

SEASIDE GROUNDWATER BASIN WATERMASTER

SPECIAL BOARD MEETING

THURSDAY, NOVEMBER 29, 2012 - 2:00 P.M.

MEETING LOCATION

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

BOARD ROOM, 5 HARRIS COURT, BUILDING "D"

"RYAN RANCH"

MONTEREY, CALIFORNIA

WATERMASTER BOARD:

Coastal Subarea Landowner – Director Paul Bruno, Chair

City of Seaside – Mayor Felix Bachofner, Vice Chair

City of Sand City – Mayor David Pendergrass

California American Water – Director Eric Sabolsice

Monterey Peninsula Water Management District – Director Bob Brower

Laguna Seca Subarea Landowner – Director Bob Costa

City of Monterey – Mayor Chuck Della Sala

City of Del Rey Oaks – Mayor Jerry Edelen

Monterey County/Monterey County Water Resources Agency – Supervisor Dave Potter, District 5

I. CALL TO ORDER

II. ROLL CALL

III. MINUTES

The minutes of the Regular Board meeting of October 3, 2012 are attached to this agenda. The Board is requested to consider approving the minutes.

IV. REVIEW OF AGENDA

If there are any items that arose after the 72-hour posting deadline, a vote may be taken to add the item to the agenda pursuant to the requirements of Government Code Section 54954.2(b). (A 2/3-majority vote is required).

V. PUBLIC COMMUNICATIONS

Oral communications is on each meeting agenda in order to provide members of the public an opportunity to address the Watermaster on matters within its jurisdiction. Matters not appearing on the agenda will not receive action at this meeting but may be referred to the Watermaster Administrator or may be set for a future meeting. Presentations will be limited to three minutes or as otherwise established by the Watermaster. In order that the speaker may be identified in the minutes of the meeting, it is helpful if speakers would use the microphone and state their names. Oral communications are now open.

VI. CONSENT CALENDAR

A. Consider Approval of Summary for Payments made during the months of October and November, 2012 totaling \$44,985.44

B. Consider Approving Fiscal Year Financial Reports through November 29, 2012

C. Consider Approving the following Professional Services Contracts for Fiscal Year 2013:

1. Two Contracts with Monterey Peninsula Water Management District (MPWMD)—one for **\$83,970.00** to cover their normal Management and Monitoring Program (M&MP) tasks as in preceding years and to conduct ongoing data entry/database maintenance. The second contract for **\$5,154.00** is to perform water level and water quality data collection for specified wells within the Seaside Basin
2. Two Contracts with HydroMetrics Water Resources, Inc.—one for **\$12,100.00** to cover their providing general hydrogeologic consulting services during the year and the second one for **\$22,655.00** to prepare the Seawater Intrusion Analysis Report (SIAR) for 2013.

VII. ORAL PRESENTATION

None Schedule

VIII. OLD BUSINESS

- A. Establishing a Schedule of Water Repayment by California American Water (CAW) for Over pumping from the Seaside Basin
 - 1. Report on Board's Ad Hoc Committee
 - 2. Discussion/Consider Approving a Professional Services Contract with HydroMetrics for \$45,290.00 to update protective water levels and perform modeling work to evaluate replenishment scenarios

IX. NEW BUSINESS

A. COMMITTEE REPORTS

1. TECHNICAL ADVISORY COMMITTEE (TAC)

- a). Discussion/Consider Approving the Seawater Intrusion Analysis Report (SIAR) for FY 2012
- B. Discussion/Consider Adopting for Water Year 2013 a **Declaration regarding the Unavailability of Artificial Replenishment Water** (Water Year 2013 Allocation attached)
- C. Discussion/Consider Approving the Watermaster's Annual Report for Water Year 2012
- D. Discussion/Consider Extending Memorandum of Understanding (MOU) between Watermaster and City of Seaside golf course in lieu replenishment program

X. INFORMATIONAL REPORTS (No Action Required)

- A. Timeline Schedule of Milestone Dates (Critical date monitoring)
- B. Technical Advisory Committee (TAC) minutes from October 10 and November 14, 2012 meetings
- C. Groundwater Level and Groundwater Quality for Water Year 2012
- D. Establish Regular Board of Directors and Technical Advisory Committee (TAC) meeting dates for Calendar Year 2013
- E. Replenishment Assessments for WY 2012 Over Production

XI. DIRECTOR'S REPORTS

XII. EXECUTIVE OFFICER COMMENTS

XIII. NEXT REGULAR MEETING DATE December 5, 2012 (MRWPCA-Board Room) 2:00 P.M. (Unless Cancelled then next regular meeting would be January 2, 2013)

XIV. ADJOURNMENT

This agenda was forwarded via e-mail to the City Clerks of Seaside, Monterey, Sand City and Del Rey Oaks; the Clerk of the Monterey Board of Supervisors, the Clerk to the Monterey Peninsula Water Management District; the Clerk at the Monterey County Water Resources Agency, Monterey Regional Water Pollution Control Agency and the California American Water Company for posting on November 21, 2012 per the Ralph M. Brown Act, Government Code Section 54954.2(a).

ITEM NO. III.

MINUTES

REGULAR MEETING
Seaside Groundwater Basin Watermaster
October 3, 2012

I. CALL TO ORDER

Chairman Bruno called the meeting to order at 2:03 p.m.

II. ROLL CALL

Coastal Subarea Landowner – Director Paul Bruno, Chair
California American Water (“CAW”) – Director Eric Sabolsice
City of Seaside – Mayor Felix Bachofner
City of Del Rey Oaks – Mayor Jerry Edelen
Laguna Seca Subarea Landowner – Director Bob Costa
City of Sand City – Mayor David Pendergrass
Monterey Peninsula Water Management District (“MPWMD”) – Director Judi Lehman, Alternate
Monterey County/Monterey County Water Resources Agency (“MCWRA”) – Supervisor Dave Potter

Absent: City of Monterey – Mayor Charles “Chuck” Della Sala

III. APPROVAL OF MINUTES

Moved by Mayor Pendergrass, seconded by Mayor Edelen, and carried, to approve the minutes of the August 1, 2012 Watermaster regular meeting. Mayor Bachofner and Director Sabolsice abstained having not attended the August meeting.

2:06 p.m. – Supervisor Potter arrived at the meeting.

IV. REVIEW OF AGENDA

There were no requested changes to the agenda.

V. PUBLIC PARTICIPATION/ORAL COMMUNICATIONS

There were no public communications.

VI. CONSENT CALENDAR

- A. Consider approval of Summary for Payments made during August and September 2012 totaling \$34,050.43.
- B. Consider approving fiscal year financial reports through September 30, 2012.

Moved by Supervisor Potter, seconded by Mayor Edelen, and unanimously carried, to approve the consent calendar as presented.

VII. ORAL PRESENTATION: None scheduled.

VIII. OLD BUSINESS

A. COMMITTEE REPORTS

1. TECHNICAL ADVISORY COMMITTEE (TAC)

- a). The board received and reviewed the staff memorandum prepared by Technical Program Manager, Robert Jaques regarding modeling results on the effects to the Basin of temporary suspension of triennial pumping reductions and whether to **1).** Apply the suspension only to CAW or to both CAW and the City of Seaside, and **2).** File the motion for the suspension at the same time as the 2012 Watermaster

Annual Report to Court, or as a separate motion. Mr. Derrick Williams, Hydrometrics Water Resources Inc., gave a presentation of the highlights of the Technical Memorandum describing the results of groundwater modeling performed to determine the effects on groundwater levels in the Seaside Basin if Standard Producers were allowed to continue at 2011 pumping rates from Water Year 2012 through Water Year 2017, rather than being reduced the 10% triennial increment in 2014, as required by the Adjudication Decision. No replenishment sources were considered in the model beyond the existing ASR replenishment currently taking place. Modeling indicated that suspending triennial reductions for Standard Producers will cause the greatest water level impact from WY 2013 through WY 2017 at no more than a 7-foot differential, and the average change in potential seawater intrusion rate over the 22-year simulation period is less than 0.001 feet per day. Chair Bruno summarized that suspending pumping reductions would not harm the Basin over the long-term as modeling showed that water levels would recover completely. Although no assumptions on Basin replenishment beyond the operational ASR project were included in the modeling scenario, pending Basin replenishment projects may be implemented during the modeling timeline, achieving water level recovery earlier than the year 2031 as shown in the modeling.

Moved by Mayor Pendergrass, seconded by Director Costa, and unanimously carried for Watermaster to file a motion with the Court to allow Standard Producers' pumping rates to continue at 2011 pumping rates from Water Year 2012 through Water Year 2017. Additionally, the filing shall include a letter that lists pending Peninsula projects aimed at replenishing the Basin, noting that simulations run are to some degree worst case because they don't account for replenishment projects coming on line.

Moved by Mayor Bachofner, seconded by Director Sabolsice, and unanimously carried for Watermaster to request the Court allow both CAW and the City of Seaside – the Standard Producers under the Decision – the temporary suspension in pumping reductions.

Moved by Mayor Edelen, seconded by Mayor Bachofner, and unanimously carried to approve that the motion be filed with the Court separate and apart from the 2012 Annual Report to Court.

IX. NEW BUSINESS

A. COMMITTEE REPORTS

1. TECHNICAL ADVISORY COMMITTEE (TAC)

- a). The board received and reviewed the memorandum from Mr. Jaques regarding consideration of a request for Watermaster to issue a letter of no objection for a proposed new housing development (the Wang subdivision) along Highway 68. Included with the memorandum is correspondence dated May 16, 2012 from Attorney Scott A. Sommer, Pillsbury, Winthrop, Shaw Pittman, LLP representing Peter and Grace Wang. Mr. Sommer provided to board members suggested wording for a letter of no objection listed as four points.

Moved by Director Costa, seconded by Director Sabolsice, and unanimously carried for Watermaster to issue a letter to Pillsbury et al stating no objection to the proposed Vesting Tentative Map Wang Subdivision (Monterey County APN Nos. 416-141-003, 416-151-003, and 416-151-004); Hidden Hills Lots 11, 13, and 20, incorporating the following points: Wang Wells Nos. 02-071, 07-11024, and 03-01132 are outside the Seaside Basin boundary as shown in the Decision; based upon current information available, it does not appear that the Wang wells and the Seaside Groundwater Basin Laguna Seca subarea are hydraulically connected; and the Board does not assert jurisdiction over the wells or the proposed subdivision.

- b). The board received and reviewed the memorandum from Mr. Jaques regarding consolidation into the Watermaster database well records obtained during well investigations; and to consider ending further well cross-aquifer contamination work. The board concurred to have the well records consolidated into the Watermaster database and to end further work regarding certain old and abandoned wells under Task I.3.d.of Watermaster RFS No. 2011-01 with MPWMD – Evaluate Coastal Wells for Cross-aquifer Contamination Potential.
- c). The board received and reviewed the memorandum from Mr. Evans regarding proposed changes to the Watermaster Rules and Regulations.

Moved by Supervisor Potter, seconded by Mayor Edelen, and unanimously carried, to approve a revision to the board-adopted Watermaster Rules and Regulations Section 3.3 third sentence wording from: “The Watermaster Board shall appoint the Chairperson of any such committee or subcommittee” to read “Committee or subcommittee members shall elect the Chairperson and any other officers of any such committee or subcommittee.”

- d). (The board considered this item after item e., and separately under New Business as it is not TAC related.) The board received and reviewed the memorandum from Mrs. Dadiw regarding clarification of the schedule of repayment by CAW of artificial or in-lieu replenishment water to the Basin per the terms and conditions of the Memorandum of Understanding (MOU) between Watermaster and CAW executed January 21 & 29, 2009. The board concurred to have the board chairman determine directors to meet ad hoc on the issue prior to the next Watermaster Board meeting on November 28, 2012.
- e). The board received and reviewed the memorandum from Mr. Evans regarding the proposed change in date of the next Watermaster Board meeting. The board concurred to change the date of the next meeting from November 7 to November 28, 2012, to allow time for review of the 2012 Watermaster Annual Report to Court by the TAC at its meeting on November 14, 2012 before coming to the board for approval.

3:33 p.m. – Director Lehman left the meeting.

2. BUDGET AND FINANCE COMMITTEE with input from TAC

- a). The board received and reviewed the memorandum from Mr. Evans regarding the Unit Cost for Water Year 2012/13 Over Production Replenishment Assessment Amount.

Moved by Director Sabolsice, seconded by Mayor Edelen, and unanimously carried, to approve \$2,780 as the Unit Cost for Water Year 2012/13 Over-Production Replenishment Assessment Amount.

- b). The board received and reviewed the memorandums regarding the Watermaster proposed budgets for 2013.

Moved by Mayor Edelen, seconded by Mayor Bachofner, and unanimously carried, to approve the Watermaster 2013 Administrative Fund Budget as presented.

Moved by Mayor Edelen, seconded by Director Sabolsice, and unanimously carried, to approve the Watermaster 2013 Monitoring and Management Fund – Operations and Capital Budgets as presented.

The Replenishment Fund Budget is provided as informational.

X. INFORMATIONAL REPORTS (No Action Required)

- A.** Timeline Schedule of Milestone Dates (Critical date monitoring)
B. Technical Advisory Committee (TAC) minutes from August 8 and September 12, 2012 meetings
C. Report of First and Second Quarter Water Year 2012 Groundwater—Quality and Groundwater—Level Data Collected for Seaside Groundwater Basin.

XI. DIRECTORS' REPORTS

There were no reports from directors.

XII. EXECUTIVE OFFICER COMMENTS

The next scheduled TAC meetings: Wednesday, October 10, 2012, and Wednesday, November 14, 2012 at 1:30 p.m. in the MRWPCA conference room.

The 2012 Watermaster Annual Report to Court will be filed no later than December 14, 2012.

XIII. NEXT MEETING DATE – It was agreed that the next meeting would be a Special Meeting held on Wednesday, November 28, 2012, at the Monterey Regional Water Pollution Control Agency (MRWPCA) Board meeting room at 5 Harris Court, Building "D" on Ryan Ranch in Monterey at 2:00 p.m.

XIV. There being no further business, Chairman Bruno adjourned the meeting 3:37 p.m.

ITEM NO. VI.

CONSENT CALENDAR

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors
FROM: Dewey D Evans, CEO
DATE: November 29, 2012
SUBJECT: Summary of Payments Authorized to be paid during the months of October and November, 2012

PURPOSE:

To advise the Board of payments authorized to be paid during the months of October and November, 2012

RECOMMENDATIONS:

Consider approving the payment of bills submitted and authorized to be paid during the months of October and November, 2012

COMMENTS and FISCAL IMPACT:

OCTOBER, 2012

DDEvans Consulting (Professional Services Agreement—CEO)— September 24, 2012 through October 21, 2012 worked on Watermaster business a total of 52.5 hours at \$100.00 per hour or **\$5,250.00**. Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Received and reviewed water production and water level reports. Received and reviewed HydroMetrics Basin summary remodeling report; Sent out public posting notice and Board meeting agenda packet; prepared and attended October 3, 2012 Board meeting. Received draft Annual Report to be submitted to the Court by December 15th; received and reviewed TAC agenda packet and follow-up meeting minutes. Received and reviewed October 3rd Board meeting minutes; received and sent out CPUC notice to Board members; composed and sent out letter on Wang Subdivision matter to Wang’s attorney Scott Sommers. Started preparing November 28th Board meeting agenda packet.

HydroMetrics Water Resources, Inc.—Two invoices submitted for payment totaling **\$11,344.93**; The first invoice for **\$1,034.93** was to cover the general consulting and related expenses for attending the September 12, 2012 Technical Advisory Committee meeting. The second invoice for **\$10,310.00** was for 61 hours of work preparing groundwater modeling scenarios and preparing for September 12, 2012 Technical Advisory Committee meeting.

Total for October, 2012

\$16,594.93

NOVEMBER, 2012

DD Evans Consulting (Professional Services Agreement—CEO)—October 22, 2012 through November 20, 2012 worked on Watermaster business a total of 42.5 hours at \$100.00 per hour or **\$4,250.00**. Responded to telephone inquiries, email and other correspondence as needed regarding the Seaside Groundwater Basin. Sent a series of Board and TAC meeting minutes to Russ McGlothlin. Worked on November 29, 2012 Board meeting agenda and agenda packet. Sent out November 7th meeting cancellation notice to public agencies as required. Sent out tentative budgets to all basin producers for their comments as required. Sent out notice to all involved regarding date of Board meeting change from November 28th to November 29th. Received and reviewed TAC agenda packet; sent out November 29th meeting items request.

Robert “Bob” Jaques (Technical Program Manager)—September 27, 2012 through November 18, 2012 worked on Watermaster business a total of 72.5 hours at \$100.00 per hour or **\$7,250.00**. Responded to email, telephone inquiries and other correspondence on a variety of Watermaster issues. Worked on Request for Services for MPWMD and HydroMetrics for FY 2013. Worked on October 10, 2012 TAC agenda items. Prepared for and attended October 3rd Board meeting. Attended October 10, 2012 TAC meeting and followed up on action items including minutes; worked on November 14th TAC meeting agenda items. Worked on 2012 Annual Report; prepared for and attended November 14th TAC meeting and followed up on action items. Worked on November 29th Board meeting agenda transmittals; prepare TAC meeting minutes and email out for review; prepared and emailed out TAC meeting cancellation notice for December 12, 2012.

Paxton Imaging (Watermaster Web Site Coordinator) Monthly Hosting Unix Server for the months of June, July and August, 2012--**\$600.00**.

HydroMetrics Water Resources, Inc.—Three invoices submitted for payment totaling **\$16,290.51**; The first invoice for **\$1,925.51** preparing for with related expenses for attending and presenting the groundwater modeling scenarios at the October 3, 2012 Board of Director’s meeting. The second invoice for **\$650.00** was to cover the general consulting and participating in the October 10, 2012 Technical Advisory Committee meeting by telephone. The third invoice for **\$13,715.00** was for 81.5 of work preparing Water Year 2012 Seawater Intrusion Analysis Report.

Total for November, 2012 **\$28,390.51**

Total for October and November, 2012 **\$44,985.44**

Seaside Groundwater Basin Watermaster
Budget vs. Actual Administrative Fund
 Fiscal Year (January 1 - December 31, 2012)
 Balance through November 29, 2012

	<u>2012 Adopted Budget</u>	<u>Contract Amount</u>	<u>Year to Date Revenue / Expenses</u>
Available Balances & Assessments			
Dedicated Reserve	25,000.00		25,000.00
FY (Rollover)	60,000.00		20,000.00
Admin Assessments	-		6,804.00
Available	<u>85,000.00</u>		<u>51,804.00</u>
Expenses			
Contract Staff	60,000.00	60,000.00	54,700.00
Legal Advisor	-	-	-
Total Expenses	<u>60,000.00</u>	<u>60,000.00</u>	<u>54,700.00</u>
Total Available	25,000.00		
Dedicated Reserve	<u>25,000.00</u>		
Net Available	<u><u>-</u></u>		

Seaside Groundwater Basin Watermaster
Budget vs. Actual Monitoring & Management - Operations Fund
 Fiscal Year (January 1 - December 31, 2012)
 Balance through November 29, 2012

	<u>2012 Adopted Budget</u>	<u>Contract Encumbrance</u>	<u>Year to Date Revenue/Expenses</u>
Available Balances & Assessments			
Monitoring & Management - Ops Fund	\$ -	\$ -	\$ 26,462.94
FY 2011 Rollover	337,954.00	-	372,996.00
Total Available	\$ 337,954.00	\$ -	\$ 399,458.94
Appropriations & Expenses			
GENERAL			
Technical Project Manager	\$ 60,000.00	\$ 60,000.00	\$ 29,050.00
Contingency @ 20% (not including TPM)	39,584.00	39,584.00	-
Total General	\$ 99,584.00	\$ 99,584.00	\$ 29,050.00
CONSULTANTS (Hydrometrics; Web Site Database)			
Program Administration	\$ 8,250.00		
Production/Lvl/Qty Monitoring	3,450.00	\$ 42,780.00	\$ 31,460.87
Basin Management Action Plan	50,780.00		
Seawater Intrusion Analysis Report	27,800.00	22,090.00	13,715.00
Total Consultants	\$ 90,280.00	\$ 64,870.00	\$ 45,175.87
MPWMD			
Production/Lvl/Qty Monitoring	\$ 74,720.00	63,330.00	\$ 26,658.75
Basin Management	5,000.00	4,140.00	-
Seawater Intrusion	3,700.00	3,600.00	300.00
Direct Costs	-	-	-
Total MPWMD	\$ 83,420.00	\$ 71,070.00	\$ 26,958.75
Reserve	\$ 24,220.00		-
Transfer Out to Capital Fund			-
Total Appropriations & Expenses	\$ 297,504.00	\$ 235,524.00	\$ 101,184.62
Total Available	40,450.00		

**Seaside Groundwater Basin Watermaster
 Budget vs. Actual Monitoring and Management - Capital Fund
 Fiscal Year (January 1 - December 31, 2012)
 Balance through November 29, 2012**

VI.B.
 11/29/2012

	2012 Adopted Budget	Contract Encumbrance	Year to Date Revenue / Expense
Available Balances and Assessments:			
Monitoring & Management Fund - Capital	\$ -		\$ 16,538
FY 2007-2011 Rollover to 2012	5,499		-
Transfer in from Operations Fund	-		-
Subtotal	<u>5,499</u>		<u>16,538</u>
Appropriations & Expenses:			
Professional Services			
Project Management	-	-	-
Subtotal	<u>-</u>	<u>-</u>	<u>-</u>
Direct Costs			
Well Drilling -	-	-	-
Subtotal	<u>-</u>	<u>-</u>	<u>-</u>
Total Appropriations and Expenses	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Available	<u><u>\$ -</u></u>		

Seaside Groundwater Basin Watermaster										VI.B
Replenishment Fund										11/29/2012
Water Year 2012 (October 1 - September 30) / Fiscal Year 2012 (January 1 - December 31)										
Balance through November 29, 2012										
Replenishment Fund	2006	2007	2008	2009	2010	2011	2012	Totals Through WY 2011	Budget 2013	Projected Totals Through WY 2013
Assessments:	WY 05/06	WY 06/07	WY 07/08	WY 08/09	WY 09/10	WY 10/11	WY 11/12		WY 12/13	
Unit Cost:	\$1,132	\$1,132	\$16,538	\$3,040	\$2,780	\$2,780	\$2,780		\$2,780	
California American Water Balance Forward	\$ -	\$ 1,641,004	\$ 4,206,475	\$ (2,900,435)	\$ (2,868,685)	\$ (3,850,964)	\$ (6,088,910)		\$ (3,807,966)	
Exceeding Natural Safe Yield Considering Alternative Producers	2,106,652	2,484,533	5,164,969	3,773,464	4,112,933	3,187,854	1,661,090	\$ 22,491,495	3,449,961	\$ 25,941,456
Operating Yield Overproduction Replenishment	-	80,938	34,045	-	-	-	619,853	734,836	-	734,836
Total California American	\$ 2,106,652	\$ 2,565,471	\$ 5,199,014	\$ 3,773,464	\$ 4,112,933	\$ 3,187,854	\$ 2,280,943	\$ 23,226,332	\$ 3,449,961	\$ 26,676,293
CAW Credit Against Assessment	(465,648)		(12,305,924)	\$ (3,741,714)	(5,095,213)	(5,425,799)	-	(27,034,298)	-	(27,034,298)
CAW Unpaid Balance	\$ 1,641,004	\$ 4,206,475	\$ (2,900,435)	\$ (2,868,685)	\$ (3,850,964)	\$ (6,088,910)	\$ (3,807,966)	\$ (3,807,966)	\$ (358,005)	\$ (358,005)
City of Seaside Balance Forward	\$ -	\$ 230,671	\$ 413,454	\$ 1,106,116	\$ 1,737,569	\$ 988,414	\$ (13,109)		\$ (678,596)	
City of Seaside Municipal	332.0 AF	287.7 AF	294.3 AF	293.4 AF	282.9 AF	240.7 AF				
Exceeding Natural Safe Yield Considering Alternative Producers	169,200	173,739	385,642	399,211	231,961	141,335	156,752	\$ 1,657,840	150,000	\$ 1,807,840
Operating Yield Overproduction Replenishment	50,487	340	16,898	66,090	82,761	-	6,757	223,332	-	223,332
Total Municipal	219,687	174,079	402,540	465,300	314,721	141,335	163,509	1,881,172	150,000	2,031,172
City of Seaside - Golf Courses										
Exceeding Natural Safe Yield - Alternative Producer	-	-	131,705	69,701	-	-	-	201,406	-	201,406
Operating Yield Overproduction Replenishment	-	-	131,705	69,701	-	-	-	201,406	-	201,406
Total Golf Courses	-	-	263,410	139,402	-	-	-	402,812	-	402,812
Total City of Seaside*	\$ 219,687	\$ 174,079	\$ 665,950	\$ 604,702	\$ 314,721	\$ 141,335	\$ 163,509	\$ 2,283,984	\$ 150,000	\$ 2,433,984
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737			88,887		88,887
In-lieu Credit Against Assessment*	-		-	\$ -	(1,079,613)	(1,142,858)	(828,996)	(3,051,467)	(1,200,000)	(4,251,467)
City of Seaside Unpaid Balance	\$ 230,671	\$ 413,454	\$ 1,106,116	\$ 1,737,569	\$ 988,414	\$ (13,109)	\$ (678,596)	\$ (678,596)	\$ (1,728,596)	\$ (1,728,596)
Total Replenishment Fund Balance	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)	\$ (4,486,563)	\$ (4,486,563)	\$ (2,086,602)	\$ (2,086,602)
Replenishment Fund Balance Forward	-	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)		\$ (4,486,563)	
Total Replenishment Assessments	2,337,323	2,748,254	5,891,676	4,404,917	4,443,391	3,329,189	2,444,452	25,599,202	3,599,961	29,199,163
Total Replenishment Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(828,996)	(30,085,765)	-	(30,085,765)
Grand Total Replenishment Fund Balance	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)	\$ (4,486,563)	(4,486,563)	\$ (886,602)	\$ (886,602)
* 2010 = 319.55 AF golf course in-lieu replenishment and 68.8 AF 4-party agmt in-lieu replenishment										
2011 = 411.1 AF golf course in-lieu replenishment										
2012 = 298.2 AF golf course in-lieu replenishment										

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager
APPROVED BY Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Consider Approving the following Professional Service Contracts for Fiscal Year 2013:
1) Two Contracts with MPWMD—one for \$83,970 and the second one for \$5,154 for continuing monitoring and other work on the Seaside Groundwater Basin Management and Monitoring Program (M&MP)
2) Two Contracts with HydroMetrics Water Resources, Inc. — one for \$12,100 for providing ongoing and as-requested general hydrogeologic consulting services during the year and the second for \$22,655 to prepare the Seawater Intrusion Analysis Report (SIAR) for 2013.

RECOMMENDATIONS:

It is recommended that the Board approve the attached RFSs No. 2013-01 and 2013-02 with MPWMD, and RFSs No. 2013-01 and 2013-02 with HydroMetrics for FY 2013.

BACKGROUND:

Attached are the proposed initial contracts for each of the Watermaster’s consultants that are expected to work on M&MP activities during 2013. Each of these firms is currently working under a master form of agreement with the Watermaster called a “Professional Services Agreement” (PSA). Actual work assignments are made through the issuance of Requests for Service (RFS) under the umbrella language of the PSA. The TAC reviewed each of these contracts at its October 10, 2012 meeting and recommends that the Board approve each of them.

DISCUSSION AND FISCAL IMPACT

The attached RFSs constitute the proposed initial 2013 work assignments for MPWMD and HydroMetrics as follows:

- MPWMD RFS No. 2013-01 for \$83,970 covering their normal M&MP tasks as in preceding years, as well as the additional M&MP work items approved by the TAC at its September 12, 2012 meeting. These were: (1) Continuing the barium and chloride testing, which commenced in 2011, under the water quality monitoring program, due to its benefit in helping to detect seawater intrusion (this only adds about \$100 per sample for the analytical costs), (2) Retrofitting one final well site to enable use of the lower-cost low-flow sampling technique at that well, and (3) providing a modest additional amount for purposes of keeping the Watermaster’s Database up-to-date.
- MPWMD RFS No. 2013-02 for \$5,154 covering their obtaining water quality and water level data from private producers who ask the Watermaster collect this data for them. The costs for this work are paid for by the well owners and are at no cost to the Watermaster.

- HydroMetrics RFS No. 2013-01 for \$12,100 covering their providing general hydrogeologic consulting services throughout the year.
- HydroMetrics RFS No. 2013-02 for \$22,655 covering their preparing the 2013 Seawater Intrusion Analysis Report.

If recommended by the TAC, and approved by the Board, additional RFSs will be developed for HydroMetrics during 2012 to (1) perform additional groundwater modeling, (2) to refine protective water levels, and/or (3) to update the BMAP. These are included as tasks in the proposed 2013 M&MP, but are not yet scheduled pending further direction from the TAC and the Board during 2013.

The costs for all of these RFSs are included in the FY 2013 M&MP Budget which the Board approved at its October 2012 meeting. These contracts are being presented to the Board for approval at today's meeting to ensure the contacts can be in effect at the start of 2013.

ATTACHMENTS:

1. MPWMD RFS No. 2013-01
2. MPWMD RFS No. 2013-02
3. HydroMetrics RFS No. 2013-01
4. HydroMetrics RFS No. 2013-02

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2013

RFS NO. 2013-01

(To be filled in by WATERMASTER)

TO: Joe Oliver

FROM: Robert Jaques

Monterey Peninsula Water Management District
PROFESSIONAL

WATERMASTER

Services Needed and Purpose:

Perform certain Tasks contained within the Watermaster's Monitoring and Management Plan for 2013 (See detailed Scope of Work in Attachment 1).

Completion Date: The work of this RFS No. 2013-01 shall be completed in accordance with the schedule contained in Attachment 2.

Method of Compensation: Time and Expense Payment Method (As defined in Section V of Agreement.)

Total Price Authorized by this RFS: \$ 83,970.00 (See Attachment 3 for a Breakdown of this Total Price. Cost is authorized only when evidenced by signature below.)

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by: _____ Date: _____
WATERMASTER Technical Program Manager

Authorized by: _____ Date: _____
WATERMASTER Chief Executive Officer

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

Detailed Scope of Work for RFS No. 2013-01

Background:

The Watermaster Board approved the Budget for the 2013 Management and Monitoring Program Work Plan (hereinafter referred to as the “2013 M&MP Work Plan”) at its meeting of October 3, 2012.

This RFS No. 2013-01 authorizes PROFESSIONAL to perform certain work on certain of the Tasks described in the 2013 M&MP Work Plan. The Task numbers listed in Table 1 of this Detailed Scope of Work for RFS No. 2013-01 correspond to the Task numbers in the 2013 M&MP Work Plan.

Table 1

M&MP TASK NO.	TASK DESCRIPTION	WORK TO BE PERFORMED
I. 2. a.1	Conduct ongoing data entry/ database maintenance	<p>PROFESSIONAL will perform water production, water level, and water quality data entry into WATERMASTER’s database, and data editing as necessary, and will provide appropriate quality control and quality assurance for this data. Upon request from WATERMASTER, PROFESSIONAL will also enter other data into the database, such as updated information pertaining to well records. WATERMASTER will provide PROFESSIONAL with water production data.</p> <p>PROFESSIONAL will review the water production data provided by WATERMASTER for quality assurance and quality control purposes, and will notify WATERMASTER of any discrepancies PROFESSIONAL observes in this data. WATERMASTER will followup as appropriate with the water producers to resolve any such discrepancies. PROFESSIONAL will also host and maintain the Watermaster’s Database. Any changes to WATERMASTER’s database will be authorized under a separate agreement for performing such work for WATERMASTER. That agreement will either be with PROFESSIONAL or with another consultant.</p> <p>PROFESSIONAL will prepare quarterly water production, water level, and water quality tabulations in Excel format and will provide those tabulations to another WATERMASTER Consultant who will post them to the WATERMASTER’s website, so it will be accessible to the public and other interested parties.</p>

M&MP TASK NO.	TASK DESCRIPTION	WORK TO BE PERFORMED
I. 2. b. 2	Collect Monthly Water Levels	<p>The monitoring wells from which water level data is to be collected by PROFESSIONAL are listed under the heading “MONITORING TO BE PERFORMED BY PROFESSIONAL” in the column titled “Level” in Table 2. PROFESSIONAL will visit each of the indicated wells at the frequencies shown in Table 2 in order to obtain the water level data. At these visits PROFESSIONAL will measure and record water levels by either taking manual water levels using an electric sounder, or by dataloggers. Dataloggers which have been installed on the four Coastal Sentinel, the four ASR monitoring, and the inland (BLM site) monitoring wells will be used to measure the levels at those wells.</p> <p>Pursuant to Section 4(a) on page 9 of the Management and Monitoring Plan approved by the Court on September 25, 2006, in 2013 wells at 2 additional sites in the Laguna Seca Subarea will be equipped with dataloggers taking measurements in two aquifers at each site. The cost included in this Task for equipping these additional wells is \$1,200/site x 2 sites = \$2,400. Also included in the cost for this Task is the purchase of one replacement datalogger @ \$500.</p> <p>All of the other wells will be manually measured.</p>

M&MP TASK NO.	TASK DESCRIPTION	WORK TO BE PERFORMED
I. 2. b. 3	Collect Quarterly Water Quality Samples	<p>The monitoring wells from which water quality data is to be collected by PROFESSIONAL are listed under the heading “MONITORING TO BE PERFORMED BY PROFESSIONAL” in the column titled “Quality” in Table 2. PROFESSIONAL will visit each of the indicated wells at the frequencies shown in Table 2 in order to obtain the water quality samples, and will perform water quality analyses on these samples. The water quality constituents that will be measured in these analyses are: Specific Conductance (micromhos/cm), Total Alkalinity (as CaCO₃), pH, Chloride, Sulfate, Ammonia Nitrogen (as NH₃), Nitrate Nitrogen (as NO₃), Total Organic Carbon, Calcium, Sodium, Magnesium, Potassium, Iron, Manganese, Orthophosphate, Total Dissolved Solids, Hardness (as CaCO₃), Boron, Bromide, and Fluoride. For the following wells listed in Table 2, Barium and Iodide will also be measured annually: SBWM MW-1 Deep (from two discrete depth zones), SBWM MW-2 Deep (from two discrete depth zones), SBWM MW-3 Deep (from two discrete depth zones), SBWM MW-4 Deep (from two discrete depth zones), MSC Shallow, MSC Deep, PCA-W Shallow, PCA-W Deep, MPWMD #FO-09 Shallow, and MPWMD #FO-09 Deep. The data may either come from water quality samples that are collected by the airlift method, by the positive displacement method during induction logging of these wells and/or other data gathering techniques, or combinations of these methods, at the discretion of PROFESSIONAL, and will be submitted to a State-certified analytical laboratory for analysis.</p> <p>Under this Task, PROFESSIONAL will complete retrofitting the wells that are sampled on an annual basis to use the new low-flow purge approach for getting water quality samples. The wells that are sampled quarterly have previously been retrofitted, and all except two of the wells that are sampled annually have been retrofitted. These two wells are FO-9 (Shallow) and FO-9 (Deep). The cost included in this Task to retrofit these two wells in 2013 is \$1,500.</p> <p>The dedicated devices sit in the water column and may periodically need to be replaced or repaired. A not-to-exceed amount of \$500 is included in the costs contained in Attachment 3 for performing ongoing maintenance and/or replacement of the sample collection equipment.</p>

M&MP TASK NO.	TASK DESCRIPTION	WORK TO BE PERFORMED
I. 2. b. 6	Reports	<p>PROFESSIONAL will prepare and submit reports to WATERMASTER summarizing and analyzing the data that is collected, according to the following schedule:</p> <ol style="list-style-type: none"> 1. One combined report summarizing the water production data and summarizing and analyzing the water quality and water level data from the 1st & 2nd Quarters of the Water Year. 2. One annual report summarizing the water production data and summarizing and analyzing the water quality and water level data from the 3rd & 4th Quarters of the Water Year, and containing tables consolidating the data from the quarterly reports and a narrative summarization of the findings, conclusions, and recommendations from the quarterly reports. This annual report may include, as attachments, each of the quarterly reports.
I.3.d	Evaluate Coastal Wells for Cross-Aquifer Contamination Potential	<p>The work of this Task was essentially completed under RFS No. 2011-01. The only work associated with this Task to be performed in 2013 under this RFS No. 2013-01 is to incorporate into the Watermaster's Database data from wells that were newly identified by the work performed under RFS 2011-01.</p>
I. 4. a	Review Seawater Intrusion Analyses	<p>WATERMASTER will have another consultant perform analyses and prepare mapping and other documents pertaining to seawater intrusion detection. PROFESSIONAL will participate in meetings with that consultant during the course of its work, and will provide review comments and recommendations to WATERMASTER regarding this work as it is being carried out by that consultant.</p>
I.4.b	Focused Hydrogeologic Investigation	<p>PROFESSIONAL will compile historical and current water quality data in the coastal area to provide more in-depth evaluation of conditions in the shallow Dune Sand/Aromas Sand aquifer in the vicinity of the Sand City Public Works well, where unique water quality conditions and variability have recently been observed. The results of this work will be summarized in a brief Technical Memorandum with conclusions and recommendations.</p>

Table 2

WELL NAME AND SUBAREA LOCATION ⁽⁸⁾	MONITORING NETWORK ⁽¹⁾		MONITORING REQUIRED BY DECISION ⁽²⁾		MONITORING CURRENTLY BEING PERFORMED BY PROFESSIONAL NOT SUBJECT TO THIS RFS ⁽³⁾		MONITORING TO BE PERFORMED BY PROFESSIONAL UNDER THIS RFS ⁽⁴⁾			
	Professional's	Watermaster's	Level (Monthly)	Quality (Annually)	Level		Level		Quality	
					Frequency		Frequency		Frequency	
					Monthly	Quarterly	Monthly	Quarterly	Annually	Quarterly
Northern Coastal Subarea (and vicinity)										
MSC-Shallow		X					X			X
MSC-Deep		X					X			X
PCA-W Shallow		X						X		X
PCA-W Deep		X						X		X
PCA-E (Multiple) Shallow	X				X					X
PCA-E (Multiple) Deep	X				X					X
Ord Grove Test-Shallow/Deep	X				X					
Paralta Test-Shallow/Deep	X				X					
Ord Terrace-Shallow	X				X					X
Ord Terrace-Deep	X				X					X
MPWMD #FO-09-Shallow	X				X					X
MPWMD #FO-09-Deep	X				X					X
MPWMD #FO-10-Shallow		X					X			X
MPWMD #FO-10-Deep		X					X			X
Fort Ord Monitor MW-B-23-180-Dune/Aromas		X					X			X
CDM MW-1-Dune/Aromas		X					X			
CDM MW-2-Dune/Aromas		X					X			
CAW Del Monte Observation-Shallow		X								X
SBWM MW-1-Deep (Punsima) ⁽⁶⁾		X						X		X
SBWM MW-2-Deep (Punsima) ⁽⁶⁾		X						X		X
SBWM MW-3-Deep (Punsima) ⁽⁶⁾		X						X		X
SBWM MW-4-Deep (Punsima/Santa Margarita) ⁽⁶⁾		X						X		X
Northern Inland Subarea (and vicinity)										
MPWMD #FO-01-Shallow	X					X				
MPWMD #FO-01-Deep	X					X				
MPWMD #FO-07-Shallow	X					X				
MPWMD #FO-07-Deep	X					X				
MPWMD #FO-08-Shallow	X					X				
MPWMD #FO-08-Deep	X					X				
MPWMD #FO-11-Shallow	X					X				
MPWMD #FO-11-Deep	X					X				
SBWM MW-5-Shallow (Paso Robles) ⁽⁶⁾		X						X		X
SBWM MW-5-Deep (Santa Margarita) ⁽⁶⁾		X						X		X

Table 2 (Continued)

WELL NAME AND SUBAREA LOCATION ⁽⁸⁾	MONITORING NETWORK ⁽¹⁾		MONITORING REQUIRED BY DECISION ⁽²⁾		MONITORING CURRENTLY BEING PERFORMED BY PROFESSIONAL NOT SUBJECT TO THIS RFS ⁽³⁾		MONITORING TO BE PERFORMED BY PROFESSIONAL UNDER THIS RFS ⁽⁴⁾			
	Professional's	Watermaster's	Level (Monthly)	Quality (Annually)	Level Frequency		Level Frequency		Quality Frequency	
					Monthly	Quarterly	Monthly	Quarterly	Annually	Quarterly
Southern Coastal Subarea (and vicinity)										
Plumas '90 Test-Deep		X					X			
R. Mart Dune/Aromas		X					X			
CDM MW-3-Dune/Aromas		X					X			
CDM MW-4-Dune/Aromas		X					X			
MW-BW-08A-Dune/Aromas		X					X			
MW-BW-09-160-Shallow		X					X			
Laguna Seca Subarea (and vicinity)										
MPWMD #FO-03-Shallow	X					X				
MPWMD #FO-03-Deep	X					X				
MPWMD #FO-04-Shallow (E)	X					X				
MPWMD #FO-04-Deep (W)	X					X				
MPWMD #FO-05-Shallow	X					X				
MPWMD #FO-05-Deep	X					X				
MPWMD #FO-06-Shallow	X					X				
MPWMD #FO-06-Deep	X					X				
Justin Court (RR M2S)-Shallow	X					X				
LS Pistol Range (Mo Co TH-1)-Deep	X					X				
York Rd West (Mo Co MW-1 D)-Deep	X					X				
Seca Place (Mo Co MW-2)-Deep	X					X				
Robley Shallow (North) (Mo Co MW-3S)-Shallow	X					X				
Robley Deep (South) (Mo Co MW-3D)-Deep	X					X				
LS No. 1 Subdivision-Deep	X					X				
Blue Larkspur-East End-Believed to be Deep	X					X				
York School-Shallow		X	X							X
Laguna Seca Driving Range (SCS-Deep)-Shallow		X						X		X
Laguna Seca County Park #2-Shallow		X	X							X
CAW Granite Construction-Deep		X					X			
CAW Ryan Ranch (RR) #7-Deep		X	X							X
Laguna Seca Golf New #12-Deep ⁽⁹⁾		X								X
Pasadera Main Gate-Deep		X	X							X
No. of Wells in Each Network⁽⁵⁾=	32	29	4	0	8	24	14	9	20	6

Notes:

- (1) The wells within the Professional's Monitoring Well Network are the wells that PROFESSIONAL monitors as part of PROFESSIONAL's own monitoring program. The wells within the Watermaster's Monitoring Well Network are the wells to be monitored under this RFS.
- (2) Monitoring required by the Decision is the monitoring described in the Monitoring and Management Program which was incorporated by reference in the Decision of the Court dated February 9, 2007.
- (3) Monitoring currently being performed by PROFESSIONAL not subject to this RFS is monitoring work PROFESSIONAL is performing under other monitoring programs. This monitoring is not a part of this RFS.
- (4) Monitoring to be performed by PROFESSIONAL is the monitoring to be performed under this RFS.
- (5) The Watermaster's Monitoring Well Network includes the wells recommended in the Enhanced Monitoring Well Network report prepared by PROFESSIONAL, dated October 23, 2007, plus the 4 new Sentinel Wells installed in 2007 and the BLM well installed in 2011.
- (6) The Seaside Basin Watermaster (SBWM) wells are all equipped with dataloggers that obtain measurements at least daily, but will be manually sounded for water level on a quarterly basis for calibration purposes. SBWM MW-4 Deep is to be sampled for water quality semi-annually.
- (7) Not used.
- (8) Shallow=Paso Robles; Deep=Santa Margarita or Purisima.
- (9) This well is so close to the Laguna Seca Old No. 12 well that no water level monitoring is necessary.
- (10) CAW East Fence Shallow well can no longer be sampled and was therefore dropped from this list.

ATTACHMENT 2 SCHEDULE

MPWMD RFS No. 2013-01 Work Schedule

ID	Task Name	2013																	
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	A
1	I.2.a DATABASE MANAGEMENT																		
2	I.2.a.1 Conduct Ongoing Data Entry/Database Maintenance (MPWMD)																		
3	I.2.b DATA COLLECTION PROGRAM																		
4	I.2.b.2 Collect Monthly Water Levels (MPWMD)																		
5	I.2.b.3 Collect Quarterly Water Quality Samples (MPWMD)																		
6	I.2.b.6 Reports (from MPWMD)																		
7	MPWMD Prepares Combined Quarterly Water Production, Water Level, and Water Quality Reports for 1st & 2nd Quarters																		
8	MPWMD Prepares Annual Water Production, Water Level, and Water Quality Report																		
9	I.3.d Evaluate Coastal Wells for Cross-Aquifer Contamination Potential																		
10	MPWMD Migrates Well Data from Newly Identified Wells into Watermaster's Database																		
11	I.4.a HydroMetrics & MPWMD Provide Oversight of Seawater Intrusion Detection and Tracking																		
12	I.4.b MPWMD Performs Focused Hydrogeologic Investigation in Vicinity of Sand City Public Works Well																		

ATTACHMENT 3 SUMMARY OF ESTIMATED COSTS

M&MP TASK NO.	LABOR HOURS		HOURLY RATE	SUPPLIES AND MATERIALS		TOTAL
	BREAKDOWN	TOTAL		BREAKDOWN	TOTAL	
I. 2. a. 1	12 mo. @ 8 hrs/mo.	96	\$94	Other services needed to host and maintain Watermaster's Database, estimate \$300 for the year.	\$300	\$9,324
I. 2. b. 2.	12 mo. @ 4 hrs/mo.	48	\$87	Equip 4 LSS wells (2 sites) with dataloggers @ \$1200/site x 2 = \$2400; plus 1 replacement datalogger @ \$500	\$2,900	\$7,076
I. 2. b. 3.	Quarterly WQ wells (Table 2): MPWMD Coastal wells (6 wells - shallow and deep aquifers @ 3 sites: MSC, PCA-W, FO-09), plus one additional quarterly WQ well sample. Labor: 4 events @ 16 hrs/event	64	\$87	Fuel: 4 events @ \$10/site x 3 sites = \$120; Lab costs: 4 events @ \$250/well x 7 wells = \$7000	\$7,120	\$12,688
	Annual WQ wells (Table 2): 1 event @ 28 hrs/event = 28 hrs	28	\$87	Eductor setup for BLM well site (use MPWMD portable unit): \$0 x 1 site = \$0; Airlift equip.: \$100 x 1 site x 1 event = \$100; Fuel: \$20 x 1 site x 1 event = \$20; Lab cost (annual WQ wells): \$250 x 15 wells x 1 event = \$3,750; One-time perm. pump retrofit, and maintenance on previously installed sample collection equipment: \$1500 + \$500 = \$2000	\$5,870	\$8,306
	WM Sentinel and Northern Inland wells: download/store dataloggers, 4 events @ 2 hrs/event	8	\$87	N/A	\$0	\$696
	WM Sentinel wells: Semi-annual induction logging -- all 4 sites; annual WQ samples from each aquifer at each site (2 per well site) -- all 4 sites; semi-annual WQ samples -- SBWM MW-4 site only. Total labor = 2 events @ 4 hr/event.	8	\$87	Induction logging: 2 events = \$15,500; Lab cost (annual samples): \$250 x 4 sites x 2 samples = \$2,000; Lab cost (semi-annual sampling @ SBWM MW-4 site only): \$250 x 1 site x 2 samples = \$500	\$18,000	\$18,696
	Compile data: 4 events @ 24 hours/event	96	\$87	N/A	\$0	\$8,352
I. 2. b. 6	1 - combined Q1 and Q2 quarterly report @ 18 hrs	18	\$94	N/A	\$0	\$1,692
	1- annual report @ 24 hrs	24	\$94	N/A	\$0	\$2,256
I.3.d	Append coastal well records from cross-aquifer contamination study to Watermaster's Database	50	\$94	N/A	\$0	\$4,700
I. 4. a	Provide SWI supplemental data and review	24	\$111	N/A	\$0	\$2,664
I. 4. b	Provide focused area hydrogeologic investigation for Sand City Public Works Well	80	\$94	N/A	\$0	\$7,520

TOTAL ESTIMATED COST = \$83,970

Notes:

1. Vehicle mileage is included in the labor costs above.
2. Regardless of the use of the term "Estimated Cost" in this RFS, if the work of this RFS is to be compensated for using Lump Sum Payment method, it is understood and agreed to by PROFESSIONAL that the Total Price listed on page A-1 of this RFS is binding and limiting as defined in Section V of the Agreement.

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2013

RFS NO. 2013-02

(To be filled in by WATERMASTER)

TO: Joe Oliver

FROM: Robert Jaques

Monterey Peninsula Water Management District
PROFESSIONAL

WATERMASTER

Services Needed and Purpose:

Perform water level and water quality data collection for specified wells within the Seaside Basin in accordance with the Scope of Work contained in Attachment 1.

Completion Date: The work of this RFS No. 2013-02 shall be completed on an as-directed basis from the Watermaster during 2013. All work under this RFS will be completed not later than December 31, 2013.

Method of Compensation: Time and Expense Payment Method (As defined in Section V of Agreement.)

Total Price Authorized by this RFS: \$5,154.00 (See Attachment 1 for details regarding this Total Price, and how costs will be authorized on an as-directed basis. Cost is authorized only when evidenced by signature below.)

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by: _____ Date: _____
WATERMASTER Technical Program Manager

Authorized by: _____ Date: _____
WATERMASTER Chief Executive Officer

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1
Scope of Work for RFS No. 2013-02

Background:

The WATERMASTER Board authorized its staff to contract with the PROFESSIONAL to collect water level and water quality data from certain wells located within the Seaside Basin, if the owners/operators of those wells expressed this desire to the WATERMASTER. The procedures for this data collection are described in the January 17, 2008 "Notice to Well Owners" that was sent out by the Watermaster to well owners in the Seaside Groundwater Basin..

This RFS No. 2013-02 authorizes PROFESSIONAL to perform this data collection work on an as-directed basis, with formal authorization from the WATERMASTER to the PROFESSIONAL being required prior to the PROFESSIONAL performing such work on any specified well. This will provide the WATERMASTER with full control over which wells are provided this service, as well as over the costs for having this work performed.

The wells to which these services may be provided are listed in Table 1.

The estimated costs, per well, to perform these services are as follows:

Monthly Water Levels - It is estimated that it will take approximately 0.5 hour/well to perform a water level measurement. This time estimate is based on the assumption that the water level measurements will be performed at the time that a field person is already out and about collecting data from other wells, and the fact that the distance between wells located within the Basin is not that great. This labor would be billed at the field rate of \$87/hr, so the estimated cost per water level measurement would be \$43.50.

The total estimated cost would be \$522 per year per well for 12 monthly measurements.

Annual Water Quality Sampling - Assuming that annual water sample collection would coincide with water level collection at a well, it is estimated that it will take approximately 0.5 hr to collect the water quality sample, including sampling time, bottle labeling, custody forms, delivery to laboratory, etc. There will also be an estimated 0.5 hr for receipt, review and computer entry of laboratory data, and an estimated \$250 per sample for the laboratory analysis. The sampling work would be billed at the field rate of \$87/hr, so the estimated cost per annual water quality sample would be \$87 for labor, and \$250 for laboratory services, for a total cost per sample of \$337. Only one sample per well will need to be collected and analyzed in 2013. This sample will be collected in the fall of 2013.

The total estimated cost for collecting and analyzing the sample per well is \$337.

Combined Water Level Measurements and Water Quality Sampling: For combined water level and water quality monitoring, the total estimated cost, per well, for the 12-month period is \$859.

Of the wells listed in Table 1 it is assumed that not more that 6 will ask to have data collected for them by the WATERMASTER, the total estimated cost would be:

Potential No. of Wells Needing Water Level Data Collected	= 6 @ \$522 =	\$3,132
Potential No. of Wells Needing Water Quality Data Collected	= 6 @ \$337 =	<u>\$2,022</u>
	TOTAL =	<u><u>\$5,154</u></u>

Table 1

APN	DETAILS	COMPANY	Watermaster "Producer" Well?	MPWMD Assigned Well #	Monthly Water Levels Required	Monthly Water Levels Being Collected?	Annual Water Quality Analyses Required?	Annual Water Quality Data Being Collected?
Within MPWMD Boundaries								
012-432-004	CAW - Plumas #4	California American Water Co.	Y	T15S/R1E-27Jg	Y	Y	Y	N
012-843-013	CAW - Darwin	California American Water Co.	Y	T15S/R1E-23Ea	Y	Y	Y	N
011-041-018	CAW - Military	California American Water Co.	Y	T15S/R1E-14Nd	Y	Y	Y	N
011-061-004	CAW - Ord Grove #2	California American Water Co.	Y	T15S/R1E-23Bc	Y	Y	Y	N
011-071-018	CAW - New Luzern	California American Water Co.	Y	T15S/R1E-23De	Y	Y	Y	N
011-091-017	CAW - Playa #3	California American Water Co.	Y	T15S/R1E-22Bc	Y	Y	Y	N
011-091-017	CAW - Playa #4	California American Water Co.	Y	T15S/R1E-22Bf	Y	Y	N	
011-493-028	CAW - Paralta	California American Water Co.	Y	T15S/R1E-14Ra	Y	Y	Y	N
031-151-010	Reservoir Well	City of Seaside	Y	T15S/R1E-13Na	Y	?	Y	N
031-231-062	Coe Avenue Well	City of Seaside	Y	T15S/R1E-14Ma	Y	?	Y	N
011-181-014	Public Works Corp. Yard	City of Sand City	Y	T15S/R1E-22Ed	Y	?	Y	N
011-011-020	Cypress Pacific	Monterey Peninsula Engineering	Y	T15S/R1E-22Dd	Y	N	Y	N
011-236-010	Robinette -Design Ctr.	City of Sand City	Y	T15S/R1E-22Mc	Y	?	Y	N
011-041-043	(in front of Target)	DBO Development	Y	T15S/R1E-22Ce	Y	N	N	
011-061-022	MMP prod well	Mission Memorial Park	Y	T15S/R1E-23Ab	Y	Y	N	
011-061-022	PRTIW -operated by MMP	Mission Memorial Park	Y	T15S/R1E-23Ac	Y	N	Y	N
011-501-014-500		Security National Guaranty, Inc.	Y	T15S/R1E-15K1	Y	N	Y	N
011-532-005		Granite Rock Company	Y	T15S/R1E-22Eb	Y	?	N	
012-511-005	Shea Well	City of Del Rey Oaks	Y	T15S/R1E-26Mc	Y	N	N	
012-115-017	City #4	Seaside Municipal Water System	Y	T15S/R1E-23Gc	Y	?	Y	?
012-653-003	City #2	Seaside Municipal Water System	Y	T15S/R1E-23Pb	Y	?	N	
012-664-017	City #1	Seaside Municipal Water System	Y	T15S/R1E-23Lb	Y	?	N	
012-115-017	City #3	Seaside Municipal Water System	Y	T15S/R1E-23Ga	Y	?	Y	?
173-071-052	East Well (Lot #9)	CAW - Bishop Unit	Y	T16S/R2E-05Fa	Y	N	N	
173-072-034	well lot Bishop #1 (west)	CAW - Bishop Unit	Y	T16S/R2E-05Ea	Y	Y	N	
173-072-041	well lot Bishop #2 (east)	CAW - Bishop Unit	Y	T16S/R2E-05Fb	Y	Y	N	
416-111-002	Mutual	CAW - Hidden Hills Unit	Y	T16S/R2E-09Cb	Y	N	N	
416-111-004	Standex	CAW - Hidden Hills Unit	Y	T16S/R2E-09Cc	Y	N	N	
416-111-004	Bay Ridge	CAW - Hidden Hills Unit	Y	T16S/R2E-09Cd	Y	Y	N	
259-031-011	RR#7	CAW - Ryan Ranch #7	Y	T15S/R1E-36Nb	Y	Y	N	
259-031-012	RR#8	CAW - Ryan Ranch #8	Y	T16S/R1E-01Cb	Y	Y	N	
259-031-012	RR#11	CAW - Ryan Ranch #11	Y	T16S/R1E-01Cd	Y	Y	N	
173-071-056	Old Main Gate (Lot #12)	Pasadera - New Cities Developme	Y	T16S/R2E-05Mg	Y	Y	N	
173-071-051	Paddock #1(Lot #11)	Pasadera - New Cities Developme	Y	T16S/R2E-05Mf	Y	N	N	
203-031-034	01-349	York School	Y	T15S/R1E-36Qa	Y	?	N	
173-071-048	(new #12)	Laguna Seca Golf Resort	Y	T16S/R2E-06Hb	Y	Y	N	
173-071-048	(racetrack)	Laguna Seca Golf Resort	Y	T16S/R2E-06Ga	Y	Y	N	
Outside MPWMD Boundaries								
173-011-025, -026	LS Cnty Park #3	MPPRPD	Y	T16S/R2E-05Gd	Y	?	N	
173-011-025, -026	LS Cnty Park #4	MPPRPD	Y	T16S/R2E-05Ge	Y	?	N	
					Y = 38	N or ? = 21	Y = 16	N or ? = 16

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2013

RFS NO. 2013-01

(To be filled in by WATERMASTER)

TO: Derrick Williams
HydroMetrics LLC
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2013, and shall be performed in accordance with the Schedule contained in Attachment 2.

Method of Compensation: Time and Materials (As defined in Section V of Agreement.)

Total Price Authorized by this RFS: \$ 12,100.00 (Cost is authorized only when evidenced by signature below.) (See Attachment 1 for Estimated Costs).

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by: _____ Date: _____
WATERMASTER Technical Program Manager

Authorized by: _____ Date: _____
WATERMASTER Chief Executive Officer

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

SCOPE OF WORK

On an ongoing and as-requested basis, PROFESSIONAL will provide general hydrogeologic consulting services to WATERMASTER on a variety of topics. These may include, but not be limited to interpretation of water level and water quality data collected by WATERMASTER, and BMAP and SIRP implementation issues.

Providing these services will likely involve attending certain of WATERMASTER's Technical Advisory Committee (TAC) meetings, most of which will be attended telephonically. These TAC meetings do not include special TAC or other meetings which may be required as part of performing other work which may be authorized under other RFSs issued to PROFESSIONAL by WATERMASTER. Any such other scope and cost proposals will incorporate costs for those meetings.

The Tasks in WATERMASTER's 2013 Monitoring and Management Program (M&MP) to which this RFS No. 2013-01 pertains are:

- M. 1. c - Preparation and Attendance of Meetings
- M. 1. e - Peer Review of Documents and Reports
- I. 2. b. 6 - Reports
- I. 4. a. - Oversight of Seawater Intrusion Detection and Tracking

ESTIMATED COSTS

General Consulting Services, including attending some TAC and other meetings either via telephone or in-person in Seaside, as requested by WATERMASTER will be billed at the following hourly rates, including all markups and other direct costs:

Derrick Williams = \$195.00/hour

Georgina King = \$165.00/hour

In addition to hourly labor costs, an allowance of \$1,000.00 is included in this RFS to cover travel and other incidental costs associated with the performance of this work.

The total cost authorized by this RFS No. 2013-01 is \$12,100.00.

ATTACHMENT 2
SCHEDULE

HydroMetrics RFS No. 2013-01
Work Schedule

ID	Task Name	2013																	
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	F
1	M. 1. c - Preparation and Attendance of Meetings																		
2	M. 1. e - Peer Review of Documents and Reports																		
3	I.2.b.6 Reports (by HydroMetrics)																		
4	I.4.a HydroMetrics & MPWMD Provide Oversight of Seawater Intrusion Detection and Tracking																		

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: 1/1/2013

RFS NO. 2013-02

(To be filled in by WATERMASTER)

TO: Derrick Williams
HydroMetrics LLC
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Prepare the Seawater Intrusion Analysis Report for 2013. See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2013, and shall be performed in accordance with the Schedule contained in Attachment 2.

Method of Compensation: Time and Materials (As defined in Section V of Agreement.)

Total Price Authorized by this RFS: \$ 22,655.00 (Cost is authorized only when evidenced by signature below.) (See Attachment 3 for Detailed Breakdown of Estimated Costs).

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by: _____ Date: _____
WATERMASTER Technical Program Manager

Authorized by: _____ Date: _____
WATERMASTER Chief Executive Officer

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

SCOPE OF WORK

The scope consists of providing professional consulting services to WATERMASTER for preparation of the 2013 Seawater Intrusion Analysis Report (SIAR).

- To promote efficiency, much of the text and graphics from the 2012 SIAR will be incorporated directly into the 2013 SIAR.

Preparing the 2013 SIAR will involve analyzing all water quality data at the end of Water Year 2013 (October 1, 2012 to September 30, 2013) and producing semi-annual (2nd and 4th quarters 2012) chloride concentration maps for each aquifer in the Basin. Time series graphs, trilinear graphs, and stiff diagram comparisons will be updated with new data. Second and fourth quarter groundwater elevation maps will also be produced. The annual EM logs will be analyzed to identify changes in seawater wedge locations. A determination of whether there is any evidence of seawater intrusion will be made, and recommendations will be included as warranted.

A Draft 2013 SIAR will be provided to WATERMASTER in electronic (not printed) form for review. WATERMASTER will provide its review comments and those of its TAC members through direct discussions with PROFESSIONAL at a TAC meeting. In addition to these oral comments, some TAC members may also provide recommended editorial changes electronically directly to PROFESSIONAL. These comments will be addressed in a Final 2013 SIAR. A CD containing an electronic version of the entire Final 2013 SIAR in MS Word and up to 15 printed and bound copies of the Final 2013 SIAR (quantity to be determined by WATERMASTER) will be provided to WATERMASTER.

ATTACHMENT 2

**HydroMetrics RFS No. 2013-02
Work Schedule**

ID	Task Name	2013																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	I.4.c Annual Seawater Intrusion Analysis Report (SIAR)																	
2	HydroMetrics Provides Draft SIAR to Watermaster											◆ 11/5						
3	TAC Approves Annual Seawater Intrusion Analysis Report (SIAR)											◆ 11/13						
4	Board Approves Annual Seawater Intrusion Analysis Report (SIAR)											◆ 11/27						

ATTACHMENT 3

DETAILED BREAKDOWN OF ESTIMATED COSTS

Note: Regardless of the use of the term "Estimated Cost" in this RFS, if the work of this RFS is to be compensated for using Lump Sum Payment method, it is understood and agreed to by PROFESSIONAL that the Total Price listed on page 1 of this RFS is binding and limiting as defined in Section V of the Agreement.

DETAILED BREAKDOWN OF ESTIMATED COSTS

HOURLY RATES:

Derrick Williams = \$195.00

Georgina King = \$165.00

Task	Hours		Costs			
	Derrick Williams	Georgina King	Derrick Williams	Georgina King	Expenses	Total Costs
2013 Seawater Intrusion Analysis Report						
Produce 2013 SIAR	16	88	\$3,120	\$14,520	\$3,130	\$20,770
Attend One TAC Meeting in Monterey	9	0	\$1,755	\$0	\$130	\$1,885
TOTALS	25	88	\$4,875	\$14,520	\$3,260	\$22,655

ITEM NO. VIII.

OLD BUSINESS

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Laura Dadiw, Assistant to the CEO

APPROVED BY: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Clarification of the schedule of repayment by California American Water (CAW) of artificial or in-lieu replenishment water to the Basin per the terms of the Memorandum of Understand, (MOU) between Watermaster and CAW dated January 21 & 29, 2009.

PURPOSE:

Consider revisions to the language of the MOU between the Watermaster and CAW in order to clarify the schedule of repayment by CAW of artificial or in-lieu replenishment water to the Basin.

RECOMMENDATION:

Consider revising the language of Section 2. (a) of the agreement within the attached copy of the MOU to clarify the schedule of repayment by CAW of artificial or in-lieu replenishment water to the Basin to be on a 25-year schedule at 700 acre-feet annually (AFA).

BACKGROUND:

An MOU was approved with revisions by the Watermaster Board at its December 3, 2008 meeting that contained conditions on the extension of Replenishment Assessment credit to CAW to ensure replenishment of the Basin by water from CAW projects operational in the years ahead. The MOU contains a guaranty from CAW that it would provide replenishment water in the future to avoid the impact of drought or seawater intrusion to the extent that CAW over-pumped through time under the judgment.

DISCUSSION:

Although the MOU stipulates that CAW will ensure replenishment of the Basin with water from its operational projects, at no cost to Watermaster, in an amount equivalent to the quantity of water that CAW has overproduced during Basin adjudication, there is currently no language as to the schedule of repayment by CAW other than "on a schedule that is feasible" per Section 2. (a) of the agreement. There is no language within the Decision itself that clarifies the schedule of repayment.

The matter was addressed at a meeting of an Ad Hoc Committee consisting of Directors Bruno, Sabolsice, Edelen, and Bachofner on November 13, 2012. Director Sabolsice

presented a “Draft – For Discussion Purposes Only” schedule which outlined various basin replenishment scenarios, with the committee ultimately focusing on three repayment scenarios: 50 years (350 AFA), 25 years (700 AFA), and 10 years (1,750 AFA), keeping in mind that each scenario affects plant design (plant size, number of wells, pre-treatment improvements, etc.) and ultimately the cost to customers. A clause would be included to allow an override of the schedule should conditions in the basin change (i.e. evidence of seawater intrusion) at some point during the replenishment period.

A majority of the committee favored the 25-year repayment scenario. CAW developed “Attachment A – California American Water Replenishment Schedule” that details the 25-year repayment schedule (attached).

FISCAL IMPACT:

There is minimal, if any, anticipated staff time required to provide information to legal counsel to make revisions to the language of the MOU. Staff time would also be required to document the repayment over the years.

ATTACHMENTS:

Draft Memorandum of Understanding between Seaside Basin Watermaster and California American Water dated January 21 & 29, 2009.

Attachment A – California American Water Replenishment Schedule

**ATTACHMENT A
CALIFORNIA AMERICAN WATER REPLENISHMENT SCHEDULE**

A1. Upon final completion and acceptance by California American Water of a Water Supply Project and beginning October 1 of the subsequent Water Year, California American Water shall commence replenishment of the Seaside Basin in accordance with the schedule contained herein. The schedule is agreed by all parties to be feasible in accordance with Section 2 of the MOU dated December 3, 2008.

A2. Watermaster and California American Water agree that the volume of artificial or in-lieu replenishment shall be based on a running five (5) Water Year average. Should the average volume of artificial or in-lieu replenishment calculated by the Watermaster be less than 700 acre feet annually and if the Watermaster declares that water for Artificial Replenishment is available from sources other than the CAW Water Supply Project, Watermaster shall have the option of requiring CAW to pay a part of CAW's Outstanding Replenishment Assessment for the purpose of providing Watermaster with funds to obtain Artificial Replenishment in sufficient quantities to replenish that quantity not provided via in-lieu replenishment.

A3. Watermaster and California American Water agree that should conditions change in the basin sufficient to indicate that Seawater intrusion is occurring; this replenishment schedule shall be subject to immediate modification.

A4. Replenishment Years subsequent to Replenishment Year 25 shall continue at 700 acre-feet annually based on a running 5-year average until California American Water's total calculated Over-Production volume has been achieved. In accordance with Section 4 of the MOU, at any stage in CAW's replenishment prior to Replenishment Year 25 should the Court determine that the Basin has been replenished in an amount sufficient to prevent seawater intrusion or the Basin has been protected by alternative seawater intrusion preventive measures CAW's obligations under conditions set by this MOU shall be deemed fully satisfied.

REPLENISHMENT YEAR *	ARTIFICIAL REPLENISHMENT (AFA)	IN-LIEU REPLENISHMENT (AFA)
1		700
2		700
3		700
4		700
5		700
6		700
7		700
8		700
9		700
10		700
11		700
12		700
13		700
14		700
15		700

16		700
17		700
18		700
19		700
20		700
21		700
22		700
23		700
24		700
25		700
**		700

**MEMORANDUM OF UNDERSTANDING BETWEEN SEASIDE BASIN
WATERMASTER AND CALIFORNIA AMERICAN WATER**

This Memorandum of Understanding between the Seaside Basin Watermaster (Watermaster) and California American Water (CAW) is entered into pursuant to a motion passed by Watermaster on December 3, 2008 with respect to the following:

RECITALS

A. The Amended Decision in Case No. M66343 filed February 9, 2007 (Decision) provides that Standard Producers that exceed their allocation of Natural Safe Yield are subject to a Replenishment Assessment for each acre foot of Over-Production for each Water Year. Under Section III.M1.d of the Decision, CAW has the right to claim a credit against its Replenishment Assessment (Replenishment Credit) for costs incurred for water supply augmentation that has or will result in replenishment of the Basin.

B. Watermaster has calculated the Replenishment Assessments for CAW for Fiscal Year 2006 (Water Year 05/06), Fiscal Year 2007 (Water Year 06/07) and Fiscal Year 2008 (Water Year 07/08) in the total amount of \$10,166,640. Pursuant to Section III.M.1.d of the Decision, CAW applied for a Replenishment Credit for expenditures totaling \$12,305,924.00 that CAW has made through calendar year 2006 for water supply augmentation associated with pre-construction expenses for the Coastal Water Project. The request was made on March 5, 2008 and supplemented with further information on May 2, 2008.

C. Watermaster approved CAW's request for a Replenishment Credit in the amount of \$12,305,924.00, subject to conditions set forth in the motion which provide that CAW will ensure replenishment of the Basin with water from the Coastal Water Project, or a comparable alternative project, at no cost to Watermaster, in an amount equivalent to the quantity of water that CAW has overproduced, and thus incurred a Replenishment Assessment obligation for Fiscal Years 2006, 2007 and 2008.

D. Watermaster and CAW desire to enter into this Memorandum of Understanding regarding future CAW requests pursuant to Section III.M.1.d of the Decision for Replenishment Credits against future Replenishment Assessment obligations.

AGREEMENT

Watermaster and CAW agree as follows:

1. At the end of each Water Year, Watermaster shall determine the Replenishment Assessments in accord with Section III.L.3.j.iii of the Decision. Within 40 days of CAW's receipt of Watermaster's notice of Replenishment Assessment against CAW for the preceding Water Year, CAW shall provide Watermaster any claim for a Replenishment Credit pursuant to Section III.M.1.d of the Decision. Such claim shall be based upon expenditures for a water supply augmentation project (such as the Coastal Water Project and/or other projects that produce water that can be used to replenish the Seaside Basin (hereinafter "Project(s)")) that CAW contends has or will result in replenishment of the Basin.

2. Watermaster agrees that the Project will result in replenishment of the Basin, and therefore:

(a) Watermaster hereby grants CAW's current request for a Replenishment Credit in the amount of \$12,305,924.00. Such Credit shall be immediately applied to CAW's Replenishment Assessments for Fiscal 2006 (Water Year 05/06), Fiscal Year 2007 (Water Year 06/07) and Fiscal Year 2008 (Water Year 07/08), which total \$10,166,640, subject to the condition that, upon completion and implementation of a water supply augmentation Project, CAW shall provide Watermaster, at no cost to Watermaster, and on a schedule that is Feasible either (1) water for Artificial Replenishment through direct replenishment and/or (2) cause in-lieu replenishment of the Basin by forbearing to produce water to which CAW is entitled as CAW's share of the Native Safe Yield, in an amount equal to CAW's total acre feet of Over-Production for the Water Years 05-06, 06-07, and 07-08, which total is 6,390.1 acre feet. Future CAW requests for Replenishment Credit shall be granted subject to the same conditions set forth in this Section 2 (a).

(b) In future Water years Watermaster shall address future requests by CAW for a Replenishment Credit as follows:

- i. For years in which Watermaster declares that water for Artificial Replenishment is not available, Watermaster shall grant CAW's request for a Replenishment Credit for that Water year, subject to CAW's obligation to provide future Artificial Replenishment as set forth in Section 2(a) herein.
- ii. For years in which Watermaster declares that water for Artificial Replenishment is available from sources other than a CAW water supply augmentation Project, Watermaster shall have the option of either: (i) requiring CAW to pay all or part of CAW's Replenishment Assessment for that Water Year for the purpose of providing Watermaster with funds to obtain Artificial Replenishment in sufficient quantities to replenish that quantity of Over-Production for which CAW pays a Replenishment Assessment; or (ii) granting CAW's request for a Replenishment Credit subject to CAW's obligation to provide future Artificial Replenishment as provided for in section 2(a) herein. . If Watermaster is unable to purchase Replenishment Water equal to CAW's total Over-Production for that Water Year,

the Watermaster shall grant CAW a Replenishment Credit for the balance of CAW's Over-Production for that Water year, subject to CAW's obligation to provide future Artificial Replenishment as set forth in Section 2(a) herein.

3. The sum of the acre feet of water to be provided to Watermaster for replenishment either by direct replenishment and/or in-lieu replenishment for each Water Year shall equal the number of acre feet for which CAW is assessed a Replenishment Assessment for the Water Year at issue. In no event shall the total amount of direct replenishment and/or forbearance by CAW be greater than the cumulative total of acre feet of CAW's Over-Production for all Water Years for which CAW is granted Replenishment Credits.

4. Upon completion and implementation of the Project(s), at any stage in CAW's direct replenishment and/or in-lieu replenishment pursuant to conditions set by Watermaster upon granting of Replenishment Credits, CAW shall have the right to request that the Court determine that, based upon principles of the physical solution set forth in the Decision, the Basin has been replenished in an amount sufficient to prevent seawater intrusion or the Basin has been protected by alternative seawater intrusion preventive measures. Upon such determination by the Court, CAW's obligations under conditions set by Watermaster upon granting of Replenishment Credits and any obligation under this Memorandum of Understanding to provide direct replenishment water and/or in-lieu replenishment at no cost to Watermaster shall be deemed fully satisfied.

5. All terms used in this Memorandum of Understanding that are defined terms in the Decision shall be defined herein as set forth in Section III.A of the Decision.

IN WITNESS WHEREOF the Parties hereby agree to the full performance of the terms set forth herein.

SEASIDE BASIN WATERMASTER



Chair, Seaside Basin Watermaster
Date: January 21, 2009

CALIFORNIA AMERICAN WATER



President, California American Water
Date: 1-29-2009

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

MODIFIED AND
APPROVED BY: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Discussion/Consider Approving a Professional Services Contract with HydroMetrics for \$45,290.00 to update protective water levels and perform modeling work to evaluate replenishment scenarios.

RECOMMENDATIONS:

It is recommended that the Board approve the attached RFS No. 2012-04 for \$45,290.00 with HydroMetrics to perform groundwater modeling of Seaside Basin replenishment scenarios.

It is also recommended that if the Board decides to approve the contract that the Board approve the funding as outlined in the fiscal impact section of this report.

BACKGROUND:

At the Board's October 3, 2012 meeting one agenda item pertained to the "Memorandum of Understanding between Seaside Basin Watermaster and California American Water" (MOU) regarding CAW's Replenishment Assessments and Replenishment Assessment Credits. Specifically, this agenda item pertained to the development of a schedule under which CAW would repay the quantities of water that it has overpumped from the Seaside Basin, upon completion of its Monterey Peninsula Water Supply Project. The Board determined that it would handle this matter without TAC involvement. However, there was discussion on this matter at the October TAC meeting which led to Eric Sabolsice stating that he would approach the Board's Ad Hoc Committee (created for the purpose of working on this topic) to provide them the TAC's recommendation that modeling be done in order to assist in the development of a "feasible" replenishment schedule for use by Cal Am in fulfilling its MOU repayment obligations. At the TAC's November meeting there was further discussion about developing a proposed contract to have HydroMetrics perform the modeling work, so it could be presented for the Board's consideration at its November 29th Special meeting.

DISCUSSION

The TAC's discussion led to the conclusion that if modeling work is to be performed, it should include the following work to provide information on the following issues:

1. Develop revised protective water levels using more detailed hydrogeologic information about the Seaside Basin than was available when the first set of protective water levels was developed during preparation of the February 2009 *Basin Management Action Plan*.

This will likely result in slightly lower protective water levels that will be easier to achieve.

2. Model two replenishment scenarios:
 - a. Scenario 1: What groundwater levels will be if Cal Am provides 700 acre-feet per year (AFY) for Basin replenishment over a period of 25 years, and how these levels will compare to the water levels needed to protect the Basin against seawater intrusion (protective water levels). This scenario will provide information about how close to achieving protective water levels the Cal Am replenishment proposal will come.
 - b. Scenario 2: How much replenishment water will need to be supplied in order to enable Standard Producer pumping rates to be sufficiently reduced over a 25 year period in order to achieve protective water levels? If completely replacing Standard Producer pumping with replenishment water does not achieve protective water levels, additional replenishment water may be needed to recharge the Basin, either by injection or by spreading. This scenario will provide information on how feasible it would be to achieve protective water levels in a 25 year period.
3. Estimate the rate-of-approach of the offshore seawater intrusion front under both Scenarios to provide a sense of how fast the front is approaching the Basin under each Scenario.

The TAC felt that this work would provide a sound and logical basis for determining whether or not the Cal Am replenishment scenario represents a “feasible” replenishment scenario, as described in the MOU. The TAC also believed that the Judge would want to have the Scenario 1 and 2 data, along with information about the rate-of-approach of the seawater intrusion front, in order to render a decision on the acceptability of Cal Am’s replenishment proposal.

The attached RFS No. 2012-4 contains the scope of work developed as a result of the TAC’s discussion on this topic, and the cost proposal from HydroMetrics to perform this work. The cost proposed by HydroMetrics is \$45,290.

FISCAL IMPACT:

At the regular meeting of the Board of Director’s on June 6, 2012 three line items in the Monitoring and Management Plan Operations Budget were identified that could be deferred to a later fiscal year to cover the modeling work that was determined to be needed to request the court to suspend the 10% triennial phasing down of pumping from the Basin. Those three line items totaling \$55,000 of which only \$30,780 was needed to cover the modeling work; leaving \$24,220 to be used for “other purposes with Board approval”. The three budget approved line items that were identified and deferred were:

- Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions \$25,000
- Refine and/or Update the Basin Management Plan \$25,000
- Evaluate Coastal Wells for Cross-Aquifer Contamination Potential \$5,000

The is another \$13,519 remaining in the Monitoring and Management—Capital Fund that is available leaving only an additional amount of \$7,551 needed to total the \$45,290 required to fund the entire Professional Services Contract with HydroMetrics. It is suggested that the \$7,551 be taken from the budgeted contingency account which would leave \$32,033 remaining in the account ($\$39,584 - \$7,551 = \$32,033$).

Summary:

Remaining amount from deferred task items	\$24,220
Balance available in M&M – Capital Fund	13,519
M&M—Contingency Account	<u>7,551</u>
	<u>\$45,290</u>

ATTACHMENT:

1. HydroMetrics RFS No. 2012-04

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: November 30, 2012

RFS NO. 2012-04
(To be filled in by WATERMASTER)

TO: Derrick Williams
HydroMetrics LLC
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Perform groundwater monitoring as described in Attachment 1.
Completion Date: All work of this RFS shall be completed not later than 60 days from the date of execution of this RFS No. 2012-04.

Method of Compensation: Time and Materials (As defined in Section V of Agreement.)

Total Price Authorized by this RFS: \$ 45,290.00 (Cost is authorized only when evidenced by signature below.) (See Attachment 1 for Estimated Costs).

Total Price may not be exceeded without prior written authorization by WATERMASTER in accordance with Section V. COMPENSATION.

Requested by: _____ Date: _____
WATERMASTER Technical Program Manager

Authorized by: _____ Date: _____
WATERMASTER Chief Executive Officer

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1



519 17th Street, Suite 500
Oakland, CA 94612

Mr. Robert S. Jaques, Technical Program Manager
Seaside Basin Watermaster
83 Via Encanto
Monterey, CA 93940

November 20, 2012

Subject: Scope and Cost Estimate to Model Replenishment Repayment Scenarios

Dear Mr. Jaques:

HydroMetrics Water Resources Inc. is pleased to submit this scope and cost estimate for preparing revised Protective Water Levels for selected wells in the Seaside Basin, and for modeling the effects from two different Seaside Basin replenishment scenarios. The purpose of the modeling work is to evaluate whether protective groundwater elevations are achieved over Cal-Am's proposed repayment period of 25 years, or how much of a decrease in pumping and/or supplemental water supply is needed to achieve protective elevations over the 25 year period.

Our scope includes providing professional consulting services to the Seaside Groundwater Basin Watermaster for preparing and running an extended baseline scenario to 2042, and developing and running two repayment scenarios.

The two repayment scenarios are:

1. **25 Year Repayment Scenario** – Cal-Am pumps an annual total of 774 AFY (1,474 AFY less 700 AFY) from the Basin for a period of 25 years beginning in 2017.
2. **25 Years to Achieve Protective Elevations Scenario** – pumping in all Standard Producer wells in the Seaside Basin will be iteratively reduced to

*HydroMetrics Water Resources Inc. • 519 17th Street, Suite 500 • Oakland, CA 94612
(510) 903-0458 • (510) 903-0468 (fax)*

determine a pumping schedule that achieves protective elevations within 25 years through in-lieu recharge. If reducing these pumping levels to zero still does not achieve protective elevations, the additional amount of water needed to replenish and protect the Basin through spreading or injection will be determined.

The tasks required to model the above scenarios are described below.

Task 1. Revise Protective Groundwater Elevations

The protective groundwater levels developed in Chapter 2 of HydroMetrics' February 2009 *Basin Management Action Plan* (BMAP) will be revised based on additional knowledge about the hydrogeologic properties of the Basin which has been gained since the 2009 BMAP was prepared. This task will involve:

1. Revising the protective groundwater elevation analyses using aquifer parameters derived from the calibrated groundwater model, and a reasonable range of aquifer parameters around the calibrated values. This will provide more confident estimates of the 100% protective groundwater elevations that protect the full depth of the aquifers. Results from this task will include revised recommendations of the 100% depth protective groundwater elevation, as well as the range of uncertainty at each well.
2. Estimating the impact of protecting only 90% of the aquifer depth. We will estimate how far inland from each monitoring well the toe of the seawater intrusion may reach if we protect only 90% of the aquifer depth.

Task 2. Extend Model to 2042

The predictive Seaside Basin model currently extends out to 2031. For the proposed scenarios, model fluxes (recharge and pumping) need to be extended to 2042, to cover the 25 year period after 2017. This extended simulation will be the basis of the two scenarios. Only the amount of pumping will change between scenarios.

Task 3A. Develop and Run 25 Year Repayment Scenario

Cal-Am's annual production will be reduced to 774 AFY for the replenishment repayment period of 25 years. After the scenario has been developed, the model

will be run and outputs generated for tabular and graphical representation of groundwater elevations vs. protective groundwater elevations, and average coastal groundwater velocities which will be representative of the rate of approach of the offshore seawater intrusion front.

Task 3B. Iterate 25 Year Repayment Scenario to Achieve Protective Elevations

If protective groundwater elevations are not achieved within the 25 year repayment period in Task 3A, we will adjust production iteratively for the Standard Producers until protective elevations are reached by the end of the 25 year repayment period. Pumping from Standard Producer wells in the Seaside Basin will be reduced proportionally until protective groundwater elevations are reached. If this cannot be achieved even if the Standard Producer pumping rates are reduced to zero, the amount of supplemental water that will need to be replenished by spreading or injection into the Basin to achieve protective elevations will be determined. Tabular and graphical representation of groundwater elevations vs. protective groundwater elevations and average coastal groundwater velocities will be prepared to show the results of the scenario.

Task 4. Meetings

The budget includes time for three meetings. The first meeting will be by teleconference and will be used to finalize model assumptions. The second meeting will be used to present the final results to the TAC, with the third meeting used to present the results to the Board.

Task 5. Reporting

Model assumptions, descriptions of the extended simulation and two model scenarios, revised protective water levels (including a map showing the inland extent of seawater intrusion due to only protecting 90% of the aquifer), findings, conclusions, and recommendations will be summarized in a brief technical memorandum. A draft of the technical memorandum will be provided electronically to the Watermaster's Technical Program Manager in MS Word format for presentation and discussion with the Technical Advisory Committee (TAC) at the second meeting mentioned in Task 4. A final version of the Technical Memorandum, reflecting comments and issues raised by the Technical

Program Manager and the TAC will be provided electronically to the Technical Program Manager in MS Word format.

The estimated cost for the work discussed is \$45,290, as shown on the attached table.

Sincerely,

A handwritten signature in black ink that reads "Derrik Williams". The signature is written in a cursive, flowing style.

Derrik Williams, President
HydroMetrics Water Resources Inc.

**Cost Estimate for Seaside Groundwater Basin Watermaster
Professional Services to Model Cal-Am Replenishment Repayment Scenarios**

Tasks	HydroMetrics WRI Labor					Labor Total	Other Direct Costs	TOTALS
	Derrick Williams	Cameron Tana	Georgina King	Nick Byler				
	President	Vice-President	Senior Hydrogeologist	Staff Hydrogeologist	Hours	(\$)	(\$)	(\$)
Rates	\$190	\$180	\$160	\$110				
Task 1. Revise Protective Groundwater Elevations								
1.1. Revise Protective Elevation Models with Final Calibrated Model Aquifer Parameters. Rerun 100% Protection Models and Analyze.	8	34	0	0	42	\$ 7,640	\$ -	\$ 7,640
1.2. Run 90% Protection, Analyze Results and Prepare Map Showing Inland Extent of Seawater Intrusion at 90% Protection	8	12	16	0	36	\$ 6,240	\$ -	\$ 6,240
Subtotal Task 1					78	\$ 13,880	\$ -	\$ 13,880
Task 2. Develop and Run Base Simulation to 2042								
Extend Base Simulation to 2042	12	0	8	6	26	\$ 4,220	\$ -	\$ 4,220
Subtotal Task 2					26	\$ 4,220	\$ -	\$ 4,220
Task 3A. Develop and Run 25 Year Repayment Scenario								
3A.1. Develop Pumping Data	2	0	2	4	8	\$ 1,140	\$ -	\$ 1,140
3A.2. Run Model, Produce Tabular and Graphical Output on Protective Elevations and Groundwater Velocity	8	0	4	8	20	\$ 3,040	\$ -	\$ 3,040
Subtotal Task 3A					28	\$ 4,180	\$ -	\$ 4,180
Task 3B. Iterate 25 Year Repayment Scenario to Achieve Protective Elevations								
3B.1. Iterate Modeling to Determine How Much Water is Needed to Achieve Protective Elevations within 50 Years	24	0	0	16	40	\$ 6,320	\$ -	\$ 6,320
3B.2. Produce Tabular and Graphical Output on Protective Elevations and Groundwater Velocity	4	0	4	8	16	\$ 2,280	\$ -	\$ 2,280
Subtotal Task 3B					56	\$ 8,600	\$ -	\$ 8,600
Task 4. Meetings								
Assume Three Meetings - One to Finalize Model Assumptions, One to Present Results to TAC and, One to Present Results to Board	20	0	8	2	30	\$ 5,300	\$ 300	\$ 5,600
Subtotal Task 4					30	\$ 5,300	\$ 300	\$ 5,600
Task 5. Reporting								
Prepare Technical Memorandum describing Revised Protective Groundwater Elevations, Scenarios, Findings, Conclusions and Recommendations	8	2	32	16	58	\$ 8,760	\$ 50	\$ 8,810
Subtotal Task 5					58	\$ 8,760	\$ 50	\$ 8,810
TOTAL					276	\$ 44,940	\$ 350	\$ 45,290

Notes

Other Direct Costs includes mileage, postage, office supplies

ITEM. IX.

NEW BUSINESS

ITEM IX. A.

COMMITTEE REPORTS

ITEM NO. IX.A.1.

**TECHNICAL ADVISORY
COMMITTEE
(TAC)**

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager
MODIFIED AND APPROVED BY Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Discussion/Consider Approving the Seawater Intrusion Analysis Report (SIAR) for FY 2012

RECOMMENDATIONS:

It is recommended that the Board approve the Seawater Intrusion Analysis Report for WY 2012.

BACKGROUND:

HydroMetrics has prepared the Draft Seawater Intrusion Analysis Report (SIAR) for Water Year 2011-2012. The Executive Summary from the SIAR is attached. The SIAR examines the “health” of the Basin with regard to whether or not there are any indications that seawater intrusion is either occurring or is imminent. At its November 14, 2012 meeting the TAC reviewed the Draft 2012 SIAR and recommended it for approval by the Board

DISCUSSION

The key Conclusion contained in the SIAR is that depressed groundwater levels, continued pumping in excess of recharge and fresh water inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin. However, in spite of these factors, no seawater intrusion is currently observed in existing monitoring wells.

A trend toward increasing chloride concentration was observed in WY 2012 in three of the near-coast monitoring wells, as well as a decreasing sodium/chloride molar ratios in some of those wells. While it is too early to determine whether these are early indications of approaching seawater intrusion, this warrants increasing the monitoring frequency in those wells. The additional monitoring will be performed for the Watermaster by MPWMD under its existing contract with the Watermaster. Since this additional work was not known when their contract was initially prepared, an addendum to that contract will need to be issued to MPWMD during the first quarter of 2013 to compensate them for performing that additional work.

FISCAL IMPACT:

Unknown at this time, additional cost is expected to be modest.

ATTACHMENTS:

Executive Summary of the WY 2012 Seawater Intrusion Analysis Report. The complete SIAR is posted on the Watermaster’s website at <http://www.seasidebasinwatermaster.org/>, for review by those Board members who wish to examine the entire document, including all of its attachments.

Executive Summary

This annual report addresses the potential for, and extent of, seawater intrusion in the Seaside Groundwater Basin. Continued pumping in excess of recharge and fresh water inflows, pumping depressions near the coast, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin. No seawater intrusion is currently observed in existing monitoring and production wells, as demonstrated by the different tools and analyses that are used to investigate for evidence of seawater intrusion. However, there are two monitoring wells (PCA-West Deep and sentinel well SBWM-4) that need to be watched carefully over the next water year.

- Piper diagrams for groundwater samples collected from depth-discreet monitoring wells during Water Year 2012 show no changes in water chemistry towards seawater.
- No groundwater samples analyzed with Stiff diagrams are indicative of incipient seawater intrusion.
- Wells with increasing chloride concentrations over the past year are: PCA-West Deep, sentinel well SBWM-4 shallow, and SBWM-4 deep. The September 2012 chloride concentration in the PCA-West Deep well is only 4 mg/L below the chloride threshold value of 186 mg/L established in the Seawater Intrusion Response Plan (SIRP) for this well (HydroMetrics WRI, 2009c). The sentinel wells do not have chloride threshold values, however, the deep sample from well SBWM-4 is above the secondary MCL of 250 mg/L. The increasing trend seen in the shallow and deep samples from well SBWM-4 start at the same time as the PCA-West Deep well's increasing trend. Well SBWM-4 should be sampled quarterly at the same time as the PCA-West Deep well so that results can be correlated. No other increases from the current monitoring frequency are warranted. Quarterly data from PAC-West Deep and SBWM-4 need to be evaluated each quarter after results are received from the laboratory.
- The PCA-West Deep well and sentinel well SBWM-4 are the only wells with decreasing sodium/chloride ratios. If these trends continue and drop below 0.86, it could indicate seawater intrusion.
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing towards the coast. The deep aquifer maps show that higher chloride concentrations are limited to coastal monitoring wells PCA-West Deep and sentinel well SBWM-4.
- Although production wells have a different water quality than the monitoring wells, this is probably as a result of them being screened across both shallow and deep zones. The production well water qualities are not indicative of seawater intrusion.
- Groundwater levels continue to be below preliminary protective elevations in all deep coastal target monitoring wells (MSC deep, PCA-W, and Sentinel Well 3). Two of the three shallow wells' groundwater levels are above protective elevations: PCA-W shallow and CDM-MW4. MSC shallow remains below preliminary protective elevations.

Based on the findings of this report, the following recommendations should be implemented to continue to monitor and track potential seawater intrusion.

1. Analyze Data from PCA-West Deep Quarterly

Increasing chloride concentrations, decreasing sodium/chloride molar ratio, and chloride concentrations approaching the chloride threshold justify increasing how often data from well PCA-West Deep is evaluated. In the past, access issues due to windblown sands from the nearby dunes have prevented sampling in the first quarter of the water year. However, every effort must be made to collect a sample in the first quarter of WY 2013 to confirm the observed trends. Additionally, due to a change in sampling method from airlifting to micropurging in 2009, it would be prudent to collect samples using both methods to verify whether the change in water quality is an artifact of the sampling method. After each quarterly sampling event at this well, the data must be analyzed and documented.

2. Initiate Quarterly Water Quality Sampling and Analysis for Sentinel Well SBWM-4

Because nearby monitoring well PCA-West Deep has an increasing chloride trend with decreasing sodium/chloride molar ratio which matches the trends observed in SBWM-4, sampling at SBWM-4 needs to increase its sampling frequency from semi-annual to quarterly so that a direct comparison can be made with the quarterly samples collected at PCA-West Deep.

3. Evaluate Water Quality at Sand City Public Works Corp Yard Well

Due to the evolving water type being observed in the Piper diagram, the source of the irregular water quality at this well needs to be evaluated. The Piper and Stiff diagrams, and sodium/chloride molar ratio suggest that the source of high chloride is not seawater, however, this needs to be confirmed with further investigation into historical water quality of the area around the well.

4. Watermaster to Request Complete Sample Analysis for Production Wells

When Watermaster makes its annual request to producers for water quality data, the request will state that full results from one sample are to be reported. This ensures that the anions and cations balance and that anion/cation analyses can be carried out for this report.

5. Continue to Analyze and Report on Water Quality Annually

Seawater intrusion is a threat, and data must be analyzed regularly to identify incipient intrusion. Maps, graphs, and analyses similar to what are found in this report should continue to be developed every year.

6. Refine Preliminary Protective Groundwater Elevations

Once the water supply parameters of the Coastal Water Project are better defined, we recommend that the preliminary protective groundwater elevations be refined using final calibrated aquifer properties from the Seaside Basin groundwater flow model. It is expected that the protective elevations will decrease by a few feet, which will make them more practical to meet.

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJ: Watermaster Declaration of **NO** Replenishment Water Available for Water Year 2013

PURPOSE:

To notify all Seaside Groundwater Basin producers that the Watermaster has declared for Water Year 2013 that **NO** Artificial Replenishment Water is available to offset Over-Production in excess of the Operating Yield for the Seaside Groundwater Basin pursuant to the Amended Decision entered in the Seaside Adjudication.

RECOMMENDATION:

Consider approving the Declaration of No Artificial Replenishment Water Available for Water Year 2013.

DISCUSSION:

The Court has declared in Section III L 3 j iii of the adjudication Decision that in the event Watermaster cannot procure Artificial Replenishment Water to offset Operating Yield Over-Production during the ensuing Water Year that the Watermaster Board shall so declare in December that no Operating Yield Over-Production then in effect may occur during the ensuing Water Year.

Watermaster has determined that there is no foreseeable replenishment water available for Water Year 2013. As ordered by the Court at the January 12, 2007 hearing, an additional 10% reduction in Operating Yield will continue to be in effect for the entire Water Year 2013. *(Commencing with the fourth Water Year, and triennially thereafter the Operating Yield for both Subareas will be decreased by ten percent (10%) until the Operating Yield is equivalent of the Natural Safe Yield.)*

If potable water becomes available to the Watermaster during Water Year 2013, such as the City of Seaside golf course irrigation program creating in-lieu replenishment water in an amount necessary to offset the 10% reduction, all producers under the Decision would be notified of such availability and of any resulting adjustments to the limits of production.

ATTACHMENTS

- 1) Declaration of Unavailability of Replenishment Water for Water Year 2013 and limits on production.
- 2) Watermaster Producer Allocations Water Year 2013 including a continuing second triennial 10% Reduction for the entire Water Year.

NOTICE TO ALL SEASIDE GROUNDWATER PRODUCERS:

Case No. M66343 Amended Decision Section III.B.2.

Commencing with the fourth Water Year, and triennially thereafter, the Operating Yield for both Subareas will be decreased by ten percent (10%) until Operating Yield is the equivalent of the Natural Safe Yield unless:

- a. The Watermaster has secured and is adding an equivalent amount of Non-Native water to the Basin on an annual basis; or*
- b. The Watermaster has secured reclaimed water in an equivalent amount and has contracted with one or more of the Producers to utilize said water in lieu of their Production Allocation, with the Producer agreeing to forego their right to claim a Stored Water Credit for such forbearance; or*
- c. Any combination of a and b above which results in the decrease in Production of Native Water required by this Decision; or*
- d. The Watermaster has determined that Groundwater levels within the Santa Margarita and Paso Robles aquifers are at sufficient levels to ensure a positive offshore gradient to prevent seawater intrusion.*

The Watermaster has determined that the conditions necessary to avoid the ten percent Operating Yield reduction have not been met as follows:

1. Watermaster has not secured water for adding an equivalent amount of Non-Native water to the Basin on an annual basis. The Watermaster and the City of Seaside have, however, entered into a Memorandum of Understanding for Seaside's In-lieu Replenishment Program which may, in future water years, provide sufficient water to avoid an Operating Yield reduction.
2. The Watermaster has not secured reclaimed water in an equivalent amount.
3. The Watermaster has not secured Non-Native water or reclaimed water which results in the decrease in Production of Native Water required by the Decision.
4. The firm contracted by Watermaster for technical analyses continued to report in 2012 that Groundwater levels within the Santa Margarita and Paso Robles aquifers are not at sufficient levels to ensure a positive offshore gradient to prevent seawater intrusion, so the requirement for this item continues to not be met.

Section III.L.3.j.iii: Watermaster declares that for Water Year 2013 Artificial Replenishment Water is not available to offset Operating Yield Over-Production and producers are limited in production to the following quantities of water:

Coastal Subarea Alternative Producers:

Seaside (Golf)	540.00 acre-feet
SNG	149.00 acre-feet
Cypress (Calabrese)	14.00 acre-feet
Mission Memorial (Alderwood)	31.00 acre-feet
Sand City	9.00 acre-feet

Laguna Seca Subarea Alternative Producers:

Pasadera	251.00 acre-feet
Bishop	320.00 acre-feet
York School	32.00 acre-feet
Laguna Seca County Park	41.00 acre-feet

Coastal Subarea Standard Producers:

California American Water.....	2,668.89 acre-feet*
Seaside (Municipal)	218.87 acre-feet**
Granite Rock	179.80 acre-feet***
D.B.O. Development 30	353.99 acre-feet****

Laguna Seca Subarea Standard Producers:

California American Water.....	147.20 acre-feet
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-
- * Total is the 2012 base allocation of 2,668.9 acre-feet. California American Water has a negative balance of 1,093.10 acre-feet of stored water credit in WY 2012 from extractions out of the Basin through the CAW/MPWMD ASR Program in 2012, formalized through a Storage Agreement.
 - ** Total is the 2012 base allocation of 218.87 acre-feet.
 - *** Total includes 89.24 acre-feet of “free” carryover and 69.94 acre-feet of “not-free” carryover credit from previous water years, plus the 2012 base allocation of 20.62 acre-feet.
 - **** Total includes 180.23 acre-feet of “free” carryover and 136.35 acre-feet of “not-free” carryover credit from previous water years, plus the 2012 base allocation of 37.41 acre-feet.

WATERMASTER PRODUCER ALLOCATIONS WATER YEAR 2012 IN ACRE-FEET (AF)

INCLUDING A 10% REDUCTION FOR 100% OF THIS WATER YEAR

Initial Basin-Wide Operating Yield ⁽¹⁾	4480.00	Coastal Operating Yield ⁽¹⁾	3688.80
Natural Safe Yield (NSY) ⁽²⁾	3000.00	Laguna Seca Operating Yield ⁽¹⁾	791.20

ALTERNATIVE PRODUCER ALLOCATIONS

Coastal Subarea ⁽³⁾	AF	Laguna Seca Subarea ⁽³⁾	AF
Seaside (Golf)	540.00	Pasadera	251.00
SNG	149.00	Bishop	320.00
Calabrese	14.00	York School	32.00
Mission Memorial (Alderwood)	31.00	Laguna Seca County Park	41.00
Sand City	9.00		
Total⁽¹⁾	743.00	Total⁽¹⁾	644.00

STANDARD PRODUCER ALLOCATIONS

Coastal Operating Yield Available to Standard Producers (AF)		2945.80	Laguna Seca Operating Yield Available to Standard Producers (AF)		147.20		
Coastal Subarea	Standard Producer Allocations		AF Available to This Producer	Laguna Seca Subarea	Standard Producer Allocations		AF Available to This Producer
	Base Water Right % ⁽⁴⁾	Weighted % ⁽⁵⁾			Base Water Right % ⁽⁴⁾	Weighted % ⁽⁵⁾	
California American Water (CAW)	77.55%	90.60%	2668.89	CAW	45.13%	100.00%	147.20
Seaside (Municipal)	6.36%	7.43%	218.87				
Granite Rock	0.60%	0.70%	20.62				
D.B.O. Development No. 30	1.09%	1.27%	37.41				
Total	85.60%	100.0%	2945.80	Total	45.13%	100.0%	147.20

Allocation of Available Operating Yield Among Standard Producers	Base Water Right Available to this Producer (AF)	% NSY to SPA (Base Water Right / Total Water Right)	NSY Available to Producers (AF) Current Water Year	Free Carryover Credits from Prior Water Year	Not-Free Carryover Credits from Prior Water Year	Water Rights Transferred / Sold	Total Producer NSY (AF) (NSY Available + Free Carryover Credits)	Total Authorized Production in Current Water Year (Base Water Right Plus All Carryover) ⁽⁶⁾	Actual AF Pumped by Producer in WY 2012	Free Carryover Credits to WY 2013	Not-Free Carryover Credits to WY 2013	Stored Water Credits to WY 2013
			WY 2012 APA Pumped 528.3 AF									
		NSY 3000 - 528.3 AF =	2471.7									
California American Water	2816.09	91.0%	2250.42	0.00	31.84	0.00	2250.42	2847.93	3070.90	0.00	0.00	(1093.10)
Seaside (Municipal)	218.87	7.1%	174.91	0.00	12.42	0.00	174.91	231.29	233.72	0.00	0.00	0.00
Granite Rock	20.62	0.7%	16.48	72.73	65.83	0.00	89.21	159.18	0.00	89.21	69.97	0.00
D.B.O. Development No. 30	37.41	1.2%	29.90	150.28	128.89	0.00	180.17	316.58	0.00	180.17	136.41	0.00
Total	3093.00	100.00%	2471.70	223.00	238.98	0.00	2694.70	3554.98	3304.63	269.38	206.38	(1093.10)

Footnotes:

- (1) From page 17 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.
- (2) From page 14 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.
- (3) From page 21 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.
- (4) From Table 1 on page 19 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.
- (5) Calculated from the Base Water Right percentages in the adjacent column.
- (6) Base Water Right plus Free and Not Free Carryover Credit = 2012 Production Allocation (see 2012 Declaration from November 30, 2011 Watermaster board meeting)

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager
REVIEWED AND APPROVED BY: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Discussion/Consider Approving Watermaster Annual Report for WY 2012 due to be filed with the Court on or before December 15, 2012

RECOMMENDATIONS:

It is recommended that the Board approve the Watermaster Annual Report for WY 2012.

BACKGROUND:

The Watermaster submits an Annual Report to the Court after the end of each Water Year to fulfill one of its obligations under the Court Decision that created the Watermaster. This document summarizes and provides information on all of the Watermaster's principle activities of the year, and as required by the Decision, is organized into the following Sections:

- A. Groundwater Extractions**
- B. Groundwater Storage**
- C. Amount of Artificial Replenishment, if any, performed by Watermaster**
- D. Leases or sales of Production Allocation and Administrative Actions**
- E. Use of imported, reclaimed, or desalinated Water as a source of Water for Storage or as a water supply for lands overlying the Seaside Basin**
- F. Violations of the Decision and any corrective actions taken**
- G. Watermaster administrative costs**
- H. Replenishment Assessments**
- I. All components of the Watermaster budget**
- J. Water Quality Monitoring and Basin Management (including the following subsections):**

Water Quality Analytical Results

Management and Monitoring Program Work Plan

Basin Management Database

Enhanced Monitoring Well Network

Basin Management Action Plan (BMAP)

Seawater Intrusion Response Plan

Seawater Intrusion Analysis Report

Groundwater Modeling

Modeling Scenarios

Protective Water Levels

Aquifer Cross-Contamination Investigation

*Evaluation of Impacts of Temporary Suspension of 10% Pumping
Reductions*

K. Conclusions and Recommendations

DISCUSSION

The Preliminary Draft Annual Report was presented to the TAC for its review and input at the TAC's November 14, 2012 meeting. Attached is the body of the Final Draft 2012 Annual Report, reflecting input from the TAC. The complete Final Draft version is posted on the Watermaster's website at <http://www.seasidebasinwatermaster.org/>.

The Final Draft version will be made into a Final version, reflecting any comments or recommendations from the Board at today's meeting. The Final version will be submitted to the Court.

Due to the length of the Annual Report, rather than making a presentation at today's meeting, Staff will respond to questions about the Annual Report from the Board and the Public

FISCAL IMPACT

None

ATTACHMENTS:

Body of the Final Draft version of the Watermaster 2012 Annual Report.

SEASIDE BASIN WATERMASTER
FINAL DRAFT ANNUAL REPORT – 2012

Integral to the Superior Court Decision (Decision) rendered by Judge Roger D. Randall on March 27, 2006 is the requirement to file an Annual Report. The ruling of the Court originally required that the Annual Report be prepared and filed with the Court and mailed to all the parties on or before the 15th day of November every year for the preceding Water Year. The Court's subsequent Annual Report Review and Order entered on January 7, 2012 revised the deadline for submittal of Annual Reports to December 15. This 2012 Annual Report is being filed on or before December 15, 2012, consistent with the provisions of the Decision, as amended by the Annual Report Review and Order. This Annual Report addresses the specific Watermaster functions set forth in Section III. L. 3. x. of the Decision. In addition this Annual Report includes a section pertaining to Water Quality Monitoring and Basin Management.

A. Groundwater Extractions

The schedule summarizing the Water Year 2012 (WY 2012) groundwater production from all the producers allocated a Production Allocation in the Seaside Groundwater Basin is provided in Attachment 1, "Seaside Groundwater Basin Watermaster, Reported Quarterly and Annual Water Production From the Seaside Groundwater Basin for all Producers Included in the Seaside Basin Adjudication During Water Year 2012." For the purposes of this Annual Report Water Year 2012 is defined as beginning October 1, 2011 and ending on September 30, 2012.

B. Groundwater Storage

Monterey Peninsula Water Management District (MPWMD), in cooperation with California American Water (CAW), operated the Seaside Basin Aquifer Storage and Recovery (ASR) program during WY 2012. During WY 2012, a total of 131.27 acre-feet (AF) of water was diverted by CAW from its Carmel River sources during periods of flow in excess of the State Water Resources Control Board (SWRCB) bypass flow requirements, and transported through the existing CAW distribution system for injection and storage in the Seaside Basin at the MPWMD's Santa Margarita ASR site and CAW's Seaside Middle School ASR site. In WY 2012, rainfall in the area was about 65% of normal, but due to the rainfall distribution pattern throughout the season, Carmel River flow was only 29% of normal. Accordingly, the amount of water that was diverted for ASR purposes is considerably less than the amount that was diverted in WY 2011, because of the low rainfall and flow amounts, and also due to limitations on diversions associated with the SWRCB bypass flow requirements to maintain flows in the Carmel River. This is the only reported storage of non-native groundwater into the Seaside Basin in WY 2012.

Also during WY 2012, MPWMD and CAW initiated construction of the second ASR well at the Seaside Middle School ASR site. This is the fourth ASR well in the basin, and it is anticipated to be ready for permanent service in late 2013. In addition, utilization of new pipeline connections from the Seaside Middle School to the Santa Margarita ASR facility began in WY 2012. Use of these pipeline connections will allow routine backflushing of the two Seaside Middle School site ASR wells to occur at the existing backflush basin at the Santa Margarita site

on an interim basis until a permanent backflush basin can be installed for this purpose. The new ASR wells at the Seaside Middle School site will eventually provide over twice the existing capacity to inject and store excess Carmel River winter flows, and their completion satisfies orders and decisions recently issued by the State Water Resources Control Board and California Public Utilities Commission.

Based upon production reported for WY 2011, the following Standard Producers are entitled to Free and Not-Free Carryover Credits in accordance with the Decision, Section III. H. 5. for WY 2012:

<u>Producer</u>	<u>Free Carryover Credit</u> <u>(Acre-feet)</u>	<u>Not-Free Carryover Credit</u> <u>(Acre-feet)</u>
Granite Rock	89.21	69.97
DBO Development	180.17	136.41
CAW	0.00	0.00
City of Seaside Muni	0.00	0.00

C. Amount of Artificial Replenishment, if any, performed by Watermaster

Per the Decision, “Artificial Replenishment” means the act of the Watermaster, directly or indirectly, engaging in contracting for Non-Native Water to be added to the Groundwater supply of the Seaside Basin through Spreading or Direct Injection to offset the cumulative Over-Production from the Seaside Basin in any particular Water Year pursuant to Section III.L.3.j.iii. It also includes programs in which Producers agree to refrain, in whole or in part, from exercising their right to produce their full Production Allocation where the intent is to cause the replenishment of the Seaside Basin through forbearance in lieu of the injection or spreading of Non-Native Water (referred to herein as “In-lieu Replenishment”).

The Watermaster has interpreted the above language to mean that the following Artificial Replenishment action was undertaken in WY 2012:

Watermaster indirectly engaged in In-lieu Replenishment of the Basin during Water Year 2012. Non-native water was made available to the Basin during Water Year 2012 and is foreseeable for Water Year 2012 under a Memorandum of Understanding and Agreement entered into by Watermaster with the City of Seaside for its golf course irrigation program creating in-lieu replenishment water. 298.2 acre-feet was in-lieu replenished to the Basin by the program in Water Year 2012.

D. Leases or sales of Production Allocation and Administrative Actions

No sale of Production Allocation and no actions pertaining to real property and/or water rights occurred during WY 2012.

At its October 3, 2012 meeting the Watermaster Board adopted revisions to its *Rules and Regulations*. These revisions pertained to the appointment of officers to committees in the third sentence in Section 3.3. The wording of that sentence was changed from “The Watermaster

Board shall appoint the Chairperson of any such committee or subcommittee” to read “Committee or subcommittee members shall elect the Chairperson and any other officers of any such committee or subcommittee.”

During WY 2012 the Watermaster Board was comprised of the following Members and Alternates:

<u>MEMBER</u>	<u>ALTERNATE</u>	<u>REPRESENTING</u>
Director Paul Bruno	N/A	Coastal Subarea Landowner
Director Craig Anthony Director Eric Sabolsice	Eric Sabolsice Brian Bruce (effective January 2012)	California American Water
Director Bob Costa	N/A	Laguna Seca Subarea Landowner
Director Bob Brower	Judi Lehman	MPWMD
Mayor Dave Pendergrass	Steve Matarazzo	City of Sand City
Supervisor Dave Potter	Jane Parker	Monterey County (MCWRA)
Mayor Jerry Edelen	Kristin Clark	City of Del Rey Oaks
Mayor Chuck Della Sala	Libby Downey	City of Monterey
Mayor Felix Bachofner	Dennis Alexander	City of Seaside

E. Use of imported, reclaimed, or desalinated Water as a source of Water for Storage or as a water supply for lands overlying the Seaside Basin

The CAW/MPWMD ASR Program occurred in WY 2012 with 131.3 acre-feet of water injected into the Basin as Stored Water Credits and 1,224.3 acre-feet extracted.

In addition to the water imported from the Carmel Basin for the ASR program described in **Section B** above, during WY 2012 298.2 acre-feet of imported water was used to irrigate golf courses owned by the City of Seaside overlying the Seaside Basin, as discussed above in **Section C**. The terms and conditions under which this in-lieu replenishment water was used to generate a credit to be applied against the City of Seaside’s overproduction replenishment assessments is described in the “Memorandum of Understanding Between the Seaside Basin Watermaster and the City of Seaside” which was contained in Attachment 3 to the Watermaster’s 2010 Annual Report. This is the only imported, reclaimed or desalinated water used either directly or for storage in the groundwater basin that has been reported to the Watermaster during WY 2012.

As reported in Section E of the 2010 Annual Report, the MPWMD, City of Seaside, MCWD, and Watermaster developed an MOU to add an additional 68.8 acre-fee of in lieu replenishment to the City of Seaside's total in lieu replenishment for Water Year 2009/2010. This MOU was finalized and executed in early 2012, and a copy of the MOU is contained in Attachment 5. This will result in a revision to the Replenishment Account balance sheet for Water Year 2009/2010.

F. Violations of the Decision and any corrective actions taken

Section III. D. of the Decision enjoins all Producers from any Over-Production beyond the Operating Yield in any Water Year in which the Watermaster declares that Artificial Replenishment is not available or possible. Section III. L. 3. j. iii. requires that the Watermaster declare the unavailability of Artificial Replenishment in December of each year, so that the Producers are informed of the prohibition against pumping in excess of the Operating Yield

The Watermaster made a declaration regarding the availability of Artificial Replenishment for WY 2012 at its Board meeting of November 28, 2012. A copy of this declaration is contained in Attachment 2. In WY 2012 the Watermaster continued the 10% water production reduction that was implemented in WY 2010, as required under Section III.B.2 of the Decision. In WY 2012 the Watermaster implemented an additional 10% water production reduction, also as required under Section III.B.2 of the Decision.

Total pumping for WY 2012 did not exceed the Operating Yield (OY) for the Seaside Basin, but it did exceed the Natural Safe Yield (NSY) of the Basin.

CAW and the City of Seaside reported annual pumping quantities that exceeded their Standard Production NSY allocations by 597.51 and 56.39 acre-feet, respectively, and reported annual pumping quantities that exceeded their Operating Yield allocations by 222.97 and 2.43 acre-feet, respectively. The City of Seaside did not exceed its Alternative Production NSY. The Watermaster will assess CAW and the City of Seaside a Replenishment Assessment for these over productions, as further described in Section H, below.

G. Watermaster administrative costs

The total estimated Administrative costs through the end of Fiscal Year 2012 amounted to \$85,000 including a \$25,000 dedicated reserve. Costs include maintaining an office and paying a part time administrator and some part time staff to take and transcribe minutes of the Watermaster Board meetings during 2012. The "Fiscal Year 2012 Administrative Fund Report" is provided as Attachment 3.

H. Replenishment Assessments

A Replenishment Assessment of \$2,780 per acre-foot was established by the Watermaster Board at its October 7, 2009 meeting for use against WY 2010 pumping, and this same unit cost was used for WY 2012. At its meeting of October 3, 2012 the Watermaster Board determined that this same \$2,780 per acre-foot Replenishment Assessment unit cost should be used against WY 2013 pumping. The Agenda transmittal from that meeting discussing this determination is contained in Attachment 4.

Alternative and Standard Producers report their production amounts from the Basin to the Watermaster on a quarterly basis. Based upon the reported production for WY 2012, CAW's Replenishment Assessment for Overproduction in excess of its share of the Natural Safe Yield is \$1,661,089.98, and for Overproduction in excess of its share of the Operating Yield is \$619,853.40. The City of Seaside's Replenishment Assessment for its Municipal System for Overproduction in excess of its share of the Natural Safe Yield is \$156,751.85, and for overproduction in excess of its share of the Operating Yield is \$6,756.65. The City of Seaside did not exceed its Alternative Production Allocation for its Golf Course System production. A summary of the calculations for Replenishment Assessment for WY 2012 is contained in Attachment 5.

I. All components of the Watermaster budget

The Watermaster budget has four separate funds: Administrative Fund; Monitoring & Management–Operations; Monitoring and Management–Capital Fund and; Replenishment Fund. Copies of the Fiscal Year 2013 adopted budgets are contained in Attachment 6. The Chief Executive Officer provides monthly financial status reports to the Watermaster Board on all financial activities for each month with year-to-date totals.

K. Water Quality Monitoring and Basin Management

Water Quality Analytical Results

Groundwater quality data continued to be collected and analyzed on a quarterly basis during WY 2012 from the enhanced network of monitoring wells. As initiated in 2009, a new low-flow sampling method continued to be implemented to improve the efficiency of sample collection, and will continue to be employed during the upcoming year. Where feasible, water quality at selected locations may continue to be supplemented with continuous water-quality dataloggers to offset the reduction in sample collection frequency. No modifications to the quarterly data collection frequency at these wells are being proposed for WY 2013, but consideration will be given to reducing the sampling frequency from quarterly to semi-annually at selected monitor wells that continue to exhibit stable water-quality results. Any recommendations for future changes in sampling frequency will be included in the 2013 Annual Report.

In addition, quarterly geophysical (induction) logging continued to be performed at the four Watermaster Sentinel wells that were installed in 2007. The induction logging results have shown very little variations and trends have been steady since this monitoring began, indicating that the coastal water quality conditions are not changing at this sample frequency. Therefore, beginning in WY 2010, as approved by the Court's Order dated February 19, 2010, the induction logging frequency was reduced to semi-annually at these wells. Water samples from these wells continue to be collected on an annual basis.

Beginning in WY 2012 water quality analyses were expanded to include barium and iodide ions. These expanded analyses will be continued in WY 2013 for the four Watermaster Sentinel wells (SBWM-1, SBWM-2, SBWM-3, and SBWM-4), and also for the 3 most coastal MPWMD monitoring wells (MSC, PCA, and FO-09).

Copies of the sampling results are contained in Attachment 7. Analysis of the results indicate no evidence of water quality changes indicative of seawater intrusion at the locations and depths sampled in the coastal areas of the basin.

All of the recommendations contained in the report in Attachment 7 are being actively pursued by the Watermaster. Funds to pursue these recommendations have been included in the adopted FY 2012 budgets contained in Attachment 6.

Management and Monitoring Program Work Plan

The Management and Monitoring Program (M&MP) 2013 Work Plan contained in Attachment 9 includes the types of basin management activities conducted in prior years as well as revisions recommended by the TAC when it reviewed the Draft M&MP 2012 Work Plan at its August 8, 2012 meeting, and the following revisions that resulted from subsequent discussions with MPWMD and HydroMetrics representatives:

- Installation of additional dataloggers on certain wells under Task I.2.b.2
- Completing well retrofits and providing ongoing maintenance funding for the sample collection equipment under Task I.2.b.3
- Incorporating into the Watermaster's Database data from wells that were newly identified by the work performed in 2012 under Task I.3.d (considered under item IX.A.1.b) above.)
- Compiling historical and current water quality data in the coastal area to provide more in-depth evaluation of conditions in the shallow Dune Sand/Aromas Sand aquifer in the vicinity of the Sand City Public Works well, where unique water quality conditions and variability have recently been observed as discussed at TAC meetings. This work is under Task I.4.b.

Basin Management Database

Pertinent groundwater resource data obtained from a number of sources has been consolidated into the Watermaster's database to allow more efficient organization and data retrieval. No modifications or enhancements to the database are planned in FY 2012.

Enhanced Monitoring Well Network

The Seaside Basin M&MP uses an Enhanced Monitoring Well Network to fill in data gaps in the previous monitoring well network used by the Monterey Peninsula Water Management District (MPWMD), and others, in order to improve the Basin management capabilities of the Watermaster. The Enhanced Monitoring Well Network has been described in detail in previous Watermaster Annual Reports. It continues to be used to obtain additional data that is useful to the Watermaster in managing the Basin.

Basin Management Action Plan (BMAP)

HydroMetrics LLC was hired by the Watermaster to prepare the BMAP which contains these Sections:

- Executive Summary
- The Background and Purpose of the Plan
- The State of the Basin
- Supplemental Water Supplies (long-term water supply solutions)

- Groundwater Management Actions (to be taken as interim measures while long-term supplies are being developed)
- Recommended Management Strategies
- References

The Final BMAP was approved by the Watermaster Board at its February 2009 meeting, and the Executive Summary from the BMAP was contained in Attachment 9 of the 2009 Annual Report. The complete document may be viewed and downloaded from the Watermaster's website at: <http://www.seasidebasinwatermaster.org/>.

Updating of the BMAP was planned for FY 2010, and again in FYs 2011 and 2012, but certain information (coming from other parties) that would be needed to perform that work was still not available. Therefore, updating the BMAP has been rescheduled for FY 2013, as described in the M&MP Work Plan contained in Attachment 9.

Seawater Intrusion Response Plan

HydroMetrics LLC was hired by the Watermaster to prepare a long-term Seawater Intrusion Response Plan (SIRP), as required in the M&MP.

The Final SIRP was approved by the Watermaster Board at its January 2009 meeting, and a summary of the Seawater Intrusion Contingency Actions from the SIRP were contained in Attachment 10 of the 2009 Annual Report. The complete document may be viewed and downloaded from the Watermaster's website at: <http://www.seasidebasinwatermaster.org/>.

Seawater Intrusion Analysis Report

The Watermaster retained HydroMetrics LLC to prepare the WY 2012 Seawater Intrusion Analysis Report (SIAR) required by the M&MP. The WY 2012 SIAR provides an analysis of data collected during this Water Year.

The WY 2012 SIAR states that depressed groundwater levels, continued pumping in excess of recharge and fresh water inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin. In spite of these factors, the SIAR reports that neither the Piper nor the Stiff Diagrams indicate the presence of seawater intrusion in the existing monitoring wells. However, a trend toward increasing chloride concentration in a few of the near-coast monitoring wells, and decreasing sodium/chloride molar ratios in some of those wells warrants increasing the monitoring frequency in those wells.

As discussed in Attachment 7, a low-flow sampling technique was implemented in 2009, replacing the previously used air-lift sampling technique. The cause of these changes in water quality at these wells may be related to this change in the method samples are collected. This will be evaluated early in WY 2013, as noted in Attachment 7.

The SIAR is lengthy, but the full *Executive Summary Section* from it is provided in Attachment 8. A complete copy of the document may be viewed and downloaded from the Watermaster's website at: <http://www.seasidebasinwatermaster.org/>. All recommendations contained in the

SIAR are being carried out and are included in the budgeted activities contained in Attachment 6 and described in Attachment 9.

The Watermaster continues to analyze the data that is being gathered at the various monitoring sites in order to keep a close watch on the conditions within the Basin, as discussed under the “Enhanced Monitoring Well Network” heading above.

Groundwater Modeling

During FY 2009 the previous Groundwater Model of the Basin was updated and a separate Groundwater Model was developed to determine protective water levels within the Basin. The modeling work was performed by HydroMetrics LLC. This Model development work was described in the 2009 Annual Report.

Modeling Scenarios

In FY 2010 one Scenario was modeled using the updated Groundwater Model. This was a scenario to evaluate the potential effects of additional pumping in the Laguna Seca Subarea. A full copy of the Technical Memorandum describing that work was contained in Attachment 14 of the Watermaster’s 2010 Annual Report.

A second Scenario was planned for modeling in FY 2012, and again in FY 2012. This scenario was to model the effects of implementing the “Monterey Regional Water Supply Project –Phase 1” as that project is defined in the Final EIR for the Coastal Water Project. A key component of this project will be a Regional Desalination Plant. That scenario (Scenario 2) was described in Section J of the 2010 Annual Report.

However, because the data needed to perform modeling of Scenario 2 was still being developed by others during FYs 2011 and 2012, the Watermaster deferred proceeding with work on Scenario 2. The Scenario 2 modeling work has been included in the Monitoring and Management Program Scope of Work and Budget for FY 2013, so that this work can be performed if the more definitive data necessary to perform this work becomes available.

Protective Water Levels

In FY 2009 the Watermaster completed development of preliminary Protective Water Levels (PWLs) for each of the Basin’s production aquifers at the locations of several coastal wells. There was discussion of performing refined analyses and/or to determine how the PWLs would be affected if less than 100% of the Basin was to be protected. Performing these refinements was included as a Task in the 2010, 2011, and 2012 M&MP Work Plans, and in their respective M&MP Budgets.

However, water supply information from the Regional Water Supply Project that would be needed to perform that work was still not available in 2012. There was consensus that there was no danger at this time in delaying refining the Protective Water Levels. Therefore, refining the PWLs has been rescheduled and budgeted for FY 2013, as described in the M&MP Work Plan contained in Attachment 9.

Aquifer Cross-Contamination Investigation

In 2012 MPWMD completed its evaluation of coastal wells for cross-aquifer contamination potential. This work consisted of the following tasks:

1. Field verifying selected older steel cased wells.
2. Inspecting well logs to assess proper seal placement to isolate aquifers.
3. Investigating the Santa Margarita – Purissima interface.
4. Investigating video logging of selected wells suspected to be conduits for cross-contamination.
5. Identifying abandoned wells that are screened in the Santa Margarita aquifer.

This work was undertaken because if seawater intrusion were to reach any of the coastal wells in any aquifer, and if a well was constructed without proper seals to prevent cross-aquifer communication, or if deterioration of the well had compromised these seals, it would be possible for the intrusion to flow from one aquifer to another. The potential sources of cross-contamination between the primary aquifers within the Seaside Groundwater basin (the confined Santa Margarita aquifer and the unconfined Paso Robles aquifer) include: (1) cross-screened wells (i.e., wells screened in both the Paso Robles and Santa Margarita/Purissima aquifers), (2) poorly-constructed wells (i.e., inadequate seals between aquifers), (3) cracked casing due to age and/or deterioration of construction materials, and (4) abandoned or improperly destroyed wells.

The work performed in this study included examining well records and performing field verifications to determine if any obvious problems existed in terms of well location, construction, maintenance, or abandonment which would pose a potential cross-aquifer contamination risk, if sea water intrusion were to reach the locations of these wells. For 261 wells, no problems related to maintenance or abandonment were evident from this work. However, 18 wells were identified to exist in the coastal zone and to be either completed in two aquifer zones or to have been drilled through the upper aquifer and completed in the deeper aquifer. These are potential conduits for seawater intrusion, as wells screened in two aquifers potentially provide a direct connection and wells completed in the deeper zone could contribute to cross-aquifer contamination through improperly constructed or failed seals. The 18 identified wells are currently being used as production, backup production, or monitoring wells.

If seawater intrusion were to be detected in the locality of one or more of these wells at some future date, it will be necessary to perform focused evaluation to inspect the integrity of well materials and determine the effects of well completions on the movement of seawater between aquifers at specific wells on a case by case basis. Seawater intrusion has not been detected or reported in the locality of any of these wells. Therefore, no further investigative work is warranted at this time.

A complete copy of the MPWMD investigation is contained in [Attachment 10](#).

Evaluation of Impacts of Temporary Suspension of 10% Pumping Reductions

In FY 2012 groundwater modeling was performed to help the Board decide whether or not to seek approval from the Court to temporarily suspend pumping reductions that are currently required under the Adjudication Decision. The rationale for making such a request to the Court is that to date no evidence of seawater intrusion, or even the imminent onset of seawater

intrusion, has been detected in the Seaside Basin, whereas there exists a current condition in the Carmel River Basin which requires that water diversions be reduced. Temporarily suspending the 10% pumping reductions in the Seaside Basin until Water Year 2018 (which begins on October 1, 2017) would help to reduce the adverse impacts of water rationing and water conservation measures that may have to be imposed while CAW implements a project to reduce its Carmel River Basin diversions to comply with the State-imposed Cease and Desist Order. The Board determined that it would make this request to the Court through a separate filing in either late 2012 or early 2013.

K. Conclusions and Recommendations

The Seaside Basin Watermaster Board has worked diligently to meet all of the Court’s established deadline dates. All of the Phase 1 Scope of Work activities, which are described in the “Implementation Plan for the Seaside Basin Monitoring and Management Program” dated March 7, 2007, have been completed. At the Watermaster Board meeting held on October 3, 2012 the Board adopted the budgets contained in Attachment 6, which support carrying out all elements of the “Seaside Groundwater Basin Management and Monitoring Program Anticipated 2013 Work Plan.” That Work Plan describes the M&MP activities that will be conducted during Fiscal Year 2013. A copy of this Work Plan is contained in Attachment 9.

As described in **Section J** above, information from the Enhanced Monitoring Well Network is being utilized to detect any seawater intrusion. The response actions described in the Watermaster’s Seawater Intrusion Response Plan, which was contained the 2009 Annual Report, will be implemented if seawater intrusion is detected within the Basin.

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Laura Dadiw, Assistant to the CEO

APPROVED BY: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJECT: Extension to the Memorandum of Understanding (MOU) between Watermaster and City of Seaside for the Golf Course In Lieu Replenishment Program (Program)

PURPOSE:

To extend the MOU between Watermaster and the City of Seaside for the City of Seaside golf course in lieu replenishment program beyond the expiration date of December 30, 2012.

RECOMMENDATION:

Consider having legal counsel draft an extension to the MOU between Watermaster and the City of Seaside for the City of Seaside golf course in lieu replenishment program beyond the expiration date of December 30, 2012.

BACKGROUND:

The attached MOU between the Seaside Basin Watermaster and the City of Seaside effective April 7, 2010 was approved by the Watermaster Board at its April 7, 2010 meeting. The MOU allowed for the City of Seaside to engage in its golf course in lieu replenishment program in exchange for a monetary credit against its Watermaster Replenishment Assessment liability.

DISCUSSION:

The term of the MOU "shall commence upon the Effective Date and continue until the earlier of five (5) years from the Effective Date, or three (3) months following the end of the Water Year in which the Chief Executive Officer of Watermaster anticipates that the City shall have provided sufficient in lieu replenishment water pursuant to the Program to offset all of its then-accrued Replenishment Assessment liability.

The MOU is set to expire on December 30, 2012 according to its terms. A copy of the Watermaster Replenishment Assessment financial report through November 29, 2012 is attached showing that the City "shall have provided sufficient in lieu replenishment water pursuant to the Program to offset its then-accrued Replenishment Assessment liability" at the end of Water Year 2012. A credit of \$678,596 is showing for City of Seaside as of November 29, 2012 for its Replenishment Assessments from Watermaster.

According to the terms of the MOU, an extension is to be negotiated in good faith between the parties, since it appears the City intends to continue the program into 2015, as indicated by the following data sent by Rick Riedl of the City of Seaside to Hydrometrics for use in its recent groundwater scenario modeling work:

Date	QTY Water	Balance	Comments
			68.8 AF Repayment to MCWD for MPWMD
9/30/2010	(388.35)	(388.35)	ASR test
2/2/2012	2,500.00	2,111.65	MOU In Lieu Replenishment
9/30/2011	(411.00)	1,700.65	Actual water delivery by MCWD
9/30/2012	(454.00)	1,246.65	Estimated water delivery
9/30/2013	(430.00)	816.65	Estimated water delivery
9/30/2014	(430.00)	386.65	Estimated water delivery
8/24/2015	(386.65)	0.00	Estimated water delivery

Russ McGlothlin of the law firm Hatch and Parent, representing the City of Seaside, developed the MOU originally and the Board may want to consider a request that he develop the MOU extension document.

FISCAL IMPACT:

Minimal

ATTACHMENTS:

Draft Memorandum of Understanding between Seaside Basin Watermaster and the City of Seaside dated April 7, 2010.

Watermaster Replenishment Fund financial report through November 29, 2012

MEMORANDUM OF UNDERSTANDING BETWEEN THE SEASIDE BASIN WATERMASTER AND THE CITY OF SEASIDE

This Memorandum of Understanding ("MOU") is entered into between the Seaside Groundwater Basin Watermaster ("Watermaster") and the City of Seaside ("City") (individually a "Party" and together the "Parties") this 7 day of April, 2010 ("Effective Date") with respect to the following:

RECITALS

A. The amended final decision ("Decision") entered in the lawsuit, California American Water v. City of Seaside et al., Monterey Superior Court, (Case No. M 66343) governs groundwater production within the Seaside Groundwater Basin (the "Basin").

B. The City is a party to the lawsuit and received groundwater production allocation pursuant to the Decision as follows: (1) 540 acre-feet of Alternative Production Allocation¹ in relation to the City-owned Blackhorse and Bayonet Golf Courses ("Golf Courses"); and (2) Standard Production Allocation in relation to the City Municipal Water System.²

C. The Decision provides that any party that exceeds its allocation of Natural Safe Yield is subject to a Replenishment Assessment for each acre-foot of Over-Production during each Water Year.

D. The City presently owes certain sums to Watermaster for previously accrued Replenishment Assessments.

E. The City projects that it will continue to engage in Over-Production to supply its Municipal Water System, and potentially its Golf Course System, and therefore anticipates that it will continue to incur additional Replenishment Assessment liability.

F. The Decision obligates the Watermaster to procure new sources of water for replenishment of the Basin to offset cumulative Over-Production.

G. The Parties have identified an in lieu replenishment program ("Program") involving the Golf Courses and the City's Alternative Production Allocation associated with the Golf Courses, which is a viable means to obtain some of the replenishment water that Watermaster is obligated to procure.

H. To implement the Program, the City has entered into an agreement with the Marina Coast Water District ("MCWD") to supply water to irrigate the Golf Courses in lieu of production of Basin groundwater for irrigation pursuant to the City's Alternative Production

¹ All capitalized terms used in this MOU are to be given the same meaning as set forth in the Decision, unless otherwise described.

² The Standard Production Allocation is set forth as a percentage of Operating Yield of the Coastal Subarea. The City's Standard Production Allocation is roughly 10.47% of the Operating Yield.

Allocation, thereby causing an in lieu replenishment of the Basin.³

I. The City desires to engage in the Program in exchange for a monetary credit against its Replenishment Assessment liability.

J. The Parties desire to enter into this MOU to memorialize the terms upon which the City shall engage in the Program, and the Watermaster shall provide the City with a monetary credit against its Replenishment Assessment liability.

AGREEMENT

The Parties agree as follows:

1. Term. This MOU shall commence upon the Effective Date and continue until the earlier of five (5) years from the Effective Date, or three (3) months following the end of the Water Year in which the Chief Executive Officer of Watermaster anticipates that the City shall have provided sufficient in lieu replenishment water pursuant to the Program to offset all of its then-accrued Replenishment Assessment liability.

2. Commencement and Scope of Program. The Program shall commence, if at all, only once the City deems it appropriate to commence the Program, in its sole discretion. The City shall notify the Watermaster CEO in writing of the date it intends to commence the program as far in advance as is feasible. The amount of in lieu replenishment that shall occur in any particular year pursuant to the Program, if at all, shall also be determined by the City in its sole discretion.

3. Accounting and Replenishment Assessment Credit.

3.1 Annual Accounting. During the term of this MOU, the City shall report to the Watermaster an accounting of the amount of water received from MCWD to be used in lieu of groundwater production from the Basin for the preceding calendar quarter, in writing, on or before January 15, April 15, July 15, and October 15 of each Water Year. The City shall record and report the MCWD deliveries based upon accurate meter readings. All meters used for such reporting shall be regularly calibrated and maintained by the City, or the City's representative, and at the City's expense to ensure accuracy. Prior to the commencement of the Program the City shall provide to the Watermaster an initial calibration report certifying the accuracy of the flowmeter which will measure the delivery of MCWD water to the City's golf courses. When and if requested by the Watermaster, the City will perform additional calibrations to verify meter accuracy. Such requests by the Watermaster will not be made more often than once every two years, unless metering data are indicative of metering inaccuracies. If the Watermaster disputes the reported quantity of MCWD deliveries, it shall inform the City of the basis of its objection within one (1) month of receipt of the City's accounting, and the Parties shall thereafter engage in good faith negotiations to attempt to resolve the dispute. Any dispute that cannot thereby be settled shall be referred to the Court for resolution.

3.2 Calculating Credit Against City's Replenishment Assessment Liability.

³ The water supply from Marina Coast Water District will initially be derived from Salinas Basin groundwater production and later reclaimed water, once available.

At the end of each Water Year, the Watermaster shall determine the cumulative gross Replenishment Assessment liability owed by the City in accord with Section 6.5 of the Watermaster's Rules and Regulations. The Watermaster shall then apply a credit against the City's gross Replenishment Assessment liability, which shall equal the amount of all MCWD deliveries to the Golf Courses for irrigation during the proceeding Water Year, not to exceed the City's 540 acre-feet of Alternative Production Allocation, multiplied by the amount of the effective Replenishment Assessment Unit Cost for that Water Year. Watermaster shall then promptly notify the City of the cumulative net Replenishment Assessment liability owed.

4. Temporary and Contingent Stay of Enforcement Proceedings for Un Paid Replenishment Assessments. To accommodate the City's efforts to offset its accrued Replenishment Assessments through the Program, enforcement against the City for unpaid Replenishment Assessments shall be stayed through the end of WY 2010. At the end of WY 2010, Watermaster shall make a recommendation to the Court in its Annual Report as to whether the stay of enforcement should be continued beyond this initial period. Watermaster's recommendation shall be based upon its determination of the relative success of the Program, the likelihood of the City continuing to make meaningful progression toward full offset of its accrued Replenishment Assessments, and whether Watermaster believes there is any other source of replenishment water available that could be purchased on an acre-foot basis in an amount at or below its Replenishment Assessment rate. If the stay is continued, Watermaster shall make such recommendations in each Annual Report thereafter until the stay is terminated, the City offsets all of its prior Replenishment Assessments pursuant to this MOU, or this MOU terminates. Should Watermaster recommend against continuation of the stay, the stay shall terminate unless otherwise ordered by the Court, and any continuation of the stay recommended by Watermaster shall be contingent upon consent by the Court.

5. Good Faith Negotiation of Program Extension. Upon termination of the initial term of this MOU, as set forth in Section 1 above, the Parties shall engage in good faith negotiations to determine whether the Program may be extended pursuant to mutual agreeable terms. No Party shall be obligated to commit to a Program extension or any particular term of a subsequent MOU for a Program extension.

6. Miscellaneous Terms. This Agreement shall be governed by and construed in accordance with the laws of California, without regard to conflicts of law principles, with venue for all purposes to be proper only in the County of Monterey, California. If any actions are required to interpret or enforce the provisions of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and costs. Any failure to enforce any provision of this Agreement shall not constitute a waiver thereof or of any other provision hereof. This Agreement constitutes the entire understanding and agreement of the Parties with respect to the subject matter of this Agreement, supersedes the earlier version of this Agreement, and there have been no promises, representations, agreements, warranties or undertakings by any of the Parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the Parties to this Agreement and by no other means. Each Party waives its future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by oral agreement, course of conduct, waiver or estoppel.

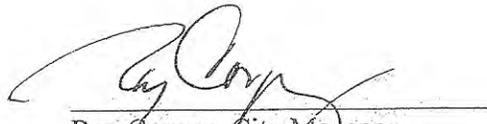
IN WITNESS WHEREOF the Parties hereby agree to perform pursuant to the terms set forth herein.

SEASIDE BASIN WATERMASTER

CITY OF SEASIDE



Dewey Evans, Chief Executive Officer
Date: April 7, 2010



Ray Corpuz, City Manager
Date: April 7, 2010

Seaside Groundwater Basin Watermaster										VI.B
Replenishment Fund										11/29/2012
Water Year 2012 (October 1 - September 30) / Fiscal Year 2012 (January 1 - December 31)										
Balance through November 29, 2012										
Replenishment Fund	2006	2007	2008	2009	2010	2011	2012	Totals Through WY 2011	Budget 2013	Projected Totals Through WY 2013
Assessments:	WY 05/06	WY 06/07	WY 07/08	WY 08/09	WY 09/10	WY 10/11	WY 11/12		WY 12/13	
Unit Cost:	\$1,132	\$1,132	\$16,538	\$3,040	\$2,780	\$2,780	\$2,780		\$2,780	
California American Water Balance Forward	\$ -	\$ 1,641,004	\$ 4,206,475	\$ (2,900,435)	\$ (2,868,685)	\$ (3,850,964)	\$ (6,088,910)		\$ (3,807,966)	
Exceeding Natural Safe Yield Considering Alternative Producers	2,106,652	2,484,533	5,164,969	3,773,464	4,112,933	3,187,854	1,661,090	\$ 22,491,495	3,449,961	\$ 25,941,456
Operating Yield Overproduction Replenishment	-	80,938	34,045	-	-	-	619,853	734,836	-	734,836
Total California American	\$ 2,106,652	\$ 2,565,471	\$ 5,199,014	\$ 3,773,464	\$ 4,112,933	\$ 3,187,854	\$ 2,280,943	\$ 23,226,332	\$ 3,449,961	\$ 26,676,293
CAW Credit Against Assessment	(465,648)		(12,305,924)	\$ (3,741,714)	(5,095,213)	(5,425,799)	-	(27,034,298)	-	(27,034,298)
CAW Unpaid Balance	\$ 1,641,004	\$ 4,206,475	\$ (2,900,435)	\$ (2,868,685)	\$ (3,850,964)	\$ (6,088,910)	\$ (3,807,966)	\$ (3,807,966)	\$ (358,005)	\$ (358,005)
City of Seaside Balance Forward	\$ -	\$ 230,671	\$ 413,454	\$ 1,106,116	\$ 1,737,569	\$ 988,414	\$ (13,109)		\$ (678,596)	
City of Seaside Municipal	332.0 AF	287.7 AF	294.3 AF	293.4 AF	282.9 AF	240.7 AF				
Exceeding Natural Safe Yield Considering Alternative Producers	169,200	173,739	385,642	399,211	231,961	141,335	156,752	\$ 1,657,840	150,000	\$ 1,807,840
Operating Yield Overproduction Replenishment	50,487	340	16,898	66,090	82,761	-	6,757	223,332	-	223,332
Total Municipal	219,687	174,079	402,540	465,300	314,721	141,335	163,509	1,881,172	150,000	2,031,172
City of Seaside - Golf Courses										
Exceeding Natural Safe Yield - Alternative Producer	-	-	131,705	69,701	-	-	-	201,406	-	201,406
Operating Yield Overproduction Replenishment	-	-	131,705	69,701	-	-	-	201,406	-	201,406
Total Golf Courses	-	-	263,410	139,402	-	-	-	402,812	-	402,812
Total City of Seaside*	\$ 219,687	\$ 174,079	\$ 665,950	\$ 604,702	\$ 314,721	\$ 141,335	\$ 163,509	\$ 2,283,984	\$ 150,000	\$ 2,433,984
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737			88,887		88,887
In-lieu Credit Against Assessment*	-		-	\$ -	(1,079,613)	(1,142,858)	(828,996)	(3,051,467)	(1,200,000)	(4,251,467)
City of Seaside Unpaid Balance	\$ 230,671	\$ 413,454	\$ 1,106,116	\$ 1,737,569	\$ 988,414	\$ (13,109)	\$ (678,596)	\$ (678,596)	\$ (1,728,596)	\$ (1,728,596)
Total Replenishment Fund Balance	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)	\$ (4,486,563)	\$ (4,486,563)	\$ (2,086,602)	\$ (2,086,602)
Replenishment Fund Balance Forward	-	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)		\$ (4,486,563)	
Total Replenishment Assessments	2,337,323	2,748,254	5,891,676	4,404,917	4,443,391	3,329,189	2,444,452	25,599,202	3,599,961	29,199,163
Total Replenishment Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(828,996)	(30,085,765)	-	(30,085,765)
Grand Total Replenishment Fund Balance	\$ 1,871,675	\$ 4,619,929	\$ (1,794,319)	\$ (1,131,116)	\$ (2,862,551)	\$ (6,102,019)	\$ (4,486,563)	(4,486,563)	\$ (886,602)	\$ (886,602)
* 2010 = 319.55 AF golf course in-lieu replenishment and 68.8 AF 4-party agmt in-lieu replenishment										
2011 = 411.1 AF golf course in-lieu replenishment										
2012 = 298.2 AF golf course in-lieu replenishment										

ITEM X.

**INFORMATIONAL
REPORTS**

(NO ACTION REQUIRED)

SEASIDE GROUNDWATER BASIN WATERMASTER CRITICAL MILESTONE DATES

ITEM X.A.

ANNUAL MILESTONES	Water Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	11/29/2012	
Alternative Producers may change to Standard Production by March 27 2009 (see amendment at right) by filing a declaraton with the Court and with the other parties.		27-Mar-06	30-Sep-07	APA to SPA election amended to in-perpetuity 12/12/2009										
Commencing with the fourth Water Year and Triennially thereafter, the Operating Yield for both Subareas will be decreased by 10% until the Operating Yield is equivalent to the Natural Safe Yield unless by recharge or reclaimed water use results in a decrease in production of Native Water as required by the decision.					75% of the Operating Yield of 5,600 decreased 10% in Jan 1, 2009; and 100% of 5,600 acre feet decreased 10/1/09			100% of the Operating Yield of 5,040 decreased another 10% of 5,600 on Oct 1, 2011			X,A	1-Oct		
After the close of each Water Year, the Watermaster will determine and levy a Replenishment Assessment against all Producers that incurred Operating Yield Over Production during the Water Year, with payment due from Producer 40 days after the mailing of a statement for the assessment by Watermaster.			15-Nov	30-Nov	30-Nov	30-Nov	23-Jan	30-Nov	30-Nov	30-Nov	30-Nov	30-Nov		
California American Water to submit annually to Watermaster any augmentation to water supply for possible credit toward Replenishment Assessment	Annually		15-Nov	CAW Credit Request Granted (signed MOU) January 15, 2009	CAW Credit Req Granted 2/3/10	CAW Credit Req Granted 2/2/11		1-Feb	15-Nov	15-Nov	15-Nov	15-Nov		
Water level monitoring - monthly data collectio from all members for inclusion in the consolidated database.	Reported Annually		Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly		
Water quality monitoring - yearly data collector from all members for inclusion in consolidated database	Reported Annually		15-Nov	28-Feb & 15-Nov	15-Nov	15-Nov	15-Nov	31-Aug	15-Nov	15-Nov	15-Nov	15-Nov		
Summary report of water resources data to all members/parties Reported the 15th each quarter month:	Quarterly		Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th	Jan, Apr, Jul, Oct 15th		
Annual Report to Court		15-Jan	15-Nov	15-Nov	15-Nov	23-Dec	8-Dec	15-Dec						
ADMINISTRATIVE MILESTONES	Calendar Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Adjudication ordered by Court and filed		27-Mar-06												
Board Directors Terms			7-Nov					1-Feb-12	1-Feb-12					
Budget (Administrative) Adopted / distributed						15-Jan-10	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan		
Budget (Operations) Adopted/distributed						15-Jan-10	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan		
Budget (Replenishment) Adopted / distributed						15-Jan-10	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan	15-Jan		
Administrative Assessments		15-Jan-06	15-Jan-07	15-Jan-08	15-Jan-09	15-Jan-10	15-Jan-11	NONE	15-Jan-13	15-Jan-14	15-Jan-15	15-Jan-16		
Operations Assessments		15-Jan-07	15-Jan-07	15-Jan-08	15-Jan-09	15-Jan-10	15-Jan-11	NONE	15-Jan-13	15-Jan-14	15-Jan-15	15-Jan-16		
Capital Assessments		15-Jan-07	15-Jan-07	NONE	15-Jan-09	NONE	NONE	NONE	15-Jan-13	15-Jan-14	15-Jan-15	15-Jan-16		
Replenishment Assessments		CAW credit	CAW credit	CAW credit	CAW credit	CAW credit	23-Jan-12	1-Feb-12	15-Jan-14	15-Jan-15	15-Jan-16	15-Jan-17		
Annual Report to Court		15-Nov-06	15-Nov-07	15-Nov-08	15-Nov-09	23-Dec-10	8-Dec-11	15-Dec	15-Dec	15-Dec	15-Dec	15-Dec		
Answers to Judge's Questions re: Annual Report		30-Jan-09	30-Jan-09	28-Feb-08	1-Feb-09	5-Feb-10	None	1-Aug-12						
Declaration of Replenishment Water Availability		Feb-06	Dec-06	Dec-07	18 Mar	2-Dec-09	1-Dec-10	30-Nov-11	Dec-12	Dec-13	Dec-14	Dec-15		
MONTHLY MILESTONES		2006-11	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12	Dec 12
Fiscal Year tentative budgets distribution to all parties												3-Oct-12		
Operating Yield of 5,600 decreased 10% ; Declaration of Replenishment Water Available		18-Mar-09												
Administrative Assessments													29-Nov-12	
Operations Assessments													29-Nov-12	
Capital Assessments													29-Nov-12	
Replenishment Assessments													Seaside In-Lieu Offset in progress	
Develop Repl Assessment Unit Cost													Same as last year	\$2,780
SPECIAL ISSUES		2006-10	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12	Oct 12	Nov 12	Dec 12
Cal-Am CWP/Alternative Projects EIR/Basin replenishment MOU														Basin Repayment Modeling
SWRCB Cease Desist Order California American Water	In Effect													
Storage and Recovery Application and Agreement Development	CAW on file with Watermaster													
Watermaster Board Regular Meeting Schedule 2012		1-Jan - cnc'l'd	1-Feb	7-Mar - cnc'l'd	4-Apr - cnc'l'd	2-May	6-Jun	11-Jul - cnc'l'd	1-Aug	5-Sep - cnc'l'd	3-Oct	29-Nov	5-Dec	
SUMMARY PROJECT SCHEDULE (See detailed project schedule for more information)														
Program Administration, Database Management(MPWMD)				1/1/12 - 12/31/12										
Coastal Wells Cross-Aquifer Contamination Potential Evaluation(MPWMD)				10/3/2012										Complete or deferred =
Production Water Level & Water Quality Monitoring (Hydrometrics, MPWMD)				1/1/12 - 12/31/12										Yet to be completed =
Refine/Update BMAP (Hydrometrics)				1/1/12 - 12/31/12										Scheduled for Board or TAC meeting =
Seawater Intrusion Analysis(Hydrometrics)				10/6/12-11/2/12										Imminent Critical Deadline =
														Revised November 15, 2012

D-R-A-F-T
MINUTES

**Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
October 10, 2012**

Attendees: TAC Members

City of Seaside – Rick Riedl (replaced at 2:48 p.m. by Leslie Llantero via phone)
California American Water – Eric Sabolsice
City of Monterey – Norm Green
Laguna Seca Property Owners – Bob Costa (arrived at 1:51 p.m.)
MPWMD – Joe Oliver
MCWRA – Rob Johnson (arrived at 2:35 p.m.)
City of Del Rey Oaks – Ron Langford (via phone)
City of Sand City – No Representative
Coastal Subarea Landowners – No Representative

Watermaster

Technical Program Manager - Robert Jaques

Consultants

HydroMetrics – Derrick Williams (via phone)

Others:

None

The meeting was called to order at 1:43 p.m. after waiting for a quorum to arrive.

1. Public Comments

There were no public comments.

2. Administrative Matters:

A. Approve Minutes from September 12, 2012 Meeting

On a motion by Mr. Riedl, seconded by Mr. Oliver, the minutes were unanimously approved as presented.

B. Administrative Update on Discussion of “Repayment” of Overpumped Groundwater

Mr. Jaques summarized the agenda packet materials for this item.

Mr. Sabolsice said that during the October 3rd Board meeting there was discussion that the TAC should weigh in on this issue. He went on to say he felt that without current evidence of seawater intrusion occurring in the Basin, he did not see how a schedule could be developed to meet the needs of the Basin. He noted that the Memorandum of Understanding (MOU) currently says that overpumped water shall be repaid on a "feasible" schedule. He wondered how the TAC could develop a feasible schedule any better than the Board could. He noted that the Board had formed an Ad Hoc committee to work on this, and that he is on that committee.

Mr. Green asked if CAW's plan was to repay the overpumped water debt with water from the new regional desalination plant. Mr. Sabolsice responded that ASR, GWRP, Sand City desalination, conservation, and regional desalination are all potential sources of the repayment water.

Mr. Oliver asked Mr. Sabolsice when CAW needed to have a schedule developed. Mr. Sabolsice said that CAW would like to have a defined schedule as soon as possible, so the regional desalination plant can be properly sized.

Mr. Sabolsice estimated that CAW's repayment debt will be about 18,000 acre feet by the time the regional desalination plant goes online. He is proposing a repayment period of 50 years with a water repayment rate of 350 acre feet per year. The cost to provide that capacity in the desalination plant will be about \$5 million, according to Mr. Sabolsice. The additional capacity costs flow to the rate-payers, and CAW would like to keep its rates as low as possible. Compressing the schedule too much will increase capital costs and will result in excess capacity in the desalination plant, once the water debt has been repaid.

Mr. Oliver asked if the Judge will likely need to weigh-in on the proposed schedule. Mr. Jaques responded that probably would be true, and that CAW's intent would be to amend the MOU to delete the word "feasible" and replace it with a defined schedule which would be an attachment to the amended MOU.

Mr. Costa asked when the desalination plant goes online will CAW continue pumping at its current 2,800 AFY rate from the Seaside Basin. Mr. Sabolsice responded that the regional desalination plant will provide sufficient water so that CAW's pumping in the Seaside Basin will be reduced to its Natural Safe Yield allowance of 1,474 acre feet per year.

Mr. Oliver noted that groundwater modeling performed to date has not included any repayment water. Such modeling could be done to show the impact of a proposed overpumped water repayment schedule. Mr. Sabolsice said that if seawater intrusion were to be detected in the Basin, the MOU should provide for revising the schedule to address that condition.

Mr. Jaques said that the Board might want the TAC to look at the reasonableness of CAW's proposal in terms of desalination plant sizing, costs, timing, etc. He also noted that modeling could be done to see if protective water levels can be lowered based on now having a better understanding of the Basin's hydrogeology. If protective water levels were lower, less repayment water might be needed to protect the Basin. Mr. Williams said that protective water levels are the gauge of whether the Basin is safe with regard to seawater intrusion.

Mr. Riedl said that the City of Seaside does not have an alternate source of water, so if seawater intrusion occurs and the Seawater Intrusion Response Plan has to be implemented, there will be significant impacts on the City's municipal water system. He said that Seaside would like to have groundwater levels brought up as quickly as possible. He noted that pumping from Seaside wells is becoming more difficult because the groundwater level at the City's wells has dropped. He went on to say the City may be forced to put in a new well to replace Well No. 4, and that this would be very costly. He noted that the Decision mentions "material damage" which could include Standard Producers having to pay more to produce water. He suggested some "rough cut" groundwater model runs be initially performed to better understand Basin response to various replenishment scenarios prior to refining the Protective Water Levels model.

There was discussion of several topics including what the modeling scenarios might be, what Seaside Golf Course pumping will be once the current in-lieu program concludes, how long it would take for HydroMetrics to perform modeling, and whether an economic evaluation of the proposed repayment schedule should be done. One suggested potential modeling scenario was in-lieu replenishment by Cal Am pumping less from the Basin. Mr. Sabolsice stated that this could be one of the possible scenarios.

There was discussion of several topics including what the modeling scenarios might be, what Seaside Golf Course pumping will be once the current MCWD in-lieu program concludes, how long it would take for

HydroMetrics to perform modeling, and whether an economic evaluation of the proposed repayment schedule should be done.

Following this discussion, Mr. Sabolsice said that he would advise the Ad Hoc committee that the TAC feels performing modeling would be helpful in developing a schedule. Mr. Sabolsice said that the Ad Hoc committee's first meeting will probably be one to two weeks prior to the November 28 board meeting.

Mr. Jaques suggested that, if the Ad Hoc committee wishes to have modeling performed, a Request for Service (RFS) to have HydroMetrics perform modeling could be put on the November 14th TAC agenda. If the TAC approves the RFS then it could go on the November 28th Board agenda for approval, and the modeling work could start shortly thereafter. Mr. Williams confirmed that he could meet that schedule in terms of preparing a scope of work description for use in preparing an RFS. Mr. Sabolsice said he would discuss this with the Ad Hoc committee and advise Mr. Jaques.

Note: At this point in the meeting Mr. Riedl had to depart for another meeting and he was replaced by Leslie Llantero as the Seaside representative at 2:48 p.m. via phone.

3. Request from California American Water to Retire and Destroy Certain Wells in the Seaside Basin

Mr. Jaques summarized the agenda packet materials for this item.

Mr. Oliver said he hoped there could be a win-win solution to minimize the loss in data that would occur through the proposed well abandonment. He said that even though there are other wells in this portion of the Basin, some of these do not report data and others have long histories of data, so MPWMD is concerned about not continuing the historical data gathering from those wells. He also posed the question of whether the Watermaster should have a protocol developed for well abandonment. He asked Mr. Sabolsice what the main driver was for CAW to propose retiring these wells. Mr. Sabolsice responded that CAW no longer needs these wells for production purposes, and that there are no plans to drill new wells to replace them. CAW would like to abandon, seal, and properly destroy the wells to protect the Basin. He went on to state that if data from the wells is not critical to seawater intrusion monitoring or to modeling, CAW would like to retire them. Otherwise, there will be ongoing costs to maintain the wells to keep them from deteriorating.

Mr. Oliver said that some of the wells have data dating back to the 1950s. He wondered if the wells could be converted from production to monitoring status by retrofitting them. Mr. Sabolsice said the CAW would be agreeable to converting them to monitoring wells if the costs to do so were not excessive. Mr. Oliver said this would satisfy MPWMD's concerns. Mr. Sabolsice said the CAW would at some point like to be able to destroy the wells when data gathering from them is no longer necessary. Mr. Oliver said that of the four wells proposed for retirement by CAW, the least important one would be the Darwin well.

Mr. Johnson asked if MPWMD would want to take over these wells. Mr. Oliver and Mr. Lear responded that MPWMD would be willing to consider doing the monitoring once they are converted to monitoring wells. The decision with regard to whether CAW or MPWMD will perform monitoring on these wells will be made between those two parties.

A motion was made by Mr. Johnson, seconded by Mr. Costa, to have CAW convert the Hilby, Military, and Luxton wells from production to monitoring wells on the understanding that conversion will be less costly than destruction, and that destruction of the Darwin well can proceed because data from that well is not critical. The motion passed unanimously. Mr. Oliver will provide Mr. Sabolsice with a proposed retrofitting procedure to convert these wells from production to monitoring wells.

4. Approve Initial RFSs for MPWMD and HydroMetrics for 2012

Mr. Jaques summarized the agenda packet materials for this item.

Mr. Oliver requested that for Task I.4.b the schedule be revised to show this work occurring in the June-July timeframe, rather than the April-May time frame, due to potential workload conflicts during the April-May time period. On a motion by Mr. Johnson, seconded by Mr. Sabolsice, all four of the RFSs were unanimously approved with only this one change to the schedule.

5. Schedules

A. For remainder of 2012

B. For 2013

Mr. Jaques briefly discussed the schedules, and there was no other discussion on this item.

6. Other Business

Mr. Oliver commented that WY 2012 has just come to an end and that WY 2013 had begun, and that CAW water production, especially from the Carmel River Basin, was lower than in prior years. Mr. Sabolsice said that new water rates have resulted in users conserving more, and also that CAW had been able to reduce its non-revenue water (water losses and unmetered water deliveries) by about 900 AFY.

There was brief discussion about CAW reporting its ASR quantities in accordance with the Storage Agreement between the Watermaster and CAW.

7. Set Next Meeting Date:

The next regular meeting will be held on Wednesday November 14, 2012 at 1:30 p.m. at the MRWPCA Board Room

The meeting adjourned at 3:25 p.m.

D-R-A-F-T
MINUTES

**Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
November 14, 2012**

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Eric Sabolsice
City of Monterey – Norm Green
Laguna Seca Property Owners – No Representative
MPWMD – Joe Oliver
MCWRA – No Representative
City of Del Rey Oaks – Leon Gomez (via phone until completion of Agenda item 8)
City of Sand City – Steve Matarazzo
Coastal Subarea Landowners – Paul Bruno

Watermaster
Technical Program Manager - Robert Jaques

Consultants
HydroMetrics – Georgina King (via phone)

Others:
Russ McGlothlin (water attorney for Seaside, via phone for Agenda item 8)

The meeting was called to order at 1:35 p.m. after waiting for a quorum to arrive.

1. Public Comments

There were no public comments.

2. Administrative Matters:

A. Approve Minutes from October 10, 2012 Meeting

On a motion by Mr. Riedl, seconded by Mr. Oliver, the minutes were unanimously approved as presented, with Mr. Bruno abstaining because he had not attended that meeting.

3. Update on Request from California American Water to Retire and Destroy Certain Wells in the Seaside Basin

Mr. Jaques introduced this agenda item. Mr. Oliver said that he and not had any discussion on this matter with Mr. Sabolsice since the last meeting. However, Mr. Sabolsice said Cal Am concurred with the conversion process for the three wells, and is currently getting pricing on conversion vs. destruction of the wells. He recommended deferring action on this item until the next TAC meeting when that information should be available. Mr. Oliver briefly described how the process could be submitted to the Monterey County Department of Health. Mr. Riedl asked if the wells will need to be surveyed after conversion. Mr. Oliver responded that the reference points at the wells will need to be checked after the work is done to correct the previously-surveyed elevations if necessary, but that MPWMD can do this without the need for assistance by an outside surveyor.

4. Sentinel Well Induction Logging Results for 2012

The Mr. Jaques summarized the agenda packet materials for this item. Mr. Oliver confirmed that the induction logging data was typical of prior years.

5. Discuss and Provide Input on the 2012 Seawater Intrusion Analysis Report (SIAR)

Mr. Jaques introduced this agenda item. Ms. King briefly described how the report was prepared and reviewed the Executive Summary. The third bullet in the Executive Summary describes three wells with either increasing chloride levels or decreasing sodium to chloride ratios. Based on this, one of the recommendations is to increase the sampling frequency at SBWM-4 to quarterly, which is the frequency that SBWM-3 is currently being sampled. Another recommendation is to use both the old and new sampling techniques for the sampling of PCA-West Deep to see how the results compare using the two techniques.

Ms. King Reported that the groundwater levels in the Basin are the lowest they have been in a long time, and some have dropped between 20 and 40 feet since last year. Ms. King also reported that induction logging is normally done at the times when quarterly sampling events are conducted and is not scheduled to occur in December, 2012. Therefore, a means of doing this will need to be developed.

Ms. King also reported that some Cal Am wells did not report data from a single sample; instead the analyses were performed on separate samples taken on separate days. She said that all data needs to be acquired from a single sample in order to be able to plot the Piper diagrams. Mr. Jaques will ask Mr. Evans to send emails to Travis at Cal Am, as well as to all other parties performing sampling on wells, to ensure that all the analyses are performed on a single sample.

Mr. Sabolsice asked if more money would be needed for the additional sampling. Mr. Oliver responded that it would probably be necessary to provide additional budget, but that it will not be needed until April 2013. He will come to the TAC prior to that date with a request for the additional amount.

Mr. Sabolsice asked if the work to provide further evaluation of the Sand City Public Works Well, which is also recommended in the SIAR, had been included in the budget. Mr. Jaques responded that it had been included in one of MPWMD's already-approved RFSs.

Mr. Jaques asked Ms. King how a change in 2009 in the sampling techniques could account for the steady upward trend of chloride in some of the wells. Mr. Lear described the differences in the two sampling techniques and how this could result in different water quality in the samples. He also clarified that the technique had only been changed on PCA-West Deep, and not on SBWM-4. Mr. Lear said that prior data shows ups and downs in the data, so this may just be another short-term trend.

Mr. Jaques and Mr. Sabolsice asked how long such a trend would need to persist before it would be considered to represent seawater intrusion. Ms. King responded that once any levels reach any of the SIRP trigger levels, the SIRP-recommended actions would need to be implemented.

Mr. Riedl asked if the Piper diagram for the Sand City well was troubling. Ms. King responded no, it simply shows differences from other wells in the Basin.

Mr. Riedl noted that in Recommendation No. 6 the word "to" should be changed to "by". Ms. King will make that correction.

Mr. Riedl asked if seawater intrusion could be coming from the Salinas Basin direction. Ms. King said that the Camp Huffman monitoring well had been installed, in part, to detect seawater intrusion coming from that direction. In the interest of time Mr. Sabolsice requested that TAC members contact Ms. King directly off-line to discuss any other questions they had about the SIAR unless there were glaring errors that needed to be discussed and corrected at today's meeting.

On a motion by Mr. Oliver, seconded by Mr. Riedl, the TAC unanimously approved in the SIAR.

8. Request for Service for HydroMetrics to Model Basin Replenishment Scenarios

[Note: In order to assist with a scheduling conflict for some of the attendees, Agenda Item No. 8 was taken out of order, immediately after Item No. 5.]

Mr. Jaques summarized the agenda packet materials for this item. Mr. Sabolsice commented that at the prior meeting there was discussion of protective water levels to determine whether or not to run the protective water level revision modeling analysis before running the replenishment scenarios.

Mr. Riedl asked Ms. King if it was costly to run the model for different time frames, e.g. twenty-five years vs. fifty years. Ms. King responded that running the model is not so costly, rather it is extracting the data, interpreting it, and reporting it which contributes to the cost.

There were questions and answers about what some of the tasks would consist of. The "Base Simulation" is the background information that needs to go into the model so it can be run out further in time. Under task 2.A all of the Standard Producers would reduce to their NSY levels by 2021 (via the 10 percent reductions), and the Alternative Producers would continue pumping at their allocated amounts. The question was raised as to whether under Task 2.B wouldn't it be better to revise the protective water levels first, and then to run the replenishment scenarios? Mr. Jaques responded that this could be done but that it would add to the cost.

Mr. McGlothlin expressed concerns about the time impacts of adding that work, noting that a recommendation on the replenishment rate needs to be provided to the Public Utilities Commission by early spring. Mr. Sabolsice reported that the Ad Hoc Committee had met yesterday and now plans to recommend to the Board that Cal Am do a 25 year replenishment program with replenishment at 700 acre feet per year. Mr. McGlothlin noted that this will have to go to Judge Randall for approval. He went on to say that if a more aggressive replenishment program is subsequently found to be necessary to reach protective water levels, then the Judge could direct a higher replenishment rate. Hence, he recommended performing Tasks 2.B and 3.B, and also estimating the rate of advance of the seawater intrusion front. Mr. Oliver said that the current protective water levels are believed to be conservative, so using them would provide a conservative analysis.

Mr. Bruno asked how long it would take to perform the protective water levels analysis. Ms. King responded that a rough estimate would be two weeks, but the elapsed time could be approximately one month. There was much discussion about whether or not to do the protective water level evaluation first. Ms. King said that one approach would be to do the scenarios first, and then do the protective water levels analysis later, as it would be easy to adjust the protective water level values in the scenarios.

Mr. Riedl asked if a ten-year analysis should also be performed. Mr. Jaques said that this could be done, but that again it would add to the time and cost of performing the work. Ms. King said it may not be feasible to reach protective water levels in a ten-year period, even if all pumping were completely stopped.

Mr. McGlothlin expressed the opinion that it would be very unlikely for the Judge to accept a 50 year replenishment period. To restore protective water levels. Mr. Sabolsice noted that there was no agreed-to replenishment scenarios scheduled in the memorandum of agreement, which the judge had previously approved. In question why then the Judge could now require a specific and more aggressive schedule. Mr. McGlothlin responded that he felt the Judge could want to see an aggressive plan, once the Monterey Peninsula Water Supply Project is finalized.

Mr. Bruno asked Ms. King if any if there was anything that could be taken out of the scope of work to reduce the cost. Ms. King said it would depend on what the Watermaster wants to learn from the modeling.

Mr. Sabolsice then recommended performing Tasks 1 and 3.A, and refining the protective water levels. Mr. Oliver suggested updating the protective water levels first, and then performing the other work.

Mr. McGlothlin recommended performing task 3.B, rather than 3.A, so the Judge will know what it will take to reach protective water levels, and what Cal Am's contribution toward that would be at their 700 acre foot per year proposed replenishment rate.

Mr. Lear recommended performing Tasks 1, 2.B, and 3.B, and also updating the protective water levels.

Ms. King noted that for Task 3.B it may even be necessary to bring in outside water as well as cutting pumping back in order to reach protective water levels. Mr. Sabolsice responded that this would not be realistic, since the Alternative Producers don't have to cut back under the Decision. Mr. McGlothlin said that once Cal Am cuts back to its NSY share and repays its overpumping, if protective water levels still are not being reached, the Watermaster could charge all Basin users to pay to obtain outside water for replenishment purposes.

Mr. McGlothlin went on to say that if the cost of a replenishment project is too high, then the replenishment project may not be "feasible" and other approaches such as barrier wells could be considered. Under all scenarios, all Alternative Producers would continue pumping at their currently allowed levels.

Mr. Jaques suggested performing Task 3.B rather than 3.A.

Mr. Sabolsice made a motion to perform Tasks 1, 3 .A, and 3.B, and to revise the protective water levels. During discussion Mr. Lear said that for Task 1 it will only be necessary to extend the model out for 25 five years, not the previously expected 50 years, and therefore there should be some cost savings. Mr. Oliver noted that Tasks 4 and 5 should also be capable of being reduced in cost for the same reason. Mr. Bruno seconded the motion and it was passed with all voting in favor except Mr. Riedl who voted no.

Mr. Jaques said he would obtain a revised scope of work and cost proposal from HydroMetrics and would send it to the TAC for review and editing prior to sending it to the Board for approval.

6. Discuss and Provide Input on the Preliminary Draft Watermaster 2012 Annual Report

Mr. Matarazzo asked that an explanation be added in the first paragraph of Section B. to explain why the injection rate under the ASR program in water year 2012 was so low, noting that he believed it was due to it being a very dry weather year. Mr. Sabolsice also commented that the amount that was injected was low due to diversion limitations caused by the amount of bypass flows necessary to sustain river flows.

Mr. Oliver had some questions about the amount of carryover water credits for Granite Rock as noted in Section B. At Mr. Jaques' request he agreed that he would discuss this directly with Ms. Dadiw who prepares that portion of the Annual Report, and either he or she would provide any necessary edits to Mr. Jaques for inclusion in the Annual Report.

Mr. Bruno asked if the issue of the Watermaster seeking Court approval to temporarily suspend the 10% pumping reductions had been raised in the Annual Report, and Mr. Jaques responded that it was included in the final paragraph of Section J.

On a motion by Mr. Matarazzo, seconded by Mr. Oliver, the TAC unanimously approved the Preliminary Draft Annual Report with the revisions as noted above.

7. Informational Items on the Cal Am Monterey Peninsula Water Supply Project (Bob Jaques)

A. Notice of Preparation of an EIR for the Project

B. Executive Summary from the "Draft Evaluation of Seawater Desalination Projects" Recently Prepared for the Monterey Peninsula Regional Water Authority

Mr. Sabolsice requested that in the interests of time this topic be continued over to the next TAC meeting.

9. Schedules (Bob Jaques)

A. For remainder of 2012

B. For 2013

Mr. Jaques reported there were no significant scheduling changes since the last TAC meeting, and there was no other discussion on this item.

10. Other Business

There was no other business discussed.

11. Set Next Meeting Date:

Since all of the work planned for the TAC in FY 2012 had been completed, the TAC cancelled its December 2012 meeting and will have its next meeting on Wednesday January 9, 2013.

The meeting adjourned at 3:40 p.m.

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors
FROM: Dewey D Evans, CEO
DATE: November 29, 2012
SUBJECT: Groundwater Quality and Groundwater Level Report for Water Year 2012

PURPOSE:

To inform the Board of Directors and Other Interested Parties as to the quality and levels of water within the Seaside Groundwater Basin during the entire Water Year 2012.

RECOMMENDATION:

Continue to monitor the water quality and water levels in the Seaside Basin.

DISCUSSION:

Due to the digital file size of the Water Year 2012 Groundwater-Quality and Groundwater-Level report prepared by the Monterey Peninsula Water Management District the document will be posted on the Watermaster website at <http://www.seasidebasinwatermaster.org/> for review by Board members and other Interested Parties.

The report of chemical data from WY 2012 for the MPWMD dedicated coastal monitor wells, as documented in the WY 2012 Seawater Intrusion Analysis Report prepared by HydroMetrics Water Resources, Inc., indicates that overall chloride concentration trends have been stable for most monitoring wells, with four wells having slight decreasing trends. Three coastal monitoring wells, however, continued their increasing trends. These are: PCA-West Deep, sentinel well SBWM-4 shallow and SBWM-4 deep. Chloride concentration trend graphs at this time do not indicate any seawater intrusion in the Seaside Groundwater Basin, based on the existing monitoring data. However, water quality from SBWM-4 and PCA-West Deep needs to be followed more closely. Water quality in some of the production wells is different than the water quality in the monitoring wells. This may be a result of mixed water quality from both shallow and deep zones in which these wells are perforated. The production wells' water qualities are not indicative of seawater intrusion.

Groundwater production in the Seaside Groundwater Basin for Water Year 2012 was 3,832.9 acre-feet, which is 318.6 acre-feet less than Water Year 2011. This amount is less than the Court-mandated operating yield of 4,480 acre-feet per year that is required between October 1, 2011 and October 1, 2014.

Groundwater levels remain below preliminary protective elevations in all deep target monitoring wells (MSC deep, PCA-W, and Sentinel Well 3). Two of the three shallow wells' groundwater levels are above protective elevations: PCA-W shallow and CDM-MW4. MSC shallow remains below preliminary protective elevations.

For a much more in-depth review please refer to the document that will be posted to the Watermaster website at <http://www.seasidebasinwatermaster.org/>.

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Dewey D Evans, CEO

DATE: November 29, 2012

SUBJ: Calendar Year 2013 Schedule of Regular Meeting Dates for Watermaster
Board of Directors and Technical Advisory Committee (TAC)

RECOMMENDATION: None, Information only.

DISCUSSION:

The attached schedule reflects the regular meeting dates for both the Watermaster Board of Directors and the Technical Advisory Committee (TAC) for calendar year 2013. All of these meetings are scheduled to be held at the Monterey Regional Water Pollution Control Agency Board Room located at 5 Harris Court, Building "D" in the City of Monterey (Ryan Ranch). The Board of Director's meetings are held the first Wednesday of each month and are scheduled to start at 2:00 PM. The Technical Advisory Committee is held the second Wednesday of each month and are scheduled to start at 1:30 PM.

If and when special meetings are necessary those meetings will be duly noticed and may be scheduled at other dates, and times at locations as needed.

ATTACHMENTS:

(1) Calendar Year 2013---Schedule of Regular Meetings

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

**2013
SCHEDULE OF REGULAR MEETINGS**

	BOARD	TAC
JANUARY	2	9
FEBRUARY	6	13
MARCH	6	13
APRIL	3	10
MAY	1	8
JUNE	5	12
JULY	3	10
AUGUST	7	14
SEPTEMBER	4	11
OCTOBER	2	9
NOVEMBER	6	13
DECEMBER	4	11

SEASIDE GROUNDWATER BASIN WATERMASTER 2011 REPLENISHMENT ASSESSMENTS

									ITEM XXX 11/28/2012
CALCULATION OF REPLENISHMENT ASSESSMENTS WATER YEAR 2012									
Using the Basin-wide methodology approved by the Court on January 12, 2007, and as shown in detail on the spreadsheet contained in this attachment, Watermaster calculated the Water Year (WY) (October 1st through September 30th) 2012 Replenishment Assessments as follows:									
2012 Replenishment Assessment Unit Charge =						\$2,780.00			
2012 Natural Safe Yield (NSY) Available to Standard Producers =						2,471.70	AF (3,000 AF NSY - 528.3 Alternative Producers 2012 Production)		
Standard Producers	WY 2012 Production (AF)	% of NSY Available	Volume of NSY Available (AF)	NSY Overproduction (AF)	NSY Overproduction Assessment	Operating Yield Available (AF)	Operating Yield Overproduction (AF)	Operating Yield Overproduction Assessment	Total Assessment
California American Water	3,070.90	91.05%	2,250.42	597.51	\$ 1,661,089.98	2,847.93	222.97	\$ 619,853.40	\$ 2,280,943.38
Seaside (Municipal)	233.72	7.08%	174.91	56.39	156,751.85	231.29	2.43	6,756.65	163,508.50
Granite Rock	-	0.67%	16.48	-	-	159.18	-	-	-
D.B.O. Development No. 30	-	1.21%	29.90	-	-	316.58	-	-	-
Total Production	3,304.63	100.00%	2,471.70	653.90	\$ 1,817,841.83	3,554.98	225.40	\$ 626,610.05	\$ 2,444,451.88
Alternative Producers	WY 2012 Production (AF)	% of NSY Available	Volume of NSY Available (AF)	NSY Overproduction (AF)	NSY Overproduction Assessment	Operating Yield Available (AF)	Operating Yield Overproduction (AF)	Operating Yield Overproduction Assessment	Total Assessment
City of Seaside (Golf Courses)	0.13	N/A	540.00	0.00	\$ -	540.00	0.00	\$ -	\$0
City of Sand City	0.94	N/A	9.00	0.00	-	9.00	0.00	-	-
Security National Guaranty	-	N/A	149.00	0.00	-	149.00	0.00	-	-
Calabrese (Cypress Pacific Inv.)	-	N/A	14.00	0.00	-	14.00	0.00	-	-
Mission Memorial (Alderwoods)	27.03	N/A	31.00	0.00	-	31.00	0.00	-	-
Pasadera Country Club	199.29	N/A	251.00	0.00	-	251.00	0.00	-	-
Laguna Seca Golf Resort (Bishop)	255.59	N/A	320.00	0.00	-	320.00	0.00	-	-
York School	18.65	N/A	32.00	0.00	-	32.00	0.00	-	-
Laguna Seca County Park	26.65	N/A	41.00	0.00	-	41.00	0.00	-	-
Total Production	528.28	N/A	1,387.00	0.00	\$ -	1,387.00	0.00	\$ -	\$0

ITEM NO. XI.

**DIRECTOR'S
REPORTS**

ITEM NO. XII.

**EXECUTIVE OFFICER
COMMENTS**