

# Regional Desalination Project

August 2011-  
Monthly Progress Report



Prepared By: Regional Desalination Project Manager

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## Section 1 Project Background

### Introduction

The Regional Desalination Project (RDP), located in the Monterey Bay area of California, will replace existing Monterey Peninsula water supplies that are constrained by recent legal decisions and will provide a new water supply for redevelopment of the former Fort Ord. The RDP is being implemented through a Water Purchase Agreement, a 3-way partnership of the Marina Coast Water District (MCWD), the Monterey County Water Resources Agency (MCWRA), and the California-America Water Company (CAW).

### Purpose and Need

The purpose of the Regional Desalination Project is to provide a replacement water supply for the Monterey Peninsula (defined as CAW's Monterey District Service Area) and a sustainable supply for approved redevelopment of the former Fort Ord area within MCWD's Ord Community Service Area that will:

- Reduce existing diversions from the Carmel River natural watercourse and withdrawals from the Seaside Groundwater Basin/aquifers;
- Reclaim seawater-intruded (brackish) water in the 180-Foot Aquifer of the Pressure Zone of the Salinas Valley Groundwater Basin, an impaired aquifer
- Improve and maintain the hydrologic balance of the Salinas Groundwater Basin;
- Protect listed species in the riparian and aquatic habitat below San Clemente Dam;
- Protect the local economy from the effects of an uncertain water supply
- Minimize water rate increases by creating a more sustainable and diversified water supply portfolio
- Implement a conjunctive-use project consistent with regional integrated resource management principles that will improve the Carmel River watershed and multiple groundwater basins; and
- Implement a project that promotes and applies a watershed perspective through a regional planning effort and collaborative partnership amongst the entities.

For a complete description of the project background see Appendix A.

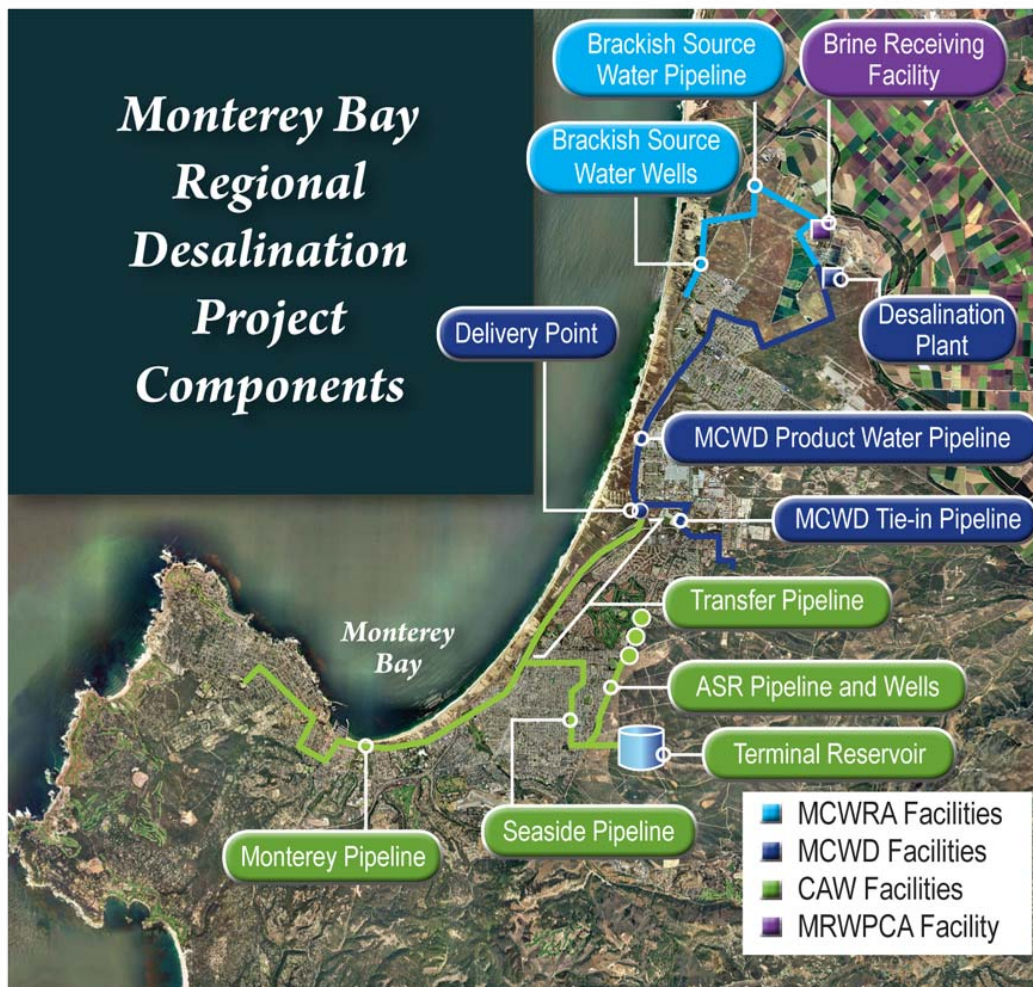
## Section 2 Description of Regional Desalination Project

Per the Water Purchase Agreement, the Project includes two general categories of facilities characterized by public versus private ownership:

- The **Project Facilities** will be owned and operated by the public agencies (MCWD, MCWRA, and MRWPCA)
- The **CAW Facilities** will be owned and operated by CAW.

Collectively, these constitute the Regional Desalination Project and include Brackish Source Water Wells, Brackish Source Water Pipeline, Desalination Plant; brine discharge Outfall Facilities; Product Water Pipelines and storage facilities; and an aquifer storage and recovery system (ASR). The overall RDP components are illustrated on Figure 1. For a complete description of the project facilities see Appendix A.

Figure 1: Project Components



## Section 3 Project Cost Estimate and Schedule

### Cost Estimate

The Water Purchase Agreement establishes a project Cost Cap for the Regional Desalination Project. The summary of the Cost Cap and the CAW facilities can be seen in Table 1 below. Project costs will be monitored for compliance within the established Cost Cap. There have been no changes in the Project Cost Estimate during this reporting period.

**Table 1. Project Cost Cap**

Facility	Total Cost Cap	% Total
Brackish Source Water Wells and Pipeline	\$ 39,800,000	10%
Desalination Plant	\$134,800,000	33%
MCWD Product Water Pipeline	<u>\$ 28,000,000</u>	7%
<b>Construction Costs Total</b>	<b><u>\$202,600,000</u></b>	
Pre-Effective Date Costs (1)	\$ 14,000,000	3%
Post-Effective Date Implementation Costs (2)	\$ 59,000,000	15%
Right of Ways, Easements, Outfall	\$ 6,900,000	2%
Reserve Fund/Cost of Obtaining Financing	<u>\$ 15,000,000</u>	4%
<b>MCWRA/ MCWD Total</b>	<b><u>\$297,500,000</u></b>	
CAW Facilities (CAW Only) (3)	<u>\$107,000,000</u>	26%
<b>Project Total</b>	<b><u>\$404,500,000</u></b>	

Notes:

- (1): Project costs incurred by MCWD and MCWRA prior to January 11, 2011.
- (2): Cost includes: design, permitting, project management, construction management, and legal fees
- (3): CAW Facility costs are not included in the forecasted costs in Figure 5 and Figure 6

### Costs Status

Delays to the project schedule (see Schedule Status below) are expected to have impacts to the project costs due to inflation. The full impacts of the cost are not known at this time. However, construction costs increase over time as evidenced by a Construction Cost Index escalation in of almost 5% over the last two years. Significant schedule delays could have substantial impacts on project implementation costs.

## Schedule

The Regional Desalination Project implementation schedule is presented in Figure 2. The project schedule has been updated this reporting period to reflect impacts from the issues described below.

**Figure 2. Summary Schedule**

Regional Desalination Project- Summary Schedule																								
Task	2011				2012				2013				2014				2015				2016			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Test Wells	Design				Design		Construction																	
Brackish Source Water Wells					Predesign, Permitting, Design								Construction											
Brackish Source Water Pipeline					Predesign, Permitting, Design								Construction											
Desalination Plant					Predesign, Permitting, Design								Construction											
MCWD Product Water Pipeline					Predesign, Permitting, Design								Construction											
MCWD Tie-in Pipeline					Predesign, Permitting, Design								Construction											
CAW Facilities					Predesign, Permitting, Design								Construction											

### Schedule Status

The overall project schedule has been impacted due to multiple reasons. They include:

1. In March, MCWRA directed a work stoppage on the Brackish Source Water Wells and Brackish Source Water Pipeline.
2. The CCC voted at its August 12 meeting to continue the Coastal Development Permit application for the Test Slant well to a later meeting.
3. In August, virtually all work on the Regional Desalination Project by the PMA was stopped due to the non-payment by MCWRA of PMA invoices.
4. In August, the three Parties to the WPA agreed to enter mediation.

The extent of these project delays is not fully known at this time. However, an initial review of the impacts of these project delays has been completed and it has been determined the project has been delayed in excess of one year, with a projected project completion date in the third quarter of 2016. This delay in project completion has been reflected in the schedule shown in Figure 2 above.

**Construction Schedule:** No construction activities have occurred to date, the construction schedules in Figure 2 are estimated timelines. When construction activities begin the contractors will be required to provide detailed schedules so progress can be tracked and updated in the master project schedule.

## Section 4 Project Budget

For the month of August 2011, the Project Management Team spent \$388,973. To date, the Project Management Team has spent \$3,812,463, which is 14.6% of the total PMA budget. Breakdowns of the monthly and total expenditures by facility owner are in Table 2 and Table 3 below and the details of the monthly invoice allocation are in Appendix B. Monthly and cumulative forecast vs. actual costs for the PMA are in Figure 3 and Figure 4. A summary of the overall project expenses is in Table 4 and monthly cumulative forecast vs. actual costs are in Figure 5 and Figure 6 below.

**Table 2. Monthly Expense by Facility Owner**

Task	Invoice	MCWD	MCWRA	CAW
Task 1 Program Management	\$ 39,959.63	\$ 29,456.48	\$ 5,578.24	\$ 4,924.92
Task 2 Funding	\$ 20,827.30	\$ 20,806.09	\$ 21.21	\$ -
Task 3 Environmental Coordination	\$ 7,235.49	\$ 3,287.13	\$ 446.47	\$ 3,501.89
Task 4 Permitting	\$ 39,129.49	\$ 20,198.33	\$ 13,195.92	\$ 5,735.24
Task 5 System-wide Engineering	\$ 4,942.67	\$ 4,942.67	\$ -	\$ -
Task 6 Brackish Wells	\$ 585.00	\$ -	\$ 585.00	\$ -
Task 7 & 8 Brackish Water Pipeline	\$ -	\$ -	\$ -	\$ -
Task 9 Desalination Plant	\$ 276,294.24	\$ 276,294.24	\$ -	\$ -
Task 10 Product Water Pipeline	\$ -	\$ -	\$ -	\$ -
Task 11 CAW Coordination	\$ -	\$ -	\$ -	\$ -
Task 12 MCWD Tie-in Pipeline	\$ -	\$ -	\$ -	\$ -
Task 13 Construction Management	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 388,973.82</b>	<b>\$ 354,984.94</b>	<b>\$ 19,826.84</b>	<b>\$ 14,162.04</b>
% of Invoice		91%	5%	4%

**Table 3. PMA Budget Status Summary**

		MCWD	MCWRA	CAW
Budget	\$ 26,050,000	\$ 20,596,000	\$ 4,163,000	\$ 1,293,000
Billed to Date	\$ 3,812,463	\$ 2,881,355	\$ 696,285	\$ 234,823
Remaining	\$ 22,237,537	\$ 17,714,645	\$ 3,466,715	\$ 1,058,177
% Remaining	85.4%	86.0%	83.3%	81.8%

**Table 4. Overall Project Costs to Date**

<b>Agency</b>	<b>Legal</b>	<b>Agency Labor and Expenses</b>	<b>Other Consultants</b>	<b>PMA</b>	<b>Construction</b>	<b>Total</b>
MCWD	\$ 150,000	\$ 221,000	\$ 336,000	\$ 2,881,000	\$ -	\$ 3,588,000
MCWRA	\$ 259,000	\$ 102,000	\$ 112,000	\$ 696,000	\$ -	\$ 1,169,000
<b>Total</b>	<b>\$ 409,000</b>	<b>\$ 323,000</b>	<b>\$ 448,000</b>	<b>\$ 3,577,000</b>	<b>\$ -</b>	<b>\$ 4,757,000</b>

Note: Costs to date are based on the reports of project expenses received at the time this report was produced. Additional costs may have been incurred but not reported at time of preparation of this monthly status report.

### **Budget Status**

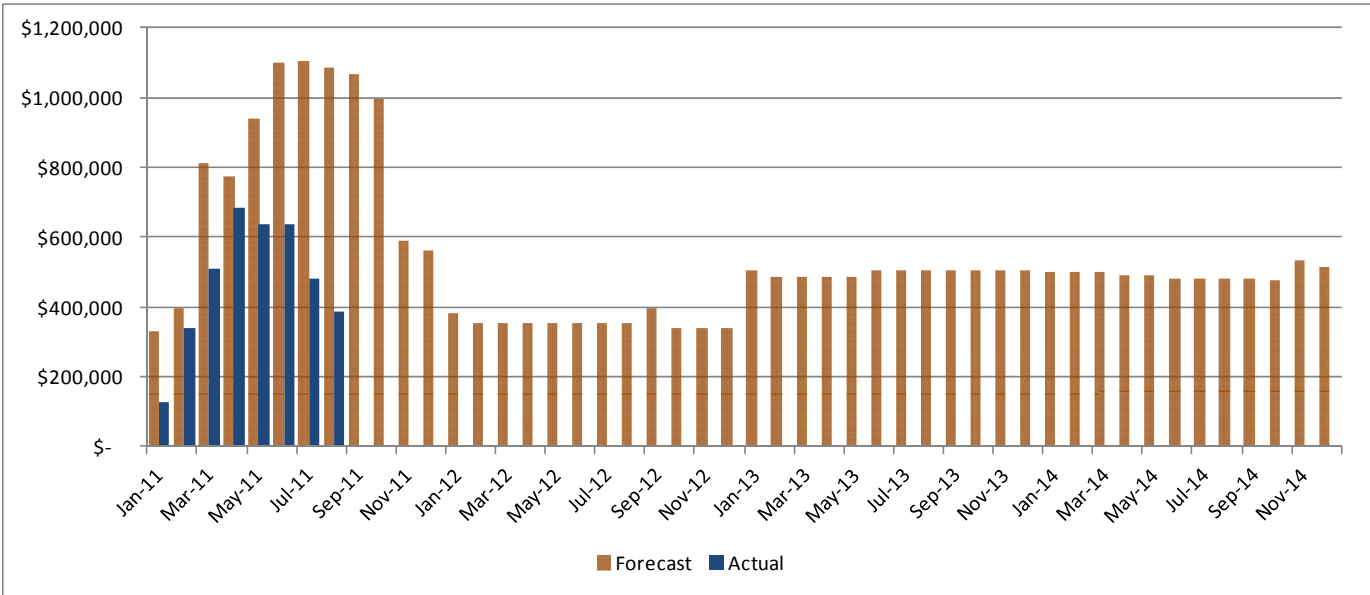
**PMA Contract:** As seen in Figure 3 below, the PMA expenditures for the month of August are lower than the planned expenditures. The reduction of monthly expenditures is primarily due to MCWRA's direction to not work on the Brackish Source Water Wells and Brackish Source Water Pipeline except as specifically directed by MCWRA. This impacts numerous tasks, including funding, environmental coordination, permitting, and system-wide engineering. This stoppage of work is also impacting the project schedule (see Schedule Status).

**Regional Desalination Project:** The actual project expenditures are running slightly lower than forecasted. However, project delays will impact the overall Project cost. The full impact of these delays on overall costs is will be assessed and reported in future monthly progress reports.

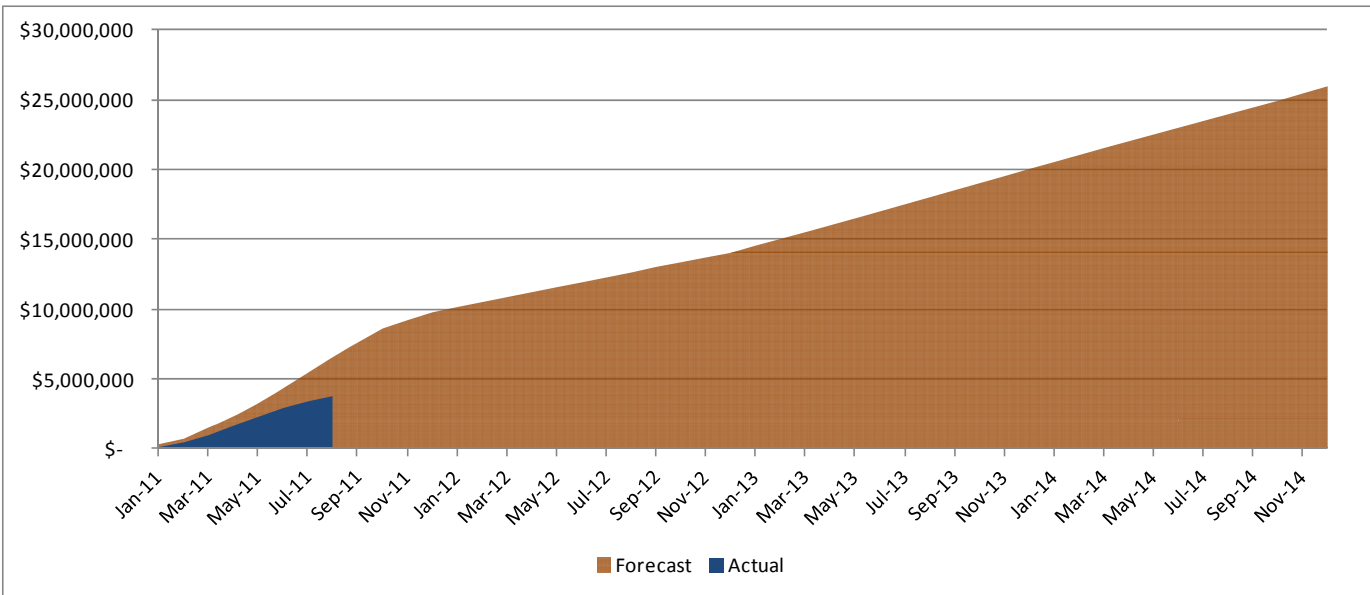
**Construction Costs:** No construction activities have occurred to date, construction costs in Table 2 are estimated values. When construction activities begin, the bid costs will be compared and tracked against the original estimates, including processing and tracking of approved contract change orders.



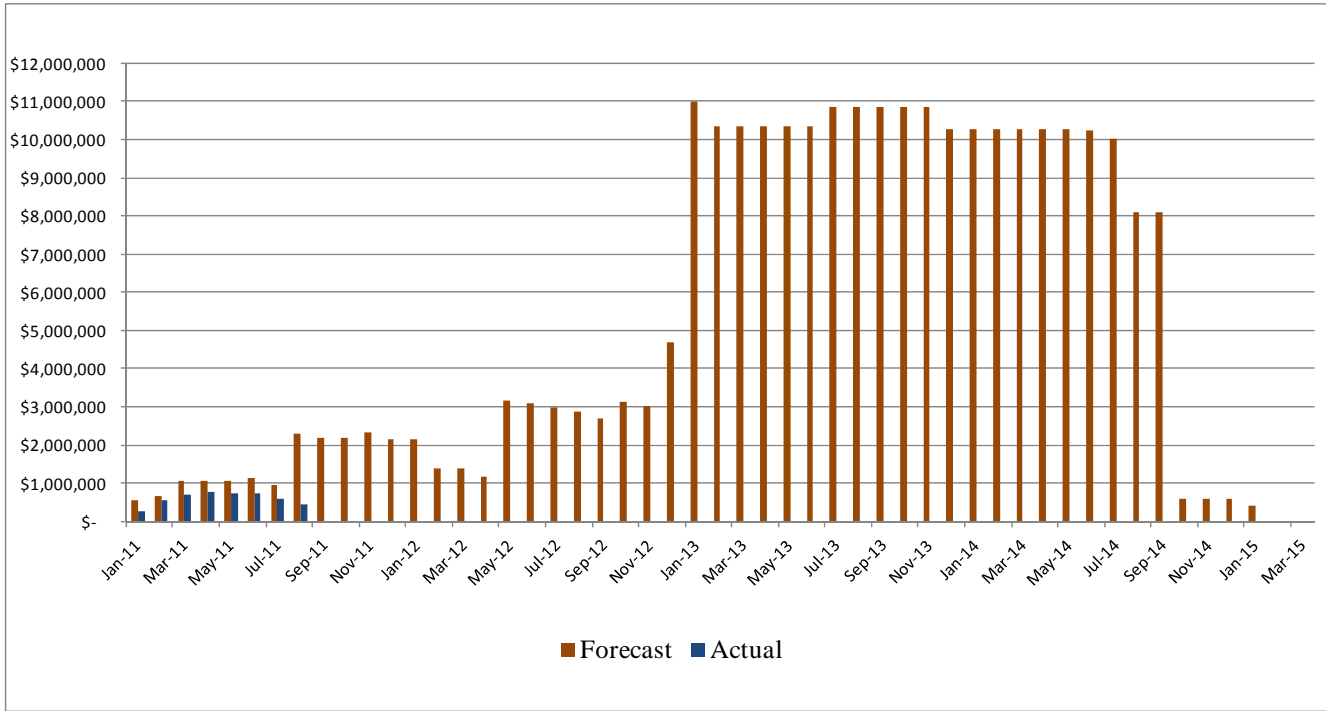
**Figure 3. Actual vs. Forecast- PMA Costs**



**Figure 4. Cumulative Actual vs. Forecast- PMA Costs**

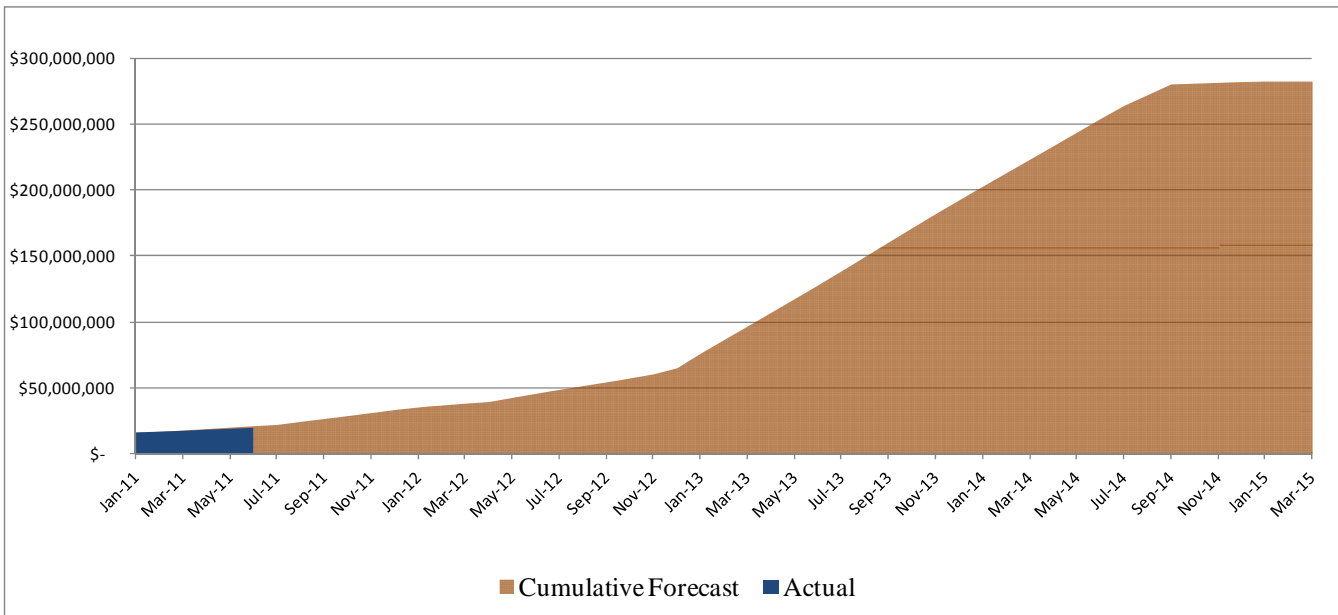


**Figure 5. Actual vs. Forecast- Regional Desalination Project Costs**



Notes: (1) The projected costs in Figure 5 and 6 do not include any costs associated with bond financing. Such costs will be paid directly from the forecasted bond proceeds. (2) Actual costs to date are based on the project expenses received at the time this report was produced. Any costs received later will be shown in next month's report, but will be reflected in the month the work was conducted in.

**Figure 6. Cumulative Actual vs. Forecast- Regional Desalination Project Costs**



## **Section 5 Project Status Updates**

Some of the major project highlights for August 2011 are summarized below.

### **Task 1: Overall Project Management**

- Weekly coordination with MCWD, CAW, and MCWRA
- Prepared presentation documents and attended the CIF meeting #2 on August 23, 2011.
- Updated the project schedule and budget tracking documents based on progress made on project tasks and expenditure information provided by MCWD and MCWRA.
- Updated project website to include a “Projects Update” page for latest project press releases.

### **Task 2: Funding**

- Met with SWRCB and USBR to coordinate funding items on August 2, 2011.
- Drafted MCWD SRF application and performed internal review.
- Revised and finalized MCWD SRF application.
- Continued coordination with Piper Jaffray and SWRCB on the Credit Review Package for MCWD SRF application.
- Coordinated with MCWD to draft and revise SRF resolutions and legal opinions.
- Produced and submitted the MCWD SRF application to SWRCB on August 23, 2011. MCWRA application for the SRF will be submitted when MCWRA approves the resolutions and all documents are received.
- Continued efforts to revise and update letter to SWRCB responding to comments from USEPA regarding watershed plan elements and project eligibility.

### **Task 3: Environmental Coordination**

- Coordinated with CAW staff for review and comments on the Environmental Assessment (EA).
- Met with SWRCB and USBR to discuss funding and coordinate process for compliance with CEQA Plus, NEPA and associated environmental processes on August 2nd, 2011.
- Developed plan for addressing Section 106 National Historic Preservation Act requirements associated with MCWD SRF application
- Coordinated with DDA to update and incorporate legal comments into the Environmental Assessment (EA).

#### **Task 4: Permitting**

- Attended and prepared presentation for the August 12<sup>th</sup> Coastal Commission Hearing for the Slant Test Well. At the August 12<sup>th</sup> Coastal Commission Hearing the Slant Test Well application was continued to a later date.
- Coordinate with Flow Science on dilution modeling to support the brine discharge efforts.
- Continued preparation of Brine Waste Disposal Study and coordination with MRWPCA for the NPDES permit amendment for discharge of brine through the MRWPCA outfall.
- Prepared response comments for questions from the Ag Land Trust.
- Finalized and submitted land lease application to the State Lands Commission for the slant test well. Application is on target for review at the October meeting.
- Performed on-going coordination with contact at State Lands Commission.
- Coordinated with MCWD for CDPH memo review and update.
- Continued finalizing vertical test well responses to the Coastal Commission. The response will be finalized when the ESHA information has been approved for release.

#### **Task 5: System-Wide Engineering**

- Preliminary Geotechnical work on MCWD facilities. This work is currently on hold.

#### **Task 6: Brackish Source Water Wells**

- Reviewed the location of the updated Slant Test well location prior to the Coastal Commission meeting.

#### **Task 7/8: Brackish Source Water Pipeline**

- During this time period no activities occurred on this task.

#### **Task 9: Desalination Plant**

- Continued and completed preparation of the Draft Desalination Plant Basis of Design Report (BODR) and Draft Cost Estimate. Internal team QA/QC comments were addressed/incorporated. The draft basis of design report was submitted to MCWD for review on August 29<sup>th</sup>.
- Completed preparation of Draft Specifications and Drawings for the Desalination Plant Basis of Design Report. Internal QA/QC comments on drawings and specifications were addressed. Draft documents were submitted to MCWD for review on August 29<sup>th</sup>

- Completed internal QA/QC review of Desalination Plant Draft Basis of Design Report, Drawings and Specifications. Addressed internal QA/QC comments.
- Continued coordination with Trussell, TJC, Burks Toma, and RMC design teams with regards to project schedule, BODR, specifications, drawings, and cost estimate.

#### **Task 10: MCWD Product Water Pipeline**

- During this time period no activities occurred on this task.

#### **Task 11: CAW Coordination**

- During this time period no activities occurred on this task.

#### **Task 12: MCWD Tie-in Pipeline**

- During this time period no activities occurred on this task.

#### **Task 13: Construction Management**

- During this time period no activities occurred on this task.

## List of Acronyms and Abbreviations

<b>Term</b>	<b>Meaning</b>
AFY	acre-feet per year
APE	Area of potential effect
Army	U.S. Army
ASR	Aquifer storage and recovery
BA	Biological Assessment
BO	Biological Opinion
CAW	California-American Water Company
CDFG	California Department of Fish & Game
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CIF	Community Involvement Forum
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
CSIP	Castroville Seawater Intrusion Project
CWA	Clean Water Act
D/B	Design/Build
DDA	Denise Duffy & Associates, Inc.
DRA	Division of Ratepayer Advocates
DWSAP	Drinking Water Source Assessment and Protection
EA	Environmental Assessment
EIR	Environmental Impact Report (CEQA)
EIS	Environmental Impact Statement (NEPA)
EPA	Environmental Protection Agency
I	Fort Ord Reuse Authority
ft	foot
GHG	greenhouse gas
gpm	gallons per minute
hp	horsepower
Hr	hour(s)
I&C	Instrumentation and Controls
in	inch
kw	kilowatt
kwh	kilowatt-hour(s)
lb	pound(s)
LCP	Local Coastal Program
LF	linear feet
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MCWD	Marina Coast Water District
MCWRA	Monterey County Water Resources Agency
MG	million gallons
mg/l	milligrams per liter

<b>Term</b>	<b>Meaning</b>
mgd	million gallons per day
MPRPD	Monterey Peninsula Regional Park District
MPWMD	Monterey Peninsula Water Management District
MRWMD	Monterey Regional Waste Management District
MRWPCA	Monterey Regional Water Pollution Control Agency
NDPES permit	National Pollution Discharge Elimination System permit
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PAB	Private Activity Bonds
PAC	Project Advisory Committee
PCAs	Potentially Contaminating Activities
PG&E	Pacific Gas and Electric
PMA	Project Management Agreement
ppm	parts per million
psi	pounds per square inch
RDP	Regional Desalination Project
Reclamation	Bureau of Reclamation, U.S. Department of Interior
REF	Renewable Energy Facility
RFP	Requests for Proposals
RFQ	Requests for Statements of Qualifications
RMC	RMC Water and Environment, Project Manager
RO	Reverse Osmosis
ROW	Right-of-Way
RUWAP	Regional Urban Water Augmentation Project
SCADA	Supervisory Control and Data Acquisition
sf	Square Feet
SOQ	Statements of Qualifications
SRF	State Revolving Fund, California
SVRP	Salinas Valley Reclamation Plant
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TAMC	Transportation Agency for Monterey County
TJC	TJC and Associates, Inc.; Electrical/I&C subconsultant to RMC
USBR	United States Bureau of Reclamation
USFWS	United States Fish & Wildlife Service
WPA	Water Purchase Agreement
yr	Year

# Appendix A



## Introduction

The Regional Desalination Project (RDP), located in the Monterey Bay area of California, will replace existing Monterey Peninsula water supplies that are constrained by recent legal decisions and will provide a new water supply for redevelopment of the former Fort Ord. The RDP is being implemented through a Water Purchase Agreement, a 3-way partnership of the Marina Coast Water District (MCWD), the Monterey County Water Resources Agency (MCWRA), and the California-America Water Company (CAW). The overall purpose of each agency is:

- MCWD provides water service to the City of Marina and the former Fort Ord. MCWD acts on behalf of persons served to furnish water for beneficial use, to protect the groundwater underlying MCWD, and to conserve the water supply for future as well as present use.
- MCWRA's boundaries are coexistent with Monterey County's boundaries and MCWRA is responsible under the Agency Act to control groundwater extractions to prevent the loss of usable groundwater through intrusion of seawater, to replace groundwater through the development and distribution of a substitute surface supply, and to prohibit groundwater exportation from the Salinas Basin.
- CAW provides water service in various areas within California, including a service area in Monterey County, adjacent to MCWD Service Area and within the boundaries of MCWRA.

MCWD, MCWRA and CAW, individually and collectively, have determined that the Regional Desalination Project is the least costly of any proposed alternative projects, is the most feasible of those projects, and is in the best interests of the customers served by each of MCWD and CAW. The Parties have also determined that the Regional Desalination Project best conserves and protects public trust assets and resources.

The Regional Desalination Project will replace existing water supplies that are constrained by recent legal decisions affecting the Carmel River and Seaside Groundwater Basin water resources. Specifically, the State Water Resources Control Board (SWRCB) Order No. WR 95-10 (Order 95-10) and the Monterey County Superior Court adjudication of water rights in the Seaside Groundwater Basin reduce California American Water's (CAW's) use of its two primary sources of supply for the Monterey District and provide an immediate impetus for the Regional Desalination Project. In addition, the Regional Desalination Project will assist Marina Coast Water District (MCWD) in meeting their long-term obligations to supply potable water for approved redevelopment of the former Fort Ord area.

The Regional Desalination Project will extract a combination of seawater and brackish water, produce potable water, convey it to the existing MCWD and CAW distribution systems, and increase the system's use of storage capacity in the Seaside Groundwater Basin. The Regional Desalination Project will consist of several distinct components: Brackish Source Water Wells and Brackish Source Water Pipeline; a Desalination Plant; brine disposal Outfall Facilities; Product Water Pipelines, storage facilities, and an aquifer storage and recovery (ASR) system.

## Purpose and Need

The purpose of the Regional Desalination Project is to provide a replacement water supply for the Monterey Peninsula (defined as CAW's Monterey District Service Area) and a sustainable supply for approved redevelopment of the former Fort Ord area within MCWD's Ord Community Service Area that will:

- Reduce existing diversions from the Carmel River natural watercourse and withdrawals from the Seaside Groundwater Basin/aquifers;
- Reclaim seawater-intruded (brackish) water in the 180-Foot Aquifer of the Pressure Zone of the Salinas Valley Groundwater Basin, an impaired aquifer
- Improve and maintain the hydrologic balance of the Salinas Groundwater Basin;
- Protect listed species in the riparian and aquatic habitat below San Clemente Dam;
- Protect the local economy from the effects of an uncertain water supply
- Minimize water rate increases by creating a more sustainable and diversified water supply portfolio
- Implement a conjunctive-use project consistent with regional integrated resource management principles that will improve the Carmel River watershed and multiple groundwater basins; and
- Implement a project that promotes and applies a watershed perspective through a regional planning effort and collaborative partnership amongst the entities.

The primary objectives of the local agencies and CAW in developing the Regional Desalination Project are to:

- Satisfy CAW's obligations to meet the requirements of SWRCB Order 95-10;
- Diversify and create a reliable drought-proof potable water supply of 10,500 AFY;
- Protect the Seaside Basin for long-term reliability;
- Protect listed species in the riparian and aquatic habitat below San Clemente Dam;
- Protect the local economy from the effects of an uncertain water supply;
- Minimize water rate increases by creating a diversified water supply portfolio;
- Satisfy MCWD's obligations to provide a water supply adequate to meet the demand associated with approved redevelopment of the former Fort Ord;
- Satisfy Monterey County Water Resources Agency's (MCWRA's) obligation to maintain hydrologic balance of the Salinas Groundwater Basin;
- Satisfy MCWRA's obligation to protect agricultural water users' utilization of water resources;
- Maximize funding opportunities through regional cooperation; and
- Integrate urban, agricultural and environmental objectives.

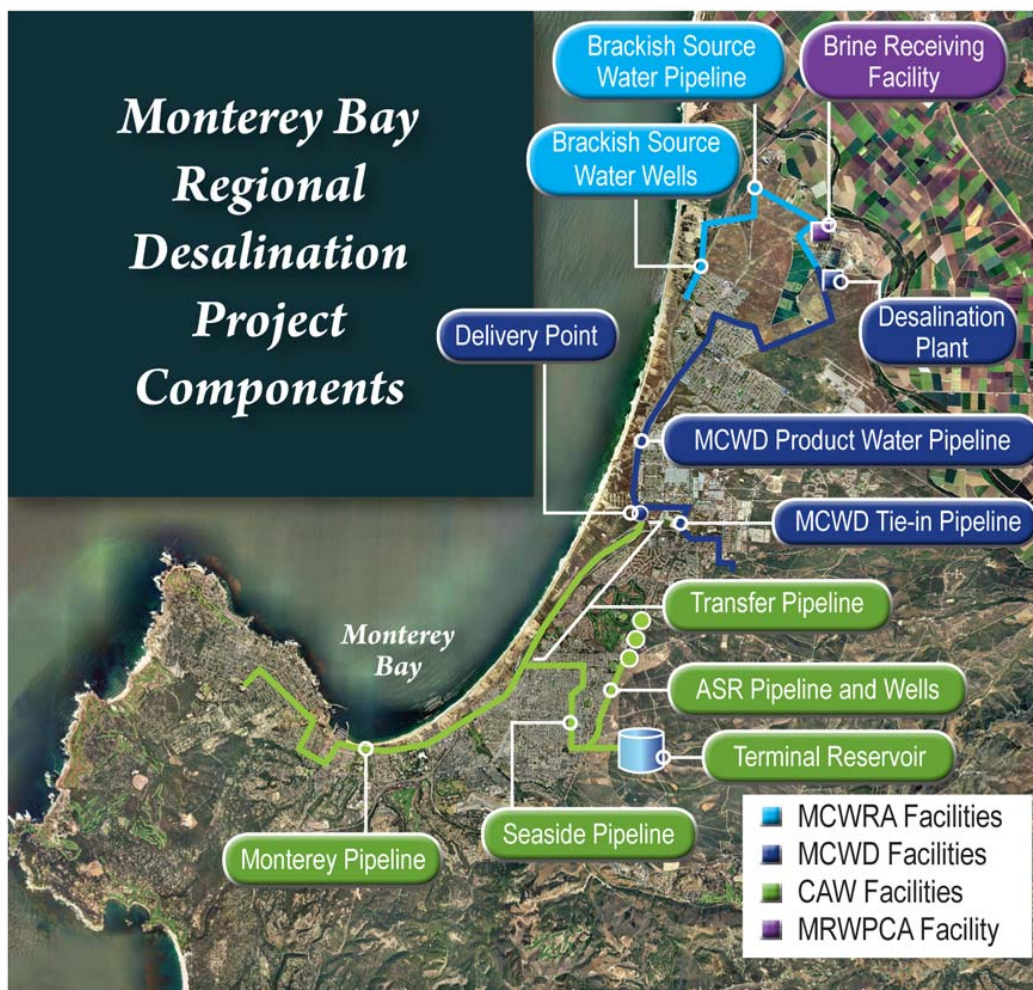
## Description of Regional Desalination Project

Per the Water Purchase Agreement, the Project includes two general categories of facilities characterized by public versus private ownership:

- The **Project Facilities** will be owned and operated by the public agencies (MCWD, MCWRA, and MRWPCA)
- The **CAW Facilities** will be owned and operated by CAW.

Collectively, these constitute the Regional Desalination Project and include Brackish Source Water Wells, Brackish Source Water Pipeline, Desalination Plant; brine discharge Outfall Facilities; Product Water Pipelines and storage facilities; and an aquifer storage and recovery system (ASR). The overall RDP components are illustrated on Figure 1 and summarized in Table 1. The Project Facilities, which will be funded by the Private Activity Bonds, are described in more detail following **Error! Reference source not found.**

**Figure 7: Project Components**



**Table 1. Overview of the Regional Desalination Project Components**

<b>Project Component</b>	<b>Description</b>	<b>Ownership</b>
<b>Project Facilities</b>		
Brackish Source Water Wells	Between one and five vertical wells drilled in the 180-Foot Aquifer and between one and five slanted seawater intake wells, for a total of six source water wells. Vertical wells will be located west of Highway 1 between the coastal dunes and Highway 1. Source water will be approximately 85% seawater and 15% seawater-intruded groundwater. Final well configuration to be determined based on Test Well Program.	MCWRA
Brackish Source Water Pipeline	25,000 linear feet (LF) of 36 to 42-inch pipe conveying the source water from the wells to the Desalination Plant.	MCWRA
Desalination Plant	Reverse osmosis treatment plant with a peak production rate of 10 million gallons per day (mgd). On-site facilities include treatment processes, clearwells, brine storage tank, distribution pump station, brackish water meter, product water meter, and non-process structures.	MCWD
MCWD Outfall Facilities and MRWPCA Outfall Facilities	A pipeline for brine conveyance from the Desalination Plant to the outfall headworks (2,500 LF of 36-inch diameter pipeline) and modifications to the existing MRWPCA outfall pipeline, including a new Brine Receiving Facility for monitoring, metering, mixing, and sampling the brine and combined effluent.	MCWD (pipeline) MRWPCA (Brine Receiving Facility)
MCWD Product Water Pipeline	A pipeline for conveyance of product water from the Desalination Plant to Delivery Point (31,000 LF; 36-inch)	MCWD
MCWD Tie In Pipeline	A pipeline for conveyance of product water from the Delivery Point to MCWD Reservoir B and/or C (12,500 LF; 24-inch)	MCWD
<b>CAW Facilities</b>		
Transfer Pipeline	A pipeline for conveyance of product water from the Delivery Point to the western terminus of Auto Center Parkway near Del Monte (15,000 LF; 36-inch)	CAW
Seaside Pipeline	A pipeline for conveyance of product water from the Western terminus of Auto Center Parkway to the Terminal Reservoir (13,000 LF; 36-inch)	CAW
Monterey Pipeline	A pipeline for conveyance of product water from the Western terminus of Auto Center Parkway to Eardley Pump Station, including Presidio of Monterey portion (28,700 LF; 36-inch)	CAW
Terminal Reservoirs and Associated Facilities	Two, 3-MG reservoirs, 130 feet in diameter, and overflow - retention/infiltration basin.	CAW
ASR System (Wells and Pumpstation)	Two ASR injection/extraction wells and a monitoring well located at Fitch Park, a pump station at the Terminal Reservoir site, pipelines along General Jim Moore Blvd. between the new ASR wells and the existing ASR wells near Coe Ave., and an ASR Pump-to-Waste System (including pipelines and a settling basin) currently proposed for the ASR well sites.	CAW
Valley Greens Pump Station	3-mgd capacity, four 25-hp pumps on 800 square foot area.	CAW
<i>Note: Pipeline lengths are approximate.</i>		

## **Appendix B**

**Invoice Detail Cost Breakdown: August 2011**

	Invoice Total	MCWD Costs		MCWRA Costs		CAW Costs	
<b>Task 1 Program Management</b>	<b>\$ 39,959.63</b>	<b>\$ 29,456.48</b>		<b>\$ 5,578.24</b>		<b>\$ 4,924.92</b>	
1.1 Project Administration	\$ 26,486.92	\$ 24,704.57	% of task 2-12	\$ 1,081.34	% of task 2-12	\$ 701.01	% of task 2-12
1.2 Public Support	\$ 12,437.71	\$ 4,145.90	33%	\$ 4,145.90	33%	\$ 4,145.90	33%
1.3 Budget and Schedule Management	\$ 780.00	\$ 351.00	45%	\$ 351.00	45%	\$ 78.00	10%
1.4 Quality, Safety and Risk Management		\$ -	45%	\$ -	45%	\$ -	10%
1.5 Financial Analysis		\$ -	45%	\$ -	45%	\$ -	10%
1.6 Contract Procurement and Admin		\$ -	48%	\$ -	48%	\$ -	5%
1.7 Litigation Support	\$ 255.00	\$ 255.00		\$ -		\$ -	
1.7A Litigation Support (Joint)		\$ -	33%	\$ -	33%	\$ -	33%
1.7B Litigation Support (MCWD)	\$ 255.00	\$ 255.00	100%				
1.7C Litigation Support (MCWRA)				\$ -	100%		
<b>Task 2 Funding</b>	<b>\$ 20,827.30</b>	<b>\$ 20,806.09</b>		<b>\$ 21.21</b>		<b>\$ -</b>	
Clean Water SRF Program	\$ 20,827.30	\$ 20,806.09	100%	\$ 21.21	0%	\$ -	0%
2.1A Clean Water SRF (Joint Work)	\$ 106.05	\$ 84.84	80%	\$ 21.21	20%	\$ -	0%
2.1B Clean Water SRF (MCWD)	\$ 20,721.25	\$ 20,721.25	100%		0%		0%
2.1C Clean Water SRF (MCWRA)			0%	\$ -	100%		0%
Bond Funding	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
2.2A Bond Funding (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
2.2B Bond Funding (MCWD)		\$ -	100%		0%		0%
2.2C Bond Funding (MCWRA)			0%	\$ -	100%		0%
Title XVI Funding	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
2.3A Title XVI (Joint Work)		\$ -	59%	\$ -	15%	\$ -	26%
2.3B Title XVI (MCWD)		\$ -	100%		0%		0%
2.3C Title XVI (MCWRA)			0%	\$ -	100%		0%
2.3D Title XVI (CAW)			0%		0%	\$ -	100%
2.4 Federal Appropriations	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
2.4A Federal Appropriations (Joint Work)		\$ -	59%	\$ -	15%	\$ -	26%
2.4B Federal Appropriations (MCWD)		\$ -	100%		0%		0%
2.4C Federal Appropriations (MCWRA)			0%	\$ -	100%		0%
2.4D Federal Appropriations (CAW)			0%		0%	\$ -	100%
2.5 Other funding opportunities	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
2.5A Other Funding Opportunities (Joint Work)		\$ -	59%	\$ -	15%	\$ -	26%
2.5B Other Funding Opportunities (MCWD)		\$ -	100%		0%		0%
2.5C Other Funding Opportunities (MCWRA)			0%	\$ -	100%		0%
2.5D Other Funding Opportunities (CAW)			0%		0%	\$ -	100%
<b>Task 3 Environmental Coordination</b>	<b>\$ 7,235.49</b>	<b>\$ 3,287.13</b>		<b>\$ 446.47</b>		<b>\$ 3,501.89</b>	
3.1 NEPA coordination	\$ 4,259.00	\$ 1,531.00	36%	\$ -	0%	\$ 2,728.00	64%
3.1A NEPA Coordination (Joint Work)		\$ -	33%	\$ -	33%	\$ -	33%
3.1B NEPA Coordination (MCWD)	\$ 1,531.00	\$ 1,531.00	100%		0%		0%
3.1C NEPA Coordination (MCWRA)			0%	\$ -	100%		0%
3.1D NEPA Coordination (CAW)	\$ 2,728.00		0%		0%	\$ 2,728.00	100%
3.2 Enviro Mitigation Delineation	\$ 2,976.49	\$ 1,756.13	59%	\$ 446.47	15%	\$ 773.89	26%
3.2A Enviro Mitigation Delineation (Joint Work)	\$ 2,976.49	\$ 1,756.13	59%	\$ 446.47	15%	\$ 773.89	26%
3.2B Enviro Mitigation Delineation (MCWD)		\$ -	100%		0%		0%
3.2C Enviro Mitigation Delineation (MCWRA)			0%	\$ -	100%		0%
3.2D Enviro Mitigation Delineation (CAW)			0%		0%	\$ -	100%
3.3 Local CEQA Adoption	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
3.3A Local CEQA Adoption (Joint Work)		\$ -	45%	\$ -	45%	\$ -	10%
3.3B Local CEQA Adoption (MCWD)		\$ -	100%		0%		0%
3.3C Local CEQA Adoption (MCWRA)			0%	\$ -	100%		0%
3.3D Local CEQA Adoption (CAW)			0%		0%	\$ -	100%
3.4 Environ Compl Mon During Const	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
3.4A Environ Compl Mon During Const (Joint Work)		\$ -	80%	\$ -	20%		0%
3.4B Environ Compl Mon During Const (MCWD)		\$ -	100%		0%		0%
3.4C Environ Compl Mon During Const (MCWRA)			0%	\$ -	100%		0%
<b>Task 4 Permitting</b>	<b>\$ 39,129.49</b>	<b>\$ 20,198.33</b>		<b>\$ 13,195.92</b>		<b>\$ 5,735.24</b>	
4.1 Test Well Permitting	\$ 7,447.28	\$ -	0%	\$ 7,447.28	100%	\$ -	0%
4.1B Test Well Permitting (MCWD)		\$ -	100%		0%		0%
4.1C Test Well Permitting (MCWRA)	\$ 7,447.28		0%	\$ 7,447.28	100%		0%
Coastal Commission	\$ 17,205.72	\$ 5,735.24	33%	\$ 5,735.24	33%	\$ 5,735.24	33%
4.2A CCC (Joint Work)	\$ 17,205.72	\$ 5,735.24	33%	\$ 5,735.24	33%	\$ 5,735.24	33%
4.2B CCC (MCWD)		\$ -	100%		0%		0%
4.2C CCC (MCWRA)			0%	\$ -	100%		0%
4.2D CCC (CAW)			0%		0%	\$ -	100%
CDPH	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
4.3A CDPH (Joint Work)		\$ -	80%	\$ -	20%		0%

4.3B CDPH (MCWD)		\$ -	100%		0%		0%
4.3C CDPH (MCWRA)			0%	\$ -	100%		0%
RWQCB	\$ 13,840.75	\$ 13,840.75	100%	\$ -	0%	\$ -	0%
4.4B RWQCB (MCWD)	\$ 13,840.75	\$ 13,840.75	100%		0%		0%
County	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
4.5A County (Joint Work)		\$ -	80%	\$ -	20%		0%
4.5B County (MCWD)		\$ -	100%		0%		0%
4.5C County (MCWRA)			0%	\$ -	100%		0%
Local	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
4.6A Local (Joint Work)		\$ -	80%	\$ -	20%		0%
4.6B Local (MCWD)		\$ -	100%		0%		0%
4.6C Local (MCWRA)			0%	\$ -	100%		0%
Misc.	\$ 635.74	\$ 622.34	98%	\$ 13.40	2%	\$ -	0%
4.7A Misc. (Joint Work)	\$ 66.99	\$ 53.59	80%	\$ 13.40	20%		0%
4.7B Misc. (MCWD)	\$ 568.75	\$ 568.75	100%		0%		0%
4.7C Misc. (MCWRA)			0%	\$ -	100%		0%
<b>Task 5 System-wide Engineering</b>	<b>\$ 4,942.67</b>	<b>\$ 4,942.67</b>		<b>\$ -</b>		<b>\$ -</b>	
System-wide operation and Sizing	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.1A System Wide Operation and Sizing (Joint Work)		\$ -	59%	\$ -	15%	\$ -	26%
5.1B System Wide Operation and Sizing (MCWD)		\$ -	100%		0%		0%
5.1C System Wide Operation and Sizing (MCWRA)			0%	\$ -	100%		0%
5.1D System Wide Operation and Sizing (CAW)			0%		0%	\$ -	100%
System-Wide Control Systems/SCADA	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.2A System Wide Controls/SCADA (Joint Work)		\$ -	59%	\$ -	15%	\$ -	26%
5.2B System Wide Controls/SCADA (MCWD)		\$ -	100%		0%		0%
5.2C System Wide Controls/SCADA (MCWRA)			0%	\$ -	100%		0%
5.2D System Wide Constrols/SCADA (CAW)			0%		0%	\$ -	100%
Surveying and Mapping	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.3A Surveying & Mapping (Joint Work)		\$ -	80%	\$ -	20%		0%
5.3B Surveying & Mapping (MCWD)		\$ -	100%		0%		0%
5.3C Surveying & Mapping (MCWRA)			0%	\$ -	100%		0%
ROW and Easement	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.4A ROW & Easement (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
5.4B ROW & Easement (MCWD)		\$ -	100%		0%		0%
5.4C ROW & Easement (MCWRA)			0%	\$ -	100%		0%
5.4D ROW & Easement (CAW)			0%		0%	\$ -	100%
Preliminary Geotechnical Services	\$ 4,942.67	\$ 4,942.67	100%	\$ -	0%	\$ -	0%
5.5A Preliminary Geotechnical Services (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
5.5B Preliminary Geotechnical Services (MCWD)	\$ 4,942.67	\$ 4,942.67	100%		0%		0%
5.5C Preliminary Geotechnical Services (MCWRA)			0%	\$ -	100%		0%
Value Engineering coordination	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.6A Value Engineering (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
5.6B Value Engineering (MCWD)		\$ -	100%		0%		0%
5.6C Value Engineering (MCWRA)			0%	\$ -	100%		0%
Constructability Review Coordination	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.7A Constructability Review Coordination (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
5.7B Constructability Review Coordination (MCWD)		\$ -	100%		0%		0%
5.7C Constructability Review Coordination (MCWRA)			0%	\$ -	100%		0%
Acceptance Test Planning	\$ -	\$ -	0%	\$ -	0%	\$ -	0%
5.8A Acceptance Test Planning (Joint Work)		\$ -	80%	\$ -	20%	\$ -	0%
5.8B Acceptance Test Planning (MCWD)		\$ -	100%		0%		0%
5.8C Acceptance Test Planning (MCWRA)			0%	\$ -	100%		0%
<b>Task 6 Brackish Wells</b>	<b>\$ 585.00</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ 585.00</b>	<b>100%</b>	<b>\$ -</b>	<b>0%</b>
<b>Task 7 &amp; 8 Brackish Water Pipeline</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>100%</b>	<b>\$ -</b>	<b>0%</b>
<b>Task 9 Desalination Plant</b>	<b>\$ 276,294.24</b>	<b>\$ 276,294.24</b>	<b>100%</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>Task 10 Product Water Pipeline</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100%</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>Task 11 CAW Coordination</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>100%</b>
<b>Task 12 MCWD Tie-in Pipeline</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100%</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>Task 13 Construction Management</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>		<b>\$ -</b>	
13.1 Joint Work			80%		20%		0%
13.2 Brackish Source Water Wells			0%		100%		0%
13.3 Brackish Source Water Pipeline			0%		100%		0%
13.4 Desalination Plant			100%		0%		0%
13.5 MCWD Product Water Pipeline			100%		0%		0%
13.6 MCWD Tie-In Pipeline			100%		0%		0%
<b>Total</b>	<b>\$ 388,973.82</b>	<b>\$ 354,984.94</b>		<b>\$ 19,826.84</b>		<b>\$ 14,162.04</b>	

## **Appendix C**



**Monterey Bay Regional Desalination Project Permitting Matrix**

Agency or Department	Permit or Approval	Contact Information	CAW-only	Test Wells	Regional Desalination Project											Status / Notes (Date Updated: 08-31-11)	
					Brackish Source Water Wells	Brackish Source Water Pipeline	Desal Plant	Brine Discharge Pipeline	Product Water Pipeline	MCWD Tie-in Pipeline	Transmission Pipeline	Monterey Pipeline	Seaside Pipeline	Terminal Reservoir	ASR Pipeline and Wells		
<b>FEDERAL AGENCIES</b>																	
U.S. Environmental Protection Agency (USEPA)	Class V Underground Injection Control Program (Part C, Safe Drinking Water Act)		✓													X	
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act compliance (ESA Section 7 consultation)																Not required
	Fish and Wildlife Coordination Act (16 U.S.C. 661-667e; the Act of March 10, 1934, ch. 55, 48 stat. 401)																Not required
National Oceanic & Atmospheric Administration (NOAA) – Fisheries	Endangered Species Act compliance (ESA Section 7 consultation or ESA Section 10 approvals)	Jacqueline Pearson Meyer 777 Sonoma Ave, Room 325, Santa Rosa, CA 93941															
Monterey Bay National Marine Sanctuary	Review and coordination for all RWQCB 404, Section 10 and NPDES permits	Brad Damitz MBNMS Main Office, 299 Foam St. Monterey 93944			X	X	X	X	X	X	X	X	X	X	X	X	Consultation only; permitting through other state and federal agencies. Started coordination; conducted meeting. Submitted draft authorization permit application to MBNMS on 5/23/11.
	Authorization Permit				X?												
Presidio of Monterey	Coordination for Rights of Entry	Darcy Brewer, U.S. Army Presidio of Monterey 1759 Lewis Road, Suite 210, Monterey, CA 93944											X			X	
Fort Ord Reuse Authority / Army (FORA)	Coordination with FORA for Right of Entry (FOST/FOSL)	Stan Cook 100 12th St, Bld 2880, Marina, CA 93933	✓											X	X	X	No FORA right of entry required for MCWD facilities; only required for Seaside Pipeline, Terminal Reservoir and ASR wells and Pipeline.
U.S. Army Corps of Engineers (ACOE)	Nationwide Section 404 Permit (CWA, 33 USC 1344)		✓														No impacts to Waters of the U.S.
	Section 10, Rivers and Harbors Act Permit (33 USC 403)																No impacts to Waters of the U.S.
Federal Aviation Administration	Form SF 7460-1, Notice of Proposed Construction and Alteration for Airport Airspace Aeronautical Study																Permit only required if structures > 73 feet tall
<b>STATE AGENCIES</b>																	
California Public Utilities Commission	Certificate of Public Convenience and Necessity (PUC Article 1)	Andrew Barnsdale 605 Van Ness Ave. San Francisco, CA 94102	✓									X	X	X	X	X	Completed
State Water Resources Control Board, Central Coast Regional Water Quality Control Board	General Construction Activity Storm Water Permit (WQO 99-08-DWQ)	Mike Higgins - mhiggins@waterboards.ca.gov, 805-542-4649		X	X	X	X	X	X	X	X	X	X	X	X	X	Use State General Permit for construction; started coordination
	401 Water Quality Certification (CWA Section 401)																Not required; no 404 Permit required
	Waste Discharge Requirements. (Water Code 13000 et seq.)			X	X	X	X	X	X	X	X	X	X	X	X	X	Use low-threat General Permit for test well and pipeline testing; started coordination.
	National Pollutant Discharge Elimination System (NPDES) Permit (CWA Section 402)						X	X									Started coordination. Met with RWQCB and MRWPCA to discuss NPDES requirements.
	Facility Operations Stormwater Permit						X?										Use State General Permit for industrial sites
California State Lands Commission	Rights-of-Way (Land Use Lease) (California Public Resource Code Section 1900); Lease amendment	Jane Smith - jane.smith@slc.ca.gov, 916-574-1892 100 Howe Ave., Ste. 100, South.							X?								Coordinating with SLC for jurisdiction determination. Meeting with Jane Smith on 6/6/11.
California Coastal Commission	Coastal Development Permit (Public Resources Code 30000 et seq.)			X	X	X	X	X	X	X	X	X	X	X	X	X	Submitted Coastal Development Permit for the Monterey Bay Regional Desalination Project on April 1, 2011. Acquired all letters of concurrence from Local Coastal Programs. Submitted response to CCC Notice of Incomplete for RDP on 5/31. Submitted CDP for the Test Well Program on April 14, 2011. CCC continued the Test Slant well application at the August 2011 meeting.
California Department of Fish and Game (CDFG)	Streambed Alteration Agreement (California Fish and Game Code Section 1602)												X				Alignment requiring permit has been deleted
	California Endangered Species Act Section 2081 Incidental Take Permits (CESA Title 14, Section 783.2)	7329 Silverado Trail, Napa, CA 94558	✓												X		
	California Endangered Species Act Section 2081 Incidental Take Permits (CESA Title 14, Section 783.2) - Letter of Concurrence re: no permit required			X	X	X	X	X	X	X	X	X	X	X	X	X	No take required for any areas EXCEPT the Terminal Reservoir site.
California Department of Public Health (CDPH)	Permit to Operate a Public Water System (California Health and Safety Code Section 116525)	Jan Sweigart 1 Lower Ragsdale, Bdg 1, Ste 120, Monterey, 93940			X	X	X	X	X	X	X	X	X	X	X	X	
California Department of Transportation (Caltrans)	Encroachment Permit (Streets and Highway Code Section 660)	Steve Senet - 805-549-3206 Steve.senet@dot.ca.gov 50 Higuera St, San Luis Obispo 93401								X	X	X	X	X	X		Submitted information package to Steve Senet at Caltrans on 3/4/11. He has provided a new contact, Peter Hendrix, to begin coordinating with. A meeting will be set up in Fall 2011.
California Department of Parks and Recreation	Encroachment, easement, or property acquisition for any project component	Ken Gray - 831-649-2862 kgray@parks.ca.gov 2211 Garden Road, Monterey 93940								X	X	X	X	X	X		Right of Entry permits and encroachment permits will be required. Info package submitted to Ken Gray 5/23/11.
California State Historic Preservation Office (SHPO)	Section 106 Consultation; National Historic Preservation Act (16 USC 470)			X	X	X	X	X	X	X	X	X	X	X	X	X	

**Monterey Bay Regional Desalination Project Permitting Matrix**

Agency or Department	Permit or Approval	Contact Information	CAW-only	Test Wells	Regional Desalination Project											Status / Notes (Date Updated: 08-31-11)		
					Brackish Source Water Wells	Brackish Source Water Pipeline	Desal Plant	Brine Discharge Pipeline	Product Water Pipeline	MCWWD Tie-in Pipeline	Transmission Pipeline	Monterey Pipeline	Seaside Pipeline	Terminal Reservoir	ASR Pipeline and Wells			
<b>LOCAL AGENCIES</b>																		
Monterey County Public Works Department	Encroachment Permit (Monterey County Code (MCC) Title 14 Chapter 14.040)	Laura Lawrence - lawrence@co.monterey.ca.us, 831-755-5148 168 W. Alisal St, 2nd Floor Salinas, CA 93901			X?	X?	X	X?	X?								Submitted information package to John Ford on 3/17/11. Coordinating with Laura Lawrence to confirm permit requirements from all Monterey County departments.	
Monterey County Health Department, Environmental Health Division	Well Construction Permit (MCC, Title 15 Chapter 15.08, Water Wells)			X	X												X	Started coordinating with Department for well requirements.
	Hazardous Materials Business Plan (Health and Safety Code Chapter 6.95)							X										Submitted general information package to Monterey County 3/17/11; John Ford provided Laura Lawrence as the new County contact.
	Hazardous Materials Inventory (Health and Safety Code Chapter 6.95)							X										Submitted draft application November 2009. Met with the County Health Department.
	Permit to Construct & Operate Desalination Facility (MCC Chapter 10.72)							X										Need for this permit is currently uncertain
Monterey County Planning and Building Inspection Department	<del>Variation on Monterey County Noise Ordinance (MCC Chapter 10.72)</del>																	
	Use Permit (MCC Chapter 21.72 Title 21)																	MCWR/MCWWD exempt from having to acquire Use and Building Permits from local agencies.
Monterey Peninsula Regional Park District	Grading Permit (M.C.C., Grading and Erosion Control Ordinance, Chapter 16.08 – 16.12)				X	X	X	X	X									
	Erosion Control Permit (MCC, Grading and Erosion Control Ordinance, Chapter 16.08 – 16.12)				X	X	X	X	X									
Monterey Peninsula Regional Park District	Encroachment Permit; Right of Entry	Tim Jensen 60 Garden Court, #325, Monterey 93940							X	X	X	X	X					
Monterey Regional Water Pollution Control Agency	Easement							X	X									
Monterey Regional Waste Management District	Participation agreements / Sewer Connection Permit							X	X									On-going coordination
	Electric Power Purchase Agreement							X										On-going coordination
Monterey Bay Unified Air Pollution Control District (MBUAPCD)	Construction Easement					X												Required if pipeline is in Charlie Benson Lane.
	Authority To Construct. (Local district rules, per Health and Safety Code 42300 et seq.)	Jean Getchell - 831-647-9411 x227 jgetchell@mbuapcd.org 24580 Silver Cloud Ct, Monterey, 93940			X?	X?	X?	X?	X?	X?	X?	X?	X?	X?	X?	X?	X?	Confirm that permit is not required; get letter of concurrence
Transportation Agency of Monterey County	<del>Permit To Operate. (Local district rules)</del>							X?										Confirm that permit is not required; get letter of concurrence
	Easement	Debra Hale 55-B Plaza Circle, Salinas 93901							X	X	X	X?	X?					
City of Marina	Grading Permits				X													Started coordination with the City of Marina.
	Encroachment Permit				X	X			X	X?								
City of Sand City	<del>Use Permits</del>																	MCWR/MCWWD exempt from having to acquire Use and Building Permits from local agencies.
	<del>Building and Grading Permits</del>																	MCWR/MCWWD exempt from having to acquire Use and Building Permits from local agencies.
City of Seaside	Encroachment Permit		✓									X						
	Building and Grading Permits		✓										X	X	X	X	X	ASR wells on federal lands; permit from Seaside not required.
City of Monterey	Encroachment Permit																	
	Use Permit																	ASR wells on federal lands; permit from Seaside not required.
City of Pacific Grove	<del>Building and Grading Permits</del>																	
	Encroachment Permit		✓										X					
Seaside Groundwater Basin Watermaster	Permit for injection/extraction		✓															X
Monterey Peninsula Water Management District (MPWMD)	Water System Expansion Permit (MPWMD Board of Directors Ordinance 96)		✓															X
Underground Services Alert (USA)	Utility clearance before subsurface work				X	X	X	X	X	X	X	X	X	X	X	X	X	X
CAW and Local Water Agencies	Participation/purchase agreements				X	X	X	X	X	X	X	X	X	X	X	X	X	Call 2 days before you dig.
<b>PRIVATE ENTITIES</b>																		
CEMEX	Land use agreement			X	X													
Armstrong Family	Land use agreement			X	X	X	X											
Landowners	Land lease/sale; Easements and encroachment agreements				X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes:  
 1. Permits for brine discharge pipeline are for the construction and operation of a pipeline required to connect the desal plant with the SVWRP outfall. Revised permitting for new outfall discharges are not included.  
 2. The cogen plant is a separate project. Power will be purchased from them and therefore no permitting is required for this aspect of the project.  
 3. X? means we believe we need a permit but we don't yet know because design is not complete. During final design the X? will either go away or become X.