

**SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR BOARD MEETING NOTICE/AGENDA**

Wednesday, October 2, 2019 – 2:00pm

**Monterey One Water Board Room, 5 Harris Court, Building “D”
Ryan Ranch, Monterey, California**

Watermaster Board

Coastal Subarea Landowner – Director Paul Bruno, Chair
City of Seaside – Mayor Ian Oglesby
California American Water – Director Christopher Cook
City of Sand City – Mayor Mary Ann Carbone, Vice Chair
Monterey Peninsula Water Management District – Director George Riley
Laguna Seca Subarea Landowner – Director Troy Thompson
City of Monterey – Councilmember Dan Albert
City of Del Rey Oaks – Councilmember John Gaglioti
Monterey County/Monterey County Water Resources Agency – Supervisor Mary Adams, District 5

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC COMMUNICATIONS

Oral communication 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.

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. MINUTES - Approve Minutes of Regular Board meeting held August 7, 20193

VI. CONSENT CALENDAR

- A. Consider approving Summary of Payments Made During August and September 2019 totaling \$45,821.367**
- B. Consider Approving Fiscal Year 2019 Financial Reports through August 31, 20199**

VII. ORAL PRESENTATION – None scheduled

VIII. NEW BUSINESS

- A. Discuss/Consider Recommendation to the Watermaster Board for Proposed Fiscal Year 2020 Annual Budgets:**
 - 1. Proposed Fiscal Year 2020 (January – December) Administrative Budget13**

2.	Proposed Fiscal Year 2020 Monitoring and Management Program; and Monitoring and Management Fund—Operations and Monitoring and Management Fund—Capital Budgets	15
3.	Proposed 2020 Replenishment Assessment Fund Budget – No Action Required	31
B.	Consider Approving the following Professional Service Contracts for Fiscal Year 2020:	33
1.	Two Contracts with Montgomery & Associates, Inc. — one for \$13,000 for providing ongoing and as-requested general hydrogeologic consulting services during the year and the second for \$24,130 to prepare the Seawater Intrusion Analysis Report (SIAR) for 2020	35
2.	Two Contracts with MPWMD—one for \$54,098 and the second one for \$3,915, both pertaining to monitoring and other work on the Seaside Groundwater Basin Monitoring and Management Program (M&MP) for 2020	43
3.	Two Contracts with Martin Feeny—one for \$4,000 to provide on-call/as-requested hydrogeologic consulting services and one for \$19,250.56 to perform induction logging of the Sentinel Wells for 2019	56
4.	One Contract with Todd Groundwater—for \$4,000 to provide on-call/as-needed hydrogeologic consulting services	63
C.	Discuss/Consider Recommendation to the Watermaster Board to Approve the Proposed Replenishment Assessment Unit Costs for Natural Safe Yield and Operating Yield Overproduction for Water Year October 1, 2019 through September 30, 2020	65
D.	Resolution expressing support of the Monterey Peninsula Water Supply Project Desalination Plant and Related Facilities.....	69

IX. OLD BUSINESS - None

X. INFORMATIONAL REPORTS (No Action Required)

A.	Technical Advisory Committee (TAC) approved minutes from meeting held August 14 and draft minutes from meeting held September 11, 2019	71
B.	Watermaster report of production of the Seaside Basin October 1, 2018 – June 30, 2019	75
C.	Watermaster letter to Court regarding City of Seaside Request for a Watermaster Storage and Recovery Agreement	77

XI. DIRECTOR’S REPORTS

XII. STAFF COMMENTS

XIII. NEXT REGULAR MEETING DATE – Wednesday, November 6, 2019 - 2:00 P.M.

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 One Water and the California American Water Company for posting on September 23, 2019 per the Ralph M. Brown Act, Government Code Section 54954.2(a).

**SEASIDE GROUNDWATER BASIN WATERMASTER (Watermaster)
REGULAR MEETING MINUTES**

Monterey One Water Board Room, 5 Harris Court, Building “D”
Ryan Ranch, Monterey, California
August 7, 2019

I. CALL TO ORDER – The meeting was called to order at 2:00 p.m.

II. ROLL CALL

Coastal Subarea Landowner – Director Paul Bruno, Chair
City of Del Rey Oaks – Council Member John Gaglioti
City of Sand City – Mayor Mary Ann Carbone
California American Water (CAW) – Director Christopher Cook
City of Monterey – Council Member Dan Albert
City of Seaside – Mayor Ian Oglesby
Monterey Peninsula Water Management District (MPWMD) – Director George Riley
Laguna Seca Subarea Landowner – Director Troy Thompson

Absent:

Monterey County/Monterey County Water Resources Agency – Supervisor Mary Adams

Others Present

Robert Jaques – Technical Program Manager, Watermaster
Laura Paxton – Administrative Officer, Watermaster
Lori Girard – Legal Counsel, CAW
Don Freeman – Legal Counsel, City of Seaside
Bob Holden – Monterey One Water (M1W)/Pure Water Monterey (PWM)
Mike McCullough – Government Affairs Administrator, M1W
Jonathan Lear – Senior Hydrogeologist, MPWMD
Patrick Breen – Water Resources Manager, Marina Coast Water District (MCWD)
Sarah Hardgrave – Policy Analyst, District 5 Supervisor May Adams’ Office
Russ McGlothlin, Esquire – City of Seaside Legal Counsel, Law Offices of O’Melveny & Myers
Michael Paxton – Paxton Associates

III. ELECTION OF OFFICER

A majority of board members cast their vote by ballot in favor of Mary Ann Carbone as Vice Chair of the Watermaster Board. Director Thompson abstained having just taken his seat on the board.

IV. PUBLIC COMMUNICATIONS: None

V. REVIEW OF AGENDA: There were no requested changes to the agenda.

VI. APPROVAL OF MINUTES

It was moved by Councilmember Albert, seconded by Mayor Oglesby and unanimously carried to approve the minutes of the Regular Board meeting held June 5, 2019.

VII. CONSENT CALENDAR

- A. Consider approval of Summary for Payments made during June 2019 totaling \$19,870.00
- B. Consider Approving Fiscal Year 2019 Financial Reports through June 30, 2019
- C. Change in Posting of Data to Watermaster Website

Moved by Mayor Carbone, seconded by Director Riley and unanimously carried to approve the consent calendar.

VIII. ORAL PRESENTATION: None

IX. NEW BUSINESS:

- A. Consider Approving/Give Direction Regarding City of Seaside Application for In-lieu Storage

Russ McGlothlin, counsel for the City of Seaside gave details of the City's proposed in lieu storage program and the associated storage application submitted to the Watermaster for approval. The City would purchase water from MCWD to use in lieu of golf course irrigation with potable water from the Seaside Groundwater Basin (Basin). The water not produced for irrigation would remain in the Basin, "stored" for later extraction and use by the City's municipal system and for sale to projects being developed in the Fort Ord communities. Mr. McGlothlin stated that the program would maximize use of recycled water for non-potable (golf course irrigation) demand as per Watermaster Decision tenets and would leave in the Basin water that requires no treatment as injected replenishment water does. The board voiced concerns that since the City of Seaside golf courses are declared in the Adjudication Decision as an Alternative Producer, its use of underlying groundwater allocation is restricted to the overlying golf courses. The Decision is not clear whether a Standard Producer, such as the City of Seaside Municipal System, is allowed storage and extraction by in-lieu means using its alternative production rights as the storage method without being subject to pumping reductions.

Moved by Council Member Gaglioti, Seconded by Mayor Oglesby and unanimously carried, to authorize a letter to the court giving Watermaster board support to the technical merits of the in-lieu storage program however seeking clarification whether the Decision allows a Standard Production Allocation (SPA) aquifer storage and recovery program using Alternative Production Allocation (APA) un-pumped water in-lieu of recharge injection and later use beyond the overlying parcel; or whether Alternative Production Allocation III.B.3 through subsection d of the Decision would require a party to convert its APA to SPA with applied pumping reductions in order to be eligible for a storage and recovery program using un-pumped water in lieu of recharge injection.

- B. Geochemical Modeling of the Pure Water Monterey Advanced Water Treatment Water

Mr. Jaques noted that the storage and recovery agreement for the Pure Water Monterey project's Advanced Water Treatment water (www.seasidebasinwatermaster.org/Other/Storage%20Recover%20Agreement%20-%20Signed.pdf) states in part that prior to injecting any advanced treated water into the Basin a geochemical interaction modeling assessment

must be provided as contemplated in the memorandum of agreement between Watermaster, MPWMD, CAW and M1W dated February 10, 2018 (www.seasidebasinwatermaster.org/Other/18%200210%20WM_CAW_M1W_MPWMD%20MOU%20Geochem%20Model%20.pdf). If any mitigation measures are required to prevent material injury to the Basin, these measures must be taken before injection occurs. The technical memorandum prepared by Pueblo Water Resources, the firm that conducted the geochemical interaction modeling assessment concluded that there were no significant changes in water quality and that the resultant water quality met all regulatory standards. The technical memorandum includes the recommendation that the advanced water treatment plant facility must operate to produce water with a pH in the range of 7.5-8.5 and that it must produce water having an alkalinity of at least 50mg/L unless reassessment using lower alkalinity water demonstrates that there will be no adverse impacts from the lower alkalinity.

Moved by Director Riley, Seconded by Council Member Albert and unanimously carried, to 1) Accept the Technical Memorandum prepared by Pueblo Water Resources for the MPWMD as satisfactorily fulfilling MPWMD's obligation to perform geochemical modeling of the Pure Water Monterey AWT water, with the caveat that retesting with 40 mg/L alkalinity water will be done and the results do not indicate any adverse impacts. If there are adverse impacts resulting from the lower alkalinity, the AWT plant should be required to operate at a minimum alkalinity of 50 mg/L; 2) Defer geochemical modeling work on the desalination plant water at this time, and perform that work when/if the desalination plant begins construction, and; 3) Issue an amendment to the Pure Water Monterey Storage and Recovery Agreement to include the requirement that the AWT plant operate to produce water having a pH in the range of 7.5 to 8.5 and a minimum alkalinity of 50 mg/L unless reassessment using lower alkalinity water demonstrates that there will be no adverse impacts from the lower alkalinity.

X. OLD BUSINESS: None

XI. INFORMATIONAL REPORTS:

- A. Technical Advisory Committee (TAC) minutes from meetings held June 12 and July 10, 2019
- B. Watermaster report of production of the Seaside Basin April 1, 2019 – June 30, 2019
- C. Watermaster letter in support of Pure Water Monterey Project dated June 11, 2019
- D. Article on three-dimensional models of subsurface freshwater/saltwater interfaces and mapping of coastline

XII. DIRECTOR'S REPORTS: Director Riley stated he would like to explore further using the Basin more as a reservoir, beyond being a production source for parties. He was also seeking to better understand the Replenishment Assessment Fund and credits that are applied.

XIII. STAFF COMMENTS: There were no staff comments.

XIV. NEXT MEETING DATE: The next meeting of the Watermaster board will be held Wednesday, September 4, 2019 at the Monterey One Water board room at 5 Harris Court, Building "D" on Ryan Ranch in Monterey at 2:00 p.m.

XV. There being no further business, Chair Bruno adjourned the meeting at 3:16 p.m.

THIS PAGE INTENTIONALLY LEFT BLANK

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors
 FROM: Laura Dadiw, AO
 DATE: October 2, 2019
 SUBJECT: Summary of Payments made during the months of August - September 2019

RECOMMENDATIONS:

Consider approving payment of bills submitted and authorized to be paid August - September 2019

Summary of Payments Made August 2019**Paxton Associates (Administrative Officer (AO))**

June 26, 2019 through July 25, 2019	37.5	\$ 3,750.00
-------------------------------------	------	-------------

Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Draft Agenda; gather docs for 8/7 meeting; speak with Bob Costa. Transmittal for Seaside In-lieu project. McGlothlin correspondence. Completion of 6/5 Board meeting minutes. Follow up re: WM data collection contracts w/certain parties & fee payments. Prepare financials and summary of payments. Prepare Board packet. Routinely picked up mail from PO Box; reconciled accounts to the City of Seaside Watermaster accounts; prepared financial reports; processed invoices; reviewed and posted items to web site.

Robert Jaques (Technical Program Manager)

July 9, 2019 through July 30, 2019	27.5	4,125.00
------------------------------------	------	----------

Responded to emails, telephone inquiries, and other correspondence on a variety of Watermaster issues; TAC agenda packet/meeting prep/attend. Prep/attend SVBGSA TAC meetings. Review Todd Groundwater 2008 study of coastal v inland injection of PWM water. Begin 2020 RFSs for consultant work & consultant schedule. Review Trussell Tech operation optimization plan for PWM project. Prepare Board agenda Transmittals.

Montgomery & Associates (Technical Consultant)

June 2019 RFS 2019-01 General Consulting & TAC	11.0	2,455.36
--	------	----------

Prepare presentations on the BMAP and sustainable yield for 6/5 Board meeting. Travel Cambria/Monterey/Cambria to attend Board meeting; emails and call to A. Imamura regarding presentation to WM. Respond to Bob Jaques regarding providing model to EKI; and respond to Bob Jaques regarding Cal-Am questions on injection in the Laguna Seca Subarea.

Total for August 2019	\$ 10,330.36
-----------------------	--------------

Summary of Payments Made September 2019

Paxton Associates (Administrative Officer (AO))

July 26, 2019 through August 25, 2019 55 \$ 5,500.00

Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Revise agenda; update distribution list and distribute agenda.

Appointment of new Laguna Seca Landowner rep and prepare New Board member orientation binder. Prepare board Packet. Draft letter to Court re: In-lieu storage. Prepare and distribute Board packet. Prep for/Attend 8/7 Board meeting. Review CAW LSSA moratorium app to PUC and respond to Mr. Lucido. Finalize letter re: In-lieu storage for Bruno signature. Mission Memorial data collection fee follow up. Joe Lucido PRA request/other docs. Routinely picked up mail from PO Box; reconciled accounts to the City of Seaside Watermaster accounts; prepared financial reports; processed invoices; reviewed and posted items to web site.

Robert Jaques (Technical Program Manager)

July 31, 2019 through September 4, 2019 32 4,800.00

Responded to emails, telephone inquiries, and other correspondence on a variety of Watermaster issues; TAC agenda packet prep/attend meeting. Prep for/attend August board meeting. 2020 M&MP & RFSs. Review/approve invoice from Montgomery & Associates. Begin Review of SVGSA Advisory Committee agenda packet. Deliver updated BMAP reports to Paxton, Miller, & Gomez. 2020 M&MP budgets & final revisions. Meeting at M1W re: availability of water for groundwater storage in SGWB. Review documents from 9/3 meeting.

Montgomery & Associates (Technical Consultant)

July 2019 RFS 2019-01 General Consulting & TAC 1.5 305.00

Respond to B. Jaques emails questioning if the Watermaster should run additional simulations for coastal injection; and prepare 2020 budget for Board packet.

Monterey Peninsula Water Management District

January through June 2019 RFS 2019-01 206.0 23,770.00

Database entry/maint; water level collection; WQ sample/datalogger collection; CASGEM data reporting; direct costs

January through June 2019 RFS 2019-02: Water level collection 18 \$ 1,116.00

Total for September 2019 \$ 35,491.00

Grand Total August - September 2019 \$ 45,821.36

Seaside Groundwater Basin Watermaster
Budget vs. Actual Administrative Fund
 Fiscal Year (January 1 - December 31, 2019)
 Balance through August 31, 2019

	<u>2019 Adopted Revised Budget</u>	<u>Contract Amount</u>	<u>Year to Date Revenue / Expenses</u>
Available Balances & Assessments			
Dedicated Reserve	-		-
FY (Rollover)	23,000.00		12,825.52
Admin Assessments	77,000.00		77,000.00
Available	<u>100,000.00</u>		<u>89,825.52</u>
Expenses			
Contract Staff	50,000.00	50,000.00	30,725.00
Legal Advisor	25,000.00		5,002.20
Filing fees and postage			-
Total Expenses	<u>75,000.00</u>	<u>50,000.00</u>	<u>35,727.20</u>
Total Available	25,000.00		
Dedicated Reserve	25,000.00		25,000.00
Net Available	<u><u>-</u></u>		<u><u>29,098.32</u></u>

Seaside Groundwater Basin Watermaster
Budget vs. Actual Monitoring & Management - Operations Fund
 Fiscal Year (January 1 - December 31, 2019)
 Balance through August 31, 2019

	2019 Adopted Budget	Contract Encumbrance	Year to Date Revenue/Expenses
Available Balances & Assessments			
Operations Fund Assessment	\$ 106,921.00	\$ -	\$ 106,921.00
Pass Through	-	3,915.00	2,049.00
Cost Share Reimbursement	-	-	-
FY 2018 Rollover	100,000.00	-	222,193.80
Total Available	\$ 206,921.00	\$ 3,915.00	\$ 331,163.80
Appropriations & Expenses			
GENERAL			
Technical Project Manager	\$ 50,000.00	\$ 50,000.00	\$ 39,937.50
Contingency @ 10% (not including TPM)	14,266.00	-	-
Total General	\$ 64,266.00	\$ 50,000.00	\$ 39,937.50
CONSULTANTS (Montgomery; Todd Groundwater; Web Site Database)			
Program Administration	\$ 21,140.00	\$ 19,400.00	\$ 10,901.61
Production/Lvl/Qlty Monitoring	2,400.00	-	-
Basin Management	30,000.00	-	-
Seawater Intrusion Analysis Report	21,550.00	21,100.00	-
Total Consultants	\$ 75,090.00	\$ 40,500.00	\$ 10,901.61
MPWMD			
Production/Lvl/Qlty Monitoring	\$ 48,832.00	48,832.00	20,950.00
Pass Through 2018	-	3,915.00	1,116.00
Basin Management	-	-	-
Seawater Intrusion	1,192.00	1,192.00	-
Direct Costs	-	-	2,820.00
Total MPWMD	\$ 50,024.00	\$ 53,939.00	\$ 24,886.00
CONTRACTOR (Martin Feeney)			
Production/Lvl/Qlty Monitoring	\$ 17,541.00	\$ 17,540.56	\$ 7,175.29
Total Appropriations & Expenses	\$ 206,921.00	\$ 161,979.56	\$ 82,900.40
Total Available	-		248,263.40

Seaside Groundwater Basin Watermaster Replenishment Fund Water Year 2019 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2019) Balance through August 31, 2019								ITEM VI.B. 10/2/19 Page 1
Replenishment Fund	2006	2007	2008	2009	2010	2011	2012	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 / \$283	\$1,132 / \$283	\$2,485 / 621.25	\$3,040 / \$760	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695
Cal-Am Water Balance Forward	\$ -	\$ 1,641,004	\$ 4,226,710	\$ (2,871,690)	\$ (2,839,939)	\$ (3,822,219)	\$ (6,060,164)	\$ (8,735,671)
Cal-Am Water Production	3710.0 AF	4059.9 AF	3862.9 AF	2966.0 AF	3713.5 AF	3416.0 AF	3070.9 AF	3076.6 AF
Exceeding Natural Safe Yield Considering Alternative Producers	2,106,652	2,565,471	5,199,014	3,773,464	4,112,933	3,187,854	2,280,943	2,380,842
Operating Yield Overproduction Replenishment	-	20,235	8,511	-	-	-	154,963	181,057
Total California American	\$ 2,106,652	\$ 2,585,706	\$ 5,207,525	\$ 3,773,464	\$ 4,112,933	\$ 3,187,854	\$ 2,435,907	\$ 2,561,899
CAW Credit Against Assessment	(465,648)		(12,305,924)	\$ (3,741,714)	(5,095,213)	(5,425,799)	(5,111,413)	-
CAW Unpaid Balance	\$ 1,641,004	\$ 4,226,710	(2,871,690)	\$ (2,839,939)	\$ (3,822,219)	\$ (6,060,164)	\$ (8,735,671)	\$ (6,173,771)
City of Seaside Balance Forward	\$ -	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)
City of Seaside Municipal Production	332.0 AF	387.7 AF	294.3 AF	293.4 AF	282.9 AF	240.7 AF	233.7 AF	257.7 AF
Exceeding Natural Safe Yield Considering Alternative Producers	219,689	174,082	402,540	465,300	314,721	141,335	163,509	236,782
Operating Yield Overproduction Replenishment	12,622	85	4,225	16,522	20,690	-	1,689	27,007
Total Municipal	232,310	174,167	406,764	481,823	335,412	141,335	165,198	263,788
City of Seaside - Golf Courses								
Exceeding Natural Safe Yield - Alternative Producer	-	-	131,705	69,701	-	-	-	-
Operating Yield Overproduction Replenishment	-	-	32,926	17,427	-	-	-	-
Total Golf Courses	-	-	164,631	87,128	-	-	-	-
Total City of Seaside*	\$ 232,310	\$ 174,167	\$ 571,395	\$ 568,951	\$ 335,412	\$ 141,335	\$ 165,198	\$ 263,788
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737			
In-lieu Credit Against Assessment	-	-	-	\$ -	(1,079,613)	(1,142,858)	(828,996)	(1,065,852)
City of Seaside Unpaid Balance	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)
Total Replenishment Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)
Replenishment Fund Balance Forward	-	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)
Total Replenishment Assessments	2,349,946	2,768,576	5,805,632	4,369,165	4,464,082	3,329,189	2,601,104	2,825,688
Total Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(5,940,409)	(1,065,852)
Grand Total Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)

Seaside Groundwater Basin Watermaster

Replenishment Fund

Water Year 2019 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2019)

Balance through August 31, 2019

2014	2015	2016	2017	2018	Totals WY 2006 Through 2018	Budget WY 2019	Projected Totals Through WY 2019
WY 13/14	WY 14/15	WY 15/16	WY 16/17	WY 17/18		WY 18/19	
\$675.50	\$675.50	\$675.50	\$2,872 / \$718	\$2,872 / \$718		\$2,872 / \$718	
\$ (6,173,771)	\$ (3,102,221)	\$ (676,704)	\$ (676,704)	\$ (491,747)		\$(48,797,949)	
3232.1 AF							
2,790,539	2,113,414	-	184,957	1,075,995	\$ 31,772,078	100,000	\$ 31,872,078
281,012	312,103	-	-	-	957,881	20,000	977,881
\$ 3,071,550	\$ 2,425,516		\$ 184,957	\$ 1,075,995	\$ 32,729,958	\$ 120,000	\$ 32,849,958
-	-	-		(49,382,196)	(81,527,907)	-	(81,527,907)
\$ (3,102,221)	\$ (676,704)	\$ (676,704)	\$ (491,747)	\$(48,797,949)	\$(48,797,949)	\$(48,677,949)	\$ (48,677,949)
\$ (1,575,876)	\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)		\$ (3,022,249)	
223.6 AF	223.6 AF	185.01 AF					
142,410	69,630	102,330	87,512	93,225	\$ 2,613,063	100,000	\$ 2,713,063
3,222	38	11,959	2,409	27,026	127,492	10,000	137,492
145,631	69,667	114,290	89,920	120,251	2,740,556	110,000	2,850,556
-	-	-	-	-	201,406	-	201,406
-	-	-	-	-	50,353	-	50,353
-	-	-	-	-	251,759	-	251,759
\$ 145,631	\$ 69,667	\$ 114,290	\$ 89,920	\$ 120,251	\$ 2,992,315	\$ 110,000	\$ 3,102,315
					88,887		88,887
(1,459,080)	(526,890)	(162)	-	-	(6,103,451)	-	(6,103,451)
\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)	\$ (3,022,249)	\$ (3,022,249)	\$ (2,912,249)	\$ (2,912,249)
\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$(51,820,198)	\$(51,820,198)	\$(51,590,198)	\$ (51,590,198)
\$ (7,749,648)	\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)		\$(51,820,198)	
3,217,182	2,495,183	114,290	274,877	1,196,246	35,811,161	230,000	36,041,161
(1,459,080)	(526,890)	(162)	-	(49,382,196)	(87,631,358)	-	(87,631,358)
\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$(51,820,198)	(51,820,198)	\$(51,590,198)	\$ (51,590,198)

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors
FROM: Laura Paxton, Administrative Officer
DATE: October 2, 2019
SUBJECT: Proposed Fiscal Year (Calendar Year) 2020 Annual Administrative Fund Budget

PURPOSE:

To advise the Board of the estimated amount necessary to properly fund the Administrative oversight portion of the Seaside Groundwater Basin Watermaster for Fiscal Year 2020.

RECOMMENDATION:

Recommended Board approval of the attached proposed Administrative Fund Budget for FY 2020.

DISCUSSION:

The court decision states that next fiscal year's budgets must be approved by the Board of Directors no later than the end of October each year in order for the tentative budgets to be circulated to each Party to the adjudication "no earlier than November 1 and no later than November 15" of each fiscal year.

Staff fields whatever legal issues it can. Legal counsels to the Watermaster parties are queried for issues beyond staff scope, primarily California American Water legal counsel. No significant legal issues have arisen in 2019.

The Watermaster board has directed staff to issue a request for proposals (RFP) for Watermaster legal services. Staff is developing a mailing list of proposal candidates and anticipates distribution of the RFP in 2020.

An estimated \$37,000 in unspent 2019 funds is the expected carry over to 2020. The estimated legal expenditure in 2020 is as follows:

Annual report review by CAW counsel:	\$ 0
No Case Management Conferences requested:	0
Unanticipated Issues/contingency:	<u>25,000</u>
Total:	\$ 25,000

The Budget and Finance Committee met on September 18, 2019 and recommended the Board approve the proposed administrative budget.

FISCAL IMPACT:

An Administrative Fund Assessment of \$63,000 is proposed:
 $\$50,000(\text{AO}) + \$25,000(\text{Legal}) + \$25,000(\text{Reserve}) = \$100,000 - \$37,000(\text{Carryover}) = \$63,000$

The assessments for the parties required to contribute to the Administrative Fund are:

California American Water 83.0%	\$52,290
City of Seaside 14.4%	9,072
City of Sand City 2.6%	1,638

ATTACHMENTS

1) Proposed Administrative Fund Budget for FY (Calendar Year) 2020

**Seaside Groundwater Basin Watermaster
Administrative Fund
Proposed Budget
Administrative Year 2020**

	<u>2019</u> <u>Adopted</u> <u>Budget</u>	<u>2019</u> <u>Estimated</u> <u>Total</u>	<u>2020</u> <u>Proposed</u> <u>Budget</u>
Assessment Income			
Reserve/Rollover*	\$ 23,000	\$ 13,000	\$ 37,000
Administrative Assessment	<u>77,000</u>	<u>77,000</u>	<u>63,000</u>
Totals	<u>100,000</u>	<u>90,000</u>	<u>100,000</u>
Expenditures			
Contractual Services - Administrative	50,000	48,000	50,000
Legal Services	<u>25,000</u>	<u>5,000</u>	<u>25,000</u>
Total Expenses	<u>75,000</u>	<u>53,000</u>	<u>75,000</u>
Total Available	25,000	37,000	25,000
Less Reserve	<u>25,000</u>	<u>25,000</u>	<u>25,000</u>
Net Available	<u><u>\$ -</u></u>	<u><u>\$ 12,000</u></u>	<u><u>\$ -</u></u>

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

REVIEWED BY: Laura Dadiw, Administrative Officer

DATE: October 2, 2019

SUBJECT: Consider Approval of Proposed FY (January – December) 2020 Monitoring and Management Program (M&MP), and Proposed 2020 M&MP Operations & Capital Fund Budgets

RECOMMENDATION:

Approve, or make changes to and then approve, the below:

1. FY 2020 M&MP
2. FY 2020 M&MP Operations Fund Budget
3. FY 2020 M&MP Capital Fund Budget (unfunded)

The projected 2021 Operations and Capital Fund Budgets are informational only, and no action on those budgets is required.

BACKGROUND:

At its August 14, 2019 meeting the TAC reviewed and discussed the proposed FY 2020 M&MP, and at its September 11, 2019 meeting the TAC reviewed and discussed the proposed 2020 M&MP Operations Fund and Capital Budgets. At its September 18, 2019 meeting the Budget and Finance Committee reviewed and discussed these same documents. Both committees recommended that the Board approve each of them.

DISCUSSION:

2020 M&MP: The following are the principle differences between the 2019 M&MP and the proposed 2020 M&MP:

1. The work to be performed under Task I.2.b.6 has been greatly reduced and the language of Tasks I.2.a.1 and I.4.c have been revised to reflect the work being transferred to those Tasks as a result of reducing the work of Task I.2.b.6.
2. The language in Task I.3.e is based on the expectation that the re-testing of PWM AWT water at a lower alkalinity will show that the water is acceptable and will not cause any adverse geochemical impacts. This re-testing has now been completed and the initial indication is that the PWM AWT water will not cause any adverse geochemical impacts. If the formal revised recommendation of MPWMD's geochemical consultant, Pueblo Water Resources, confirms that, then the language in Task I.3.e will be satisfactory as presented. If that proves not to be the case, the language will need to be revised to address this.

It should be noted that none of the Recommendations from the recently updated Basin Management Action Plan (BMAP) were included in the 2020 M&MP because at its July 12 meeting the TAC felt that only three of those recommendations (water conservation, coordination with the Salinas Valley Basin GSA, and Seaside storm water recharge) were feasible for pursuit at this time. None of these have any out-of-pocket cost or work consequence to the Watermaster, so they are not included in the 2020 M&MP. The other BMAP recommendations may become feasible or necessary in future years.

2020 M&MP Budgets:

Tasks M.1.c, M.1.d, and M.1.e (On-call/as-needed Consulting Services): There have been some hourly rate increases for the Montgomery and Associates staff that will likely be the ones to provide on-call/as-needed hydrogeological consulting services under Tasks M.1.c, M.1.d, and M.1.e (Derrick Williams and Georgina King). However, I have left the budget amounts for those tasks unchanged from 2019. This is because there is often some money left over in those budget line-items at the end of the year, and because the dollar amounts provided for those Tasks are only guesstimates.

Task M.1.g (SGMA Documentation Preparation): In 2019 the amount budgeted for this Task was \$2,140. The proposed scope of work for this task is unchanged from 2019, but there was budget left over after the work in 2019 was completed. Therefore, the amount proposed for 2020 is decreased by \$140 to \$2,000.

Task I.2.b.3 (Collect Quarterly Water Quality Samples): In 2019 the total amount budgeted for this Task was \$42,083, comprised of \$24,542 for MPWMD and \$17,541 for Martin Feeney. The proposed scope of work for this task in 2020 is changed slightly from 2019 due to (1) the need to perform some maintenance work on the Sentinel Wells by Mr. Feeney, and (2) by a reduction in the amount of work required by MPWMD to compile data. The cost for the induction logging subcontractor to Mr. Feeney is unchanged from 2019, but the amount proposed for Mr. Feeney's portion of this work in 2020 is increased by \$1,710 to perform the maintenance work. MPWMD's costs for 2020 are reduced by \$992. Therefore, the amount proposed for 2020 is increased by \$718 to \$42,801.

Task I.2.b.6 (Prepare Data Appendix for SWI Report): MPWMD's scope of work for this Task in 2020 has been reduced by having them only compile the data in MS Access format and provide that to Montgomery & Associates, rather than preparing a water quality and water level report. Therefore, the amount proposed for 2020 is reduced by \$1,490 to \$2,086.

Task I.2.b.7 (CASGEM Data Submittal for Watermaster's Voluntary Wells): Because of the increased time MPWMD encountered in 2019 to format and submit this data to the Department of Water Resources (DWR) to comply with the Sustainable Groundwater Management Act (SGMA) requirements for adjudicated basins, the number of hours provided for this Task in 2020 has been significantly increased from 16 hours in 2019 to 60 hours in 2020. The hourly rate for this work is unchanged from 2019, but the additional hours resulted in an increase in cost. Therefore, the amount proposed for 2020 is increased by \$6,556 to \$8,940.

Task I.4.c (Annual Report- Seawater Intrusion Analysis): In 2019 the total amount budgeted for this Task was \$22,742, comprised of \$1,192 for MPWMD and \$21,550 for Montgomery & Associates. The proposed scope of work for this task is changed from 2019 by having Montgomery & Associates prepare the water quality and water level report that was formerly prepared by MPWMD under Task I.2.a.1. The hourly rate for the MPWMD staff involved in performing their portion of this task is unchanged, so the amount proposed for 2020 for their portion of this work is unchanged from the amount in 2019. The hourly rates for some of the personnel working on this at Montgomery and Associates have increased slightly, and additional hours have been added for Montgomery & Associates to take the raw data provided to them by MPWMD and use it to prepare the water level and water quality report, so it can be included in the SIAR. Therefore, the amount proposed for 2020 is increased by \$2,580 to \$25,322.

Task I.3.e (Seaside Basin Geochemical Model): The full cost of the geochemical modeling that was performed in 2019 is being borne by the three proponents of the projects that intend to inject new sources of water into the Basin. These are California American Water, MPWMD, and Monterey One Water (formerly MRWPCA). It is anticipated that, if Montgomery & Associates needs to perform work on this Task in 2020, these same parties will reimburse the Watermaster for all of the costs to perform this work. Therefore, there should be no net cost to the Watermaster for the work of this Task.

SUMMARY:

As indicated by the right-hand column titled “Comparative Costs from 2019 Budget” in the proposed 2020 M&MP Operations Budget in Attachment 2, the proposed 2020 Budget, including the associated \$822 increase in the 10% Contingency line item, is \$9,046 higher (\$215,967-\$206,921) than the 2019 Budget.

Since no Capital Projects are anticipated in 2020, there is no change in the M&MP Capital Budget from 2019 to 2020, and that budget remains at zero dollars.

ATTACHMENTS:

1. Proposed 2020 M&MP
2. M&MP: Operations Fund Budgets Proposed for 2020
3. M&MP: Operations Fund Budgets Projected for 2021
4. M&MP: Capital Fund Budgets Proposed for 2020 and Projected for 2021 (both unfunded)

ATTACHMENT 1

Seaside Groundwater Basin 2020 Monitoring and Management Program

The tasks outlined below are those that are anticipated to be performed during 2020. Some Tasks listed below are specific to 2020, while other Tasks are recurring such as data collection, database entry, and Program Administration Tasks.

Within the context of this document the term “Consultant” refers either to a firm providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term “Contractor” refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.

M.1 Program Administration

M. 1. a Project Budget and Controls (\$0)	Consultants will provide monthly or bimonthly invoices to the Watermaster for work performed under their contracts with the Watermaster. Consultants will perform maintenance of their internal budgets and schedules, and management of their subconsultants. The Watermaster will perform management of its Consultants.
M. 1. b Assist with Board and TAC Agendas (\$0)	Watermaster staff will prepare Board and TAC meeting agenda materials. No assistance from Consultants is expected to be necessary to accomplish this Task.
M. 1. c., M. 1. d, & M.1.e Preparation for and Attendance at Meetings, and Peer Review of Documents and Reports (\$19,000)	<p>The Consultants’ work will require internal meetings and possibly meetings with outside governmental agencies and the public. For meetings with outside agencies, other Consultants, or any other parties which are necessary for the conduct of the work of their contracts, the Consultants will set up the meetings and prepare agendas and meeting minutes to facilitate the meetings. These may include planning and review meetings with Watermaster staff. The costs for these meetings will be included in their contracts, under the specific Tasks and/or subtasks to which the meetings relate. The only meeting costs that will be incurred under Tasks M.1.c, M.1.d, and M.1.e will be:</p> <ul style="list-style-type: none">• Those associated with attendance at TAC meetings (either in person or by teleconference connection), including providing periodic progress reports to the Watermaster for inclusion in the agenda packets for the TAC meetings, when requested by the Watermaster to do so. These progress reports will typically include project progress that has been made, problem identification and resolution, and planned upcoming work.• From time-to-time when Watermaster staff asks Consultants to make special presentations to the Watermaster Board and/or the TAC, and which are not included in the Consultant’s contracts for other tasks. <p>Appropriate Consultant representatives will attend TAC meetings (either in person or by teleconference connection) when requested to do so by Watermaster Staff, but will not be asked to prepare agendas or meeting minutes. As necessary, Consultants may provide oral updates to their progress reports (prepared under Task M.1.d) at the TAC meetings.</p> <p>When requested by the Watermaster staff, Consultants may be asked to assist the TAC and the Watermaster staff with peer reviews of documents and reports prepared by various other Watermaster Consultants and/or entities.</p>

M. 1. f QA/QC (\$0)	A Consultant (MPWMD) will provide general QA/QC support over the Seaside Basin Monitoring and Management Program. These costs are included in the other tasks.
M.1.g Prepare Documents for SGMA Reporting (\$2,000)	Section 10720.8 of the Sustainable Groundwater Management Act (SGMA) requires adjudicated basins to submit annual reports. Most of the documentation that needs to be reported is already generated by the Watermaster in conjunction with preparing its own Annual Reports. However, some information such as changes in basin storage is not currently generated and will require consultant assistance to do so. This task will be used to obtain this consultant assistance, as needed.

I. 2 Comprehensive Basin Production, Water Level and Water Quality Monitoring Program

I. 2. a. Database Management

I. 2. a. 1 Conduct Ongoing Data Entry and Database Maintenance/ Enhancement (\$17,004)

The database will be maintained by a Consultant (MPWMD) performing this work for the Watermaster. MPWMD will enter new data into the consolidated database, including water production volumes, water quality and water level data, and such other data as may be appropriate. Other than an annual reporting of data to another Watermaster Consultant at the end of the Water Year, as mentioned in Task I.4.c below, no reporting of water level or water quality data during the Water Year is required. However, MPWMD will promptly notify the Watermaster of any missing data or data collection irregularities that were encountered.

At the end of the Water Year MPWMD will prepare an annual water production, water level, and water quality tabulation in Access format and will provide the tabulation to another Watermaster Consultant who will use that data in the preparation of the SIAR under Task No. I.4.c of the Monitoring and Management Program.

No enhancements to the database are anticipated during 2020.

I. 2. a. 2 Verify Accuracy of Production Well Meters (\$0)

To ensure that water production data is accurate, the well meters of the major producers were verified for accuracy during 2009 and again during 2015. No additional work of this type is anticipated during 2020.

I. 2. b. Data Collection Program

I. 2. b. 1 Site Representation and Selection (\$0)

The monitoring well network review that was started in 2008 has been completed, and sites have been identified where future monitoring well(s) could be installed, if it is deemed necessary to do so in order to fill in data gaps. No further work of this type is anticipated in 2020.

I. 2. b. 2 Collect Monthly Manual Water Levels (\$3,726)

Each of the monitoring wells will be visited on a regular basis. Water levels will be determined by either taking manual water levels using an electric sounder, or by dataloggers. The wells where the use of dataloggers is feasible or appropriate have been equipped with dataloggers. All of the other wells will be manually measured.

This Task includes the purchase of one datalogger and parts for the datalogger to keep in inventory as a spare if needed.

**I. 2. b. 3
Collect Water Quality
Samples.
(\$42,801)**

Water quality data will be collected quarterly from certain of the monitoring wells, but will no longer be collected from the four coastal Sentinel Wells. Discontinuing water quality sampling in those wells is the result of the finding made in 2018 that the water quality samples being extracted from those wells are not representative of the aquifer. Those wells were designed for the purpose of electric induction logging, and will therefore continue to be induction logged twice a year in WY 2020.

In 2012 water quality analyses were expanded to include barium and iodide ions, to determine the potential benefit of performing these additional analyses. These two parameters have been useful in analyzing seawater intrusion potential in other vulnerable coastal groundwater basins, and are briefly mentioned in the Watermaster's annual Seawater Intrusion Analysis Reports. These parameters were added to the annual water quality sampling list 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). Barium and iodide analyses will continue being performed on the 3 most coastal MPWMD monitoring wells in 2020, but will no longer be performed on the Watermaster's coastal Sentinel Wells as discussed above.

Water quality data may come from water quality samples that are taken from these wells and submitted to a State Certified analytic laboratory for general mineral and physical suite of analyses, or the data may come from induction logging of these wells and/or other data gathering techniques. The Consultant or Contractor selected to perform this work will make this judgment based on consideration of costs and other factors.

Under this Task in 2013 retrofitting to use the low-flow purge approach for getting water quality samples was completed on all of the wells that are sampled. This sampling equipment sits in the water column and may periodically need to be replaced or repaired. Accordingly, an allowance to perform maintenance on previously installed equipment has been included in this Task. Also, in the event a sampling pump is found to be no longer adequate due to declining groundwater levels an allowance to purchase a replacement sampling pump has been included in this Task.

Improvements to the QA/QC program for the water quality sampling work were adopted in mid-2017 and will be included in this work in 2020.

**I. 2. b. 4
Update Program
Schedule and Standard
Operating Procedures.
(\$0)**

All recommendations from prior reviews of the data collection program have been implemented. No additional work of this type is anticipated in 2020.

**I. 2. b. 5
Monitor Well
Construction
(\$0)**

An additional monitoring well was installed in 2009. No further work of this type is anticipated in 2020.

I. 2. b. 6 Reports (\$2,086)	This task was essentially eliminated starting in 2020 by having the data collected by MPWMD under tasks I.2.b.1, I.2.b.2, and I.2.b.3 reported in the SIAR under Task I.4.c. The only work remaining under this task is for MPWMD to prepare and provide the data appendix to the Consultant that prepares the SIAR.
I.2.b.7 CASGEM Data Submittal (\$8,940)	On the Watermaster’s behalf MPWMD will compile and submit data on the Watermaster’s “Voluntary Wells” into the State’s CASGEM groundwater management database. The term “Voluntary Well” refers to a well that is not currently having its data reported into the CASGEM system, but for which the Watermaster obtains data. This will be done in the format and on the schedule required by the Department of Water Resources under the Sustainable Groundwater Management Act.
<i>I. 3 Basin Management</i>	
I. 3. a. Enhanced Seaside Basin Groundwater Model (Costs listed in subtasks below)	The Watermaster and its consultants use a Groundwater Model for basin management purposes.
I.3.a.1 Update the Existing Model (\$0)	The Model, described in the report titled “Groundwater Flow and Transport Model” dated October 1, 2007, was updated in 2009 in order to develop protective water levels, and to evaluate replenishment scenarios and develop answers to Basin management questions. The Model was again updated in 2014.
	In 2018 the Model was recalibrated and updated. No further work of this type is anticipated in 2020.
I. 3. a. 2 Develop Protective Water Levels (\$0)	A series of cross-sectional models was created in 2009 in order to develop protective water levels for selected production wells, as well as for the Basin as a whole. This work is discussed in Hydrometrics’ “Seaside Groundwater Basin Protective Water Elevations Technical Memorandum.” In 2013 further work was started to refine these protective water levels, but it was found that the previously developed protective water levels were reasonable. Protective water levels will be updated, if appropriate, as part of the work of Task I.3.c.
I. 3. a. 3 Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions (\$20,000)	In 2009 the updated Model was used to evaluate different scenarios to determine such things as the most effective methods of using supplemental water sources to replenish the Basin and/or to assess the impacts of pumping redistribution. This work is described in HydroMetrics’ “Seaside Groundwater Basin Groundwater Model Report.” In 2010, and again in 2013, HydroMetrics used the updated Model to develop answers to some questions associated with Basin management.
	Modeling performed in 2014, 2015, and 2016 led to the conclusion that groundwater levels in parts of the Laguna Seca Subarea will continue to fall even if all pumping within that subarea is discontinued, because of the influence of pumping from areas near to, but outside of, the Basin boundary. Additional modeling work may be performed in 2020 to further examine this situation. This Task provides a \$20,000 allowance to perform modeling or other work to develop answers to basin management questions, if so directed by the Watermaster Board.

<p>I. 3. b. Complete Preparation of Basin Management Action Plan (\$0)</p>	<p>The Watermaster’s Consultant completed preparation of the Basin Management Action Plan (BMAP) in February 2009. The BMAP serves as the Watermaster’s long-term seawater intrusion prevention plan. The Sections that are included in the BMAP are: Executive Summary Section 1 – Background and Purpose Section 2 – State of the Seaside Groundwater Basin Section 3 – Supplemental Water Supplies Section 4 –Groundwater Management Actions Section 5 – Recommended Management Strategies Section 6 – References</p>
<p>I. 3. c. Refine and/or Update the Basin Management Action Plan (\$0)</p>	<p>In 2019 the BMAP was updated based on new data and knowledge that has been gained since it was prepared in 2009.</p> <p>No further work of this type is anticipated in 2020. However, after the Groundwater Sustainability Plan (GSP) for the adjacent Monterey Subbasin of the Salinas Valley Groundwater Basin is completed, it may be appropriate to further update the BMAP to reflect the impacts of implementing that GSP. That GSP is scheduled to be completed by early 2022.</p>
<p>I. 3. d. Evaluate Coastal Wells for Cross-Aquifer Contamination Potential (\$0)</p>	<p>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. An evaluation of this was completed in 2012 and is described in MPWMD’s Memorandum titled “Summary of Seaside Groundwater Basin Cross-Aquifer Contamination Wells Investigation Process and Conclusions” dated August 8, 2012. This Memorandum did not recommend performing any further work on this matter, other than to incorporate into the Watermaster’s Database data from wells that were newly identified by the work performed in 2012. That data has now been incorporated into the Database, and no further work by the Watermaster on this matter is anticipated. In late 2017 a request was made to MPWMD to destroy one of its no-longer-used monitoring wells that is perforated in multiple aquifers (Well PCA-East Multiple). MPWMD performed this work in 2018.</p> <p>No further work of this type is anticipated in 2020.</p>

**I.3. e.
Seaside Basin Geochemical
Model
(\$10,000)**

When new sources of water are introduced into an aquifer, with each source having its own unique water quality, there can be chemical reactions that may have the potential to release minerals which have previously been attached to soil particles, such as arsenic or mercury, into solution and thus into the water itself. This has been experienced in some other locations where changes occurred in the quality of the water being injected into an aquifer. MPWMD's consultants have been using geochemical modeling to predict the effects of injecting Carmel River water into the Seaside Groundwater Basin under the ASR program.

In order to predict whether there will be groundwater quality changes that will result from the introduction of desalinated water and additional ASR water (under the Monterey Peninsula Water Supply Project) and advance-treated water (under the Pure Water Monterey Project) geochemical evaluations, and potentially modeling, will be performed in the areas of the Basin where injection of these new water sources will occur.

In 2019 a geochemical evaluation of introducing advance-treated water from the Pure Water Monterey Project was performed. That evaluation concluded that there would be no adverse geochemical impacts as a result of introducing that water into the Basin. A similar evaluation of the impact of introducing ASR water also concluded that there would be no adverse geochemical impacts. An evaluation of introducing desalinated water will be performed if the Monterey Peninsula Water Supply Project's desalination plant proceeds into the construction phase.

If any of the geochemical evaluations indicate the potential for problems to occur, then Montgomery and Associates may use the Watermaster's updated groundwater model, and information about injection locations and quantities, injection scheduling, etc. provided by MPWMD for each of these projects, to develop model scenarios to see if the problem(s) can be averted by changing delivery schedules and delivery quantities. This Task includes an allowance of \$10,000 to have Montgomery and Associates perform such modeling, if necessary.

If the modeling predicts that there may be adverse impacts from introducing these new sources of water, measures to mitigate those impacts will be developed under a separate task that will be created for that purpose when and if necessary.

***I. 4 Seawater Intrusion Response Plan (formerly referred to as the
Seawater Intrusion Contingency Plan)***

**I. 4. a.
Oversight of Seawater
Intrusion Detection and
Tracking
(\$0)**

Consultants will provide general oversight over the Seawater Intrusion detection program under the other Tasks in this Work Plan.

<p>I. 4. b. Focused Hydrogeologic Evaluation (\$0)</p>	<p>MPWMD attempted to 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 as discussed at TAC meetings. However, it was found that no historical water quality data from Cal Am's now-abandoned wells existed, and consequently it was not possible to answer the question of why water quality in the Sand City Public Works well differs from water quality in other wells in the Basin. The Sand City desalination plant could be affecting water quality in this area, but without the prior water quality data from now-abandoned wells, this could not be determined. The results of this work were summarized in 2013 in a brief Technical Memorandum prepared by MPWMD with conclusions and recommendations, and no further work on this matter is planned.</p>
<p>I. 4. c. Annual Report- Seawater Intrusion Analysis (\$25,322)</p>	<p>At the end of each water year, a Consultant will reanalyze all water quality data. Water level and water quality data will be provided to the Consultant in MS Access format. The Consultant will put this data into a report format and will include it as an attachment to the Seawater Intrusion Analysis Report. Semi-annual chloride concentration maps will be produced for each aquifer in the basin. Time series graphs, trilinear graphs, and stiff diagram comparisons will be updated with new data. The annual EM logs will be analyzed to identify changes in seawater wedge locations. All analyses will be incorporated into an annual report that follows the format of the initial, historical data report. Potential seawater intrusion will be highlighted in the report, and if necessary, recommendations will be included. The annual report will be submitted for review by the TAC and the Board. Modifications to the report will be incorporated based on input from these bodies, as well as Watermaster staff.</p>
<p>I. 4. d Complete Preparation of Seawater Intrusion Response Plan (\$0)</p>	<p>The Watermaster's Consultant (HydroMetrics) completed preparation of the long-term Seawater Intrusion Response Plans (SIRP) in February 2009. The Sections that are included in the SIRP are: Section 1 – Background and Purpose Section 2 – Consistency with Other Documents Section 3 – Seawater Intrusion Indicators and Triggers Section 4 –Seawater Intrusion Contingency Actions Section 5 - References No further work on the SIRP is anticipated in 2020.</p>
<p>I. 4. e. Refine and/or Update the Seawater Intrusion Response Plan (\$0)</p>	<p>At the beginning of 2009 it was thought that it might be beneficial or necessary to perform work to refine the SIRP and/or to update it based on new data or knowledge that was gained subsequent to the preparation of the SIRP. However, this did not prove to be necessary, and no further work of this type is anticipated in 2020.</p>
<p>I. 4. f. If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan (\$0)</p>	<p>The SIRP will be implemented if seawater intrusion, as defined in the Plan, is determined by the Watermaster to be occurring.</p>

ATTACHMENT 2

Monitoring and Management Program Operations Budget For Tasks to be Undertaken in 2020							Comparative Costs from 2019 Budget	
Task	Subtask	Sub-Subtask	Cost Description	CONSULTANTS & CONTRACTORS ⁽⁹⁾				Total
				MPWMD	Private Consultants	Contractors		
				Labor				
			Technical Project Manager	\$0	\$50,000	\$0	\$50,000	\$50,000
M.1 Program Administration								
	M.1.a		Project Budget and Controls	\$0	\$0	\$0	\$0	\$0
	M.1.b		Assist with Board and TAC Agendas	\$0	\$0	\$0	\$0	\$0
	M.1.c, M.1.d. & M.1.e		Preparation for and Attendance at Meetings and Peer Review of Documents and Reports ⁽⁶⁾	\$0	\$19,000	\$0	\$19,000	\$19,000
	M.1.f		QA/QC	\$0	\$0	\$0	\$0	\$0
	M.1.g		SGMA Documentation Preparation	\$0	\$2,000	\$0	\$2,000	\$2,140
I.1 Initial Phase 1 Monitoring Well Construction (Task Completed in Phase 1)								
I.2 Production, Water Level and Quality Monitoring								
	I.2.a		Database Management					
		I.2.a.1.	Conduct Ongoing Data Entry/ Database Maintenance/Enhancement	\$14,604	\$2,400	\$0	\$17,004	\$17,004
		I.2.a.2.	Verify Accuracy of Production Well Meters	\$0	\$0	\$0	\$0	\$0
	I.2.b		Data Collection Program					
		I.2.b.1.	Site Representation and Selection ⁽⁷⁾	\$0	\$0	\$0	\$0	\$0
		I.2.b.2.	Collect Monthly Water Levels ⁽⁶⁾	\$3,726	\$0	\$0	\$3,726	\$3,726
		I.2.b.3.	Collect Quarterly Water Quality Samples ⁽¹⁰⁾⁽⁹⁾	\$23,550	\$0	\$19,251	\$42,801	\$42,083
		I.2.b.4.	Update Program Schedule and Standard Operating Procedures.	\$0	\$0	\$0	\$0	\$0
		I.2.b.5.	Monitor Well Construction ⁽⁷⁾	\$0	\$0	\$0	\$0	\$0
		I.2.b.6.	Reports	\$2,086	\$0	\$0	\$2,086	\$3,576
		I.2.b.7.	CASGEM Data Submittal for Watermaster's Voluntary Wells	\$8,940	\$0	\$0	\$8,940	\$2,384
I.3 Basin Management								
	I.3.a		Enhanced Seaside Basin Groundwater Model	(Costs Shown in Subtasks Below)				
		I.3.a.1	Update the Existing Model ⁽¹¹⁾	\$0	\$0	\$0	\$0	\$0
		I.3.a.2	Develop Protective Water Levels ⁽¹²⁾	\$0	\$0	\$0	\$0	\$0
		I.3.a.3	Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions ⁽¹⁰⁾	\$0	\$20,000	\$0	\$20,000	\$20,000
	I.3.b.		Complete Preparation of Basin Management Action Plan	\$0	\$0	\$0	\$0	\$0
	I.3.c.		Refine and/or Update the Basin Management Action Plan	\$0	\$0	\$0	\$0	\$0
	I.3.d.		Evaluate Coastal Wells for Cross-Aquifer Contamination Potential	\$0	\$0	\$0	\$0	\$0
	I.3.e		Seaside Basin Geochemical Model ⁽¹³⁾	\$0	\$10,000	\$0	\$10,000	\$10,000
I.4 Seawater Intrusion Contingency Plan								
	I.4.a.		Oversight of Seawater Intrusion Detection and Tracking	\$0	\$0	\$0	\$0	\$0
	I.4.b.		Provide focused area hydrogeologic investigation for Sand City Public Works	\$0	\$0	\$0	\$0	\$0
	I.4.c.		Annual Report- Seawater Intrusion Analysis	\$1,192	\$24,130	\$0	\$25,322	\$22,742
	I.4.d.		Complete Preparation of Seawater Intrusion Response Plan ⁽²⁾	\$0	\$0	\$0	\$0	\$0
	I.4.e.		Refine and/or Update the Seawater Intrusion Response Plan ⁽²⁾⁽⁹⁾	\$0	\$0	\$0	\$0	\$0
	I.4.f.		If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan ⁽²⁾	(No Costs are Included for This Task, as This Task Will Likely Not be Necessary During 2020. If it Does Become Necessary, Use of Contingency Funds or a Budget Modification Will Likely be Necessary)				
TOTALS CONSULTANTS & CONTRACTORS				\$54,098	\$127,530	\$19,251		
SUBTOTAL not including Technical Program Manager =							\$150,879	\$142,655
Contingency (not including Technical Program Manager) @ 10% ⁽⁴⁾ =							\$15,088	\$14,266
Technical Program Manager =							\$50,000	\$50,000
TOTAL=							\$215,967	\$206,921

Footnotes:

- (1) Under this Subtask the Watermaster will directly contract with an outside contractor to perform the Sentinel Well induction logging work, and to also collect water level data in conjunction with doing the induction logging. MPWMD will perform the other portions of the work of this Subtask.
- (2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.
- (3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.
- (4) Due to the uncertainties of the exact scopes of some of the larger Tasks listed above at the time of preparation of this Budget it is recommended that a Contingency of approximately 10% be included in the Budget.
- (5) Includes \$1,000 to maintain equipment previously installed for this purpose, and \$2,000 to purchase a new sampling pump if an existing one needs to be replaced. Also includes lab costs to analyze for barium and iodide ions in certain of these wells as was done in preceding years
- (6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks. Includes the purchase and installation of one new and/or replacement datalogger at a price of \$700, plus \$50 for installation parts, to keep in inventory as a spare if needed.
- (7) No additional monitoring well is expected to be constructed in 2020.
- (8) This cost is for Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager. This work may include participation in conference calls and reviewing documents prepared by others.
- (9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.
- (10) Since the Model and BMAP were updated in 2018 and 2019 respectively, this Task would only be used if there were other issues the Board wished to evaluate and which were not covered in the updated BMAP.
- (11) The Model was updated and recalibrated in 2018, so no costs for this Task are anticipated in 2020.
- (12) The protective water levels developed in 2009 were examined in 2013 to see if they needed to be updated. It was concluded that the 2009 protective levels were still satisfactory for Basin management purposes, and that no revisions were needed. No work under this Task is anticipated in 2020.
- (13) This was a new Task that was started in 2018, and was completed for the PWM AWT water in 2019. Funds allocated for this Task in 2020 would only be used if the geochemical modeling that is expected to be performed in 2020 for the MPWSP desalination plant water indicates the need to have Montgomery and Associates use the Seaside Basin groundwater model to provide additional information needed by the geochemical model to develop mitigation measures for any adverse water quality impacts the geochemical model predicts could occur from introducing desalinated water into the Basin.

ATTACHMENT 3

Monitoring and Management Program Operations Budget							
For Tasks to be Undertaken in 2021^(1,2)							
Task	Subtask	Sub-Subtask	Cost Description	CONSULTANTS & CONTRACTORS ⁽³⁾			Total
				MPWMD	Private Consultants	Contractors	
Labor							
			Technical Project Manager	\$0	\$50,000	\$0	\$50,000
M.1 Program Administration							
	M.1.a		Project Budget and Controls	\$0	\$0	\$0	\$0
	M.1.b		Assist with Board and TAC Agendas	\$0	\$0	\$0	\$0
	M.1.c, M.1.d, & M.1.e		Preparation for and Attendance at Meetings and Peer Review of Documents and Reports ⁽⁶⁾	\$0	\$19,570	\$0	\$19,570
	M.1.f		QA/QC	\$0	\$0	\$0	\$0
	M.1.g		SGMA Documentation Preparation	\$0	\$2,060	\$0	\$2,060
I.1 Initial Phase 1 Monitoring Well Construction (Task Completed in Phase 1)							
I.2 Production, Water Level and Quality Monitoring							
	I.2.a.		Database Management				
		I.2.a.1.	Conduct Ongoing Data Entry/ Database Maintenance/Enhancement	\$15,042	\$2,472	\$0	\$17,514
		I.2.a.2.	Verify Accuracy of Production Well Meters	\$0	\$0	\$0	\$0
	I.2.b.		Data Collection Program				
		I.2.b.1.	Site Representation and Selection ⁽⁷⁾	\$0	\$0	\$0	\$0
		I.2.b.2.	Collect Monthly Water Levels ⁽⁶⁾	\$3,838	\$0	\$0	\$3,838
		I.2.b.3.	Collect Quarterly Water Quality Samples ⁽⁸⁾⁽⁹⁾⁽⁶⁾	\$24,257	\$0	\$19,829	\$44,085
		I.2.b.4.	Update Program Schedule and Standard Operating Procedures.	\$0	\$0	\$0	\$0
		I.2.b.5.	Monitor Well Construction ⁽⁷⁾	\$0	\$0	\$0	\$0
		I.2.b.6.	Reports	\$2,149	\$0	\$0	\$2,149
		I.2.b.7.	CASGEM Data Submittal for Watermaster's Voluntary Wells	\$9,208	\$0	\$0	\$9,208
I.3 Basin Management							
	I.3.a.		Enhanced Seaside Basin Groundwater Model	(Costs Shown in Subtasks Below)			
		I.3.a.1.	Update the Existing Model	\$0	\$0	\$0	\$0
		I.3.a.2.	Develop Protective Water Levels	\$0	\$0	\$0	\$0
		I.3.a.3.	Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions	\$0	\$20,000	\$0	\$20,000
	I.3.b.		Complete Preparation of Basin Management Action Plan	\$0	\$0	\$0	\$0
	I.3.c.		Refine and/or Update the Basin Management Action Plan ⁽¹¹⁾	\$0	\$0	\$0	\$0
	I.3.d.		Evaluate Coastal Wells for Cross-Aquifer Contamination Potential ⁽¹³⁾	\$0	\$0	\$0	\$0
	I.3.e.		Seaside Basin Geochemical Model ⁽¹⁴⁾	\$0	\$0	\$0	\$0
I.4 Seawater Intrusion Contingency Plan							
	I.4.a.		Oversight of Seawater Intrusion Detection and Tracking	\$0	\$0	\$0	\$0
	I.4.b.		Analyze and Map Water Quality from Coastal Monitoring Wells	(Costs Included Under I.4.a)			
	I.4.c.		Annual Report- Seawater Intrusion Analysis	\$1,228	\$24,854	\$0	\$26,082
	I.4.d.		Complete Preparation of Seawater Intrusion Response Plan ⁽²⁾	\$0	\$0	\$0	\$0
	I.4.e.		Refine and/or Update the Seawater Intrusion Response Plan ⁽²⁾⁽⁹⁾	\$0	\$0	\$0	\$0
	I.4.f.		If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan ⁽²⁾	(No Costs are Included for This Task, as This Task Will Likely Not be Necessary During 2019. If it Does Become Necessary, Use of Contingency Funds or a Budget Modification Will Likely be Necessary)			
TOTALS CONSULTANTS & CONTRACTORS				\$55,721	\$118,956	\$19,829	
SUBTOTAL not including Technical Program Manager =							\$144,505
Contingency (not including Technical Program Manager) @ 10% ⁽⁴⁾ =							\$14,451
Technical Program Manager							\$50,000
TOTAL=							\$208,956

Footnotes:						
(1) Under this Subtask the Watermaster will directly contract with an outside contractor to perform the Sentinel Well induction logging work, and to also collect water level data in conjunction with doing the induction logging. MPWMD will perform the other portions of the work of this Subtask.						
(2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.						
(3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.						
(4) Due to the uncertainties of the exact scopes of some of the Tasks listed above at the time of preparation of this Budget, it is recommended that a 10% Contingency be included in the Budget.						
(5) A portion of this cost is for maintaining sampling equipment that was installed in prior years.						
(6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks.						
(7) No additional monitoring well is expected to be constructed in 2021.						
(8) For Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager.						
(9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.						
(10) Not used.						
(11) If necessary to reflect knowledge gained from modeling work or other data sources. Since the BMAP was updated in 2018, no work on this Task is anticipated in 2021.						
(12) Includes a 3% inflation factor on most annually recurring costs in the 2020 Budget, except the Technical Program Manager cost which has no inflation factor applied to it.						
(13) No further work on this Task is anticipated in 2021.						
(14) It is assumed that all work of this Task will be completed in 2020.						

ATTACHMENT 4

Monitoring and Management Program Capital Budget
For Tasks to be Undertaken in 2020

No Capital projects are anticipated to be undertaken in 2020, so this budget is \$0.
--

Monitoring and Management Program Capital Budget
For Tasks to be Undertaken in 2021

No Capital projects are anticipated to be undertaken in 2021, so this budget is \$0.
--

THIS PAGE INTENTIONALLY LEFT BLANK

Seaside Groundwater Basin Watermaster									
Replenishment Fund									
Water Year 2020 (October 1 - September 30) / Fiscal Year					January 1 - December 31, 2020				
Proposed 2020 Budget									
	2006	2007	2008	2009	2010	2011	2012	2013	2014
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	WY 13/14
Unit Cost:	\$1,132 / \$283	\$1,132 / \$283	\$2,485 / 621.25	\$3,040 / \$760	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695	\$2,780 / \$695	\$2,702 / \$675.50
Cal-Am Water Balance Forward	\$ -	\$ 1,641,004	\$ 4,226,710	\$ (2,871,690)	\$ (2,839,939)	\$ (3,822,219)	\$ (6,060,164)	\$ (8,735,671)	\$ (6,173,771)
Cal-Am Water Production	3710.0 AF	4059.9 AF	3862.9 AF	2966.0 AF	3713.5 AF	3416.0 AF	3070.9 AF	3076.6 AF	3232.1 AF
Exceeding Natural Safe Yield									
Considering Alternative Producers	2,106,652	2,565,471	5,199,014	3,773,464	4,112,933	3,187,854	2,280,943	2,380,842	2,790,539
Operating Yield Overproduction									
Replenishment	-	20,235	8,511	-	-	-	154,963	181,057	281,012
Total California American	\$ 2,106,652	\$ 2,585,706	\$ 5,207,525	\$ 3,773,464	\$ 4,112,933	\$ 3,187,854	\$ 2,435,907	\$ 2,561,899	\$ 3,071,550
CAW Credit Against Assessment	(465,648)		(12,305,924)	\$ (3,741,714)	(5,095,213)	(5,425,799)	(5,111,413)		
CAW Unpaid Balance	\$ 1,641,004	\$ 4,226,710	(2,871,690)	\$ (2,839,939)	\$ (3,822,219)	\$ (6,060,164)	\$ (8,735,671)	\$ (6,173,771)	\$ (3,102,221)
City of Seaside Balance Forward	\$ -	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)
City of Seaside Municipal Production	332.0 AF	387.7 AF	294.3 AF	293.4 AF	282.9 AF	240.7 AF	233.7 AF	257.7 AF	223.6 AF
Exceeding Natural Safe Yield									
Considering Alternative Producers	219,689	174,082	402,540	465,300	314,721	141,335	163,509	236,782	142,410
Operating Yield Overproduction									
Replenishment	12,622	85	4,225	16,522	20,690	-	1,689	27,007	3,222
Total Municipal	232,310	174,167	406,764	481,823	335,412	141,335	165,198	263,788	145,631
City of Seaside - Golf Courses									
Exceeding Natural Safe Yield -									
Alternative Producer	-	-	131,705	69,701	-	-	-	-	-
Operating Yield Overproduction									
Replenishment	-	-	32,926	17,427	-	-	-	-	-
Total Golf Courses	-	-	164,631	87,128	-	-	-	-	-
Total City of Seaside*	\$ 232,310	\$ 174,167	\$ 571,395	\$ 568,951	\$ 335,412	\$ 141,335	\$ 165,198	\$ 263,788	\$ 145,631
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737				
In-lieu Credit Against Assessment				\$ -	(1,079,613)	(1,142,858)	(828,996)	(1,065,852)	(1,459,080)
City of Seaside Unpaid Balance	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)	\$ (2,889,325)
Total Replenishment Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)	\$ (5,991,546)
Replenishment Fund Balance Forward		\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)
Total Replenishment Assessments	2,349,946	2,768,576	5,805,632	4,369,165	4,464,082	3,329,189	2,601,104	2,825,688	3,217,182
Total Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(5,940,409)	(1,065,852)	(1,459,080)
Grand Total Fund Balance	\$ 1,884,298	\$ 4,652,874	\$ (1,847,417)	\$ (1,219,966)	\$ (2,930,710)	\$ (6,170,178)	\$ (9,509,483)	\$ (7,749,648)	\$ (5,991,546)

Seaside Groundwater Basin Watermaster						ITEM VIII.A.3		
Replenishment Fund						10/2/19		
Water Year 2020 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2020)						PAGE TWO		
Proposed 2020 Budget								
	2015	2016	2017	2018	Estimated 2019	Totals WY 2006 Through 2019	Budget WY 2020	Projected Totals Through WY 2020
Assessments:	WY 14/15	WY 15/16	WY 16/17	WY 17/18	WY 18/19		WY 19/20	
Unit Cost:	\$2,702 / \$675.50	\$2,702 / \$675.50	\$2,872 / \$718	\$2,872 / \$718	\$2,872 / \$718		\$2,872 / \$718	
Cal-Am Water Balance Forward	\$ (3,102,221)	\$ (676,704)	\$ (676,704)	\$ (491,747)	\$ (48,797,949)		\$ (48,677,949)	
Cal-Am Water Production								
Exceeding Natural Safe Yield Considering Alternative Producers	2,113,414	-	184,957	1,075,995	100,000	\$ 31,872,078	100,000	\$ 31,972,078
Operating Yield Overproduction Replenishment	312,103	-	-	-	20,000	977,881	20,000	997,881
Total California American	\$ 2,425,516		\$ 184,957	\$ 1,075,995	\$ 120,000	\$ 32,849,958	\$ 120,000	\$ 32,969,958
CAW Credit Against Assessment	-	-	-	(49,382,196)	-	(81,527,907)	-	(81,527,907)
CAW Unpaid Balance	\$ (676,704)	\$ (676,704)	\$ (491,747)	\$ (48,797,949)	\$ (48,677,949)	\$ (48,677,949)	\$ (48,557,949)	\$ (48,557,949)
City of Seaside Balance Forward	\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)	\$ (3,022,249)		\$ (2,912,249)	
City of Seaside Municipal Production	223.6 AF	185.01 AF						
Exceeding Natural Safe Yield Considering Alternative Producers	69,630	102,330	87,512	93,225	100,000	\$ 2,713,063	100,000	\$ 2,813,063
Operating Yield Overproduction Replenishment	38	11,959	2,409	27,026	10,000	137,492	10,000	147,492
Total Municipal	69,667	114,290	89,920	120,251	110,000	2,850,556	110,000	2,960,556
City of Seaside - Golf Courses								
Exceeding Natural Safe Yield - Alternative Producer	-	-	-	-	-	201,406	-	201,406
Operating Yield Overproduction Replenishment	-	-	-	-	-	50,353	-	50,353
Total Golf Courses	-	-	-	-	-	251,759	-	251,759
Total City of Seaside*	\$ 69,667	\$ 114,290	\$ 89,920	\$ 120,251	\$ 110,000	\$ 3,102,315	\$ 110,000	\$ 3,212,315
City of Seaside Late Payment 5%	-	-	-	-	-	88,887	-	88,887
In-lieu Credit Against Assessment	(526,890)	(162)	-	-	-	(6,103,451)	-	(6,103,451)
City of Seaside Unpaid Balance	\$ (3,346,548)	\$ (3,232,420)	\$ (3,142,500)	\$ (3,022,249)	\$ (2,912,249)	\$ (2,912,249)	\$ (2,802,249)	\$ (2,802,249)
Total Replenishment Fund Balance	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$ (51,820,198)	\$ (51,590,198)	\$ (51,590,198)	\$ (51,360,198)	\$ (51,360,198)
Replenishment Fund Balance Forward	\$ (5,991,546)	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$ (51,820,198)		\$ (51,590,198)	
Total Replenishment Assessments	2,495,183	114,290	274,877	1,196,246	230,000	36,041,161	230,000	36,271,161
Total Paid and/or Credited	(526,890)	(162)	-	(49,382,196)	-	(87,631,358)	-	(87,631,358)
Grand Total Fund Balance	\$ (4,023,252)	\$ (3,909,125)	\$ (3,634,247)	\$ (51,820,198)	\$ (51,590,198)	(51,590,198)	\$ (51,360,198)	\$ (51,360,198)

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: October 2, 2019

SUBJECT: Consider Approving the Following Professional Services Contracts for Fiscal Year 2020:

- 1) Two Contracts with Montgomery & Associates (formerly HydroMetrics) — one for \$13,000 for providing on-call/as-requested hydrogeologic consulting services and for providing assistance in preparing documents that the Watermaster will need to submit to fulfill its reporting requirements under the Sustainable Groundwater Management Act, and the second for \$24,130.00 to prepare the Seawater Intrusion Analysis Report (SIAR) for 2020.
- 2) Two Contracts with MPWMD—one for \$54,098.00 and the second one for \$3,915, both pertaining to monitoring and other work on the Seaside Groundwater Basin Management and Monitoring Program (M&MP).
- 3) Two Contracts with Martin Feeney - one for \$4,000 to provide on-call/as-requested hydrogeologic consulting services and one for \$19,250.56 to perform induction logging of the Sentinel Wells.
- 4) One Contract with Todd Groundwater – for \$4,000 to provide on-call/as-requested hydrogeologic consulting services.

RECOMMENDATIONS:

It is recommended that the Board approve the attached RFSs No. 2020-01 and 2020-02 with Montgomery & Associates, RFSs No. 2020-01 and 2020-02 with MPWMD, RFSs No. 2020-01 and 2020-02 with Martin Feeney, and RFS No. 2020-01 with Todd Groundwater.

BACKGROUND:

Attached are the proposed initial contracts for each of the Watermaster’s consultants that are expected to work on M&MP activities during 2020. 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 and discussed the Montgomery & Associates, MPWMD, Martin Feeney, and Todd Groundwater items at its September 11, 2019 and the Budget and Finance Committee reviewed and discussed these contracts at its September 18, 2019 meeting and both committees recommended that the Board approve each of them.

DISCUSSION

The attached RFSs constitute the proposed initial 2019 work assignments for each of these consultants as follows:

- Montgomery & Associates RFS No. 2020-01 covering their providing general hydrogeologic consulting services and for providing assistance in preparing documents that the Watermaster will need to submit to fulfill its reporting requirements under the Sustainable Groundwater Management Act. These tasks are similar to those in preceding years.

- Montgomery & Associates RFS No. 2020-02 covering their preparing the 2020 SIAR.
- MPWMD RFS No. 2020-01 covering their anticipated 2020 M&MP tasks. These tasks are similar to those in preceding years.
- MPWMD RFS No. 2020-02 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 reimbursed by the private producers, and there is no net cost to the Watermaster for work performed under this RFS.
- Martin Feeney RFS No. 2020-01 covering his performing induction logging of certain of the Watermaster's monitoring wells and providing that data to MPWMD and Montgomery & Associates. This year's work also includes performing some maintenance on the Sentinel Wells.
- Martin Feeney RFS No. 2020-02 covering his providing general hydrogeologic consulting services.
- Todd Groundwater RFS No. 2020-01 covering their providing general hydrogeologic consulting services.

These contracts are being presented to the Board for approval at today's meeting to ensure the contacts will be in effect by the start of 2020. All of these costs are included in the Budgets that the Board is asked to approve at today's meeting under a preceding agenda item.

If geochemical modeling needs to be performed on Cal Am's desalination plant water in 2020, and if that indicates the need to develop mitigation measures for possible adverse impacts from introducing non-native water into the Basin, I will develop an additional RFS for Montgomery & Associates during 2020 to use the Seaside Basin Groundwater Model to provide information to MPWMD's consultant (Pueblo Water Resources) to use in performing that geochemical modeling to develop such mitigation measures. Funds for this additional RFS have been included in the proposed M&MP Operations Budget for 2020. When and if drafted, the RFS would come to the TAC for approval before going to the Board.

ATTACHMENTS:

1. Montgomery & Associates RFS No. 2020-01
2. Montgomery & Associates RFS No. 2020-02
3. MPWMD RFS No. 2020-01
4. MPWMD RFS No. 2020-02
5. Martin Feeney RFS No. 2020-01
6. Martin Feeney RFS No. 2020-02
7. Todd Groundwater RFS No. 2020-01.

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2020

RFS NO. 2020-01
(To be filled in by WATERMASTER)

TO: Hale Barter
Montgomery & Associates
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: General hydrogeologic consulting and document preparation services. See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2020, 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: \$ 13,000.00 (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

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, BMAP and SIRP implementation issues, and preparation of documents for WATERMASTER's use in fulfilling its Sustainable Groundwater Management Act reporting requirements.

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 2020 Monitoring and Management Program (M&MP) to which this RFS No. 2020-01 pertains are:

- M. 1. c & M.1. d - Preparation and Attendance of Meetings
- M. 1. e - Peer Review of Documents and Reports
- M.1.g – Sustainable Groundwater Management Act Documentation Preparation

ESTIMATED COSTS

Tasks M.1.c, M.1.d, and M.1.e: General Consulting Services will consist of working on these Tasks and attending some TAC and other meetings either via telephone or in-person in Seaside, as requested by WATERMASTER.

\$10,000 in labor costs of this RFS No. 2020-01 are allocated to performing work on these Tasks. In addition to hourly labor costs, an allowance of \$1,000.00 is included in for this Task to cover travel and other incidental costs associated with the performance of this work.

Task M.1.g: Section 10720.8 of the Sustainable Groundwater Management Act (SGMA) requires adjudicated basins to submit annual reports. Most of the documentation that needs to be reported is already generated by the WATERMASTER in conjunction with preparing its own Annual Reports. However, information regarding changes in basin storage is not currently generated. PROFESSIONAL will provide an estimate of the change in basin storage under this RFS No. 2020-01.

\$2,000 in labor costs of this RFS No. 2020-01 are allocated to performing work for Task M.1.g.

All work under this RFS No. 2020-01 will be billed at the following hourly rates, including all markups and other direct costs:

Derrick Williams = \$225.00/hour

Georgina King = \$200.00/hour

The total cost authorized by this RFS No. 2020-01 is \$13,000.00.

ATTACHMENT 2
SCHEDULE

**Montgomery & Associates RFS No. 2020-01
Work Schedule**

ID	Task Name	2020																	
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	A
1	M. 1. c - Preparation and Attendance of Meetings																		
2	M. 1. e - Peer Review of Documents and Reports																		
3	M.1.g - SGMA Document Preparation																		

Montgomery Work Schedule for RFS No 2020-01 7-20-19.mpp Page 1

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: 1/1/2020

RFS NO. 2020-02
(To be filled in by WATERMASTER)

TO: Hale Barter
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Prepare the Seawater Intrusion Analysis Report for 2020.
See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2020,
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: \$ 24,130.00 (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

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

SCOPE OF WORK

The scope consists of providing professional consulting services to WATERMASTER for preparation of the 2020 Seawater Intrusion Analysis Report (SIAR).

To promote efficiency, much of the text and graphics from the 2019 SIAR will be incorporated directly into the 2020 SIAR.

Preparing the 2020 SIAR will involve analyzing all water quality data at the end of Water Year 2020 (October 1, 2019 to September 30, 2020) and producing semi-annual (2nd and 4th quarters 2020) 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.

Water level and water quality data for WY 2020 will be provided to PROFESSIONAL in MS Access format. PROFESSIONAL will put this data into a report format and will include it as an attachment to the 2020 SIAR.

A Draft 2020 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 2020 SIAR. A CD containing an electronic version of the entire Final 2020 SIAR in MS Word and up to 15 printed and bound copies of the Final 2020 SIAR (quantity to be determined by WATERMASTER) will be provided to WATERMASTER.

ATTACHMENT 2

**Montgomery & Associates RFS No. 2020-02
Work Schedule**

ID	Task Name	2020																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	I.4.c Annual Seawater Intrusion Analysis Report (SIAR)																		
2	HydroMetrics Provides Draft SIAR to Watermaster												◆ 11/11						
3	TAC Approves Annual Seawater Intrusion Analysis Report (SIAR)												◆ 11/18						
4	Board Approves Annual Seawater Intrusion Analysis Report (SIAR)												◆ 11/25						

Work Schedule for Montgomery RFS No 2020-02 7-20-19.mpp Page 1

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.

Task	Hours		Costs			
	Georgina King (\$200 per hr)	Staff (\$135 per hr)	Georgina King	Staff	Expenses	Total Costs
2020 Seawater Intrusion Analysis Report						
Produce 2020 SIAR	32	108	\$ 6,400	\$ 14,580	\$ 600	\$ 21,580
Attend One TAC Meeting in Monterey	12	0	\$ 2,400	\$ -	\$ 150	\$ 2,550
TOTALS	42	100	\$ 8,400	\$ 12,000	\$ 700	\$ 24,130

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2020

RFS NO. 2020-01
(To be filled in by WATERMASTER)

TO: Jonathan Lear
Monterey Peninsula Water Management District
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose:

Perform certain Tasks contained within the Watermaster's Monitoring and Management Plan for 2020 (See detailed Scope of Work in Attachment 1).

Completion Date: The work of this RFS No. 2020-01 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: \$ 54,098.00 (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

Agreed to by: _____ **Date:** _____
PROFESSIONAL

ATTACHMENT 1

Detailed Scope of Work for RFS No. 2020-01

Background:

The Watermaster Board approved the Budget for the 2020 Monitoring and Management Program (hereinafter referred to as the “2020 M&MP”) at its meeting of October 2, 2019.

This RFS No. 2020-01 authorizes PROFESSIONAL to perform certain work on certain of the Tasks described in the 2020 M&MP. The Task numbers listed in Table 1 of this Detailed Scope of Work for RFS No. 2020-01 correspond to the Task numbers in the 2020 M&MP.

Table 1

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. Other than an annual reporting of data to another WATERMASTER Consultant at the end of the Water Year, as mentioned below, no reporting of water level or water quality data during the Water Year is required. However, PROFESSIONAL will promptly notify the Watermaster of any missing data or data collection irregularities that were encountered during the quarterly reporting period. 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. 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>At the end of the Water Year PROFESSIONAL will prepare an annual water production, water level, and water quality tabulation in Access format and will provide the tabulation to another WATERMASTER Consultant who will use that data in the preparation of the SIAR under Task No. I.4.c of the Monitoring and Management Program.</p>
-----------	--	--

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. The wells where the use of dataloggers is feasible or appropriate have already been equipped with dataloggers.</p> <p>This Task includes the purchase of one datalogger @ \$700 to keep in inventory as a spare if needed, plus \$50 in parts for the datalogger.</p> <p>All of the other wells will be manually measured.</p>
------------	------------------------------	--

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), Bicarbonate (as HCO₃), 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 quarterly: 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>Retrofitting to use the low-flow purge approach for getting water quality samples has already been completed on all of the wells that are sampled on a quarterly basis. Retrofitting of the wells that are sampled on an annual basis is not warranted. This sampling equipment sits in the water column and may periodically need to be replaced or repaired. Accordingly, an allowance of \$1,000 to perform maintenance on previously installed equipment has been included in this Task. Also, in the event a sampling pump is found to be no longer adequate due to declining groundwater levels, or if a sampling pump needs to be installed on a Sentinel Well, an allowance of \$2,000 to purchase a sampling pump has been included in this Task.</p>
I.2.b.7	CASGEM Data Submittal	<p>PROFESSIONAL will compile and submit data on the Watermaster’s “Voluntary Wells” into the State’s CASGEM groundwater management database. The term “Voluntary Well” refers to a well that is not currently having its data reported into the CASGEM system, but for which the Watermaster obtains data. This will be done in the format and on the schedule required by the Department of Water Resources under the Sustainable Groundwater Management Act.</p>
I.4.c	Review Seawater Intrusion Analyses	<p>WATERMASTER will have another consultant perform analyses and prepare mapping and other documents pertaining to seawater intrusion detection. PROFESSIONAL may participate in meetings with that consultant during the course of its work, and may provide review comments and recommendations to WATERMASTER regarding this work as it is being carried out by that consultant.</p>

Table 2. Monitoring Wells

WELL NAME AND SUBAREA LOCATION ⁽⁶⁾	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 (Purisima) ⁽⁶⁾		X						X		
SBWM MW-2-Deep (Purisima) ⁽⁶⁾		X						X		
SBWM MW-3-Deep (Purisima) ⁽⁶⁾		X						X		
SBWM MW-4-Deep (Purisima/Santa Margarita) ⁽⁶⁾		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)

Southern Coastal Subarea (and vicinity)										
Plumas '90 Test-Deep		X					X			
K-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-09-180-Shallow		X					X			
Shea		X						X		
Sand City Public Works Well		X					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⁽⁹⁾	32	31	4	0	8	24	15	10	17	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.
- (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

MPWMD RFS No. 2020-01 Work Schedule		2020												2021									
ID	Task Name	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	I.2.a DATABASE MANAGEMENT																						
2	I.2.a.1 Conduct Ongoing Data Entry/Database Maintenance																						
3	Annual Water Production, Water Level, and Water Quality Tabulation for 2020																◆ 11/16						
4	I.2.b DATA COLLECTION PROGRAM																						
5	I.2.b.2 Collect Monthly Water Levels (MPWMD)																						
6	I.2.b.3 Collect Quarterly Water Quality Samples (MPWMD)																						
7	I.2.b.7 CASGEM Data Submittal																						
8	I.4.c MPWMD Provides Assistance in Seawater Intrusion Detection																						

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	\$149	Other services needed to host and maintain Watermaster's Database, estimate \$300 for the year.	\$300	\$14,604
I. 2. b. 2.	12 mo. @ 4 hrs/mo.	48	\$62	Purchase one datalogger @ \$700 plus \$50 in parts to keep in inventory as a spare if needed.	\$750	\$3,726
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 verification WQ sample at Ord Terrace Shallow Well Labor: 4 events @ 16 hrs/event	64	\$62	Fuel: 4 events @ \$10/site x 3 sites = \$120; Lab costs: 4 events @ \$225/well x 7 wells = \$6,300; plus one verification sample lab cost = \$225.	\$6,645	\$10,613
	Annual WQ wells (Table 2): 1 event @ 28 hrs/event = 28 hrs	28	\$62	BLM site: Eductor setup (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): \$175 x 15 wells x 1 event = \$2,625; maintenance on previously installed sample collection equipment = \$1,000. One-time cost, if necessary, for replacing a well sampling pump if the existing pump fails or is found to be inadequate due to dropping groundwater levels = \$2,000.	\$5,745	\$7,481
	WM Sentinel and Northern Inland wells: download/store dataloggers, 4 events @ 2 hrs/event	8	\$62	N/A	\$0	\$496
	Compile data: 4 events @ 20 hours/event	80	\$62	N/A	\$0	\$4,960
I. 2. b. 6	Provide Data Appendix for SWI Report	14	\$149	N/A	\$0	\$2,086
I. 2. b. 7	Quarterly CASGEM Data Submittal for Watermaster's Voluntary Wells	60	\$149	N/A	\$0	\$8,940
I. 4. c	Provide SWI supplemental data and review.	8	\$149	N/A	\$0	\$1,192
TOTAL ESTIMATED COST =						\$54,098

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, 2020

RFS NO. 2020-02

(To be filled in by WATERMASTER)

TO: Jonathan Lear

Monterey Peninsula Water Management District
PROFESSIONAL

FROM: Robert Jaques

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. 2020-02 shall be completed on an as-directed basis from the Watermaster during 2020. All work under this RFS will be completed not later than December 31, 2020.

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

Total Price Authorized by this RFS: \$3,915.00 (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

Agreed to by: _____ **Date:** _____
PROFESSIONAL

ATTACHMENT 1
Scope of Work for RFS No. 2020-02

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. 2020-02 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 \$62/hr, so the estimated cost per water level measurement would be \$31.00.

The total estimated cost would be \$372 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 \$175 per sample for the laboratory analysis. The sampling work would be billed at the field rate of \$62/hr, and the review and computer data entry work would be billed at the rate of \$149/hr, so the estimated cost per annual water quality sample would be \$105.50 for labor, and \$175 for laboratory services, for a total cost per sample of \$280.50. Only one sample per well per year will need to be collected and analyzed. This sample will be collected in the fall.

The total estimated cost for collecting and analyzing the sample per well is \$280.50.

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 \$652.50.

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 @ \$372 =	\$2,232
Potential No. of Wells Needing Water Quality Data Collected	= 6 @ \$280.50 =	<u>\$1,683</u>
	TOTAL =	<u>\$3,915</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)	Pasadena - New Cities Developme	Y	T16S/R2E-05Mg	Y	Y	N	
173-071-051	Paddock #1 (Lot #11)	Pasadena - 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

THIS PAGE INTENTIONALLY LEFT BLANK

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2020

RFS NO. 2020-01

(To be filled in by WATERMASTER)

TO: Martin Feeney
Martin Feeney
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose:

Perform certain Tasks contained within the Watermaster's Monitoring and Management Plan for 2020 (See detailed Scope of Work in Attachment 1).

Completion Date: The work of this RFS No. 2020-01 shall be completed in accordance with the schedule described in Attachment 1.

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

Total Price Authorized by this RFS: \$ 19,250.56 (See Attachment 2 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.

Authorized by: _____ **Date:** _____
WATERMASTER Technical Program Manager

Agreed to by: _____ **Date:** _____
PROFESSIONAL

ATTACHMENT 1

Detailed Scope of Work for RFS No. 2020-01

Background:

The Watermaster Board approved the Budget for the 2020 Management and Monitoring Program Work Plan (hereinafter referred to as the “2020 M&MP Work Plan”) at its meeting of October 2, 2019.

Scope of Work

This RFS No. 2020-01 authorizes PROFESSIONAL to perform the work described in PROFESSIONAL’s Proposal for Hydrogeologic Services, dated August 5, 2019 and contained in Attachment 2, with the following clarifications and/or additions:

PROFESSIONAL will collect water level data from the wells identified as SBWM-1, SBWM-2, SBWM-3, and SBWM-4. PROFESSIONAL will also perform induction logging on each of these wells. These wells are commonly referred to as WATERMASTER’s Sentinel Wells. Water level data collection and induction logging will be performed on each of these wells as described below and according to the schedule described below:

Induction Logging

Induction logging will be performed on each of the four Sentinel Wells semi-annually in March and September.

Water Level

Water levels in each of the four Sentinel Wells will be continuously measured by data loggers and will be downloaded semi-annually when induction logging is being performed.

PROFESSIONAL will transmit the digital water level data to the Monterey Peninsula Water Management District (MPWMD), Montgomery and Associates, and to the WATERMASTER promptly after the data is acquired, so that (1) MPWMD can use that data in preparing its reports to the WATERMASTER and (2) Montgomery and Associates and the WATERMASTER will be made promptly aware of the data. Digital induction data will also be provided to MPWMD, Montgomery and Associates, and to the WATERMASTER as soon as it becomes available to PROFESSIONAL. Digital induction data will also be reduced and presented graphically and provided to Montgomery and Associates for use by Montgomery and Associates in preparing reports for the WATERMASTER.

August 5, 2019

Seaside Basin Watermaster
PO Box 51502
Pacific Grove CA.
93950

Attention: Bob Jaques, PE

Subject: Sentinel Well Data Collection Program 2020 – Proposal for Hydrogeologic Services

Dear Bob:

Following up on our discussions, I'm pleased to provide this proposal to assist the Seaside Basin Watermaster (Watermaster) with data collection from the Sentinel Wells for the upcoming year. Presented in this proposal are an outline of the data collection plan and an estimate of associated costs.

The data collection program for the Sentinel Wells will continue as it has been performed the last half of 2017. The data collection program currently includes semi-annual induction logging and continuous water level data collection. The program previously included depth-specific downhole water quality sampling, however, the data proved unreliable and this portion of the program was terminated. The subcontractor for the induction logging remains unchanged.

The components of this program are as follows:

Data collection from each well:

- Semi-Annual down-loading of water level data logger.
- Semi-Annual induction logging (March and September)
- Transmittal of water level data to Monterey Peninsula Water Management District personnel.
- Processing of induction log data and presentation

The well vaults that protect the Sentinel Wells need some maintenance to continue in service. This could include painting of the vault covers, repairing stripped threads for the bolts that hold down the covers, and general cleaning. Cost of these services are included in this proposal.

It is understood that, as in the past, the Monterey Peninsula Water Management District (District) will share some of the data collection and analysis tasks of the overall data collection program. The District will collect water level data from the array of data loggers on the alternate quarters. Water level data from the data loggers will be collected as part of this scope of services only when induction logging is performed. Collected water level data will be transmitted to the District for compilation and processing. Induction logging data will continue to be compiled and processed by this author.

Annual costs for the data collection program are estimated at \$ 19,250.56 inclusive of outside services. A breakdown of costs is presented in the table below.

SENTINEL WELLS LOGGING/SAMPLING WL DATA COLLECTION PROGRAM						
2020						
	Unit Cost	Number	Semi-Annual Cost	# per annum	Annual Cost	
Pacific Surveys						
Service Charge	1085	1	1085	2	\$ 2,170.00	
Induction Logging	0.75	5310	3982.5	2	\$ 7,965.00	
E-file generation/transmittal	115	1	115	2	\$ 230.00	
mileage	0.99	422	417.78	2	\$ 835.56	
per diem	175	2	350	2	\$ 700.00	
					\$ 11,900.56	
Professional Services (hrs)						
Well Vault Maintainance	175	8	1400	1	\$ 1,400.00	
Supervise Logging/Download Data Loggers	175	10	1750	2	\$ 3,500.00	
Process Induction Data	200	4	800	2	\$ 1,600.00	
Transmit Water Level Data	200	2	400	2	\$ 800.00	
					\$ 7,300.00	
Materials						
Paint, helicoils, etc.					\$ 50.00	
					\$ 19,250.56	
					Total \$ 19,250.56	

The opportunity to present this proposal is appreciated. Please call if you have any questions.

Sincerely,



Martin B. Feeney

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2020

RFS NO. 2020-02

(To be filled in by WATERMASTER)

TO: Martin Feeney
Martin Blair Feeney
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Consultation and other hydrogeologic services. See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2020.

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

Total Price Authorized by this RFS: \$4,000.00 (Cost is authorized only when evidenced by signature below.) (See Attachment 1 for derivation of this Total Price).

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

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

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, and seawater intrusion analysis issues.

Providing these services will likely involve attending certain of WATERMASTER's Technical Advisory Committee (TAC) and /or Board meetings, most of which will be attended telephonically.

Consulting services will be provided at the rate of \$200/hour. Related other direct costs (such as travel costs) will be billed at actual cost. Services under this RFS No. 2020-02 will only be provided when specifically requested by WATERMASTER.

The total cost authorized by this RFS No. 2020-02 is \$4,000.

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: January 1, 2020

RFS NO. 2020-01

(To be filled in by WATERMASTER)

TO: Gus Yates
Todd Groundwater
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, 2020.

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

Total Price Authorized by this RFS: \$ 4,000.00 (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

Agreed to by: _____ Date: _____
PROFESSIONAL

ATTACHMENT 1

Scope of Work

On an ongoing and as-requested basis PROFESSIONAL will provide hydrogeologic consulting services to WATERMASTER on groundwater modeling and related topics. These may include, but not be limited to, responding to questions regarding the Seaside Basin Model that HydroMetrics WRI has prepared for WATERMASTER, assisting in the interpretation of modeling results, and other related activities.

Providing these services may involve attending certain of WATERMASTER's Technical Advisory Committee (TAC) meetings, some of which may be attended telephonically.

Estimated Costs

Consulting services provided under this RFS No. 2020-01, including attending meetings either via telephone or in-person as requested by WATERMASTER, will be billed at PROFESSIONAL's standard hourly rates for calendar year 2020, including all markups and other direct costs.

In addition to hourly labor costs, an allowance of \$500.00 is included in the estimated cost of this RFS to cover travel and other incidental costs associated with the performance of this work.

The total cost authorized by this RFS No. 2020-01 is \$4,000.00.

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Budget/Finance Committee

FROM: Laura Paxton, Administrative Officer

DATE: October 2, 2019

SUBJECT: Unit Cost for Water Year 2019/20 Over Production Replenishment Assessment Amounts

RECOMMENDATION:

The Budget and Finance Committee recommended at its September 18 meeting that the Board approve a Proposed Replenishment Assessment Unit Cost of \$2,872 for Natural Safe Yield Overproduction and \$718 (25% of \$2,872) for Operating Yield Over Production for Water Year 2019 (October 1, 2019 - September 30, 2020).

SUMMARY:

The Replenishment Assessment Unit Cost is used to calculate the Replenishment Assessments that are charged to any Standard Producer that exceeds its allocations (both Natural Safe Yield and Operating Yield allocations) during the Water Year.

Per page 33 of the Decision, *“The per acre-foot amount of the Replenishment Assessments shall be determined and declared by Watermaster in October of each Water Year in order to provide Parties with advance knowledge of the cost of Over-Production in that Water Year.”* Thus, the per acre-foot amount determined by the Board on or before October of 2019 will be used to calculate Replenishment Assessments for pumping that occurs during the Water Year beginning October 1, 2019 and ending September 30, 2020.

BACKGROUND:

For each of the three Water Years 2014, 2015, and 2016, the Board adopted a unit cost of \$2,702/AF. This unit cost was developed starting with Water Year 2014 by taking the average of the Base Unit Cost (\$/AF) listed in Table 1 for each project $[\$3,507+\$1,800+\$2,000+\$3,500]/4$, as the Replenishment Assessment Unit Cost. The Water Year 2014 unit cost was carried over to the two subsequent Water Years because no updated cost data was available for the projects listed in Table 1, and no other viable projects could be identified. For Water Year 2016/17 the Budget and Finance Committee updated the basis from which the annual calculation of the Unit Cost of replenishment water is established, a blended cost of a reduced size desalination plant for the Monterey Peninsula Water Supply Project and groundwater replenishment provided by the Pure Water Monterey Project $[(\$4,591+\$2,025+\$2,000)/3] = \$2,872$ (see Table 2).

DISCUSSION:

Due to the lack of more supportable data the recommendation is to continue using \$2,872, the average of the Base Unit Cost (\$/AF) listed in Table 2 for each project $[(\$4,591+\$2,025+\$2,000)/3]$ as the Natural Safe Yield Over Production Replenishment Assessment Unit Cost for the Water Year 2019/2020. The Operating Yield Over Production Replenishment Assessment Unit Cost is 25% of that amount, or \$718.

ATTACHMENTS:

Table 1: Water Year 2014 Unit Cost Calculation Data
Table 2: Current Unit Cost Data

WATER YEAR 2014 (October 1, 2013-September 30, 2014)

ANTICIPATED UNIT COSTS OF REPLENISHMENT WATER FOR THE SEASIDE BASIN

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISHMENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) ⁽¹⁾	LEVEL OF PROJECT DEVELOPMENT	CONTINGENCY INCLUDED IN BASE UNIT COST ⁽²⁾ (%)	BASE UNIT COST (\$/AF)	BASE UNIT COST YEAR	ADDITIONAL CONTINGENCY ADDED TO REFLECT LEVEL OF PROJECT DEVELOPMENT ⁽³⁾ (%)	UNIT COST INCLUDING ADDITIONAL CONTINGENCY (\$/AF)	UNIT COST INFLATED @ 3% FROM COST BASIS YEAR TO YEAR REPLENISHMENT WATER COULD BECOME AVAILABLE (\$/AF)	VOLUME-WEIGHTED AVG %
Monterey Peninsula Water Supply Project (Regional Desalination) ⁽⁴⁾	2018	9,752	Project Report	30%	\$3,507	2012	0%	\$3,507	\$4,188	56.53%
Seaside Basin ASR Expansion ⁽⁵⁾	2015	1,000	Conceptual	11%	\$1,800	2012	39%	\$2,502	\$2,734	5.80%
Regional Urban Water Augmentation Project ⁽⁶⁾	2017	3,000	Design	5%	\$2,000	2013	10%	\$2,200	\$2,476	17.39%
Groundwater Replenishment Project (GWRP) ⁽⁷⁾	2017	3,500	Conceptual	50%	\$3,500	2017	0%	\$3,500	\$3,500	20.29%
Total Quantity of Replenishment Water (AFY) the Listed Projects Could Cumulatively Potentially be Able to Produce Within the Next 10 Years ⁽⁸⁾ =									17,252	

FOOTNOTES:

- (1) For the Monterey Peninsula Water Supply Project this is the total amount of water from this source which could potentially come to the CAW distribution system. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 5). For the RUWAP this is the total amount of water that this project is expected to produce. Only a portion of this amount might be used as in-lieu replenishment of the Seaside Basin. For the GWRP this is the quantity of water that is being considered at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.
- (2)(3) The following Contingency percentages were considered reasonable for the indicated levels of project development: Conceptual Level - 50%, Project Report Level - 30%, and Design Level - 15%. The sum of the values in the columns titled "Contingency Included in Base Unit Cost" and "Additional Contingency Added to Reflect Level of Project Development" equals the Contingency appropriate for the project's level of development.
- (4) Project data based on documents provided by Cal Am and MPWMD.
- (5) Project data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.
- (6) Project data provided by MCWWD.
- (7) Project data provided by MRWPCA. MRWPCA reported that the GWRP quantity being used in the current CEQA documentation is 3,500 AFY, but that the project could potentially supply 6,500 AFY or more. The unit cost would be lower if a quantity larger than 3,500 AFY were produced.
- (8) This value is the cumulative production capacity of all of the Potential Sources of Replenishment Water that listed in this table, and is used only to determine the "Volume-Weighted Average." It is not the amount of water that is expected to be available to the Seaside Basin.

TABLE 2
WATER YEAR 2017 (October 1, 2016-September 30, 2017)

**ANTICIPATED UNIT COSTS OF WATER COULD POTENTIALLY BE USED FOR
REPLENISHMENT OF THE SEASIDE BASIN**

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISH-MENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) ⁽¹⁾	BASE UNIT COST (\$/AF)	BASE UNIT COST YEAR
Regional Desalination ⁽²⁾	2020	6,250	\$6,147	2019
Groundwater Replenishment Project (Pure Water Monterey) ⁽²⁾	2018	3,500	\$1,811	2018
Monterey Peninsula Water Supply Project (Combined Regional Desalination with Groundwater Replenishment Project)	GWRP in 2018 Regional Desalination in 2020	9,750	\$4,591	
Seaside Basin ASR Expansion ⁽³⁾	2020	1,000	\$2,025	2016
Regional Urban Water Augmentation Project ⁽⁴⁾	2018	1,400-1,700	\$2,000	2018

FOOTNOTES:

(1) For the Regional Desalination Project this is the total amount of water from this source which could potentially come to the CAW distribution system, based on the desalination plant having a 6.4 MGD capacity which is equivalent to 7,169 AFY. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of non-potable water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 3). For the GWRP this is the quantity of water that is being planned at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2) Base unit cost data based on PUC filing documents and provided by Dave Stoldt of MPWMD .

(3) Base unit cost data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(4) Project data provided by MCWD.

THIS PAGE INTENTIONALLY LEFT BLANK

SEASIDE GROUNDWATER BASIN WATERMASTER

RESOLUTION NO. 2019-01

**A Resolution of the Board of Directors of the
Seaside Groundwater Basin Watermaster
Expressing Support of the Monterey Peninsula Water Supply Project Desalination
Plant and Related Facilities**

WHEREAS, the Monterey Peninsula Water Supply Project (Project) has been identified by the California Public Utilities Commission as a benefit to water users on the Monterey Peninsula and in Monterey County; and

WHEREAS, the Project includes sub-surface slant intake wells, a desalination plant, and related facilities including source water pipelines, product water pipelines and brine disposal facilities; and

WHEREAS, the purpose of the Project is to enable California American Water to fully comply with the requirements of State Water Resources Control Board Order Nos. WR 95-10 and 2009-0060 and the Seaside Basin Adjudication Decision (California American Water v. City of Seaside, et al. Monterey County Superior Court Case No. M66343); and

WHEREAS, the Seaside Groundwater Basin Watermaster administers and enforces the provisions of the Seaside Basin Adjudication Decision.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Seaside Groundwater Basin Watermaster that the Board supports the proposed sub-surface slant intake wells, desalination plant, and related facilities including source water pipelines, product water pipelines and brine disposal facilities as important in solving the long standing water supply problems of the Monterey Peninsula.

On a motion by _____ and seconded by _____ the foregoing resolution is duly adopted this 2nd day of October, 2019 by the following votes:

Ayes:

Nays

Absent

I, Laura Paxton, Secretary of the Board of Directors of the Seaside Groundwater Basin Watermaster, hereby certify that the forgoing is a resolution duly adopted on the 2nd day of October, 2019.

Laura Paxton, Secretary of the Board

THIS PAGE INTENTIONALLY LEFT BLANK

D-R-A-F-T
MINUTES

**Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
August 14, 2019**

Attendees: **TAC Members**
City of Seaside – Rick Riedl (via telephone)
California American Water – Nina Miller (via telephone)
City of Monterey – Max Rieser
Laguna Seca Property Owners – Wes Leith
MPWMD – Jon Lear
MCWRA – Tamara Voss
City of Del Rey Oaks – No Representative
City of Sand City – No Representative
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques

Consultants
None

Others
Tom Harty – City of Monterey

The meeting was convened at 1:42 p.m. after a quorum was established.

1. Public Comments

There were no public comments.

2. Administrative Matters:

A. Approve Minutes from the July 10, 2019 Meeting

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

B. March 2019 Sentinel Well Induction Logging

Mr. Jaques summarized the agenda packet materials for this item. There were no questions or other discussion.

3. Update on Geochemical Modeling for the Pure Water Monterey Project AWT Water

Mr. Jaques summarized the agenda packet materials for this item. Mr. Lear reported that the bench testing was now complete and the data was in the hands of Pueblo Water Resources for evaluation. He said the data did not appear to raise any issues of concern.

4. Approve Monitoring and Management Program (M&MP) for FY 2020

Mr. Jaques summarized the agenda packet materials for this item. Following a brief discussion a motion was made by Ms. Voss, seconded by Mr. Riedl, to approve the M&MP for FY 2020 as presented. The motion passed unanimously.

5. Schedule

Mr. Jaques said there were no significant changes to report. There was no other discussion.

6. Other Business

Mr. Riedl asked if there would be a TAC meeting in September. Mr. Jaques responded “yes” and that the FY 2020 M&MP O&M and Capital Budgets, as well as the 2020 RFSs for the consultants and contractors, would be on the agenda for approval at that meeting.

The meeting adjourned at 1:52 p.m.

D-R-A-F-T
MINUTES

**Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
September 11, 2019**

Attendees: **TAC Members**
City of Seaside – Rick Riedl
California American Water – Mike Magretto
City of Monterey – No Representative
Laguna Seca Property Owners – Wes Leith
MPWMD – Jon Lear
MCWRA – Tamara Voss
City of Del Rey Oaks – No Representative
City of Sand City – Leon Gomez (via telephone)
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques

Consultants
None

Others
MCWD – Patrick Breen

The meeting was convened at 1:33 p.m.

1. Public Comments

There were no public comments.

2. Administrative Matters:

A. Approve Minutes from the August 14, 2019 Meeting

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

3. Update on Geochemical Modeling for the Pure Water Monterey Project AWT Water

Mr. Jaques summarized the agenda packet materials for this item. Mr. Lear reported that the geochemical modeling firm in Australia had evaluated the updated lab data and concluded that introducing the PWM AWT water into the Basin would not pose any water quality problems. He went on to say that Pueblo Water Resource's report will be revised to reflect this, and the report should be provided to the Watermaster within one to two weeks. Mr. Jaques said he would email the updated report to TAC members.

Assuming that the revised report confirms that there will be no problems resulting from introducing the PWM AWT water into the Basin, there was consensus that no further action or discussion of this would be needed.

4. Approve the FY 2020 Monitoring and Management Program (M&MP) Operations and Capital Budgets

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

In response to a question from Ms. Voss, Mr. Lear explained that with regard to the CASGEM data reporting under Task I .2 b.7, the Department of Water Resources has not yet determined how it will handle the processing of this data. MPWMD was one of the first entities to submit data for an adjudicated basin, and it has been more time-consuming than initially expected to have the data submitted in a manner that is satisfactory to the Department of Water Resources. Ms. Voss asked if Mr. Lear thought the extra time that was needed in 2019 would be required again in 2020. Mr. Lear responded that he could not tell, but he budgeted for the additional time on the assumption that the Department of Water Resources will still be revising its process in 2020. He went on to note that getting simultaneous CASGEM and SGMA compliance has been one of the problems.

Mr. Riedl asked if Monterey One Water's newly installed Pure Water Monterey monitoring wells will be added to the database for monitoring. Mr. Lear said MPWMD would be collecting data from those wells, but they are not required to be reported to CASGEM. He noted that The Monitoring and Management Program approved by the Court lists the wells to be monitored, and these new wells were not in that list. Mr. Riedl asked if we could discuss whether adding these wells would be beneficial for basin management purposes, and if so, whether they could be included in the water level and water quality reporting. It was agreed that Mr. Jaques would pose that question to Montgomery and Associates in conjunction with their preparation of the Seawater Intrusion Analysis Report, and this matter can be further discussed at the TAC's November meeting.

On a motion by Mr. Gomez, seconded by Mr. Riedl, the budgets were unanimously approved as presented.

5. Approve Initial RFSs for Montgomery & Associates, MPWMD, Martin Feeney, and Todd Groundwater for 2020

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

Mr. Riedl asked whether under the Montgomery and Associates RFS to prepare the Seawater Intrusion Analysis Report, if having only one presentation to the TAC, and not a presentation to the Board, was sufficient. Mr. Jaques responded that historically the TAC has reviewed the document in detail, and made its recommendation to the Board. The Board had not had a presentation made to it since the TAC had already given this recommendation for approval.

On a motion by Ms. Voss, seconded by Mr. Leith, the RFS's were unanimously approved as presented.

6. Schedule

Mr. Jaques commented that there would be no need for an October TAC meeting, and that the TAC's next meeting would be on the third Wednesday, not the second Wednesday, of November. This is to allow time for the Seawater Intrusion Analysis Report to be completed so it can be presented to the TAC at that meeting. There was no other discussion.

7. Other Business

There was no other business.

The meeting adjourned at 2:02 p.m.

SEASIDE GROUNDWATER BASIN WATERMASTER
Reported Quarterly and Annual Water Production From the Seaside Groundwater Basin
For All Producers Included in the Seaside Basin Adjudication -- Water Year 2019

(All Values in Acre-Feet [AF])

	Type	Oct	Nov	Dec	Oct-Dec 18	Jan	Feb	Mar	Jan-Mar 19	Apr	May	Jun	Apr-Jun 19	Jul	Aug	Sep	Jul-Sep 19	Reported Total	Yield Allocation	from WY 2018	for WY 2019	
Coastal Subareas																						
CAW - Coastal Subareas	SPA	340.23	291.75	161.71	793.69	145.42	133.68	144.34	423.43				0.00				0.00	1,217.12	1,791.62	453.87	2,245.49	
	Luzern	1.25	4.51	0.00	5.76	0.00	4.57	0.00	4.57	0.00	0.00	8.96	8.96					19.29		0.00		
	Ord Grove	123.91	118.28	118.81	361.00	116.84	103.82	113.35	334.01	105.62	105.95	98.48	310.05					1,005.06				
	Paralta	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00				
	Playa	0.00	1.97	32.07	34.04	8.91	0.00	13.80	22.71	31.99	7.85	7.82	47.65					104.40				
	Plumas	0.05	0.00	0.00	0.05	19.67	25.28	17.19	62.14	0.00	0.00	7.77	7.77					69.96				
	Santa Margarita	215.02	166.99	10.83	392.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					392.85				
City of Seaside (Municipal)	SPA	15.74	14.59	11.76	42.09	6.74	17.24	14.15	38.13	13.97	15.68	15.59	45.24				0.00	125.46	146.99	0.00	146.99	
Granite Rock Company	SPA	--	--	--	0.00	--	--	--	0.00	--	--	--	0.00				0.00	0.00	13.87	221.99	235.86	
DBO Development No. 30	SPA	--	--	--	0.00	--	--	--	0.00	--	--	--	0.00				0.00	0.00	25.16	403.96	429.12	
Calabrese (Cypress Pacific Inv.)	SPA	--	--	--	0.00	--	--	--	0.00	--	--	--	0.00				0.00	0.00	3.37	16.09	19.46	
City of Seaside (Golf Courses)	APA	51.64	26.75	0.00	78.38	0.51	2.61	6.22	9.34	55.10	48.14	76.91	180.15				0.00	267.87	540.00		540.00	
Sand City	APA	0.20	0.21	0.04	0.46	0.04	0.04	0.04	0.12	0.08	0.14	0.11	0.34				0.00	0.91	9.00		9.00	
SNG (Security National Guaranty)	APA	--	--	--	0.00	--	--	--	0.00	--	--	--	0.00				0.00	0.00	149.00		149.00	
Calabrese (Cypress Pacific Inv.)	APA	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				0.00	0.03	6.00		6.00	
Mission Memorial (Alderwoods)	APA	2.51	1.49	0.00	4.00	0.03	0.00	0.00	0.03	0.32	1.51	2.11	3.93				0.00	7.95	31.00		31.00	
Coastal Subareas Totals					1,712.32				894.49				604.10				0.00	3,210.91	2,716.00	1,095.91	3,811.91	
Laguna Seca Subarea																						
CAW - Laguna Seca Subarea	SPA	28.44	24.66	17.80	70.90	14.84	14.10	16.81	45.76				0.00				0.00	116.66	0.00		0.00	
	Ryan Ranch Unit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	3.01				0.00	3.01				
	Hidden Hills Unit	11.24	9.73	7.31	28.29	7.11	5.93	6.97	20.01	8.31	11.90	11.67	31.88				0.00	80.17				
	Bishop Unit 3	17.20	14.93	10.48	42.62	7.74	8.17	9.84	25.75	11.68	15.10	11.09	37.86				0.00	106.23				
	Bishop Unit 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.99	5.99				0.00	5.99				
The Club at Pasadera	APA	16.00	24.00	7.00	47.00	2.00	0.00	0.00	2.00	9.00	10.00	35.00	54.00				0.00	103.00	251.00		251.00	
Laguna Seca Golf Resort (Bishop)	APA	16.55	12.42	0.22	29.19	0.00	0.30	0.00	0.31	0.19	16.49	16.71	33.38				0.00	62.88	320.00		320.00	
York School	APA	1.33	0.49	0.00	1.81	0.03	0.00	0.00	0.03	1.69	1.47	1.78	4.94				0.00	6.78	32.00		32.00	
Laguna Seca County Park	APA	3.01	1.47	0.76	5.23	1.70	0.41	1.16	3.28	1.84	2.55	2.62	7.00				0.00	15.52	41.00		41.00	
Laguna Seca Subarea Totals					154.13				51.37				99.33				0.00	304.84	644.00	0.00	644.00	
Total Production by WM Producers					1,866.45				945.87				703.43				0.00	3,515.75	3,360.00	1,095.91	4,455.91	
																		Annual Production from APA Producers	464.94	1,379.00		
																		Annual Production from SPA Producers	1,459.24	3,076.91		

City of Seaside Golf Courses In-Lieu (MCWD source water)																					
MCWD delivery		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00			
CAW / MPWMD ASR (Carmel River Basin source water)																					
Injection		0.00	0.00	0.00	0.00	269.63	306.73	372.93	949.29	282.60	103.18	0.00	385.78				0.00	1335.07			
(Recovery)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00			
Net ASR		0.00	0.00	0.00	0.00	269.63	306.73	372.93	949.29	282.60	103.18	0.00	385.78	0.00	0.00	0.00	0.00	1335.07			

Notes:

- The Water Year (WY) begins October 1 and ends September 30 of the following calendar year. For example, WY 2019 begins on October 1, 2018, and ends on September 30, 2019.
- "Type" refers to water right as described in Seaside Basin Adjudication decision as amended, signed February 9, 2007 (Monterey County Superior Court Case No. M66343).
- Values shown in the table are based on reports to the Watermaster received by July 15, 2019.
- All values are rounded to the nearest hundredth of an acre-foot. Where required, reported data were converted to acre-feet utilizing the relationships: 325,851 gallons = 43,560 cubic feet = 1 acre-foot.
- "Base Operating Yield Allocation" values are based on Seaside Basin Adjudication decision. These values are consistent with the Watermaster Producer Allocations Water Year 2019 (see Item IX A. in 1/2/2019 Board packet).
- Any minor discrepancies in totals are attributable to rounding.
- APA = Alternative Producer Allocation; SPA = Standard Producer Allocation; CAW = California American Water.
- It should be noted that CAW/MPWMD ASR "Injection" and "Recovery" amounts are not expected to "balance" within each Water Year. This is due to the injection recovery "rules" that are part of SWRCB water rights permits and/or separate agreements with state and federal resources agencies that are associated with the water rights permits.

THIS PAGE INTENTIONALLY LEFT BLANK

SEASIDE GROUNDWATER BASIN WATERMASTER

Post Office Box 51502, Pacific Grove, CA 93950

(831) 641-0113 • watermasterseaside@sbcglobal.net

August 12, 2019

Board of Directors

Chairman

Paul Bruno

Coastal Subarea

Landowners

Vice Chairman

Troy Thompson

Laguna Seca Subarea

Landowners

Secretary

Laura Paxton

Watermaster

Administrative Officer

Treasurer

Kimberly Drabner

City of Seaside

Mary Adams

Monterey

County/Monterey

County Water

Resources Agency

Dan Albert

City of Monterey

Mary Ann Carbone

City of Sand City

Christopher Cook

California American

Water

John Gaglioti

City of Del Rey Oaks

Ian Oglesby

City of Seaside

George Riley

Monterey Peninsula

Water Management

District

Staff

Technical Program

Manager

Robert Jaques

Administrative Officer

Laura Paxton

Honorable Judge O'Farrell

Monterey Superior Court

1200 Aguajito Road

Monterey, CA 93942

Re: City of Seaside Request for a Watermaster Storage and Recovery Agreement

Your Honor,

The City of Seaside (City), a party to the Adjudication Decision having Standard Production Allocation (SPA) and Alternative Production Allocation (APA) rights, has submitted to the Seaside Groundwater Basin Watermaster (Watermaster) a Watermaster Storage and Recovery Agreement application for in lieu storage as described in a June 5, 2019 letter from Russell McGlothlin, Counsel for City. The Watermaster reviewed the letter (attached) and the application at its August 7, 2019 board meeting.

The Watermaster found the Decision to be clear under Alternative Production Allocation III. B. 3 through subsection d that parties with APA rights are not allowed to store water in the Basin, and use of APA is restricted to overlying parcels. Further, Watermaster found the Decision not clear whether a public agency with both SPA and APA rights can use its SPA storage rights to store in-lieu its un-pumped APA, later recovering the water for use beyond the bounds of the overlying parcel.

The Decision allows parties to convert all or part of an APA to SPA. Parties choosing to do so are subject to triennial ramp downs applied to the APA that significantly reduce, sometimes on the order of 50%, the resulting SPA. The Watermaster seeks Decision clarification to address the allowance for programs such as that proposed by the City of Seaside versus the limitations of an APA party's use and lack of storage rights and the reductions faced when converting to SPA.

Watermaster appreciates the benefits of water stored in the basin and, provided any technical issues that may arise are satisfactorily addressed, does not oppose the proposed City of Seaside program in concept. However Watermaster requests the City file a motion for the court to clarify, with regard to the City of Seaside proposed project:

1. Whether the Decision allows an SPA aquifer storage and recovery program using APA un-pumped water in-lieu of recharge injection and later use beyond the overlying parcel;
2. Or whether Alternative Production Allocation III. B. 3 through subsection d of the Decision would require a party to convert its APA to SPA with applied pumping reductions in order to be eligible for a storage and recovery program using un-pumped water in-lieu of recharge injection.

Sincerely,



Paul B. Bruno, Chair
Watermaster Board of Directors