and other infrastructure subprojects on Project Priority List.
- Prepare necessary SRF permit application materials including preparation of a Financial Assistance Application ("FAA").
- Oversee economic subconsultant(s) preparation of necessary economic analyses and financial analyses.
- Prepare Credit Review Package portion of the SRF application.
- Continue to meet with SWRCB funding representatives on a regular basis.

2.2 Title XVI Funding

Under this subtask, Project Manager will conduct the following activities:

- Complete preparation of feasibility study (FS) for submittal to the Bureau of Reclamation ("Bureau").
- Track and review release of Bureau's new Title XVI funding program (anticipated to be released in November 2011).
- Modification of FS, as required, to meet new funding program guidelines.
- Preparation of Financial Capability Analysis package for submittal to Bureau.
- Coordination with the economic subconsultant for economic evaluation portion of FS.
- Coordination with financial subconsultant for financial capability portion of submittal.
- Continue to coordinate with Bureau on an on-going basis.
- Continued monitoring of upcoming federal programs to identify other potential sources of funding.

2.3 Federal Appropriations

Federal appropriations will be sought both directly, through the preparation of program-specific legislation, and through both Senate and House representatives for other appropriation programs.

As part of this subtask, Project Manager will:

- Coordinate with independent consultant retained by MCWD and MCWRA on an on-going basis.
- Prepare documents supporting federal appropriations as required (e.g. appropriation request packages for legislative offices).
- Provide on-going technical support to independent consultant retained by MCWD and MCWRA.

2.4 Bonds

Provide continued support in the acquisition of Private Activity or other related Bonds, including preparation of an Engineer's Report. The Engineer's Report will be prepared in close coordination with independently retained MCWD and MCWRA Bond Counsel(s) and Bond Underwriter(s).

2.5 Other Funding Opportunities

Federal and state funding programs are generally linked to specific bills, legislation and/or bonds, with grant programs typically released as "one time" opportunities. To that end, Project Manager will continue to monitor State and Federal agency funding websites to identify possible grant and/or loan opportunities for which the Project may qualify. While specific funding opportunities have not yet been identified, existing and future funding programs offered by the Bureau of Reclamation, Army Corps of Engineers, U.S. Environmental Protection Agency, California Department of Water Resources, State Water Resources Control Board, California Department of Public Health, and others will be monitored to identify specific applicable opportunities. When found, recommendations will be provided as to a "go-no go" decision on application preparation, with subsequent application documents prepared as directed. As part of this subtask, Project Manager will prepare application documents for unidentified funding programs, as directed, to the maximum budget as presented for this subtask.

In addition, Project Manager will continue to support the Advisory Committee, as directed, with respect to the potential for funding under the State's Integrated Regional Water Management ("IRWM") program. This will include, but is not limited to, the preparation of project information for inclusion in one or more IRWM Plans and the preparation of project-specific information for the inclusion in IRWM grant application packages.

Deliverables

- Engineer's Report for Bond Counsel
- Additional deliverables as requested by the Advisory Committee.

3 Environmental Coordination

Provide technical support and overall coordination of the NEPA documentation being prepared by others. This work will include coordination with the Bureau for document preparation and review, coordination of the work of Denise Duffy and Associates ("DDA"), and other subconsultants (as needed), conducting biweekly conference calls for progress updates, preparation of Project Descriptions for the public agency portion of the Project, and review of documents. Provide technical support and overall coordination of any FEIR addendum required, and prepare environmental mitigation requirements for inclusion in contract documents.

Activities and deliverables will be provided on an as-needed basis when requested by the Advisory Committee, but are expected to generally include the following:

3.1 NEPA Coordination

Project Manager will coordinate and review the work of DDA in preparing NEPA documentation, including required consultation under Section 106 of the National Historic Preservation act, and Section 7 Endangered Species Act Consultation. Project Manager will serve as the primary point of contact for Bureau environmental staff. Documents to be prepared by DDA and reviewed by Project Manager before submittal to Bureau include:

- Project Description for NEPA document
- Cultural Resources Area of Potential Effects ("APE") mapping
- Biological Impact Study
- Wetland Delineation Map and Report
- Section 7 USFWS Biological Assessment
- Section 7 NOAA Biological Assessment
- Section 106 Report
- 1st Administrative Draft Environmental Assessment
- 2nd Administrative Draft Environmental Assessment
- Final Environmental Assessment

Project Manager will coordinate with Bureau to obtain Biological Opinions for the project from both USFWS and NOAA, and to obtain Section 106 clearance from the State Historic Preservation Officer (SHPO).

3.2 Environmental Mitigation Delineation

Project Manager will update the Mitigation Monitoring Program for the project to include any additional mitigation measures or requirements that result from preparation of supplemental CEQA documentation. Project Manager will also coordinate with resource agencies including USFWS and NOAA Fisheries in regard to any mitigation requirements that may be associated with Biological Opinions issued by those agencies. Project Manager will prepare a conceptual restoration plan for all natural habitat areas that would be affected by project construction specifying how areas disrupted by construction would be restored to their existing condition. The restoration plan will be submitted as part of the Coastal Development Permit application.

3.3 Local CEQA Adoption

Project Manager will prepare and review any supplemental CEQA documentation in coordination with WPA Parties' legal counsel.

Deliverables

To be defined on an as-needed basis when requested by MCWD, MCWRA, and the Advisory Committee.

3.4 Environmental and Permit Compliance Monitoring During Construction

For the Project Facilities, Project Manager will oversee and manage the Environmental Compliance Monitor who will provide environmental and permit compliance monitoring during construction of the Project Facilities as required under the mitigation monitoring program approved by the agencies and the final permits for construction. It is expected that the Environmental Compliance Monitoring consultant will be under direct contract with the WPA Parties.

For the test well construction, Program Manager will conduct environmental training for engineering and construction personnel who will be involved with installation of the test wells. Program Manager will also conduct required preconstruction monitoring required for the test wells and flag any environmentally sensitive habitat areas that must be avoided during construction.

Deliverables

• To be defined on an as-needed basis when requested by MCWD, MCWRA, and the Advisory Committee.

4 Permitting

Coordinate and acquire the required permits for construction and operation of the MCWD and MCWRA facilities, and provide coordination with CAW for related permits. A permitting matrix will be maintained to track and monitor the status and progress of each permit. The permitting effort will be organized in four subtasks listed below.

4.1 Test Well Permitting/CEQA Compliance

Test well permitting/CEQA Compliance is being conducted under separate agreement with WPA Parties. This subtask contains no Project Management budget and is included herein only to reconcile task numbering with overall Project Work Breakdown Structure cost and schedule accounting shown in Exhibit D.

4.2 Regional Desalination Project Facilities

4.2.1 Coastal Commission

For the Project, a consolidated Coastal Development Permit ("CDP") will be prepared for submittal to the California Coastal Commission ("CCC") for all project facilities (including the CAW-Only facilities). The consolidated CDP will replace individual CDPs from local coastal programs ("LCP"s). Retain Coastal Commission consultant to assist in preparation and review of application for the Coastal Development Permit.

As part of this subtask, Project Manager will:

- Obtain concurrence with LCPs for consolidated permitting approach.
- Coordinate the requirements necessary to prepare permit applications.
- Communicate regularly with CAW consultants preparing supporting permits and documentation for CAW facilities
- Prepare draft CDP for informal review by CCC.
- Prepare supporting documentation and analyses for CDP submittal and approval.
- Prepare final CDP application package.
- Initiate regular communications (meetings and conference calls) with CCC planners to determine any concerns/changes to the Project required for approval and to resolve outstanding concerns or issues.
- Coordination with special interest representative for obtaining the CDP.
- Preparation of supporting documents (i.e. presentation) as required for CCC hearing on CDP

4.2.2 California Department of Public Health

This task involves preparation of permit documents for acceptance of the treated (desalination) water as a new water supply by the California Department of Public Health ("CDPH").. Subtask activities include:

- Coordination of testing required supporting potable water use of desalinated water.
- Preparation of application documents to obtain a domestic water supply permit, including preparation of permit application, the Technical, Managerial and Financial (TMF) assessment and permit technical report.
- Coordination with environmental leads to obtain necessary supporting environmental documentation.
- Development of water quality monitoring program (analysis of data from full-scale test well with respect to raw water characterization and brine discharge permit).

- Preparation of CDPH Technical Report including preparation of Drinking Water Source Assessment and Protection ("<u>DWSAP</u>") Program.
- Preparation of Domestic Water Supply Permit to Operate.
- Coordination of draft and final permit documents.
- Long term monitoring plan (lab need, ops needs, compliance needs with CDPH).
- Regular communications (meetings and conference calls) with CDPH regarding any concerns/changes to the project design required for approval.

4.2.3 RWQCB

Multiple permits will likely be required from the Central Coast Region of the California Regional Water Quality Control Board ("RWQCB"). Permits to be obtained include but may not be limited to:

- Waste Discharge Requirements for infrastructure construction, start-up testing, and operation and maintenance.
- Modifications to MRWPCA NPDES permit for Regional Treatment Plant outfall as required for use for brine disposal.
- General Construction Activity Stormwater Permit (may be delegated to construction contractor).
- Facility operations (industrial) Stormwater Permit (may be required depending on facility design).

Subtask includes coordination of draft and final permit documents, preparation of supporting documentation and analyses for obtaining required permits, coordination with CAW consultant preparing equivalent permits for CAW facilities, and ongoing communication with Central Coast RWQCB (meetings and conference calls) regarding any concerns/changes to the project required for approval

4.2.4 Monterey County

As part of this subtask, Project Manager will coordinate multiple permits required from Monterey County for the construction and operation of the Project Facilities. These include as follows:

- County Encroachment Permit(s)
- Well Construction Permits
- Permit to Construct and Operate a Desalination Facility
- Hazardous Materials/Waste Permit
- Hazardous Materials Business Plan
- Hazardous Materials Inventory
- Use Permit (for Desalination Plant site)
- Grading Permit(s)
- Erosion Control Permit(s)

It is anticipated that a consolidated permit approach will be taken with Monterey County in which a single planner is assigned to the project to coordinate permitting with various County departments. Work to be conducted as part of this subtask includes preparation of draft and final permits, preparation of analyses and documentation required to support permitting, coordination with CAW consultant preparing equivalent permits for CAW facilities, coordination of permit requirements, and meetings with County representatives to determine any concern/changes to the project required for approval.

Permits required for construction will be identified; however, acquisition of ministerial permits (e.g. grading permits) will be the responsibility of the Contractors

4.2.5 Local

Local permits will also be required as part of the project permitting. Anticipated permits to be required for the project include the following:

- Building and grading permits from the cities of Marina, Sand City and Seaside
- Use permit from Seaside for terminal reservoir
- Noise permits

Activities to be conducted as part of this subtask include:

- Coordinate acquisition of local permits necessary for the construction and operation of MCWD and MCWRA facilities.
- Coordinate with CAW consultants to ensure corresponding local permits are obtained by CAW consultant(s) in a timely manner.

Permits required for construction will be identified; however, acquisition of some of those permits (e.g. building permits) will be the responsibility of the Contractors.

4.2.6 Miscellaneous

Under this subtask, Project Manager will coordinate the application preparation and submittal for other permits and agreements that may be required for project construction and operation. These permits/agreements are anticipated to include:

- Electric Power Purchase Agreement
- Authority to Construct Permit from Monterey Bay Unified Air Pollution Control District ("MBUAPCD")
- Permit to Operate from MBUAPCD
- Incidental Take Permit from California Department of Fish and Game
- Easement from Transportation Agency of Monterey County ("TAMC")
- Form SF 7460-1, Notice of Proposed Construction and Alternation for Airport Airspace Aeronautical Study (Federal Aviation Administration)

Other permits that may also be required, depending on final project facility design and CEQA/NEPA analyses, include:

• Section 2081 Incidental Take Permit

- Encroachment agreements from California Department of Transportation
- Encroachment agreements from California Department of Parks and Recreation
- Section 1602 Streambed Alteration Agreement
- Section 404 Permit/Section 10 Permit (for permanent and temporary impacts on jurisdictional wetlands)
- Section 401 Water Quality Certification
- Section 106 Permit/State Historic Preservation Officer ("SHPO") concurrence

As part of this subtask, Project Manager will coordinate and support acquisition of other miscellaneous permits necessary for the construction and operation of MCWD and MCWRA facilities and coordinate with CAW consultants obtaining coordinating permits to ensure their timely completion (as required for obtaining the required CDP). Further, Project Manager will identify the permits required for construction, but acquisition of some of these permits may be the responsibility of the contractors

4.3 Permit Fees

The Project Management budget assumes that permit fees will be paid directly by each WPA Party for its respective facility or facilities. This subtask is included in the Work Breakdown Structure to track permit fees paid by each WPA Party, but it does not include scope or budget for the Project Manager.

4.4 Mitigation

The Project Management budget assumes that mitigation costs will be paid directly by each WPA Party for its respective facility or facilities, such as mitigation fee in-lieu of project-specific mitigation, or implemented under facility construction contracts and therefore included in the Contractors' Bids. This subtask is included in the Work Breakdown Structure to track mitigation costs paid on the project, but it does not include scope or budget for the Project Manager.

Deliverables:

- Permit applications
- Approved Permits

5 Project-Wide Engineering

Provide project-wide engineering and associated technical support services to complete each portion of the Project in a cost-effective and coordinated fashion which results in the Project functioning as an integrated unit, including coordinating the interconnection of all components of the Regional Desalination Project. The Project Manager's project-wide engineering includes establishment of overall system operating criteria and design criteria; establishing standards for surveying and geotechnical work and performing surveying, mapping, ROW and geotechnical work except where specifically provided by individual facility design consultants; and providing value engineering services and providing constructability reviews.

5.1 System-wide Operation and Sizing

To determine the most cost effective construction and delivery of services considering all factors

including the life cycle and functionality of the subject improvements, the Project Manager, in consultation with the WPA Parties and the Advisory Committee, will establish overall sizing criteria for wells, pipelines, pump stations, reservoirs, and the Desalination Plant that take into account demand variations, operational bands of the Project components, varying hydraulic control points on a seasonal basis, and redundancy requirements. In connection with this Sub-Task, the Project Manager shall develop a hydraulic model for the Project Facilities from the intake wells downstream to the CAW Delivery Point.

Deliverables:

• TM System Operations and Design Criteria

5.2 System-Wide Control System/SCADA

Develop the Supervisory Control and Data Acquisition ("<u>SCADA</u>") control architecture for the Regional Project. SCADA system includes identification of signal hardware (input and output), controllers, networks, user interface (HMI), communications equipment and software. Project Manager will identify the SCADA system architecture for each WPA Party's facilities, its integration with the other Project general control strategies for major facilities and design criteria to be used in detailed design.

Deliverables:

• TM System-Wide Control Architecture and Design Criteria

5.3 Surveying and Mapping

Provide surveying and mapping support services to support design of MCWD and MCWRA project facilities, including the following activities:

- Establish surveying and mapping standards and datum to be used on the project.
- Conduct aerial photography, ground surveys, topographic mapping, and utility and property/easement research to develop base maps needed for preparation of preliminary design drawings.
- Survey location of geotechnical test holes and utility potholes completed during preliminary design.
- Provide base mapping and field survey data to final design consultant for each facility.
- It is assumed that final design consultant may need to do additional utility potholing, geotechnical drilling, and other supplemental field work during final design. Provide surveyed locations on an as-requested basis during final design.
- It is assumed that surveying during construction will be performed by the facility construction contractor, and no construction surveying is included in this task.

Survey and Mapping for MCWD Facilities

Provide surveying and mapping support for MCWD facilities.

Survey and Mapping for MCWRA Facilities

Provide survey and mapping support for MCWRA facilities.

Deliverables:

- TM Project Survey and Mapping Standards and Control
- Project Photographic and Topographic Base Maps
- Facility-Specific Photographic and Topographic Base Maps
- Survey data for survey control and field locates of borings, utilities and other site features

5.4 Rights-of-Ways and Easements

Coordinate with the MCWD and MCWRA Right-of-Way specialist who will provide the lead in acquisition of Rights-of-Ways (ROW) and temporary and permanent easements needed for the project. It is assumed that the Rights-of-Way specialist will be under direct contract with MCWD and MCWRA.

5.4.1 ROW and Easements for MCWD Facilities

Provide ROW and easements support for MCWD facilities.

5.4.2 ROW and Easements for MCWRA Facilities

Provide ROW and easement support for MCWRA facilities.

Deliverables:

• To be defined on an as-needed basis when requested by the WPA Parties' Right-of-Way specialist.

5.5 Preliminary Geotechnical Services

Provide Preliminary geotechnical engineering services to MCWD and MCWRA to support preliminary design of project facilities, including the following activities:

- Review of existing geologic map, soils reports, and other information as well as site
 reconnaissance for the MCWD and MCWRA facilities to identify expected subsurface
 conditions, relevant geotechnical issues and constraints, and identify an appropriate approach
 and scope for site subsurface explorations. Summarize in a TM Preliminary Geotechnical
 Conditions and Exploration Plan for the overall project.
- Subsurface investigations to explore site conditions relevant to construction of the proposed facilities. This is expected to include field reconnaissance and some combination of borings, cone penetrometer tests and test pits, piezometer installation and monitoring, grouting/abandonment of boreholes in accordance with local regulations, and associated traffic control for exploration that must occur in roadways.
- Permitting of boreholes/piezometers in accordance with local regulations.
- Laboratory testing of soil/rock samples to assist in classifying subsurface materials and determining properties needed for engineering and corrosion evaluations.
- Evaluation of potential geologic hazards and constraints for facility siting, design and construction.

- Preliminary engineering analysis and recommendations for preliminary geotechnical design of foundations, subsurface installations and earthwork construction.
- Preparation of Preliminary Geotechnical Data Report(s) suitable for reference in future construction contract documents and Preliminary Geotechnical Design Report(s) for use in preliminary design.
- During startup of final design, meet with the final design consultant, and their geotechnical subconsultant, to review findings and recommendations from the preliminary investigations.

Geotechnical engineering support for final design and construction observation, including any supplemental exploration and testing, is not part of this scope of work but will be the responsibility of the engineering design consultant selected for final design of the facility.

5.5.1 Preliminary Geotechnical Services for MCWD Facilities

Provide preliminary geotechnical investigation and engineering evaluations to support preliminary design of MCWD facilities.

5.5.2 Preliminary Geotechnical Services for MCWRA Facilities

Provide preliminary geotechnical investigation and engineering evaluations to support preliminary design of MCWRA facilities.

Deliverables:

- TM Preliminary Geotechnical Conditions and Exploration Plan for the overall project
- Preliminary Geotechnical Data Report for each facility
- Preliminary Geotechnical Design Report for each facility

5.6 Value Engineering

In accordance with Article 4.3(c) of the WPA, the Project Manager will engage an independent Certified Value Engineer to perform Value Engineering ("<u>VE</u>") reviews of the plans of each WPA Party's respective portion of the Regional Desalination Project. The Agreement budget assumes that Value Engineering shall be conducted for each facility at the pre-design stage and at approximately 30% to 60% design completion. It is expected that the Value Engineer and its team will be under direct contract with each WPA Party.

The costs and schedule for the VE workshop will be tracked by assigning a separate subtask to each facility as shown below:

- 5.6.1 Brackish Source Water Wells
- 5.6.2 Brackish Source Water Pipeline
- 5.6.3 Desalination Plant
- 5.6.4 Product Water Pipeline
- 5.6.5 CAW Facilities.

Deliverables:

• VE Report from each VE workshop

5.7 Constructability Review

In accordance with Article 4.6 of the WPA, the Project Manager will appoint an independent qualified person or committee of persons to review the Preliminary Design Documents, Procurement Documents, and 100% Construction Documents, as appropriate, to assure that the facilities can be constructed using construction methods, materials and techniques in compliance with Best Industry Practices, and that the Preliminary Design Documents and Procurement Documents provide the contractor or contractors, as applicable, with clear, concise information that can be utilized to prepare a competitive cost-effective proposal or bid. It is expected that the Constructability Review consultant will be under direct contract with each WPA Party.

The costs and schedule for the Constructability Reviews will be tracked by assigning a separate subtask to each facility as shown below:

- 5.7.1 Brackish Source Water Wells
- 5.7.2 Brackish Source Water Pipeline
- 5.7.3 Desalination Plant
- 5.7.4 Product Water Pipeline
- 5.7.5 CAW Facilities.

Deliverables:

• Constructability Review Comments

5.8 Acceptance Testing

At least one hundred (100) days before the earlier of any scheduled or projected Acceptance Date or the date upon which MCWD or MCWRA plan to begin Acceptance Testing, the Project Manager shall prepare and submit to each of MCWD, MCWRA and CAW for their respective review and consideration a detailed plan for the Acceptance Test for the MCWD Owned Facilities or the MCWRA Owned Facilities.

Within sixty (60) days following conclusion of any required Acceptance Test, Project Manager will provide a certified written report describing and certifying the applicable Acceptance Test has been conducted and, if the procedures and standards relating thereto and all other requirements specified in the Acceptance Test Plan have been completed, that Acceptance has occurred. The written test report shall include copies of the original data sheets, log sheets and all calculations used to determine performance during the applicable Acceptance Test, as well as copies of laboratory reports conducted in conjunction with the Acceptance Test, including all laboratory sampling and test results.

The costs and schedule for the Acceptance Testing will be tracked by assigning a separate subtask to each of the facility as shown below:

- 5.8.1 Brackish Source Water Wells
- 5.8.2 Brackish Source Water Pipeline
- 5.8.3 Desalination Plant
- 5.8.4 Product Water Pipeline

Deliverables

- Acceptance Testing Plans for each Facility
- Acceptance Test Reports and Certification for each Facility

6 Brackish Source Water Wells

Provide engineering services for the MCWRA Brackish Source Water Wells, including preliminary and final design engineering of test well implementation authorized under a previous Reimbursement Agreement, preliminary design of production wells, management of final design of production wells to be provided by separate final design consultant(s) to MCWRA, coordination and oversight of the final design consultant(s) and construction manager during bidding and construction of the wells, and startup support. Work under this task will be performed in two key phases:

- An initial test well implementation phase to design, construct and monitor one vertical and one slant test well, along with associated monitoring wells, wellhead equipment and temporary piping needed for pumping and monitoring for an appropriate time period.
- A production well-field phase to design and construct four to six additional brackish source
 water wells, along with associated wellhead equipment to serve as the brackish source water
 supply for the Project, as well as monitoring wells. The final number, location, type and sizing
 of wells in the production well-field will be determined based in part on the findings of the test
 well program.

Wells will be approximately 18-inches in diameter and will extend into the "180-foot" deep aquifer. Wells will be located on the west side of Highway 1 at locations to be determined based on the test well implementation.

6.1 Engineering Management

Engineering management activities included in this subtask consist of providing technical, resource, quality and budget/schedule management of final design consultants, contractors, and other service providers from design through construction and startup, and in a manner consistent with QA/QC, contracting and other protocols established for the Project.

6.1.1 Design Coordination

Assist in selection of a qualified consultant for final design. Identify potential qualified design consultants, prepare technical and work scope requirements to be included in the request for proposals, participate in a pre-proposal meeting to describe the work and answer questions, review and evaluate proposals, participate on interview panel at request of MCWRA, assist in negotiating scope of work and budget for final design contract with MCWRA.

Coordinate facility-specific work with overall Project-wide engineering support, ROW and permitting activities, including participating in overall Project monthly progress meetings. Convene regular design team coordination workshops. Review/approve monthly invoices and progress reports from design consultant(s) before processing for payment under Task 1. Prepare budget adjustment and change management documents where needed and justified. Track costs, schedule, work progress and issues; identify risk management issues and corrective actions to manage change; prepare task status monthly progress reports.

Develop and manage the technical requirements. Coordinate and perform QA/QCA reviews of deliverables for the 30%, 60% and 90% and 100% design deliverables. Manage design consultant's participation in the VE workshops and constructability reviews described in Task 5. Prepare Board agenda memoranda for those items that require approval from MCWRA's Board of Supervisors or Board of Directors. Conduct project close out activities, including close out of agreements, release of retention, archiving of project files.

6.1.2 Bid Period Support

Provide oversight and management of the design consultant during the bidding and award period. Coordinate with MCWRA and design consultant to finalize bidding documents, conduct and document the prebid meeting, respond to bidder questions, prepare addenda, evaluate bids, and provide input concerning contract award to MCWRA and the Advisory Committee..

6.1.3 MCWRA's Representative During Construction

Provide oversight and management of the design consultant and construction manager during the construction period, and serve as a representative for MCWRA in administration of the construction contract. Coordinate engineering services during construction ("ESDC") to be provided by the final design consultant for review of technical submittals, review of equipment Operations and Maintenance ("O&M") manuals, responses to requests for information ("RFIs"), issuance of contract document clarifications ("CDCs"), preparation of change order documents, and attendance at regular and special construction meetings. Develop template and requirements for O&M manual for overall Facility and review design consultant's preparation of overall Facility O&M manual. Coordinate with construction manager to provide onsite coordination meetings, contract administration, construction observation and special inspection/testing services. Coordinate with MCWRA and Advisory Committee for Notice to Proceed, processing of pay requests, contract change requests, determination of substantial completion and final acceptance, as well as addressing any risk management issues. Participate on behalf of MCWRA in coordination meetings; MCWRA review and approvals of contract clarifications, pay requests, change requests, and contractor VE proposals; and in issuance of notices of non-conformance, contract change orders and acceptance of completed work. MCWRA shall approve all contract change orders prior to issuance by Project Manager.

In coordination with MCWRA, design consultant and contractor, develop Acceptance Plan schedule and procedures in accordance with Task 5. Develop a preliminary checklist of required tests that would identify the test action and expected results and will be present to witness performance testing and review the results submitted by the contractor. Act as MCWRA's representative during Acceptance testing. Conduct project close out activities, including close out agreements, release of retention, archiving of project files.

Deliverables:

• Monthly updates regarding cost, schedule and progress

- Meeting agendas and minutes
- Technical and work scope requirements for procuring services of final design consultant(s) and construction manager
- Memo providing input concerning final design consultant
- Facility information on an as-requested basis to support permit applications, right-of-way, or for discussions/meetings with the Advisory Committee or its designees or appointees.
- QA/QC review comments for milestone reviews
- Bid evaluation memo and input concerning award of construction contract(s)
- Correspondence, approvals and other contract documentation required of MCWRA's representative on behalf of MCWRA.
- Acceptance Plan development
- Startup testing documentation including checklists, data and summary report
- Close out agreements, project archiving
- Production well startup testing documentation including checklists for startup testing, testing data and summary report.
- Providing support during initial startup and testing of well equipment and development of the well.

6.2 Test Well Implementation, Monitoring, and Analysis

This subtask includes the services required to complete the design of the test wells, monitor and analyze the test well data. Construction management, inspection, and startup of the test wells are included in Task 12.1.

6.2.1 Test Well Monitoring and Analysis Program

Project Manager will coordinate with GeoScience Support Services ("GeoScience"), who is under direct contract with MCWRA, to complete the final design bid documents for the vertical and slant test wells, monitoring wells, and outfall connection. Services include review of the 90% documents, incorporation of permitting requirements into the final documents, and continued coordination with the MRWPCA.

Based on the data from the test wells and monitoring wells, MCWRA, in consultation with Project Manager and other consultants of MCWRA's choosing, will:

- Confirm long-term sustainable production rates for the intake wells.
- Confirm the long-term sources of water to these wells (ocean water versus intruded ground water) by updating the hydrologic model for the full scale production wells and water quality samples and drawdown data taken during the test period.
- Take samples for monitoring water quality for use in the design of project facilities.
- Evaluate the natural variability (vertical and lateral) of Total Dissolved Solids ("<u>TDS</u>") in the aquifer systems.

- Assess the amount of vertical leakage in the aquifer system to consider all factors that may cause a future variance on water quality.
- Develop the final number, location, depth and sizing of the wells and wellhead equipment, specify performance requirements and operational design criteria.

Deliverables

- Well completion reports
- Monitoring well data
- Water quality results
- TM on final number, location, depth and size of the final production wells
- Coordination and review of modeling report of long term water source (ocean vs. intruded groundwater)
- In conjunction with MCWRA legal counsel, prepare TM addressing whether the MCWD Agreed Allocation as calculated under section 9.3 of the Water Purchase agreement would comply with Legal Requirements.

6.3 Test Well Construction and Development

Please see "Non-Project Management Subtasks" above.

6.4 Predesign - Production Wells

After completion and implementation of the test wells Project Manager, in coordination with GeoScience (under direct contract with MCWRA), will conduct the predesign of the Brackish Source Water Wells. Information from the test wells will be used to develop major plans and sections, and to establish structural, mechanical, corrosion, electrical and Instrumentation & Controls design criteria ("I&C"). Predesign drawings will be developed, and an outline of required technical specifications will be prepared. A preliminary opinion of construction cost for the production well field will also be developed.

The preliminary design will be summarized in a Basis of Design Report that establishes the technical basis for final design of the Brackish Source Water Wells in a method that will be consistent with the other Regional Project facilities. Preliminary design will also include coordination with geotechnical investigations and topographic surveys, and system-wide control systems/SCADA engineering to be provided under Task 5.

Deliverables

 Basis of Design Report for Production Wells, including preliminary design drawings and corresponding opinion of construction cost.

6.5 Final Design - Production Wells

Please see "Non-Project Management Subtasks" above.

6.6 Bid and Award - Production Wells

Please see "Non-Project Management Subtasks" above.

6.7 Construction & Development - Production Wells

Please see "Non-Project Management Subtasks" above.

7 MCWRA Brackish Source Water Pipeline

Provide engineering services for the MCWRA portion of the Brackish Source Water Pipeline, including preliminary design, management of final design to be provided by one or more separate final design consultant(s) to MCWRA/MCWD, coordination and oversight of the final design consultant(s) and construction manager during bidding and construction, and startup support.

The Brackish Source Water Pipeline will convey source water from the wells to the Desalination Plant. MCWRA will own a portion of the pipeline to convey water from each of the well head meters to a brackish source water receipt point meter, with MCWD owning the remaining portion of pipeline from the brackish source water receipt point meter to the Desalination Plant.

Because portions of this pipeline will be designed, constructed and owned separately by MCWRA and MCWD, and to facilitate allocation of costs among these two Owners, work will be performed under two parallel but separate tasks. MCWRA and MCWD will each contract separately with a design consultant for final design of their portion of the pipeline, and they will let separate bid packages for construction. It is possible that, but has not been determined whether, MCWRA and MCWD might each utilize the same design consultant and construction contractor for each of their portions of the Brackish Source Water Pipeline. As part of Project Manager's project management and predesign work tasks described below, Project Manager will coordinate design and construction to assure functional compatibility and operational integration across both portions of the Brackish Source Water Pipeline.

7.1 Engineering Management

Engineering management activities included in this subtask consist of providing technical, resource, quality and budget/schedule management of final design consultants, contractors, and other service providers from design through construction and startup, and in a manner consistent with QA/QC, contracting and other protocols established for the Project.

7.1.1 Design Coordination

Assist in selection of a qualified consultant for final design. Identify potential qualified design consultants, prepare technical and work scope requirements to be included in the request for proposals, participate in a pre-proposal meeting to describe the work and answer questions, review and evaluate proposals, participate on interview panel at request of Parties, assist in negotiating scope of work and budget for final design contract with the Parties.

Coordinate facility-specific work with overall Project-wide engineering support, ROW and permitting activities, including participating in overall Project monthly progress meetings. Convene regular design team coordination workshops. Review/approve monthly invoices and progress reports from design consultant(s) before processing for payment under Task 1. Prepare budget adjustment and change management documents where needed and justified. Track costs, schedule, work progress and issues; identify risk management issues and corrective actions to manage change; prepare task status monthly progress reports.

Develop and manage the technical requirements. Coordinate and perform QA/QCA reviews of deliverables for the 30%, 60% and 90% and 100% design deliverables. Manage design consultant's participation in the VE workshops and constructability reviews described in Task 5. Prepare Board agenda memoranda for those items that require approval from the Party's Board of Directors. Conduct project close out activities, including close out of agreements, release of retention, archiving of project files.

7.1.2 Bid Period Support

Provide oversight and management of the design consultant during the bidding and award period. Coordinate with MCWRA and design consultant to finalize bidding documents, conduct and document the prebid meeting, respond to bidder questions, prepare addenda, evaluate bids, and provide input concerning contract award to MCWRA and Advisory Committee.

7.1.3 Owner's Representative During Construction

Provide oversight and management of the design consultant and construction manager during the construction period, and serve as a representative for Party in administration of the construction contract. Coordinate ESDC to be provided by the final design consultant for review of technical submittals, review of equipment O&M manuals, responses to RFIs, issuance of CDCs, preparation of change order documents, and attendance at regular and special construction meetings. Develop template and requirements for O&M manual for overall Facility and review design consultant's preparation of overall Facility O&M manual. Coordinate with construction manager to provide onsite coordination meetings, contract administration, construction observation and special inspection/testing services. Coordinate with MCWRA and Advisory Committee for Notice to Proceed, processing of pay requests, contract change requests, determination of substantial completion and final acceptance, as well as addressing any risk management issues. Participate on behalf of MCWRA in coordination meetings; participate in MCWRA review and approvals of contract clarifications, pay requests, change requests, and contractor VE proposals; and in issuance of notices of non-conformance, contract change orders and acceptance of completed work. MCWRA shall approve all contract change orders prior to issuance by Project Manager.

In coordination with MCWRA, design consultant and contractor, develop Acceptance Plan schedule and procedures in accordance with Task 5. Develop a preliminary checklist of required tests that would identify the test action and expected results and be present to witness performance testing and review the results submitted by the contractor. Act as MCWRA's representative during Acceptance testing. Conduct project close out activities, including close out agreements, release of retention, archiving of project files.

Deliverables:

- Monthly updates regarding cost, schedule and progress
- Meeting agendas and minutes
- Technical and work scope requirements for procuring services of final design consultant(s) and construction manager
- Memo recommending selection of final design consultant
- Facility information on an as-requested basis to support permit applications, right-of-way, or for discussions/meetings with the Technical Committee or Advisory Committee

- QA/QC review comments for milestone reviews
- Bid evaluation memo and provide input concerning award of construction contract(s)
- Correspondence, approvals and other contract documentation required of MCWRA's representative on behalf of MCWRA.
- Acceptance Plan development
- Startup testing documentation including checklists, data and summary report
- Close out agreements, project archiving

7.2 Predesign

Prepare Preliminary Design to develop information needed for Project permitting, to minimize costs that may arise from the failure to coordinate the design and engineering, permitting and construction of each portion of the Project, to verify that the Project Facilities can be constructed using construction methods, materials, and techniques in compliance with Best Industry Practices while still meeting the objectives and specific design criteria of MCWRA, and to provide the design engineers with clear, concise information that can be utilized to prepare a competitive cost-effective proposal. The Predesign activities will include the following:

- Alignment Refinement
- Field Reconnaissance
- Utility Research
- Appurtenance Development
- Hydraulic Analysis
- Develop Pipeline Design Criteria
- Review Geotechnical and Corrosion Reports
- Pipe Materials Analysis
- Permitting Requirements
- Define Easement Requirements
- MRWPCA Outfall Crossing Concepts (2 places)
- Caltrans Crossing Concepts (2 Hwy 1 and Del Monte Blvd.)
- Prepare Plan/Profile Drawings
- Prepare Draft Preliminary Design Report
- Prepare Final Preliminary Design Report

Deliverables

• Basis of Design Report for MCWRA Brackish Source Water Pipeline, including preliminary design drawings and corresponding opinion of construction cost.

7.3 Final Design

Please see "Non-Project Management Subtasks" above.

7.4 Bid and Award

Please see "Non-Project Management Subtasks" above.

7.5 Construction

Please see "Non-Project Management Subtasks" above.

8 MCWD Brackish Source Water Pipeline

8.1 Engineering Management

Engineering management of the MCWD Brackish Source Water Pipeline is similar to that indicated for the MCWRA Brackish Source Water Pipeline. For budgeting purposes it is assumed that the two portions of the pipeline will be designed and constructed using separate final design consultants and contractors.

8.2 Predesign

The predesign activities for the MCWD portion of the Brackish Source Water Pipeline will be similar to the predesign of the MCWRA portion of the pipeline except that the predesign will not include the outfall crossings, or the Caltrans Crossing Concepts, but will include predesign of the Brackish Source Water meter and vault.

Deliverables

• Basis of Design Report for MCWD Brackish Source Water Pipeline, including preliminary design drawings and corresponding opinion of construction cost.

8.3 Final Design

Please see "Non-Project Management Subtasks" above.

8.4 Bid and Award

Please see "Non-Project Management Subtasks" above.

8.5 Construction

Please see "Non-Project Management Subtasks" above.

9 Desalination Plant

Provide engineering and project management services for the Desalination Plant, including preliminary design development and membrane testing, procurement of a qualified design-build ("<u>DB</u>") contractor, serving as MCWD's representative in coordination and oversight of the DB construction contract, and startup support.

The Desalination Plant will be owned by MCWD and will consist of a reverse osmosis ("RO") treatment plant with a production rate of 10 million gallons per day ("mgd"). Structures at the site include the desalination building, chemical storage and feed facilities, electrical substation, pump stations, post-treatment facility, clearwells, laboratory and administrative spaces, maintenance facilities and ancillary facilities such as roadways and site improvements, and a brine holding tank. In addition to the Desalination Plant, this task includes coordination with two ancillary projects: the brine receiving facilities being designed and constructed by MRWPCA, and possibly the Renewable Energy Facility ("REF"), being designed and constructed by Monterey Regional Waste Management District ("MRWMD"), that may provide power to the Desalination Plant.

Final design and construction of the treatment plant will be let separately by MCWD using a two-phase DB procurement process that provides for prequalification of DB contractors, and selection/negotiation from contractor proposals using evaluation criteria that will evaluation at least value, technical, and cost-based criteria. The type of DB contract to be used - DB (lump sum) or DB (/progressive/open book) – will be determined under Task 1.7 in consultation with MCWD and the Advisory Committee.

9.1 Engineering Management

Engineering management activities included in this subtask consist of providing technical, resource, quality and budget/schedule management of final design consultants, contractors, and other service providers from design through construction and startup, and in a manner consistent with QA/QC, contracting and other protocols established for the Project.

Key project management activities include the following:

9.1.1 Design-Build Pregualification

In consultation with the Advisory Committee, and based on DB procurement strategy identified in Task 1.7.1, assist the Advisory Committee in prequalifying DB contractors for the Desalination Plant Project. This includes identifying potential DB contractors, preparing technical requirements and other descriptive information for inclusion in the Request for Qualifications ("RFQ"), participating in a presubmittal meeting/site tour to describe the work and answer questions, evaluating Statements of Qualification ("SOQs") submitted by interested contractors, conducting follow-up research/reference checks, and participating in a selection meeting with MCWD.

9.1.2 Design-Build Proposal/Selection

In consultation with the Advisory Committee, assist MCWD in procuring a DB contractor for the Desalination Plant from the previously developed list of prequalified contractors. This includes preparing and issuing a DB solicitation package using the Basis of Design Report prepared, setting performance standards and associated contract penalties, participating in pre-proposal meeting to describe the work and answer questions, evaluating DB proposals submitted, conducting follow-up research including potential visit(s) to completed DB plant projects, participating in a selection meeting with MCWD, participation in follow-up contract negotiations with the selected contractor, and finalizing the basis of design and costs for inclusion in the final DB contract.

9.1.3 Design Coordination

Coordinate facility-specific work with overall Project-wide engineering support, ROW and permitting activities, including participating in overall Project monthly progress meetings. Convene regular design

team coordination workshops. Review/approve monthly invoices and progress reports from design consultant(s) before processing for payment under Task 1. Prepare budget adjustment and change management documents where needed and justified. Track costs, schedule, work progress and issues; identify risk management issues and corrective actions to manage change; prepare task status monthly progress reports.

Develop and manage the technical requirements. Coordinate and perform QA/QCA reviews of deliverables at key design milestones. Manage design consultant's participation in the VE workshops and constructability reviews described in Task 5. Prepare Board agenda memoranda for those items that require approval from the Party's Board of Directors. Conduct project close out activities, including close out of agreements, release of retention, archiving of project files.

9.1.4 MCWD's Representative During Construction

Provide oversight and management of the design consultant and construction manager during the construction period, and serve as a representative for MCWD in administration of the construction contract. Coordinate ESDC to be provided by the final design consultant for review of technical submittals, review of equipment O&M manuals, responses to RFIs, issuance of CDCs, preparation of change order documents, and attendance at regular and special construction meetings. Develop template and requirements for O&M manual for overall Facility and review design consultant's preparation of overall Facility O&M manual. Coordinate with construction manager to provide onsite coordination meetings, contract administration, construction observation and special inspection/testing services. Coordinate with MCWD and Advisory Committee for Notice to Proceed, processing of pay requests, contract change requests, determination of substantial completion and final acceptance, as well as addressing any risk management issues. Participate on behalf of MCWD in coordination meetings; participate in MCWD review and approvals of contract clarifications, pay requests, change requests, and contractor VE proposals; and in issuance of notices of non-conformance, contract change orders and acceptance of completed work. MCWD shall approve all contract change orders prior to issuance by Project Manager.

In coordination with MCWD, and DB contractor, develop Acceptance Plan schedule and procedures in accordance with Task 5. Develop a preliminary checklist of required tests that would identify the test action and expected results and be present to witness performance testing and review the results submitted by the contractor. Act as MCWD's representative during Acceptance testing. Conduct project close out activities, including close out agreements, release of retention, archiving of project files.

Deliverables:

- Technical and other information for the RFQ for DB Contractor for Desalination Plant.
- Technical Memo summarizing evaluation of DB SOQs
- Meeting notes from meeting to select prequalified DB contractors
- Technical and other information for DB solicitation package for the Desalination Plant.
- Technical Memo summarizing evaluation of DB Proposals
- Meeting notes from meeting to select DB contractor
- Updated basis of design and cost estimate following final negotiations with DB contractor
- Monthly updates regarding cost, schedule and progress

- Meeting agendas and minutes
- Technical and work scope requirements for procuring services of final design consultant(s) and construction manager.
- Memo providing input concerning selection of final design consultant
- Facility information on an as-requested basis to support permit applications, right-of-way, or for discussions/meetings with the Technical Committee or Advisory Committee.
- QA/QC review comments for milestone reviews
- Bid evaluation memo and provide input concerning award of construction contract(s)
- Correspondence, approvals and other contract documentation required of Owner's representative on behalf of MCWD.
- Acceptance Plan development
- Startup testing documentation including checklists, data and summary report
- Close out agreements, project archiving

9.2 Predesign Preparation

Prepare Preliminary Design to develop information needed for Project permitting, to minimize costs that may arise from the failure to coordinate the design and engineering, permitting and construction of each portion of the Project, to verify that the Project Facilities can be constructed using construction methods, materials, and techniques in compliance with Best Industry Practices while still meeting the objectives and specific design criteria of the MCWD and the Advisory Committee, and to provide the design/build contractors with clear, concise information that can be utilized to prepare a competitive cost-effective proposal.

Predesign drawings will be developed to the approximate 30% design stage, and an outline of required technical specifications will be prepared. A preliminary opinion of construction cost for the Desalination Plant will also be developed. The preliminary design will be summarized in a Basis of Design Report that establishes the technical basis for selection of a DB contractor for the Desalination Plant.

The Predesign activities will include the following subtasks:

9.2.1 Treatment Process

Confirm the process selection based on raw water characterization, raw water characterization, treatment requirements flow and water quality for each distribution systems and ASR injection, and plant Water quality Performance Standards. Evaluate various RO configurations: hybrid and split stream design. Develop design criteria, process train descriptions, and process flow diagrams for the following processes;

- Pretreatment (greensand or not)
- Process: RO design (first and second pass)
- Ancillary system including CIP, chemical feed systems
- Residuals handling including lime inerts, CIP waste, washwater waste if Iron and Manganese removal, secondary containment wash down, plant sewer

- Post treatment disinfection, residual stability DBP formation
- Energy Recovery Facilities
- Post treatment: corrosion control at plant and distribution system based on information from Mixing/Blending study and Lead and Copper Rule testing below
- Reservoir operation: chemical additions if needed at MCWD reservoir and CAW Terminal reservoir

9.2.2 Membrane Prequalification Testing

Conduct limited scale testing on brackish water from test well to develop information needed for prequalification of membranes to assure that the membranes provided by the design/build contractor meet the Project's water quality criteria, particularly boron rejection in a cost-effective manner. Information on membrane prequalification will be included in the DB procurement package. Activities include preparation of test plan, installation of test equipment, supervision of operation, and review of results. For budgeting purposes, it is assumed that the membrane testing will occur at the MCWD headquarters site using water from a test well, that up to six membranes will be tested in parallel, and that the test will operate continuously for a period of 4 months. Costs shown do not include procurement or installation of the testing equipment.

9.2.3 Lead Copper Rule Testing

Conduct field testing to evaluate RO permeate for compliance with the lead copper rule. Determine the post treatment required to avoid lead/copper compliance issues in the distribution system. Activities include preparation of test plan, installation of test equipment, supervision of operation, and analysis of results, Budget assumes that the lead copper rule will operate concurrently with the Membrane Prequalification testing using the permeate from the RO test skids. Costs shown do not include procurement or installation of the testing equipment.

9.2.4 Mixing/Blending Study

Downstream of the Delivery Point, the desalinated water will be mixed with Salinas Basin groundwater in the MCWD distribution system and with Seaside basin groundwater and Carmel River water in the CAW system. The proportions of each type of water within each distribution system will vary seasonally which can result in potential aesthetic concerns such as taste, odor, and color as the waters mix. The mixing/blending study will analyze the mix of the waters within each distribution system to identify and develop solutions for potential aesthetic concerns. The work includes development of a hydraulic/water quality distribution model for each system which includes the ability to vary the proportions of each water source and the water quality of each source. Information needed from MCWD and CAW includes existing pipe materials, any existing hydraulic modeling of the distribution systems, detailed information on how the blending of the waters will occur, and water quality information for the existing water sources. The results of the mixing/blending study will be used to determine post treatment requirements including the potential need for remote post treatment facilities at the MCWD or CAW reservoirs.

9.2.5 Facility Layout

Develop major plans and sections of treatment facilities to identify locations of each treatment process, space required for each process, corridors for piping systems, electrical systems, areas for maintenance and equipment access

9.2.6 Hydraulic Profile

Develop hydraulic gradeline through the Desalination Plant and the downstream distribution system

9.2.7 Clearwell and Pump Station

Provide the basis for design and preliminary layouts for clearwell and distribution pump station. The key issues that will be addressed include:

- Selecting the preferred materials and methods for construction;
- Developing preliminary pump station layouts and pipeline plan and profile drawings.

9.2.8 Brine Handling Facilities

Establish design criteria for the brine handling facilities including size of brine holding tanks based on information from the MRWPCA outfall hydraulics, pumping requirements, and need for any brine treatment to meet NPDES requirements for discharge to the outfall, such as remediation of low dissolved oxygen.

9.2.9 Site Plan

Develop the facility site plan taking into account the need to maintain existing facilities in operation during construction. TM will include the following:

- Overall site plan showing process structures and access roadways
 - Location of major new yard piping, i.e. pipes greater than 24 inches in diameter
 - Identification of corridors for other yard piping and for electrical duct banks.
 - Identify needs for non-process buildings. More detailed analyses of these buildings will occur in the Architectural Criteria subtask
 - Identify landscaped areas

9.2.10 Mechanical Design Criteria

Establish design criteria for materials of construction for pumps, infrastructure at treatment plant and pipelines materials needs. Consult with operators of other high TDS facilities with long-term operational histories such as the geothermal industry or seawater aquariums to confirm long-term reliability of materials. Develop preliminary corrosion control criteria for all buried facilities.

9.2.11 Architectural Criteria

Through a series of workshops with the WPA Parties and the Advisory Committee, establish the architectural design criteria to be used at the Desalination Plant. Determine space and functionality requirements for new non-process facilities including administrative, operation and maintenance facilities. Identify construction materials, colors and textures, and building features that provide for efficient use of space. Address "green building" design features that can be incorporated into the design to improve sustainability and energy efficiency on a cost-effective basis. Identify lab requirements in terms of instruments, staffing and space requirements

9.2.12 Structural Criteria

Develop preliminary foundation design criteria, corrosion protection and dewatering/construction considerations based on geotechnical information and recommendations from Task 5. Provide a basis for design for all structures with references to the latest codes and standards.

9.2.13 Electrical Criteria

Analyze electrical requirements and standby power. Coordinate with MRWMD on development of criteria for the REF. Evaluate need for new PG&E service as either standby power or as alternative to REF. Develop major plans for electrical substations, MCC rooms, and one-line diagrams.

9.2.14 I&C/SCADA Criteria

Develop system architecture for a new SCADA system with remote monitoring and control capabilities that will integrate input/output for the Desalination Plant, other Project Facilities, and the WPA Parties' existing distribution system controls. Describe the new SCADA system, its integration with other facilities, a new hardwired backup system, and general control strategies for major facilities. Develop preliminary P&IDs for each process and for the overall treatment system.

Deliverables

- Basis of Design Report for Desalination Plant that establishes the technical basis for selection of a DB contractor for the Desalination Plant. The Report would include the following:
 - TM for each subtask
 - o Preliminary design drawings
 - o Preliminary technical specifications
 - o Construction cost estimate

9.3 Design-Build Construction

Please see "Non-Project Management Subtasks" above.

9.4 Coordination with Renewable Energy Facility

Independent of design and construction contracts being let by MCWD and MCWRA under the Project, MRWMD will be designing and constructing a proposed REF that might expand MRWMD's existing landfill gas to electricity facilities to supply power for the Desalination Plant. Project Manager will provide coordination with MRWMD and its consultants for the REF with respect to integration of electrical supply facilities for the Desalination Plant. Activities include:

- Coordination during design for operational integration of renewable power supply along with backup power from PG&E, and coordination of project delivery schedule and power supply agreements
- Construction coordination regarding sequence, schedule and interface responsibilities
- Startup/testing coordination

Deliverables

- Exchange of electrical supply requirements and design criteria, power schedule and control/switchover protocols, and other design and construction documents needed to assure operational integration of electrical supply to the Desalination Plant
- Meeting minutes from coordination meetings

9.5 MRWPCA Brine Receiving Facilities

Provide engineering support services and coordination with MRWPCA for necessary modifications to the headworks of MRWPCA's existing outfall to accept desalination brine for discharge to the ocean.

Conveyance facilities from the Desalination Plant up to the new connection with MRWPCA's existing 60-inch-diameter outfall pipeline, including a brine receiving station that will meter and aerate the brine prior to disposal into the outfall, will be designed and constructed by MCWD as part of the Desalination Plant. In accordance with the Outfall Agreement between MCWD and MRWPCA, the design and construction of the connection to the MRWPCA outfall pipeline, and other associated outfall modifications, will be designed and constructed by MRWPCA with costs to be reimbursed by MCWD. Project Manager's coordination activities include:

- Coordinate with MRWPCA and the RWQCB for issues and design requirements related to the existing outfall discharge permit
- Perform supplemental hydraulic analyses and modeling to evaluate hydraulic performance and sizing criteria, including consideration of seasonal variability in brine and outfall flow rates
- In cooperation with MRWPCA, evaluate corrosion protection, water quality monitoring, flow measurement, aeration, and other requirements related to receiving brine in the outfall.
- Coordinate with MRWPCA to identify outfall flow-rate, schedule and other constructability constraints for making the outfall connection, for startup testing of the brackish source water wells, and for startup testing of the Desalination Plant.
- Conduct preliminary design workshop with MRWPCA to identify the preferred location, sizing, configuration, design criteria and construction sequence for the connection, as well as any ancillary modifications to the outfall. Prepare summary TM for use by MRWPCA as the agreed-upon basis of design for their respective portions of the outfall connection. Include an estimate of construction cost for the connection.
- Provide ongoing coordination between MRWPCA during final design and construction.
- Monitor and administrator MRWPCA performance under the Outfall Agreement and report to the WPA Parties on the status of MRWPCA's performance.

10 MCWD Product Water Pipeline

Provide engineering services for the MCWD Product Water Pipeline, including preliminary design, management of final design to be provided by a separate final design consultant(s) to MCWD, coordination and oversight of the final design consultant and construction manager during bidding and construction, and startup support.

The MCWD Product Water Pipeline will consist of approximately 31,000 feet of 36-inch-diameter pipeline extending from the Desalination Plant to a metered connection to the CAW Product Water

Pipeline near the intersection of Highway 1 and 1st Street in Marina; the pipeline includes the CAW water meter to measure water deliveries to CAW.

10.1 Engineering Management

Engineering management activities included in this subtask consist of providing technical, resource, quality and budget/schedule management of final design consultants, contractors, and other service providers from design through construction and startup, and in a manner consistent with QA/QC, contracting and other protocols established for the Project.

Key project management activities include the following:

10.1.1 Design Coordination

Assist in selection of a qualified consultant for final design. Identify potential qualified design consultants, prepare technical and work scope requirements to be included in the request for proposals, participate in a pre-proposal meeting to describe the work and answer questions, review and evaluate proposals, participate on interview panel at request of MCWD, assist in negotiating scope of work and budget for final design contract with MCWD.

Coordinate facility-specific work with overall Project-wide engineering support, ROW and permitting activities, including participating in overall Project monthly progress meetings. Convene regular design team coordination workshops. Review/approve monthly invoices and progress reports from design consultant(s) before processing for payment under Task 1. Prepare budget adjustment and change management documents where needed and justified. Track costs, schedule, work progress and issues; identify risk management issues and corrective actions to manage change; prepare task status monthly progress reports.

Develop and manage the technical requirements. Coordinate and perform QA/QCA reviews of deliverables for the 30%, 60% and 90% and 100% design deliverables. Manage design consultants participation in the VE workshops and constructability reviews described in Task 5. Prepare Board agenda memoranda for those items that require approval from MCWD's Board of Directors. Conduct project close out activities, including close out of agreements, release of retention, archiving of project files.

10.1.2 Bid Period Support

Provide oversight and management of the design consultant during the bidding and award period. Coordinate with MCWD and design consultant to finalize bidding documents, conduct and document the prebid meeting, respond to bidder questions, prepare addenda, evaluate bids, and provide input concerning contract award to MCWD and the Advisory Committee.

10.1.3 MCWD's Representative During Construction

Provide oversight and management of the design consultant and construction manager during the construction period, and serve as a representative for MCWD in administration of the construction contract. Coordinate ESDC to be provided by the final design consultant for review of technical submittals, review of equipment O&M manuals, responses to RFIs, issuance of CDCs, preparation of change order documents, and attendance at regular and special construction meetings. Develop template and requirements for O&M manual for overall Facility and review design consultant's preparation of

overall Facility O&M manual. Coordinate with construction manager to provide onsite coordination meetings, contract administration, construction observation and special inspection/testing services. Coordinate with MCWD and Advisory Committee for Notice to Proceed, processing of pay requests, contract change requests, determination of substantial completion and final acceptance, as well as addressing any risk management issues. Participate on behalf of MCWD in coordination meetings; MCWD review and approvals of contract clarifications, pay requests, change requests, and contractor VE proposals; and in issuance of notices of non-conformance, contract change orders and acceptance of completed work. MCWD shall approve all contract change orders prior to issuance by Project Manager.

In coordination with MCWD, design consultant and contractor, develop Acceptance Plan schedule and procedures in accordance with Task 5. Develop a preliminary checklist of required tests that would identify the test action and expected results and be present to witness performance testing and review the results submitted by the contractor. Act as MCWD's representative during Acceptance testing. Conduct project close out activities, including close out agreements, release of retention, archiving of project files.

Deliverables:

- Monthly updates regarding cost, schedule and progress
- Meeting agendas and minutes
- Technical and work scope requirements for procuring services of final design consultant(s) and construction manager
- Memo providing input concerning selection of final design consultant
- Facility information on an as-requested basis to support permit applications, right-of-way, or for discussions/meetings with the Advisory Committee or its designees or appointees.
- QA/QC review comments for milestone reviews
- Bid evaluation memo and provide input concerning award of construction contract(s)
- Correspondence, approvals and other contract documentation required of MCWD's representative on behalf of MCWRA.
- Acceptance Plan development
- Startup testing documentation including checklists, data and summary report
- Close out agreements, project archiving

10.2 Predesign

Prepare Preliminary Design to develop information needed for Project permitting, to minimize costs that may arise from the failure to coordinate the design and engineering, permitting and construction of each portion of the Project, to verify that the Project Facilities can be constructed using construction methods, materials, and techniques in compliance with Best Industry Practices while still meeting the objectives and specific design criteria of MCWD, and to provide the design engineers with clear, concise information that can be utilized to prepare a competitive cost-effective proposal. The Predesign activities will include the following:

- Alignment Refinement
- Field Reconnaissance

- Utility Research
- Appurtenance Development
- Review Hydraulic Analysis
- Develop Pipeline Design Criteria
- Review Geotechnical and Corrosion Reports
- Pipe Materials Analysis
- Permitting Requirements
- Define Easement Requirements
- Caltrans Crossing Concepts (3 Del Monte Blvd, Hwy 1 Marina, Hwy 1 Sand City)
- CAW Delivery Point water meter
- Prepare Plan/Profile Drawings
- Prepare Draft PDR
- Prepare Final PDR

Deliverables

• Basis of Design Report for the MCWD Product Water Pipeline, including preliminary design drawings and corresponding opinion of construction cost.

10.3 Final Design

Please see "Non-Project Management Subtasks" above.

10.4 Bid and Award

Please see "Non-Project Management Subtasks" above.

10.5 Construction

Please see "Non-Project Management Subtasks" above.

11 Coordination with CAW Facilities Manager

Independent of design and construction contracts being let by MCWD and MCWRA for the Project Facilities, CAW will be permitting, designing and constructing the CAW Pipeline and ancillary facilities that extend from the Delivery Point to CAW's water distribution system. To assure integration of the overall water delivery system from the Desalination Plant to the CAW Facilities, Project Manager will coordinate with CAW's Facilities Manager. This requires coordination regarding permitting requirements, engineering design criteria and pipeline construction materials, scheduling and sequencing of construction, operational control systems and testing/startup. Activities include:

• Review of CAW's draft permit applications to assure consistency in information being presented to the permitting agencies.

- Review of preliminary and final design documents for consistency of design criteria including hydraulics, sizing, construction materials and flow control.
- Review of control strategies for the CAW facilities to assure communication of information between the control system for the Desalination Plant and that of the CAW facilities.
- Construction coordination regarding sequence, schedule, and interface connection responsibilities
- Startup/Testing coordination

Deliverables

- Exchange of design criteria, hydraulic models, construction/startup documents and other information needed to assure operational integration of facility components.
- Meeting minutes from coordination meetings

12 MCWD Tie-In Pipeline

Provide engineering services for the MCWD Tie-In Pipeline, including preliminary design, management of final design to be provided by a separate final design consultant(s) to MCWD, coordination and oversight of the final design consultant and construction manager during bidding and construction, and startup support.

The MCWD Tie-In Pipeline will consist of approximately 12,500 feet of 24-inch-diameter pipeline extending from a metered connection to the MCWD Product Water Pipeline near Highway 1 and 1st street in Marina to Reservoir C; the pipeline includes the MCWD water meter to measure water deliveries to MCWD.

12.1 Engineering Management

Engineering management activities included in this subtask consist of providing technical, resource, quality and budget/schedule management of final design consultants, contractors, and other service providers from design through construction and startup, and in a manner consistent with QA/QC, contracting and other protocols established for the Project.

Key project management activities include the following:

12.1.1 Design Coordination

Assist in selection of a qualified consultant for final design. Identify potential qualified design consultants, prepare technical and work scope requirements to be included in the request for proposals, participate in a pre-proposal meeting to describe the work and answer questions, review and evaluate proposals, participate on interview panel at request of MCWD, assist in negotiating scope of work and budget for final design contract with the MCWD.

Coordinate facility-specific work with overall Project-wide engineering support, ROW and permitting activities, including participating in overall Project monthly progress meetings. Convene regular design team coordination workshops. Review/approve monthly invoices and progress reports from design consultant(s) before processing for payment under Task 1. Prepare budget adjustment and change management documents where needed and justified. Track costs, schedule, work progress and issues;

identify risk management issues and corrective actions to manage change; prepare task status monthly progress reports.

Develop and manage the technical requirements. Coordinate and perform QA/QCA reviews of deliverables for the 30%, 60% and 90% and 100% design deliverables. Manage design consultant's participation in the VE workshops and constructability reviews described in Task 5. Prepare Board agenda memoranda for those items that require approval from MCWD's Board of Directors. Conduct project close out activities, including close out of agreements, release of retention, archiving of project files.

12.1.2 Bid Period Support

Provide oversight and management of the design consultant during the bidding and award period. Coordinate with MCWD and design consultant to finalize bidding documents, conduct and document the prebid meeting, respond to bidder questions, prepare addenda, evaluate bids, and make recommendation to MCWD and Advisory Committee regarding contract award.

12.1.3 MCWD's Representative During Construction

Provide oversight and management of the design consultant and construction manager during the construction period, and serve as a representative for Party in administration of the construction contract. Coordinate ESDC to be provided by the final design consultant for review of technical submittals, review of equipment O&M manuals, responses to requests for information RFIs, issuance of CDCs, preparation of change order documents, and attendance at regular and special construction meetings. Develop template and requirements for O&M manual for overall Facility and review design consultant's preparation of overall Facility O&M manual. Coordinate with construction manager to provide onsite coordination meetings, contract administration, construction observation and special inspection/testing services. Coordinate with MCWD and Advisory Committee for Notice to Proceed, processing of pay requests, contract change requests, determination of substantial completion and final acceptance, as well as addressing any risk management issues. Participate on behalf of MCWD in coordination meetings; MCWD review and approvals of contract clarifications, pay requests, change requests, and contractor VE proposals; and in issuance of notices of non-conformance, contract change orders and acceptance of completed work. MCWD shall approve all contract change orders prior to issuance by Project Manager.

In coordination with MCWD, design consultant and contractor, develop Acceptance Plan schedule and procedures in accordance with Task 5. Develop a preliminary checklist of required tests that would identify the test action and expected results and be present to witness performance testing and review the results submitted by the contractor. Act as MCWD's representative during Acceptance testing. Conduct project close out activities, including close out agreements, release of retention, archiving of project files.

Deliverables:

- Monthly updates regarding cost, schedule and progress
- Meeting agendas and minutes
- Technical and work scope requirements for procuring services of final design consultant(s) and construction manager
- Memo providing input concerning selection of final design consultant

- Facility information on an as-requested basis to support permit applications, right-of-way, or for discussions/meetings with the Advisory Committee or its designees or appointees
- QA/QC review comments for milestone reviews
- Bid evaluation memo and provide input concerning award of construction contract(s)
- Correspondence, approvals and other contract documentation required of MCWD's representative on behalf of MCWD.
- Acceptance Plan development
- Startup testing documentation including checklists, data and summary report
- Close out agreements, project archiving

12.2 Predesign

Prepare Preliminary Design to develop information needed for Project permitting, to minimize costs that may arise from the failure to coordinate the design and engineering, permitting and construction of each portion of the Project, to verify that the Project Facilities can be constructed using construction methods, materials, and techniques in compliance with Best Industry Practices while still meeting the objectives and specific design criteria of MCWD, and to provide the design engineers with clear, concise information that can be utilized to prepare a competitive cost-effective proposal. The Predesign activities will include the following:

- Alignment Refinement
- Field Reconnaissance
- Utility Research
- Appurtenance Development
- Review Hydraulic Analysis
- Develop Pipeline Design Criteria
- Review Geotechnical and Corrosion Reports
- Pipe Materials Analysis
- Permitting Requirements
- Define Easement Requirements
- Caltrans Crossing Concepts (1 Ft. Ord 1st Street)
- Prepare Plan/Profile Drawings
- Prepare Draft PDR
- Prepare Final PDR

Deliverables

• Basis of Design Report for the MCWD Product Water Pipeline, including preliminary design drawings and corresponding opinion of construction cost.

12.3 Final Design

Please see "Non-Project Management Subtasks" above.

12.4 Bid and Award

Please see "Non-Project Management Subtasks" above.

12.5 Construction

Please see "Non-Project Management Subtasks" above.

13 Project Facilities Construction Management

13.1 MCWRA Brackish Source Water Test Wells

Project Manager will provide field supervision during construction of above-ground wellhead facilities and test water disposal facilities for the vertical test well including the connection to the MRWPCA outfall, provide support regarding well design issues, monitor and report construction budget and schedule, and review results of drilling reports. Project Manager will coordinate with Geoscience who, under direct contract with MCWRA, will provide the field supervision during test well drilling, constructing and developing, the step drawdown and 5-day aquifer pumping tests and installation of long-term test pump, instrumentation and start up Construction Management of Project Facilities.

13.2 Other Project Facilities Construction Management

On behalf of each of MCWD and MCWRA, as applicable, provide construction management services during the construction phase for Project Facilities to be owned by MCWD and MCWRA, including: administering the construction contracts, serving as the on-site resident project representative during construction, coordinating QA material testing and special inspections to be provided under separate contract to MCWD and MCWRA, and preparing construction closeout documentation at the completion of construction. These activities are described further below.

Construction Contract Administration

Provide a full-time Construction Manager and supplemental clerical support staff for day-to-day administration of the construction contract paperwork, including:

- Submittals
- Contractor Requests for Information/Clarification
- Noncompliance Reports
- Change Orders
- Monthly Progress Reports
- Meetings Notes from Contractor Progress Meetings
- Contractor Correspondence
- Monthly and Final Pay Requests

The Construction Manager and supplemental clerical support staff will be housed in the Project Office in Marina; however, contractor progress meetings may be conducted in job-site field trailers provided by the Construction Contractors as well as at the Project Office. Progress meetings will be convened by the Construction Manager or Resident Project Representative for each facility and will be attended by the Contractor, Design Consultant, and designated Owner's Representative.

Resident Project Representative

Provide one or more resident project representatives to serve as on-site representative for MCWD or MCWRA, as applicable, for full-time observation and testing of the quality of construction work, to determine conformance of the completed work with respect to contract requirements, and to determine acceptability of the work for payment. Resident project representatives will work under the direction of the Construction Manager and will have duties and responsibilities consisting of:

- 1. Observing the progress and quality of the work.
- 2. Monitoring the construction progress schedule.
- 3. Reviewing contract documents with the Contractor's superintendent.
- 4. Considering Contractor's suggestions and reviewing them with the Design Engineer and designated Owner's Representative for decisions.
- 5. Attending construction meetings.
- 6. Observing tests.
- 7. Maintaining records of construction.
- 8. Keeping a daily log of construction activities.
- 9. Assisting in reviewing shop drawings.
- 10. Reviewing applications for payment.
- 11. Reviewing record documents periodically.
- 12. Reviewing punch lists.
- 13. Assisting in the final inspection.

It is assumed that the resident project representatives will consist of the following staff:

- 3 Resident engineers
- 3 Inspectors

MCWD and MCWRA will contract directly with outside testing agencies for materials testing and specialty inspections (e.g. welding) needed for QA testing and inspections of project facilities. Resident Project Representative will coordinate testing and specialty inspections; however, this task does not include the costs for the services of the outside testing agencies. MCWD and MCWRA will also contract directly with a third party for Environmental Monitoring during Construction services.

Closeout Documentation

In cooperation with the Design Engineer and Contractor for each facility, compile closeout documentation at the completion of construction, including the following:

- Final Construction Report
- Record Drawings to be prepared and stamped by the Design Engineer based on information compiled by the Contractor supplemented by observations of the Resident Project Representatives.
- Facility O&M Manuals
- Commissioning Plan and Documentation

Deliverables

- Construction Management Plan
- QA Testing and Inspection Plan
- Contract Administration Documents (Response to Submittals, RFIs, Change Orders, Nonconformance Reports, Final Inspection Punch List, Certificate of Substantial Completion, Monthly Progress and Final Pay Requests)
- Construction Correspondence
- Notes from Construction Progress Meetings
- Daily Field Inspection Reports and Photographs documenting construction
- Reports of Material Testing, Special Inspections and Field Performance Tests
- Record Drawings
- Final Construction Report
- O&M Manuals
- Commissioning Plan and Documentation

13.2.1 Construction Management Services

Project Manager's Construction Management costs will be tracked on this task and then allocated to the following tasks:

13.2.1.2 MCWRA Facilities

13.2.1.3 MCWD Facilities

13.2.2 QA Testing and Specialty Inspections for MCWD Facilities

Please see "Non-Project Management Subtasks" above.

13.2.3 QA Testing and Specialty Inspections for MCWRA Facilities

Please see "Non-Project Management Subtasks" above.

14 Additional Services

When requested by the Advisory Committee, provide additional Project-related services that are not included under the Scope of Work for the previous Tasks. The nature of such additional work has not been identified at this time, but could include engineering, environmental or support services for new Tasks, or as out-of-scope work on previously authorized Tasks. Project Manager will provide requested services on an as-needed basis when authorized by the WPA Parties or applicable WPA Party or WPA Parties, with the scope of services and approximate budget for the additional work to be defined in the written Additional Services Work Authorization. For budgeting purposes, an allowance of 10% of the total Agreement cost is included for this task.

Deliverables

As defined in the Additional Services Work Authorization

Owner's Responsibilities

In addition to the general responsibilities described in overall Agreement, the WPA Parties agree to be responsible for the following items, including associated coordination with each other WPA Party:

- 1. Each of their own legal services required for Project implementation
- 2. Timely coordination and communication of input and decisions by the Project Owners that may be needed for Project implementation as called for under the Water Purchase Agreement.
- 3. Review and coordination of draft and final NEPA documentation prepared by Denise Duffy and Associates under contract to MCWD.
- 4. Attendance at public meetings and hearings required under the NEPA process.
- 5. Payment of permit fees for permits other than those acquired by construction contractors.
- 6. Adoption/implementation of mitigation and monitoring required under acquired permits.
- 7. Acquisition of necessary easements and rights-of-way for project facilities.
- 8. Providing "front-end" contract documents needed for Bidding and construction of the facilities and for procurement of engineering service providers.
- 9. Providing Additional Services Work Authorizations to authorize performance of out-of-scope work when requested as set forth in the Agreement.

EXHIBIT B

Project Manager Personnel

2011 PMA Billing Rates

Employee Classifications	Hourly Billing Rate
Principal Project Manager 3	\$255
(Melton – Project Manager, Bailey – Engineering Manager)	
Principal Project Manager 2	\$245
Principal Project Manager 1	\$235
Sr. Project Manager 3	\$225
(Cort – Environmental Lead, Green-Heffern – Project Controls Lead, Dumas – Permitting Lead,)	
Sr. Project Manager 2	\$220
Sr. Project Manager 1	\$215
Project Manager 3	\$205
Project Manager 2	\$200
Project Manager 1 (Alameda – Schedule/Budget Controls)	\$195
Project Engineer 3	\$185
Project Engineer 2	\$175
Project Engineer 1	\$160
Environmental Planner/Scientist 3	\$175
Environmental Planner/Scientist 2	\$165
Environmental Planner/Scientist 1	\$155
Assistant Professional	\$130
Sr. CAD Designer	\$140
CAD Designer	\$125
Sr. Graphic Designer/Artist	\$125
Graphic Designer/Artist	\$115
Sr. Project Accountant	\$120
Project Accountant	\$110
Sr. Project Administrator	\$105
Project Administrator	\$95

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TASK ORDER NO. 1 - INITIAL PMA SERVICES

REGIONAL DESALINATION PROJECT MANAGEMENT AGREEMENT

In accordance with the Project Management Agreement ("Agreement") dated _______ between RMC WATER AND ENVIRONMENT ("Project Manager") and MARINA COAST WATER DISTRICT ("MCWD"), MONTEREY COUNTY WATER RESOURCES AGENCY ("MCWRA") and CALIFORNIA-AMERICAN WATER COMPANY ("CAW"), (together the "WPA Parties"), the Project Manager and WPA Parties agree as follows:

- A. <u>Project Manager Scope of Services</u>: Project Manager is authorized to perform Services under the Agreement as identified in the Task Order Description below. No services are authorized beyond the Task Order Limit noted in paragraph C of this Task Order.
- B. WPA Parties Responsibilities: as called for under the Agreement.
- C. <u>Compensation and Task Order Amount</u>: Project Manager shall be compensated for PMA Services provided under this Task Order as described in Article 12 of the Agreement, up to a maximum amount of \$5 million for Task Order No. 1.
- D. <u>Times of Performance</u>: Initiation of services provided under this Task Order No. 1 shall be commencing January 11, 2011. Completion of services provided under this Task Order shall be June 30, 2011.

Task Order Description

- 1. Overview: Task Order No. 1 covers PMA Services performed by the Project Manager during the initial months of the project prior to securing additional financing by the WPA Parties necessary for design and implementation of Project Facilities. PMA Services included under this Task Order include limited Pre-Construction and Construction Phase services covered under Articles 7 and 8 of the Agreement and as more specifically described in Exhibit A of the Agreement, with the level of effort subject to a limit based on the Task Order No. 1 budget limitation of \$5 million, and subject to the priorities determined by the Advisory Committee during the course of the work.
- Scope of Services: Project Manager will perform work under the following Tasks described in Exhibit B of the Agreement, consistent with the Task Order No. 1 objectives and limitations noted below:

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Task	Task Order Objectives/Limitations
Task 1 – Program Management	Develop and implement PM framework for project; begin work under all subtasks.
Task 2 – Funding	Assist PAC in securing funding; work under all subtasks.
Task 3 – Environmental	Coordinate NEPA documentation and identify mitigation
Coordination	requirements; work under all tasks.
Task 4 – Permitting	Prepare permit applications for Test Wells and for overall Coastal Development Permit; work under all subtasks.
Task 5 – System-Wide Engineering	Preliminary design support only.
Task 6 – Brackish Wells	Test well implementation, and preliminary design support for production wells.
Task 7 – MCWRA Brackish Water Pipeline	Preliminary design support only.
Task 8 – MCWD Brackish Water Pipeline	Preliminary design support only.
Task 9 – Desalination Plant	Preliminary design support only.
Task 10 – Product Water Pipeline	Preliminary design support only.
Task 11 – CAW Coordination	Preliminary design support only.
Task 12 - MCWD Tie-In Pipeline	Preliminary design support only.
Task 13 – Construction	Support for test well construction and monitoring only.
Management	

- 3. Budget Allocation: The maximum allowable budget under Task Order No. 1 shall be \$5 million. Actual allocation of budget to each of the PMA tasks shall be as agreed between the WPA Parties and the Project Manager, except that all work shall be performed within the budgets established in Article 12 of the Agreement and allocated to each of the WPA Parties based on the Allocable PMA Percentage as established in Article of the Agreement.
- 4. Compensation: Invoices and compensation for services provided under Task Order No. 1 shall be as described in Article 12 of the Agreement.
- 5. Attachments: None

[SIGNATURE PAGE FOLLOWs]

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IN WITNESS WHEREOF, this Task Order No. 1 is executed on		
MARINA COAST WATER DISTRICT, a California County Water District	CALIFORNIA-AMERICAN WATER COMPANY a California corporation and regulated public utility	
By: Title:	By: Title:	
MONTEREY COUNTY WATER RESOURCES AGENCY, a California Water Resources Agency	RMC WATER AND ENVIRONMENT, a California corporation	
By: Title:	By: Title:	