

**SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR MEETING OF THE BOARD OF DIRECTORS**

VIRTUAL

Wednesday, June 1, 2022 – 2:00pm Draft Agenda

IN KEEPING WITH GOVERNOR NEWSOM’S EXECUTIVE ORDERS N-29-20 AND N-35-20, THE WATERMASTER REGULAR BOARD MEETING WILL NOT BE HELD IN PERSON. YOU MAY ATTEND AND PARTICIPATE IN THE MEETING BY JOINING FROM A PC, MAC, IPAD, IPHONE OR ANDROID DEVICE (NOTE: ZOOM APP MAY NEED TO BE DOWNLOADED FOR SAFARI OR OTHER BROWSERS PRIOR TO LINKING) AT THIS WEB ADDRESS:

<https://us02web.zoom.us/j/81150780956?pwd=Vnl0N3FnYmJQc1JlVmJpV0tkdXNtdz09>

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Meeting ID: 811 5078 0956 Passcode: 114935

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

Monterey Peninsula Water Management District – Director George Riley

Laguna Seca Subarea Landowner – Director Wesley Leith

City of Monterey – Councilmember Dan Albert, Vice Chair

City of Del Rey Oaks – Councilmember John Gaglioti

Monterey County/Monterey County Water Resources Agency – Supervisor Wendy Root Askew, District 4

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC COMMUNICATIONS

Oral communications are 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 state their names.

IV. REVIEW OF AGENDA

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

V. CONSENT CALENDAR

- A.** Consider Approving Minutes of Regular Board meeting held May 4, 2022 3
- B.** Consider Approving Summary of Payments made April 2022 for \$13,813,1023,064.47..... 7
- C.** Consider Approving Fiscal Year 2022 Financial Reports through April 30, 2022 9
- D.** TAC Recommendation to the Board Regarding Preparing a Sustainable Yield Analysis 15
- E.** Results from March 2022 Induction Logging of the Sentinel Wells and Recommendation to Reduce Frequency of Induction Logging 17

- VI. ORAL PRESENTATION – None**
- VII. OLD BUSINESS**
 - A. TECHNICAL ADVISORY COMMITTEE (TAC)**
 - i. Initial Findings from Replenishment Water Modeling Work and Recommendation to Perform Additional Replenishment Water Analyses 19
- VIII. NEW BUSINESS**
- IX. INFORMATIONAL REPORTS (No Action Required)**
 - A. Technical Advisory Committee (TAC) meeting minutes April 27 (review on website at <https://www.seasidebasinwatermaster.org/sbwmARC.html>) and Draft May 11, 2022
 - B. Watermaster Report of Production second quarter Water Year 2022 (Jan 1 – Mar 31, 2022)
 - C. Correspondence from Watermaster to Department of Water Resources re: Final Draft Groundwater Sustainability Plan for the Monterey Subbasin of the Salinas Valley Groundwater Basin
 - D. Correspondence Between CAW, Pure Water Monterey and MPWMD regarding ASR-01
 - E. Mission Memorial Park Replenishment Assessment Update 27
- X. DIRECTOR’S REPORTS**
- XI. STAFF COMMENTS**
- XII. NEXT REGULAR MEETING DATE**
 - A. Consider setting the next regular meeting date for **July 6, 2022 - 2:00 P.M.**
- XIII. 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 May 26, 2022 per the Ralph M. Brown Act, Government Code Section 54954.2(a).

**SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR MEETING MINUTES**

Wednesday, May 4, 2022 Via Zoom Teleconference

I. CALL TO ORDER – The meeting was called to order at 2:03pm

II. ROLL CALL

Coastal Subarea Landowner – Director Paul Bruno – Chair
City of Del Rey Oaks – Council Member John Gaglioti
Laguna Seca Subarea Landowner – Director Wesley Leith
California American Water (CAW) – Director Christopher Cook
City of Monterey – Council Member Dan Albert – Vice Chair
Monterey Peninsula Water Management District (MPWMD) – Director George Riley
Monterey County/Monterey County Water Resources Agency – Supervisor Wendy Root Askew
City of Seaside – Mayor Ian Oglesby
Absent: City of Sand City – Mayor Mary Ann Carbone

Others Present: Robert Jaques, Watermaster Technical Program Manager (TPM)
Laura Paxton, Watermaster Administrative Officer (AO)
Jonathan Lear, MPWMD
Chris Campbell, Watermaster Legal Counsel
Lorrie Muriel, Mission Memorial Park
Steve Gurnee, Mission Memorial Park Legal Counsel
Alvin Edwards, Chair, MPWMD Board of Directors
Tim O’Halloran, Engineering Manager, CAW
Evan Jacobs, President, CAW
Yuri Anderson, Chief of Staff, Office of Supervisor Askew
Susan Schiavone
Michael Paxton, Assistant AO

III. PUBLIC COMMUNICATIONS – None

IV. REVIEW OF AGENDA – It was determined that a closed session was not appropriate or required.

V. CONSENT CALENDAR

- A.** Consider Adopting Watermaster Resolution 22-02 finding that continuing Covid pandemic state of emergency declared by Governor Newsom directly impacts ability of board to meet safely in person
- B.** Consider Approving Minutes of Regular Board meeting held January 5, 2022
- C.** Consider Approving Summary of Payments made December 2021 through April 2022 in the amount of \$123,577.90
- D.** Consider Approving Fiscal Year 2022 Financial Reports through March 31, 2022

Director Bruno noted item V.C. summary of payments presented were through March not April.
Director Leith disapproved of Item A and requested it be pulled for separate vote.

It was moved by Council Member Dan Albert and seconded by Council Member Gaglioti to approve the consent calendar items B, C, and D with the correction to the Summary of Payments. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Aye; Council Member Albert – Aye; Council Member Gaglioti – Aye; Supervisor Askew – Aye. Motion carried 8-0.

It was moved by Supervisor Askew and seconded by Council Member Albert to approve Item A Resolution 22-02 of the consent calendar. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Nay; Council Member Albert – Aye; Council Member Gaglioti – Aye; Supervisor Askew – Aye. Motion carried 7-1.

VI. ORAL PRESENTATION – None

VII. NEW BUSINESS

- A. Consider Setting Policy / Revisions to Watermaster Rules and Regulations Regarding Replenishment Assessment Review.** AO Paxton reviewed her transmittal then referred the issue to Watermaster legal counsel Chris Campbell. Mr. Campbell reviewed his submitted opinion that the Watermaster board, not solely the court, has authority to make determinations in matters of its actions or decisions. The authority was codified in proposed amended revised Watermaster Rules and Regulations. The board was also asked to approve non-substantive editorial changes to the Watermaster Rules and Regulations.

It was moved by Director Riley and seconded by Council Member Albert to approve the amended revised Watermaster Rules and Regulations with removal of the word “promptly” in section 16.2 to read “The Watermaster Board will place the matter...” and to approve the non-substantive editorial changes. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Aye; Council Member Albert – Aye; Council Member Gaglioti – Aye; Supervisor Askew – Aye. Motion carried 8-0.

VIII. OLD BUSINESS

- A. Consider Making a Determination Regarding Mission Memorial Park (Alderwood) 2021 Over Production Replenishment Assessment Fee.** AO Paxton reviewed the item transmittal. The Watermaster board is authorized to review the Mission Memorial Park (MMP) appeal of its 2021 replenishment assessment fee and render a determination based on the revised Rules and Regulations approved in the previous item. The board heard from Watermaster Legal Counsel Campbell, MMP Manager Lorrie Muriel, and MMP Legal Counsel Steve Gurnee on details of what led to the inadvertent 2021 over production and actions now being taken to avoid any future over production. Directors Bruno and Leith felt the circumstances presented by MMP and the party’s past substantial under production of its allocation since inception of Watermaster warranted consideration. Both felt the fee, if exacted, should be redirected to MMP to cover its water saving expenditures. Director Bruno requested staff send to each Watermaster party on an annual basis a description of Watermaster, the party’s assigned production allocation, and the over-production fee schedule.

It was moved by Council Member Albert and seconded by Council Member Gaglioti to approve reducing the \$58,114.34 2021 Mission Memorial Park over production replenishment assessment to \$25,000 payable over time and require submission of an action plan on how Mission Memorial Park will avoid future over production. Director Bruno – Nay; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Nay; Council Member Albert – Aye; Council Member Gaglioti – Aye; Supervisor Askew – Aye. Motion carried 6-2.

IX. OTHER NEW BUSINESS

There was no other new business.

X. COMMITTEE REPORTS

A. TECHNICAL ADVISORY COMMITTEE (TAC)

- i. *Discuss/Consider further Watermaster input on the Final Draft Groundwater Sustainability Plan for the Monterey Subbasin.* TPM Jaques gave highlights from his transmittal.

Supervisor Askew left the meeting at 3:56 p.m.

It was moved by Council Member Gaglioti and seconded by Mayor Oglesby for Watermaster to submit a letter to the Department of Water Resources developed by TPM Jaques and Director Gaglioti that captures Jaques' comments and concisely frames Watermaster's intent in actively participating with other basins to achieve sustainability for all. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Aye; Council Member Albert – Aye; Council Member Gaglioti – Aye; Motion carried 7-0.

B. PUBLIC AWARENESS COMMITTEE

- i. *Consider approving the addition of a Public Awareness Page to the Watermaster website at a cost not to exceed \$3,000 and authorize a transfer from the Administrative Fund Reserve.* Ms. Paxton reviewed the item transmittal.

It was moved by Director Riley and seconded by Director Cook to approve the addition of a Public Awareness page to the Watermaster website at a cost not to exceed \$3,000 and authorize a transfer from the Administrative Fund Reserve. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Aye; Council Member Albert – Aye; Council Member Gaglioti – Aye; Motion carried 7-0.

The Board concurred that the letter once written by Jaques and Gaglioti could be signed by the president and mailed and presented to the other directors after the fact.

- ii. *Consider Ratifying Montgomery & Associates Request for Services (RFS) No. 2022-03 for \$5,000 issued by AO Paxton for Public Awareness Committee Scope of Work and authorize payment from the Administrative Fund Reserve.* Ms. Paxton reviewed the item transmittal.

It was moved by Director Riley and seconded by Director Cook to approve the ratification of Montgomery & Associates RFS No. 2022-03 not to exceed \$5,000 for development of a Watermaster Public Awareness Committee PowerPoint public presentation and authorize payment from the Administrative Fund Reserve. Director Bruno – Aye; Mayor Oglesby – Aye; Director Cook – Aye; Director Riley – Aye; Director Leith – Aye; Council Member Albert – Aye; Council Member Gaglioti – Aye; Motion carried 7-0.

XI. CLOSED SESSION

No closed session was held.

XII. INFORMATIONAL REPORTS (No Action Required)

- A. Minutes of January 11 and draft minutes of the February 8, 2022 Watermaster Public Awareness Committee Meeting
- B. Technical Advisory Committee (TAC) meeting minutes January 12 and March 9, 2022 (review on website at <https://www.seasidebasinwatermaster.org/sbwmARC.html>)
- C. Watermaster Report of Production second quarter Water Year 2022 (Jan 1, 2022 – Mar 31, 2022)
- D. Correspondence from Watermaster to Bureau of Reclamation in support of Pure Water Monterey Expansion Project
- E. Update on Security National Guaranty litigation and status of well repair

XIII. DIRECTOR'S REPORTS

XIV. STAFF COMMENTS

AO Paxton advised the Pure Water Monterey 2021 Annual Summary Report, and correspondence involving CAW, Monterey One Water, and MPWMD referencing the Watermaster Storage and Recovery Agreement with CAW/MPWMD will be posted for reference to the Watermaster website.

AO Paxton suggested a location to hold in-person Watermaster board meetings be investigated. Council Member Albert will contact Monterey Salinas Transit for possible use of that agency's meeting room.

XV. NEXT REGULAR MEETING DATE

- A. The next regular meeting date was set for **June 1, 2022 - 2:00 P.M.**

XVI. ADJOURNMENT – Chair Bruno adjourned the meeting at 4:19pm

Seaside Groundwater Basin Watermaster
Budget vs. Actual Administrative Fund
 Fiscal Year (January 1 - December 31, 2022)
 Balance through April 30, 2022

	2022 Adopted Budget	Contract Amount	Year to Date Revenue / Expenses
Available Balances & Assessments			
Dedicated Reserve	-		-
FY (Rollover)	34,500.00		52,000.00
Admin Assessments	65,500.00		65,500.00
Available	100,000.00		117,500.00
Expenses			
Contract Staff	55,000.00	55,000.00	20,115.00
Legal counsel	20,000.00	20,000.00	3,143.00
Filing fees and postage			-
Total Expenses	75,000.00	75,000.00	23,258.00
Total Available	25,000.00		
Dedicated Reserve	25,000.00		25,000.00
Net Available	-		69,242.00

Seaside Groundwater Basin Watermaster
Budget vs. Actual Monitoring & Management - Operations Fund
 Fiscal Year (January 1 - December 31, 2022)
 Balance through April 30, 2022

	<u>2022 Adopted Budget</u>	<u>Contract Encumbrance</u>	<u>Year to Date Revenue/Expenses</u>
Available Balances & Assessments			
Operations Fund Assessment	\$ 232,878.00	\$ -	\$ 232,878.00
Pass Through		-	1,278.00
FY 2020 Rollover	38,000.00	-	50,950.00
Total Available	\$ 270,878.00	\$ -	\$ 285,106.00
Appropriations & Expenses			
GENERAL			
Technical Project Manager*	\$ 75,000.00	\$ 75,000.00	\$ 21,750.00
Contingency @ 10% (not including TPM)	17,807.00	-	
Total General	\$ 92,807.00	\$ 75,000.00	\$ 21,750.00
CONSULTANTS (Montgomery; Web Site Database)			
Program Administration	\$ 21,940.00	\$ 24,340.00	\$ 2,215.00
Production/Lvl/Qty Monitoring	2,400.00		
Basin Management	30,000.00		946.00
Seawater Intrusion Analysis Report	26,290.00	26,290.00	-
Total Consultants	\$ 80,630.00	\$ 50,630.00	\$ 3,161.00
MPWMD			
Production/Lvl/Qty Monitoring	\$ 68,876.00	68,876.00	-
Pass Through 2021		-	-
Basin Management	-		-
Seawater Intrusion	-	-	-
Direct Costs	-	-	-
Total MPWMD	\$ 68,876.00	\$ 68,876.00	\$ -
CONTRACTOR (Martin Feeney)			
Hydrogeologic Consulting Services	\$ 4,000.00	4,000.00	-
Production/Lvl/Qty Monitoring	20,565.00	20,565.00	9,251.37
	\$ 24,565.00	\$ 24,565.00	\$ 9,251.37
CONTRACTOR (Todd Groundwater)			
Hydrogeologic Consulting Services	\$ 4,000.00	\$ 4,000.00	-
Total Appropriations & Expenses	\$ 270,878.00	\$ 223,071.00	\$ 34,162.37
Total Available	-		250,943.63

**Seaside Groundwater Basin Watermaster
 Budget vs. Actual Monitoring and Management - Capital Fund
 Fiscal Year (January 1 - December 31, 2022)
 Balance through April 30, 2022**

ITEM V.C.
 6/1/22

	2022 Adopted Budget	Contract Encumbrance	Year to Date Revenue / Expense
Available Balances and Assessments:			
Monitoring & Management Fund - Capital	\$ 66,667		\$ 66,667
Transfer out to Operations Fund	-		-
Subtotal	<u>66,667</u>		<u>66,667</u>
Appropriations & Expenses:			
Professional Services			
Project Management	-	-	-
Subtotal	<u>-</u>	<u>-</u>	<u>-</u>
Direct Costs			
Well Drilling -	-	-	-
Subtotal	<u>-</u>	<u>-</u>	<u>-</u>
Total Appropriations and Expenses	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Available	<u><u>\$ 66,667.00</u></u>		<u><u>\$ 66,667.00</u></u>

Seaside Groundwater Basin Watermaster											
Replenishment Fund											
Water Year 2022 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2022)											
Balance through April 30, 2022											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	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	WY 14/15	WY 15/16
Assessment Water Year											
Unit Cost:	a \$ 1,132 / \$283	\$ 1,132 / \$283	\$ 2,485 / \$21.25	\$ 3,040 / \$760	\$ 2,780 / \$695	\$ 2,780 / \$695	\$ 2,780 / \$695	\$ 2,780 / \$695	\$ 2,702/\$675.50	\$ 2,702/\$675.50	\$ 2,702/\$675.50
Cal-Am Water Balance Forward	b \$ -	\$ 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)	\$ (676,704)
Cal-Am Water Production (AF)	c 3,710.00	4,059.90	3,862.90	2,966.02	3,713.52	3,416.04	3,070.90	3,076.61	3,232.10	2,764.73	1,879.21
Cal-Am Water NSY Over-Production (AF)	d 1,862.69	2,266.32	2,092.16	1,241.27	1,479.47	1,146.71	820.48	856.42	1,032.77	782.17	-
Exceeding Natural Safe Yield Considering Alternative Producers	e \$ 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	\$ 2,113,414	\$ -
Operating Yield Overproduction Replenishment	f \$ -	\$ 20,235	\$ 8,511	\$ -	\$ -	\$ -	\$ 154,963	\$ 181,057	\$ 281,012	\$ 312,103	\$ -
Total California American	g \$ 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	\$ 2,425,516	
CAW Credit Against Assessment	h \$ (465,648)		\$ (12,305,924)	\$ (3,741,714)	\$ (5,095,213)	\$ (5,425,799)	\$ (5,111,413)				
CAW Unpaid Balance	i \$ 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)	(676,704)	(676,704)
City of Seaside Balance Forward	j \$ -	\$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)	\$ (2,889,325)	\$ (3,346,548)
City of Seaside Municipal Production (AF)	k 332.00	287.70	294.20	293.44	282.87	240.68	233.72	257.73	223.64	185.01	195.16
City of Seaside NSY Over-Production (AF)	l 194.07	153.78	161.99	153.06	113.21	50.84	58.82	85.17	52.71	25.77	37.87
Exceeding Natural Safe Yield Considering Alternative Producers	m \$ 219,689	\$ 174,082	\$ 402,540	\$ 465,300	\$ 314,721	\$ 141,335	\$ 163,509	\$ 236,782	\$ 142,410	\$ 69,630	\$ 102,330
Operating Yield Overproduction Replenishment	n \$ 12,622	\$ 85	\$ 4,225	\$ 16,522	\$ 20,690	\$ -	\$ 1,689	\$ 27,007	\$ 3,222	\$ 38	\$ 11,959
Total Municipal	o \$ 232,310	\$ 174,167	\$ 406,764	\$ 481,823	\$ 335,412	\$ 141,335	\$ 165,198	\$ 263,788	\$ 145,631	\$ 69,667	\$ 114,290
City of Seaside - Golf Courses (APA - 540 AFY)											
Exceeding Natural Safe Yield - Alternative Producer	p \$ -	\$ -	\$ 131,705	\$ 69,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Yield Overproduction Replenishment	q \$ -	\$ -	\$ 32,926	\$ 17,427	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Golf Courses	r \$ -	\$ -	\$ 164,631	\$ 87,128	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total City of Seaside*	s \$ 232,310	\$ 174,167	\$ 571,395	\$ 568,951	\$ 335,412	\$ 141,335	\$ 165,198	\$ 263,788	\$ 145,631	\$ 69,667	\$ 114,290
City of Seaside Late Payment 5%	t \$ 10,984	\$ 8,704	\$ 26,712	\$ 26,750	\$ 15,737						
In-lieu Credit Against Assessment	u \$ -	\$ -	\$ -	\$ (1,079,613)	\$ (1,142,858)	\$ (828,996)	\$ (1,065,852)	\$ (1,459,080)	\$ (526,890)	\$ (162)	
City of Seaside Unpaid Balance	v \$ 243,294	\$ 426,165	\$ 1,024,272	\$ 1,619,973	\$ 891,509	\$ (110,014)	\$ (773,813)	\$ (1,575,876)	\$ (2,889,325)	\$ (3,346,548)	\$ (3,232,420)
Mission Memorial Park											
Mission Memorial Park Production (AF)	w		20.80	26.40	12.80	22.40	27.00	24.95	24.89	17.97	13.67
Mission Memorial Park NSY Over-Production (AF)	x	-	-	-	-	-	-	-	-	-	-
Exceeding Natural Safe Yield - Alternative Producer	y \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Yield Overproduction Replenishment	z \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Mission Memorial Park	aa \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Replenishment Fund Balance	bb \$ 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)	\$ (4,023,252)	\$ (3,909,125)
Replenishment Fund Balance Forward	cc \$ -	\$ 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)	\$ (4,023,252)
Total Replenishment Assessments	dd \$ 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	\$ 2,495,183	\$ 114,290
Total Paid and/or Credited	ee \$ (465,648)	\$ -	\$ (12,305,924)	\$ (3,741,714)	\$ (6,174,826)	\$ (6,568,657)	\$ (5,940,409)	\$ (1,065,852)	\$ (1,459,080)	\$ (526,890)	\$ (162)
Grand Total Fund Balance	ff \$ 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)	\$ (4,023,252)	\$ (3,909,125)
* 2010 = 319.55 AF golf course in-lieu replenishment and 68.8 AF 4-party agmt in-lieu replenishment											
2011 = 411.1 AF golf course in-lieu replenishment											
2012 = 298.2 AF golf course in-lieu replenishment											
2013 = 383.4 AF golf course in-lieu replenishment											
2014 = 552.4 AF golf course in-lieu capped at 540 AF											
2015 = 195.0 AF golf course in-lieu											
2016 = 00.06 AF golf course in-lieu											
2017 = 00.00 AF golf course in-lieu											

Seaside Groundwater Basin Watermaster									
Replenishment Fund									
Water Year 2022 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2022)									
Balance through April 30, 2022									
	2017	2018	2019	2020	WY 2021	Totals WY 2006 Through 2021	Budget WY 2022	Projected Totals Through WY 2022	
Replenishment Fund	WY 16/17	WY 17/18	WY 18/19	WY 19/20	WY 20/21		WY 21/22		
Assessment Water Year									
Unit Cost:	\$2,872 / \$718	\$2,872 / \$718	\$2,872 / \$718	\$2,872 / \$718	\$2,947 / \$737		\$2,947 / \$737		
Cal-Am Water Balance Forward	\$ (676,704)	\$ (491,747)	\$ (48,797,949)	\$ (47,979,852)	\$ (46,855,121)		\$ (46,855,121)		
Cal-Am Water Production (AF)	2,029.51	2,229.45	2,120.22	2,245.88	1,664.04	46,041.03			
Cal-Am Water NSY Over-Production (AF)	64.40	374.65	284.85	334.21	-	14,638.57			
Exceeding Natural Safe Yield Considering Alternative Producers	\$ 184,957	\$ 1,075,995	\$ 818,097	\$ 959,859	\$ -	\$ 33,550,034	\$ 100,000	\$ 33,650,034	
Operating Yield Overproduction Replenishment				\$ 164,872	\$ -	\$ 1,122,753	\$ 20,000	\$ 1,142,753	
Total California American	\$ 184,957	\$ 1,075,995	\$ 818,097	\$ 1,124,731	\$ -	\$ 34,672,786	\$ 120,000	\$ 34,792,786	
CAW Credit Against Assessment		\$ (49,382,196)	\$ -	\$ -	\$ -	\$ (81,527,907)	\$ -	\$ (81,527,907)	
CAW Unpaid Balance	\$ (491,747)	\$ (48,797,949)	\$ (47,979,852)	\$ (46,855,121)	\$ (46,855,121)	\$ (46,855,121)	\$ (46,735,121)	\$ (46,735,121)	
City of Seaside Balance Forward	\$ (3,232,420)	\$ (3,142,500)	\$ (3,022,249)	\$ (2,919,806)	\$ (2,802,831)		\$ (2,708,828)		
City of Seaside Municipal Production (AF)	188.31	184.63	178.40	181.65	174.69	3,733.83			
City of Seaside NSY Over-Production (AF)	30.47	32.46	27.82	32.06	25.52	1,235.62			
Exceeding Natural Safe Yield Considering Alternative Producers	\$ 87,512	\$ 93,225	\$ 79,893	\$ 92,089	\$ 75,197	\$ 2,860,242	\$ 100,000	\$ 2,960,242	
Operating Yield Overproduction Replenishment	\$ 2,409	\$ 27,026	\$ 22,550	\$ 24,886	\$ 18,806	\$ 193,734	\$ 10,000	\$ 203,734	
Total Municipal	\$ 89,920	\$ 120,251	\$ 102,443	\$ 116,975	\$ 94,003	\$ 3,053,977	\$ 110,000	\$ 3,163,977	
City of Seaside - Golf Courses (APA - 540 AFY)									
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*	\$ 89,920	\$ 120,251	\$ 102,443	\$ 116,975	\$ 94,003	\$ 3,305,736	\$ 110,000	\$ 3,415,736	
City of Seaside Late Payment 5%						\$ 88,887		\$ 88,887	
In-lieu Credit Against Assessment						\$ (6,103,451)		\$ (6,103,451)	
City of Seaside Unpaid Balance	\$ (3,142,500)	\$ (3,022,249)	\$ (2,919,806)	\$ (2,802,831)	\$ (2,708,828)	\$ (2,708,828)	\$ (2,598,828)	\$ (2,598,828)	
Mission Memorial Park (APA - 31 AFY)									
Mission Memorial Park Production (AF)	13.74	14.43	16.07	20.00	46.77	301.89			
Mission Memorial Park NSY Over-Production (AF)	-	-	-	-	15.77	15.77			
Exceeding Natural Safe Yield - Alternative Producer	\$ -	\$ -	\$ -	\$ -	\$ 46,488	\$ 46,488		\$ 46,488	
Operating Yield Overproduction Replenishment	\$ -	\$ -	\$ -	\$ -	\$ 11,626	\$ 11,626		\$ 11,626	
Board Approved (5/4/22) Credit Against Assessment					(33,114)	(33,114)		(33,114)	
Mission Memorial Park Unpaid Balance	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 25,000		\$ 25,000	
Total Replenishment Fund Balance	\$ (3,634,247)	\$ (51,820,198)	\$ (50,899,658)	\$ (49,657,952)	\$ (49,538,949)	\$ (49,538,949)	\$ (49,333,949)	\$ (49,333,949)	
Replenishment Fund Balance Forward	\$ (3,909,125)	\$ (3,634,247)	\$ (51,820,198)	\$ (50,899,658)	\$ (49,657,952)		\$ (49,538,949)		
Total Replenishment Assessments	\$ 274,877	\$ 1,196,246	\$ 920,540	\$ 1,241,706	\$ 119,003	\$ 38,092,410	\$ 230,000	\$ 38,322,410	
Total Paid and/or Credited		\$ (49,382,196)				\$ (87,631,358)	\$ 25,000	\$ (87,606,358)	
Grand Total Fund Balance	\$ (3,634,247)	\$ (51,820,198)	\$ (50,899,658)	\$ (49,657,952)	\$ (49,538,949)	\$ (49,538,949)	\$ (49,283,949)	\$ (49,283,949)	

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: June 1, 2022

SUBJECT: TAC Recommendation to the Board Regarding Preparing a Sustainable Yield Analysis

RECOMMENDATIONS:

The Sustainable Yield (SY) approach is a technically superior Basin management tool compared to the Natural Safe Yield (NSY) approach used in the Decision. However, an SY analysis should not be performed at this time because the Groundwater Sustainability Plans (GSPs) for the adjacent subbasins have not been sufficiently developed to assess their impacts on the Seaside Basin, and because no source of replenishment water for the Seaside Basin has been secured. This decision should be revisited annually.

If the Board approves this recommendation, no costs for performing an SY analysis will be included in the Watermaster's 2023 budget.

BACKGROUND:

The topic of performing an SY analysis of the Seaside Groundwater Basin has been discussed by the TAC and the Board at several meetings over the past few years, starting in 2019. This topic was most recently discussed by the TAC at its May 11, 2022 meeting, and by the Board at its September 1, 2021 meeting. Numerous background papers were included with the agenda transmittals at those meetings to inform the Board and TAC members about the SY approach and what would be involved in changing from the NSY to the SY approach. One of those attachments is included with this agenda transmittal providing background information on the differences between the NSY and SY approaches.

Those prior discussions covered a number of topics including:

- The technical work associated with performing an SY analysis would be a costly (over \$100K) and complex undertaking.
- Replacing NSY with SY would impact producer rights and/or allocations and would necessitate having an adjudication decision amendment that would most likely involve a lengthy court process and substantial litigation costs.
- Making this change would not be justified until a source for Seaside Basin replenishment water has been secured, because without raising groundwater levels through replenishment, neither the NSY nor the SY approaches would keep the Basin from continuing to be at risk of seawater intrusion..
- The impact on the Seaside Basin of implementation of the GSPs for the neighboring subbasins would need to be incorporated into an SY analysis.

DISCUSSION:

After discussing this topic at its May 11, 2022 meeting, the TAC felt that it would be premature to perform an SY analysis, principally because the Groundwater Sustainability Plans (GSPs) for the adjacent Monterey and 180/400-Foot Aquifer Subbasins have not been sufficiently developed or implemented in order to assess their impacts on the Seaside Basin.

The TAC, however, also felt that this decision should be revisited annually, as progress in implementing the GSPs is made, and progress toward obtaining a source of replenishment water is made..

ATTACHMENTS:

Background information on NSY and SY

Background Information
from
Montgomery & Associates and Todd Groundwater
on
Natural Safe Yield and Sustainable Yield

Natural Safe Yield is defined in the Decision as the quantity of groundwater existing in the Seaside Basin that occurs solely as a result of natural replenishment. The only truly natural replenishment is from percolation of rainfall into the aquifers and inflow of groundwater from adjacent basins. Through the use of the groundwater model we have come to understand that although some replenishment occurs from inflow from neighboring basins, more subsurface groundwater leaves the Seaside Basin than enters it, and there is a net subsurface loss from the Basin to neighboring basins. The amount of net outflow from the Basin over the past five years is more than the long-term average (1988-2017). If one assumes that rainfall recharge has remained essentially the same, then the biggest change to natural replenishment is increased outflow to neighboring basins. Increased injection for temporary storage of imported water and decreased native groundwater pumping have changed how groundwater moves within, and in and out of, the Basin. Another way to look at it is that increased Basin outflows are due to groundwater levels in the neighboring basins being lower than those in the Seaside Basin, thereby causing increased flows out of the Seaside Basin.

The method used to estimate Natural Safe Yield is now recognized as not being complete enough to take into account the complexities of inflows and outflows that are occurring and changing operations and conditions. These ultimately affect the amount of groundwater that can sustainably be pumped from the Basin.

A more robust method would be to use the groundwater model to optimize the amount of pumping that can be sustained (Sustainable Yield) at existing and/or new wells, using management targets such as meeting protective groundwater elevations and/or stopping declining groundwater levels. The SY approach would include performing an iterative series of modeling scenarios to determine how much water could be pumped by selected (the main production) wells while still achieving those management targets. Once determined, those values would become the new production allocations for those wells.

The Watermaster's *2019 Updated Basin Management Action Plan* includes a recommendation to use the Seaside Basin groundwater model to conduct additional model runs to simulate a combination of basin management actions and supplemental water supply projects that would be able to raise groundwater levels to protective levels. This would be part of the approach to estimate Sustainable Yield for the Basin.

**SEASIDE GROUNDWATER BASIN
WATERMASTER**

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: June 1, 2022

SUBJECT: Results from March 2022 Induction Logging of the Sentinel Wells and Recommendation to Reduce Frequency of Induction Logging

RECOMMENDATIONS:

Reduce the induction logging frequency of the four Sentinel Wells from semi-annually to annually starting in Water Year 2023. If the Board approves this recommendation, the cost to perform induction logging of the Sentinel Wells will be reduced by approximately \$10,000 in the Watermaster's 2023 budget.

BACKGROUND:

In 2007 the Watermaster constructed four of what are called "Sentinel Wells" along the coast. The purpose of these wells is to serve as a means of detecting the possible intrusion of seawater into the Seaside Basin aquifers.

Induction logging is a process by which changes in conductivity, an indicator of possible seawater intrusion, are measured in the soil surrounding these wells. If a trend in increasing conductivity is detected, it would be an indication that seawater intrusion is occurring.

Induction logging was initially performed on a quarterly basis, with the intent that in subsequent years it might be feasible to reduce the induction logging frequency if a good correlation between the induction logging data from year-to-year was found to exist. In 2010, after several years of induction logging that showed the same results and showed no indication of seawater intrusion, the induction logging frequency was reduced to semi-annually.

DISCUSSION:

Attached are plots of the induction logging data from the March 2022 Sentinel Well logging event. As the plots show, the 2022 data is virtually identical to the data from the preceding years of induction logging.

Martin Feeney, the Watermaster's consultant who has performed this induction logging each year starting in 2007, reports that the March 2022 data shows no detectable change in formation conductivity. Thus, the induction logging does not show any indication of the start of seawater intrusion in any of the formations within which production wells are located (primarily the Paso Robles and Santa Margarita formations).

Since the results of the logging ever since the start of logging many years ago continue to be the same, and do not show any intrusion occurring, Mr. Feeney also recommended that the frequency of induction logging of these wells can now be reduced from semi-annually to annually. His recommendation was concurred with by Ms. King and Mr. Williams of Montgomery & Associates, the Watermaster's primary hydrogeologic consultants.

The TAC discussed this topic at its May 11, 2022 meeting and there was unanimous concurrence with Mr. Feeney's recommendation. If approved by the Board, reducing the induction logging frequency would be reported in the 2022 Annual Report that is filed with the Court at the end of each Water Year, and the reduced frequency would be implemented starting in Water Year 2023.

ATTACHMENTS: Induction logs from March 2022

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: June 1, 2022

SUBJECT: Initial Findings from Replenishment Water Modeling Work and Recommendation to Perform Additional Replenishment Water Analyses

RECOMMENDATIONS:

1. Approve Montgomery & Associates RFS No. 2022-04 to perform additional replenishment water analyses.
2. Fund the costs of this work from Task I.3.a.3, Task I.3.e, and the Contingency line-item in the Watermaster's 2022 Monitoring and Management Program Operations Budget.

BACKGROUND:

At its February 13, 2021 meeting the Board directed the TAC to undertake several actions in response to the possible detection of seawater intrusion in Monitoring Well FO-9 Shallow. One of these actions was to update the groundwater modeling performed in 2013 to provide a more accurate indication of current replenishment water needs.

At its September 1, 2021 meeting the Board approved a contract with Montgomery & Associates to update the replenishment water modeling performed in 2013. The work consisted of these Tasks:

- Extending the historical hydrology of the Baseline scenario (from that used in the 2013 modeling) by using actual data to present
- Incorporating all existing and approved/planned projects into the Baseline Model
- Incorporating sea level rise at ocean boundaries
- Developing iterative scenarios to achieve protective elevations in 20 years
- Preparing a Technical Memorandum
- Making presentations to both the TAC and the Board

At its January 12, 2022 meeting the TAC received a presentation on, and discussed, a Draft Technical Memorandum from Montgomery & Associates describing the replenishment water modeling update work they had performed. The TAC moved to approve the Draft Technical Memorandum with edits to reflect the January 12th-discussion and input, and to forward it to the Board for its consideration. However, at this meeting the TAC also discussed a proposed list of revised assumptions that Montgomery & Associates could potentially use to run additional replenishment water modeling scenarios. The proposed revised assumptions were requested by representatives of Cal Am, the City of Seaside, and the MPWMD. Consequently, the draft Technical Memorandum was held for inclusion of potential additional replenishment water modeling, rather than being forwarded to the Board.

At its March 9, 2022 meeting the TAC continued its discussion of the proposed revised assumptions. Following those discussions, the revised assumptions were compiled into two "Scenarios" as described in Exhibit 1. A motion was unanimously passed directing me to obtain a Montgomery & Associates Scope and Cost Proposal to perform additional replenishment water analyses using the revised assumptions.

At its April 27, 2022 meeting the TAC received and discussed the Scope and Cost Proposal from Montgomery & Associates to perform additional replenishment water analyses covering the two Scenarios described in Exhibit 1. As a result of those discussions there was TAC consensus to only recommend performing

additional work to evaluate Scenario 1, and to defer any work on Scenario 2 because the GSP for the Monterey Subbasin has not yet been sufficiently developed to determine what projects that subbasin would actually be implementing. Thus, the impacts on the Seaside Basin of GSP implementation are not currently determinable.

At its May 11, 2022 meeting the TAC received and discussed the reduced Scope and Cost Proposal from Montgomery & Associates to analyze Scenario 1. The TAC then moved unanimously to recommend that the Board approve RFS No. 2022-04 which would authorize Montgomery & Associates to perform the work described in the reduced Scope and Cost Proposal. A copy of that RFS is contained in Exhibit 2.

DISCUSSION:

The Draft Technical Memorandum presented to the TAC in January fulfilled the contract requirements of the September 2021 contract issued to Montgomery & Associates, and provided projections of the amounts of replenishment water that would be needed each year to achieve protective groundwater elevations. However, the assumptions used in this work were based largely on MPWMD's 2019 projections of water supply, demand, and ASR supply volumes, and were also based on future hydrology being repetitive of historical hydrology. The principal conclusions drawn from this work are listed in Exhibit 3.

The proposed revised assumptions are based largely on Cal Am's Urban Water Management Plan (that was approved by the California Public Utilities Commission), the City of Seaside's water demand plans, and on lower ASR supply volumes that would be reflective of the area's climate being drier in the future than it has been in the past.

The TAC feels that assessing the Seaside Basin's replenishment water needs using the revised assumptions will help to provide a better understanding of the amounts of water that will be needed for replenishment over a wider range of possible supply, demand, and climatological scenarios. One of the key findings of the recently performed modeling is that groundwater levels in the Basin are very sensitive to multi-year droughts, and even just-below-normal rainfall periods, which impact the availability of water for ASR and PWM recharge and on the timing of reaching and maintaining protective groundwater elevations. The information that would be provided by performing the additional analysis would serve to "book end" the likely range of the Basin's replenishment water needs, i.e., the amounts needed under both optimistic and potentially more realistic sets of future conditions. For these reasons the TAC recommends that the Board approve RFS No. 2022-04, so that the Board will have a more complete understanding of the Basin's replenishment water needs.

A comprehensive presentation on this expanded replenishment water analysis will be presented to the Board once the additional work of RFS No. 2022-04 has been completed.

FISCAL IMPACTS

The work of RFS No. 2022-04 was not anticipated when the 2022 budget was being prepared, so funding for this work was not included in the Watermaster's 2022 Monitoring and Management Program Operations Budget. However, that budget contains several line-items that could be used to fund the cost of RFS No. 2022-04. These are:

- Task I.3.a.3 "Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions" budgeted for \$20,000 with this full amount unexpended to date.
- Task I.3.e "Seaside Basin Geochemical Model" budgeted for \$10,000 and for which no expenditures are now expected to be needed in 2022.
- Contingency budgeted for \$17,807 with this full amount unexpended to date.

ATTACHMENTS:

Exhibit 1: Proposed Revised Assumptions for Additional Replenishment Water Modeling "What If" Scenarios

Exhibit 2: Montgomery & Associates RFS No. 2022-04.

Exhibit 3: Principal Conclusions from the Draft Replenishment Water Technical Memorandum

EXHIBIT 1

PROPOSED REVISED ASSUMPTIONS FOR ADDITIONAL REPLENISHMENT WATER MODELING “WHAT IF” SCENARIOS

PROPOSED “WHAT IF” SCENARIO NO. 1 (THIS COULD BE A “MAXIMUM POTENTIAL REPLENISHMENT WATER NEED” SCENARIO):

Regarding the City of Seaside, the following revised assumptions will be used:

1. Assume golf course uses 491.4 AFY of recycled water.
2. Assume City pumps an in-lieu amount of 491.4 AFY from the deep aquifer at Latitude = -36.615304, Longitude = 121.826278 -(Which is generally in the location of the Lincoln-Cunningham Park in Seaside).
3. Convert 26 AFY of golf course allocation from APA to SPA. New golf course allocation = $540 - 26 = 514$.
4. The remaining unused balance of $514 - 491.4 = 22.6$ AFY would be held as a reserve and/or for flushing of greens and tee boxes.

Regarding Cal Am the following revised assumptions will be used:

1. -15 acre-feet per day will be used as the average daily amount of ASR diversion, not the 20 acre-feet per day that was used in the earlier modeling in anticipation of drier future years.
2. The Pure Water Monterey Expansion Project will begin operation in 2024.
3. To provide a factor of safety, the amount of water that the Pure Water Monterey Expansion Project will deliver will be reduced from 5,700 acre-feet to the “*Minimum Allotment*” of 4,600 acre-feet per year as set forth in the “*Amended and Restated Water Purchase Agreement*” executed between Cal Am, MPWMD, and M1W in late 2021.
4. Cal Am’s desalination plant will begin operation in 2030, and its repayment of 700 AFY will not begin until the desalination plant begins operation, in accordance with Cal Am’s *Urban Water Management Plan*.
5. Cal Am’s *Urban Water Management Plan* demand figures rather than MPWMD’s demand figures will be used for Cal Am’s projected water demands.
6. Cal Am will make up any shortfall between supply and demand by overpumping its Seaside Basin allocation of 1,474 AFY plus the balance of Alternative Production Allocation not pumped.

PROPOSED “WHAT IF” SCENARIO NO. 2 (THIS COULD BE A “MINIMUM POTENTIAL REPLENISHMENT WATER NEED” SCENARIO):

As suggested by Mr. Lear, evaluate the effects on the Seaside Basin if the projects and management actions in the Monterey Subbasin Groundwater Sustainability Plan (GSP) are successfully implemented and result in significant reductions in the amounts of water lost from the Seaside Subbasin to the Monterey Subbasin. In this scenario the inter-basin groundwater levels projected in those GSPs at the end of the 20-year GSP implementation time frame would be used. The model currently assumes that no GSP implementation projects are implemented.

EXHIBIT 2

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: June 2, 2022

RFS NO. 2022-04

(To be filled in by WATERMASTER)

TO: Cameron Tana
Montgomery & Associates
PROFESSIONAL

FROM: Robert Jaques
WATERMASTER

Services Needed and Purpose: Perform additional analyses to determine how much replenishment water will be needed to achieve protective groundwater elevations in the Basin. See Scope of Work in Attachment 1.

Completion Date: All work of this RFS shall be completed not later than December 31, 2022, and shall be performed in accordance with the Schedule described in Attachment 1.

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

Total Price Authorized by this RFS: \$ 40,735.00 (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

Under RFS No. 2021-01, Amendment No. 2, PROFESSIONAL performed initial groundwater modeling to determine how much replenishment water will be needed to achieve protective groundwater elevations in the Basin. This RFS No. 2022-04 authorizes PROFESSIONAL to perform the additional analyses described in Attachment 2 hereto to determine how much replenishment water will be needed to achieve protective groundwater elevations in the Basin under different assumptions than those used in the initial modeling work.

Cost Estimate for Seaside Basin Replenishment Modeling Additional Scenarios & Analysis										
		Montgomery & Associates Labor					Labor Total		Other Direct Costs	TOTALS
		Scientist VIII	Scientist VI	Scientist V	Scientist III	Technical Editor				
		D. Williams	G. King	P. Benito			Hours	(\$)	(\$)	
Task	Hourly Rates	\$275	\$228	\$205	\$160	\$80				
1.0	WATER BUDGET ANALYSIS OF ORIGINAL JANUARY 2022 BASELINE SIMULATION & REPLENISHMENT SCENARIOS									
	Water budget analysis of Baseline Simulation & 1000 AFY Replenishment Scenario Simulation. Focused on Inflow and Outflows for the Northern Coastal Subarea (extended to include PWM Expansion)	0	1	16	16	0	33	\$6,068	\$0	\$6,068
	<i>Task 1 Subtotal</i>	0	1	16	16	0	33	\$6,068	\$0	\$6,068
2.0	DEVELOP ALTERNATIVE SCENARIO 1									
2.1	Incorporate revised City of Seaside Assumptions & New Well Location	0	0	6	0	0	6	\$1,230	\$0	\$1,230
2.2	Incorporate Cal-AM UWMP Demand Assumptions, MPWSP Desal Project, reduced PWM Expansion delivery and revised ASR Diversion Rate into Monthly Supply-Demand Pumping & Injection Model	2	4	32	16	0	54	\$10,582	\$0	\$10,582
	<i>Task 2 Subtotal</i>	2	4	38	16	0	60	\$11,812	\$0	\$11,812
3.0	Hybrid Water Budget Analysis To Show Effects Of Different Demand/Supply Assumptions On Volume Of Replenishment Needed									
	Develop hybrid water budget analysis framework and tables for comparing different fractions of components of net-recharge required to achieve protective elevations under different Demand and Supply assumptions	2	2	32	16	0	52	\$10,126	\$0	\$10,126
	<i>Task 3 Subtotal</i>	2	2	32	16	0	52	\$10,126	\$0	\$10,126
4.0	REPORTING									
4.1	Prepare Technical Memorandum describing Scenarios, Analyses, Findings, and Conclusions	2	6	24	16	8	56	\$10,038	\$0	\$10,038
4.2	Prepare Presentation and Present Findings to TAC and Board via Zoom	1	2	8	2	0	13	\$2,691	\$0	\$2,691
	<i>Task 4 Subtotal</i>	3	8	32	18	8	69	\$12,729	\$0	\$12,729
	Total	7	15	118	66	8	214	\$40,735	\$0	\$40,735

EXHIBIT 3

Principal Conclusions from the January 28, 2022 Draft Replenishment Water Technical Memorandum

1. If 500 AFY of replenishment water is provided, protective groundwater elevations are not reached in all protective elevation wells during the 25-year modeling period.
2. If 1,000 AFY of replenishment water is provided, protective groundwater elevations are reached, at least initially, in all protective elevation wells within 11 years.
3. 1,000 AFY of replenishment water also maintains and enhances the reversal of flow from a net inflow of water from offshore to a net outflow of water to offshore, even when protective elevations are not being met at all the wells. This volume of replenishment water adds a buffer to maintain strong net offshore outflows even in drought years.
4. The modeling assumed that all replenishment water would be injected into the Santa Margarita aquifer. Increasing replenishment to 1,500 AFY results in only slight improvement in reaching protective groundwater elevations, particularly in the Paso Robles aquifer. This suggests that there is limited benefit in trying to continue to raise the groundwater levels by increasing replenishment of the Santa Margarita aquifer. Rather, other alternatives may be more effective such as redistributing pumping from wells screened completely or partially in the Paso Robles aquifer, increased use of recycled water for irrigation purposes, and/or directly replenishing the Paso Robles aquifer.
5. The modeling work covered a 25-year period and ended at the same time that Cal Am's estimated 25-year 700 AFY overpumping payback period would end, so no definitive assessment of groundwater levels after the end of the payback period was made. However, groundwater levels would very likely stop increasing and slowly decline due to the drought years in the projected hydrologic cycles that reduce the availability of water for ASR and PWM injection and increases extraction of ASR and PWM water in storage. This would require an increase in replenishment water to continue to protect the Basin.
6. There is a significant impact from multi-year droughts, and even just below normal rainfall periods, on the availability of water for ASR and PWM recharge and on the timing of reaching and maintaining protective groundwater elevations.
7. In addition to the constant 1,000 AFY replenishment, additional "booster" injections could be considered following protracted drought periods to make up the lost water.
8. It is also not clear how future climate change and the potential increased frequency and duration of extreme weather events will impact the ability to maintain protective elevations. Additional modeling of projected future climate scenarios could be used to evaluate this.

TO: Board of Directors

FROM: Laura Paxton, Administrative Officer

DATE: June 1, 2022

SUBJECT: Mission Memorial Park Replenishment Assessment Update

BACKGROUND:

Mission Memorial Park (MMP) is an Alternative Producer as described in the Court Decision with a fixed production allocation of 31 acre-feet per year (AFY) that has not been exceeded since Amended Decision inception in 2007 through Water Year (October-September) 2020. MMP has under pumped on average 13AFY for a total of approximately 169AF. In Water Year 2021, MMP exceeded its allocation by 15.77 acre-feet, incurring a Natural Safe Yield Overproduction Replenishment Assessment of \$46,488.32 and an Operating Yield Overproduction Replenishment Assessment of \$11,626.02 derived from a unit cost of \$2,947.90 and \$737.22 respectively, totaling \$58,114.34 invoiced to MMP on November 29, 2021.

At its May 4th, 2022 meeting, the Watermaster Board approved reducing the \$58,114.34 2021 Mission Memorial Park over production replenishment assessment to \$25,000 payable over time and require submission of an action plan on how Mission Memorial Park will avoid future over production.

UPDATE

Lorrie Muriel, MMP General Manager was contacted after the Watermaster Board made its decision. She informed that MMP would be paying the balance of the fee in one payment by check mailed May 26th 2022. Ms. Muriel submitted the attached action plan to Watermaster.

RECOMMENDATION:

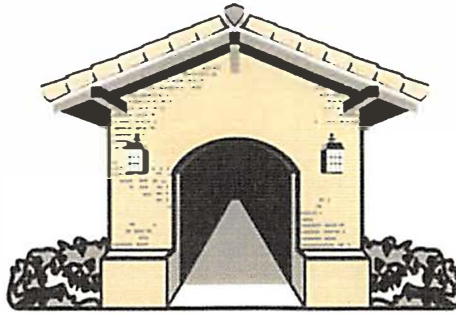
This report is informational only.

FISCAL IMPACT:

A \$25,00 addition to the Watermaster Replenishment Fund

ATTACHMENTS:

Action plan on how Mission Memorial Park will avoid future over production



To: Seaside Groundwater Basin Watermaster

Re: Action Plan for Mission Memorial Park

Date: May 16, 2022

Thank you for your consideration in our water usage issue from 2021. To ensure this does not happen again, I will be taking the following steps:

- 1) Our sprinklers have been turned down to $\frac{1}{4}$ of the amount of time they were running last year, with strict instructions given not to increase the time without my prior approval.
- 2) We have started mixing mulch with our soil as we perform burials in hopes that it will aid in water retention.
- 3) We will be having a plumber come remove the handles from the 20 or so outdoor water spigots so the public are unable to access the water on the cemetery grounds. Therefore no one will be able to leave the water running (something that has happened in the past).
- 4) Any water line breaks are dealt with promptly, with the water being turned off as soon as possible.
- 5) Any future cemetery development will be with water usage in mind, we will look into grass alternatives and drought friendly plants for those areas.
- 6) I am having signage made to reflect the California Cemetery Maintenance Standards where it specifies the following:

*California Cemetery Maintenance Standards (16 CCR 2333) require we provide a sufficient supply of water to keep cemetery grass and plants green as seasonably possible in accordance with natural terrain, **availability of water, and local or county ordinances regarding water use.***

I will keep a file on this matter that, if for some reason I am to seek employment elsewhere, it will be clear what the expectations are to future management of Mission Memorial Park.

Respectfully,

Lorrie Ann Muriel, Location Leader