SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR MEETING OF THE BOARD OF DIRECTORS
DRAFT AGENDA

Wednesday, September 3, 2025–2:00pm HYBRID

City Hall, City of Sand City
1 Pendergrass Way, Sand City, CA 93955

To access the meeting virtually, please click on the Zoom link or copy/paste it into your browser:
https://us02web.zoom.us/j/88555828077?pwd=LG7qW40jQOyyg62CGOb7dqCD1DsIwh.1
Meeting ID: 885 5582 8077 **Passcode:** 541069
If your computer does not have audio, you can join the meeting via phone. To participate via phone, please call: 408 638 0968 US (San Jose) • 669 444 9171 US • 669 900 6833 US (San Jose)
If you would like to comment on any item on the agenda or any item not on the agenda, please submit those in writing to our office or via email at watermasterseaside@sbcglobal.net by 10 a.m. on the day before the Board meeting. All submitted written comments will be provided to the Board and you may also comment during the meeting.

Watermaster Board
City of Seaside—Mayor Ian Oglesby—Chair
City of Sand City—Mayor Mary Ann Carbone—Vice Chair
Monterey County/Monterey County Water Resources Agency—Supervisor Wendy Root Askew, District 4
City of Monterey—Council Member Kim Barber
Coastal Subarea Landowner—Director Paul Bruno
Laguna Seca Subarea Landowner—Director John Gaglioti
California American Water (CAW)—Director Tim O'Halloran
Monterey Peninsula Water Management District (MPWMD)—Director Alvin Edwards (George Riley, alternate)
City of Del Rey Oaks—Council Member Kim Shirley

I. **CALL TO ORDER**

II. **ROLL CALL**

III. **REVIEW OF AGENDA AND ANNOUNCEMENTS**
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).

IV. **PUBLIC COMMUNICATIONS**
Oral communications are on each meeting agenda 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.

V. **CONSENT CALENDAR**

VI. **ORAL PRESENTATION**

A. Status of CAW Desal Project satisfying California Coastal Commission conditions (Director O'Halloran)

VII. **NEW BUSINESS**

A. Presentation by Montgomery & Associates of the Draft version of the Updated Seawater Intrusion Response Plan (SIRP) 19
   1. Discuss/Provide Input/Suggest Revisions to the Draft Update of the SIRP 51

B. Consider appointing a Recruitment Committee to fill Administrative Officer position 53

VIII. **OLD BUSINESS—None**

IX. **INFORMATIONAL REPORTS (No Action Required)**

A. Watermaster report of Water Year 2025 Quarter 3 Production of the Seaside Basin (October 1, 2024 – June 30, 2025) 55
B. Sustainable Groundwater Management Act Monthly Update February through July 2025 57
C. Notice of CAW/Bishop Unit-McIntosh Amendment to Water Distribution Permit 67
D. Draft minutes of the Replenishment Ad Hoc Committee meeting held July 3, 2025 71

X. **DIRECTOR REPORTS**

XI. **STAFF COMMENTS**

XII. **CLOSED SESSION**

A closed session of the Board is not planned but may be held if necessary for certain limited purposes authorized pursuant to the California Government Code.

XIII. The Watermaster will consider a motion to adjourn to the next regular Watermaster Board meeting to be held on Wednesday, October 1, 2025 at 2:00 P.M.

This agenda was forwarded via email 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 California American Water Company for posting on or before August 29, 2025, per the Ralph M. Brown Act, Government Code Section 54954.2 (a).

SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR MEETING MINUTES
Wednesday, March 5, 2025
City of Sand City, City Hall, 1 Pendergrass Way, Sand City, CA 93955 (Hybrid)

I. CALL TO ORDER – The meeting was called to order at 2:07 p.m.

II. ROLL CALL

Directors Present:
City of Seaside – Mayor Ian Oglesby, Chair
City of Sand City – City Manager Vibeke Norgaard (alternate for Mayor Mary Ann Carbone)
Laguna Seca Subarea Landowner – Director John Gaglioti
California American Water (CAW) – Director Tim O'Halloran
Monterey Peninsula Water Management District (MPWMD) – Director Alvin Edwards
City of Del Rey Oaks – Council Member Kim Shirley

A board quorum was present.

Directors Absent:
Monterey County/Water Resources Agency – Supervisor Wendy Root Askew
City of Monterey – Council Member Kim Barber
Coastal Subarea Landowner – Director Paul Bruno

Others Present:
Bob Jaques, Watermaster Technical Program Manager (TPM)
Laura Paxton, Watermaster Administrative Officer (AO)
Yuri Anderson, Chief of Staff, Office of Supervisor Wendy Root Askew*
Jessica Riley, Acting Finance Director, City of Seaside*
Sarah Hardgrave, Deputy General Manager, Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA)*
Jon Lear, Water Resource Manager/District Hydrogeologist, MPWMD
Andreas Baer, Senior Engineer, City of Seaside

An asterisk (*) signifies virtual attendance.

III. REVIEW OF AGENDA AND ANNOUNCEMENTS – There were no announcements or requested changes to the agenda.

IV. PUBLIC COMMUNICATIONS – There were no public communications.

V. ORAL PRESENTATIONS – None

VI. CONSENT CALENDAR
A. Minutes of Regular Board meeting held on February 5, 2025
B. Summary of Payments made in February 2025

It was moved by Director Shirley, seconded by Director Gaglioti, and unanimously carried 6-0 to approve the Consent Calendar items as presented.

VII. NEW BUSINESS

A. Discuss/Consider Approving RFS No. 2025-03 to Montgomery & Associates to Update the Watermaster's Seawater Intrusion Response Plan

TPM Jaques described the proposed contract, which the TAC reviewed at its February 12, 2025 meeting and recommended for forwarding to the Board for approval. Montgomery & Associates will prepare an updated Seawater Intrusion Response Plan (SIRP) to replace the original SIRP prepared by Hydrometrics LLC (now Montgomery & Associates) in 2009. There will be three virtual presentations made to the Technical Advisory Committee and Board of Directors on the update. The $25,481 cost of the update is incorporated in the current Watermaster budget.

Board members discussed how the contractor will indicate changes from the 2009 SIRP. Because this will be an entirely new document, the contractor will provide a summary of changes rather than a red-line document with tracked changes.

It was moved by Director O'Halloran, seconded by Director Gaglioti, and unanimously carried 6-0 to approve Montgomery and Associates RFS No. 2025-03 to update the Watermaster Seawater Intrusion Response Plan.

B. Discuss/Consider Approving the Professional Services Agreement and RFS 2025-01 to Geophysical Imaging Partners to Perform a Pilot Test of Subsurface Imaging in the Vicinity of Sentinel Well No. 4

TPM Jaques described the proposed contract, which the TAC reviewed at its February 12, 2025 meeting and recommended for forwarding to the Board for approval. As reported to TAC and the Board at past meetings, monitoring over time of Seaside Basin Water Monitoring Well No. 4 (SBWM-4)—located on California State Parks property at the site of the former Fort Ord Village Lift Station—has shown increased conductivity at 140 to 200 feet below ground surface in the Paso Robles Formation, which may suggest seawater intrusion.

It was moved by Director O'Halloran, seconded by Director Gaglioti, and unanimously carried 6-0 to approve the Professional Services Agreement and RFS 2025-01 to Geophysical Imaging Partners to perform a subsurface imaging pilot test.

VIII. OLD BUSINESS – None

IX. INFORMATIONAL REPORTS (No Action Required)

TPM Jaques reported that the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) Board of Directors has received a letter from the Seaside Groundwater Basin Watermaster asking to maintain its seat on the SVBGSA Advisory Committee. On behalf of the SVBGSA, Deputy General Manager Sarah Hardgrave confirmed that the Board received the letter. She reported that the Board considers the Advisory Committee to be too large and has directed the General Manager to reduce the size to better integrate it with the six subbasins in the SVBGSA jurisdictional boundaries that are subject to the Sustainable Groundwater Management Act (SGMA). (Adjudicated groundwater basins such as the Seaside Groundwater Basin are exempt from SGMA.) The Board would change the makeup of its Advisory Committee through a bylaw change, which has not occurred yet, and would be a public process that Watermaster could engage in. It was noted that TPM could actively participate on behalf of Watermaster in committee proceedings even if not a voting member.

X. DIRECTOR REPORTS

Director Alvin Edwards reported he had expressed his desire to the Monterey Peninsula Water Management District (MPWMD) Board of Directors that MPWMD post videos of the Seaside Groundwater Basin Watermaster Board of Directors meetings on the District's YouTube channel, and the Board approved MPWMD assisting with the posting. Arrangements could be made through Sara Reyes, Clerk of the MPWMD Board of Directors.

XI. STAFF COMMENTS – There were no staff comments.

XII. ADJOURNMENT – There being no further business, the meeting was adjourned at 2:29 p.m. to the Board workshop scheduled for April 2, 2025, at 2:00 p.m.

SEASIDE GROUNDWATER BASIN WATERMASTER
SPECIAL MEETING/BOARD WORKSHOP MINUTES - DRAFT
Wednesday, April 2, 2025 In-Person (with virtual for public)
City of Sand City, City Hall, 1 Pendergrass Way, Sand City, CA 93955

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

II. ROLL CAL

Directors Present:
California American Water (CAW) – Director Tim O'Halloran
City of Seaside – Mayor Ian Oglesby, Chair
City of Sand City –Mayor Mary Ann Carbone
City of Monterey – Council Member Kim Barber
City of Del Rey Oaks – Council Member Kim Shirley
Laguna Seca Subarea Landowner – Director John Gaglioti
Monterey County/Water Resources Agency – Supervisor Wendy Root Askew

Directors Absent:
Coastal Subarea Landowner – Director Paul Bruno
Monterey Peninsula Water Management District (MPWMD) – Director Alvin Edwards

Others Present:
Bob Jaques, Watermaster Technical Program Manager (TPM)
Laura Paxton, Watermaster Administrative Officer (AO)
Rem Scherzinger, Marina Coast Water District (MCWD)
Patrick Breen, Marina Coast Water District (MCWD)
Kevin Dayton
Chelsea Lenowska
Sarah Hardgrave, Salinas Valley Basin Groundwater Sustainability Agency*
Yuri Anderson, Chief of Staff, Office of Supervisor Wendy Root Askew*
Maureen Hamilton, Monterey Peninsula Water Management District (MPWMD)*
Jon Lear, MPWMD*
Josef Polk*
Susan Schiavone, Public Water Now*
Kyla Linville*
An asterisk (*) signifies virtual attendance.

III. INTRODUCTION: WATERMASTER STRUCTURE AND AUTHORITY, AND THE CONDITION OF THE SEASIDE GROUNDWATER BASIN AND ITS PROBLEMS

AO Paxton provided a slide presentation entitled "What Does Watermaster Do?" It outlined the following: enactment of the Watermaster concept in California law; the Watermaster program as state law and the California Department of Water Resources (DWR) defines it today; the history and outcome of the Monterey Superior Court adjudication that established the Seaside Groundwater Basin Watermaster; the duties, operations, and governance structure of the Seaside Groundwater Basin Watermaster; and the parties relevant to the Seaside Groundwater Basin Watermaster and their classifications under the adjudication.

A second slide presentation entitled "Watermaster Authority with Respect to Basin Sustainability" outlined the purpose of the adjudication, the definitions of various terms and conditions in the adjudication, and clarified the purpose of the Seaside Groundwater Basin Watermaster.

Watermaster Technical Program Manager Bob Jaques provided a slide presentation entitled "Basin Description." It included maps and tables showing the Seaside Groundwater Basin conditions and concluded that net outflow is occurring from the northern boundary of the Seaside Groundwater Basin into the Marina-Ord area of the Monterey Subbasin, or to the ocean, or to both locations.

Mr. Jaques provided a second slide presentation entitled "What Is the Problem?" It divided the problems into two categories: physical problems related to groundwater levels and institutional problems related to how the Monterey Peninsula Water Management District (MPWMD) generally rejects key findings of the Seaside Groundwater Basin Watermaster.

The slides will be posted for the public on the Watermaster website.

IV. DISCUSSION ITEM: WATERMASTER STRUCTURE AND AUTHORITY, AND THE CONDITION OF THE SEASIDE GROUNDWATER BASIN AND ITS PROBLEMS

Board members asked questions related to the governing structure, the definition and implications of "Carryover" (the portion of a party's Production Allocation that isn't extracted from the Basin during a particular Water Year), the possibility of changing the Natural Safe Yield (the amount of groundwater in the Seaside Basin that occurs solely as a result of Natural Replenishment), the lack of clarity, authority, and funding for the Seaside Groundwater Basin Watermaster as opposed to the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) and their subbasin committees, the difference between Operating Yield (the maximum amount of Groundwater producers are allowed to extract) and Natural Safe Yield (the amount of Groundwater resulting from Natural Replenishment), and the differences in perspectives of the Seaside Groundwater Basin Watermaster and the Monterey Peninsula Water Management District (MPWMD).

V. PUBLIC COMMENT ON THE PRESENTATIONS GIVEN ON THE WATERMASTER AND THE SEASIDE GROUNDWATER BASIN CONDITIONS

Kevin Dayton asserted that outside entities may attempt to terminate the Seaside Groundwater Basin Watermaster by contending to the Monterey County Superior Court or another authority that the agency has fulfilled its purpose. He told the board that such a decision needs to be theirs and not driven by an outside party, and they need to take a stand on whether or not it has fulfilled its purpose. He suggested that the board consider the positive and negative implications of converting from a Watermaster to a subbasin under the authority of the Sustainable Groundwater Management Act (SGMA).

VI. ADJOURNMENT – There being no further business, the meeting was adjourned at 4:13 p.m.

Respectfully submitted by Laura Paxton, Board Secretary

WATERMASTER CHECK REGISTER

	Type	Date	Num	Name	Memo	Split	Amount
MARCH 2025							
Administrative Fund	Check	03/08/2025	021925KDG	Klein DeNatale Goldner (Hughes)	February 2025 Invoice	Legal	-$814.50
	Check	03/08/2025	022525PA	Paxton Associates	February 2025 Invoice	Contract Staff	-6,562.50
							-7,377.00
Monitoring & Mgmt Ops Fund							
	Check	03/08/2025	022825BJ	Robert Jaques	February 2025 Invoice	Technical Project Manager	-6,387.50
	Check	03/08/2025	013125MA	Montgomery & Associates	January 2025 Invoice	Monitoring & Management - Ops	-4,085.00
	Check	03/08/2025	013125MA	Montgomery & Associates	January 2025 Invoice	Seawater Intrusion	-1,160.00
	Check	03/08/2025	123124MPWMD	MPWMD	Quarter 4 2024 Invoice	Monitoring & Management - Ops	-22,264.70
	Check	03/08/2025	020825TG	Todd Groundwater	February 2025 Invoice	Monitoring & Management - Ops	-425.00
							-34,322.20
						TOTAL MARCH 2025	**-41,699.20**
APRIL 2025							
Administrative Fund	Check	04/05/2025	022526PA	Paxton Associates		Contract Staff	-4,500.00
	Check	04/05/2025	022527KDG	Klein DeNatale Goldner (Hughes)		Legal	-630.00
							-5,130.00
Monitoring & Mgmt Ops Fund	Check	04/05/2025	020826TG	Todd Groundwater		Monitoring & Management - Ops	-165.00
	Check	04/05/2025	020827MA	Montgomery & Associates		Monitoring & Management - Ops	-2,055.00
	Check	04/05/2025	020828BJ	Robert Jaques		Technical Project Manager	-11,112.50
							-13,332.50
						TOTAL APRIL 2025	**-18,462.50**
MAY 2025							
Administrative Fund	Check	05/05/2025	022528KDG	Klein DeNatale Goldner (Hughes)	April Invoice	Legal	-810.00
	Check	05/05/2025	022529PA	Paxton Associates	April Invoice	Contract Staff	-6,125.00
							-6,935.00
Monitoring & Mgmt Ops Fund	Check	05/05/2025	020829BJ	Robert Jaques	April Invoice	Technical Project Manager	-4,112.50
	Check	05/05/2025	020830MA	Montgomery & Associates	March Invoice	Monitoring & Management - Ops	-3,167.50
							-7,280.00
						TOTAL MAY 2025	**-14,215.00**
JUNE 2025							
Administrative Fund	Check	06/07/2025	052525PA	Paxton Associates	May Invoice	Contract Staff	-4,574.15
Monitoring & Mgmt Ops Fund	Check	06/07/2025	053125BJ	Robert Jaques	May Invoice	Technical Project Manager	-2,362.50
	Check	06/07/2025	053126MF	Feeney, Martin B., PG, CHg	2025 1st Qtr.	Monitoring & Management - Ops	-630.00
	Check	06/07/2025	043025MA	Montgomery & Associates	April Invoice	Monitoring & Management - Ops	-11,012.50
	Check	06/07/2025	033125MPWMD	MPWMD	2025 1st Qtr.	Monitoring & Management - Ops	-12,316.62
							-26,321.62
						TOTAL JUNE 2025	**-30,895.77**
JULY 2025							
Administrative Fund	Check	07/05/2025	062526PA	Paxton Associates	June 2025 Invoice	Contract Staff	-4,500.00
Monitoring & Mgmt Ops Fund	Check	07/07/2025	063025BJ	Robert Jaques	June 2025 Invoice	Technical Project Manager	-6,212.50
						TOTAL JULY 2025	**-10,712.50**
						GRAND TOTAL MARCH - JULY 2025	**-$111,484.97**

Seaside Groundwater Basin Watermaster

Budget vs. Actual Administrative Fund

Fiscal Year (January 1 - December 31, 2025)
Balance through July 31, 2025

	2025 Adopted Budget		Contract Amount	Year to Date Revenue / Expenses
Available Balances & Assessments				
Other Assessments	-			
FY (Rollover)	2,500.00			30,000.00
Admin Assessments	113,000.00			113,000.00
Replenishment Assessments	10,474.00			10,474.00
Available	**125,974.00**			**153,474.00**
Expenses				
Contract Staff	78,000.00		78,000.00	39,147.56
Legal Counsel			12,500.00	
General	12,500.00			3,699.00
Replenishment	10,474.00	*		2,070.00
				5,769.00
Filing fees and postage				-
Total Expenses	**100,974.00**		**90,500.00**	**44,916.56**
Total Available	25,000.00			
Dedicated Reserve	25,000.00			-
Net Available	**-**			**108,557.44**

** $10,474 Replenishment related legal and administrative costs will be covered by funds transferred into the Administrative Fund from the Replenishment Assessment Fund*

Seaside Groundwater Basin Watermaster

Budget vs. Actual Monitoring & Management - Operations Fund

Fiscal Year (January 1 - December 31, 2025)

Balance through July 31, 2025

	2025 Adopted Budget	Contract Encumbrance	Year to Date Revenue/Expenses
Available Balances & Assessments			
Operations Fund Assessment	$ 335,000.00	$ -	$ 335,000.00
Pass Through		-	1,890.00
FY 2022 Rollover (estimated)	143,973.00	-	188,000.00
Total Available	**$ 478,973.00**	**$ -**	**$ 524,890.00**
Appropriations & Expenses			
GENERAL			
Technical Project Manager*	$ 75,000.00	$ 75,000.00	$ 45,050.00
Contingency @ 10% (not including TPM)	52,692.00	-	
Total General	**$ 127,692.00**	**$ 75,000.00**	**$ 45,050.00**
CONSULTANTS (Montgomery; Web Site Database)			
Program Administration	$ 15,694.00	$ 15,694.00	$ 11,882.50
Production/Lvl/Qlty Monitoring	-		
Basin Management	175,000.00	7,000.00	
Seawater Intrusion Analysis Report	55,531.00	55,531.00	9,597.50
Total Consultants	**$ 246,225.00**	**$ 78,225.00**	**$ 21,480.00**
MPWMD			
Production/Lvl/Qlty Monitoring	$ 81,556.00	81,556.00	12,316.62
Pass Through 2024	-	-	-
Basin Management	-		-
Seawater Intrusion	-	-	-
Direct Costs	-	-	-
Total MPWMD	**$ 81,556.00**	**$ 81,556.00**	**$ 12,316.62**
CONTRACTOR (Martin Feeney)			
Hydrogeologic Consulting Services	$ 4,000.00	4,000.00	630.00
Production/Lvl/Qlty Monitoring		-	-
	$ 4,000.00	**$ 4,000.00**	**$ 630.00**
CONTRACTOR (Todd Groundwater)			
Hydrogeologic Consulting Services	**$ 4,000.00**	**$ 4,000.00**	590.00
CONTRACTOR (Subsurface Imaging)			
Hydrogeologic Consulting Services	**$ 15,500.00**	**$ 15,500.00**	-
Total Appropriations & Expenses	**$ 478,973.00**	**$ 242,781.00**	**$ 80,066.62**
Total Available	**-**		**444,823.38**

Seaside Groundwater Basin Watermaster

Replenishment Fund

9/3/25

Water Year 2025 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2025)

Balance through July 31, 2025

Replenishment Fund		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Assessment Water Year		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
Unit Cost:	a	$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	$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)**

Seaside Groundwater Basin Watermaster — 9/3/25

Replenishment Fund — Page 2

Water Year 2025 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2025)

Balance through July 31, 2025

Replenishment Fund		2017	2018	2019	2020	WY 2021	WY 2022	WY 2023	WY 2024	Totals WY 2006 Through 2024	Budget WY 2025	Projected Totals Through WY 2025
Assessment Water Year		WY 16/17	WY 17/18	WY 18/19	WY 19/20	WY 20/21	WY 21/22	WY 22/23	WY 23/24		WY 23/24	
Unit Cost:	a	$2,872 / $718	$2,872 / $718	$2,872 / $718	$2,872 / $718	$2,947 / $737	$3,260/ $815	$3,461/ $865	$4,529/$1,132		$4,845/$1,211	
Cal-Am Water Balance Forward	b	**$ (676,704)**	**$ (491,747)**	**$ (48,797,949)**	**$ (47,979,852)**	**$ (46,855,121)**	**$ (46,855,121)**	**$ (46,855,121)**	**$ (46,855,121)**		**$ (46,855,121)**	
Cal-Am Water Production (AF)	c	*2,029.51*	*2,229.45*	*2,120.22*	*2,245.88*	*1,664.04*	*1,648.71*	*1,569.60*	*1,594.25*	*50,853.59*		
Cal-Am Water NSY Over-Production (AF)	d	*64.40*	*374.65*	*284.85*	*334.21*	-	-	-		*14,638.57*		
Exceeding Natural Safe Yield Considering Alternative Producers	e	$ 184,957	$ 1,075,995	$ 818,097	$ 959,859	-	-	-	-	$ 33,550,034	-	$ 33,550,034
Operating Yield Overproduction Replenishment	f				164,872	-	-	-	-	$ 1,122,753	-	$ 1,122,753
Total California American	g	**$ 184,957**	**$ 1,075,995**	**$ 818,097**	**$ 1,124,731**	**$ -**	**$ -**	**$ -**	**-**	**$ 34,672,786**	**-**	**$ 34,672,786**
CAW Credit Against Assessment	h		$ (49,382,196)	-	-	-	-	-	-	$ (81,527,907)	-	$ (81,527,907)
CAW Unpaid Balance	i	***$ (491,747)***	***$ (48,797,949)***	***$ (47,979,852)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***	***$ (46,855,121)***
City of Seaside Balance Forward (120.28 AF)	j	**$ (3,232,420)**	**$ (3,142,500)**	**$ (3,022,249)**	**$ (2,919,806)**	**$ (2,802,831)**	**$ (2,708,829)**	**$ (2,661,184)**	**$ (2,661,184)**		**$ (2,661,184)**	
City of Seaside Municipal Production (AF)	k	*188.31*	*184.63*	*178.40*	*181.65*	*174.69*	*155.12*	*158.46*		*4,047.41*		
City of Seaside NSY Over-Production (AF)	l	*30.47*	*32.46*	*27.82*	*32.06*	*25.52*	*11.69*	-		*1,247.31*		
Exceeding Natural Safe Yield Considering Alternative Producers	m	$ 87,512	$ 93,225	$ 79,893	$ 92,089	$ 75,197	$ 38,116	-	0.00	$ 2,898,358	0.00	$ 2,898,358
Operating Yield Overproduction Replenishment	n	2,409	27,026	22,550	24,886	18,806	9,529	-	0.00	$ 203,263	0.00	$ 203,263
Total Municipal	o	$ 89,920	$ 120,251	$ 102,443	$ 116,975	$ 94,002	$ 47,645	$ -	0.00	$ 3,101,621	0.00	$ 3,101,621
City of Seaside - Golf Courses (APA - 540 AFY)												
Exceeding Natural Safe Yield - Alternative Producer	p	-	-	-	-	-	-			$ 201,406		$ 201,406
Operating Yield Overproduction Replenishment	q	-	-	-	-	-	-			$ 50,353		$ 50,353
Total Golf Courses	r	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ 251,759		$ 251,759
Total City of Seaside*	s	**$ 89,920**	**$ 120,251**	**$ 102,443**	**$ 116,975**	**$ 94,002**	**$ 47,645**	**-**	**0.00**	**$ 3,353,380**	**0.00**	**$ 3,353,380**
City of Seaside Late Payment 5%	t									$ 88,887		$ 88,887
In-lieu Credit Against Assessment	u									$ (6,103,451)		$ (6,103,451)
City of Seaside Unpaid Balance	v	***$ (3,142,500)***	***$ (3,022,249)***	***$ (2,919,806)***	***$ (2,802,831)***	***$ (2,708,829)***	***$ (2,661,184)***	***$ (2,661,184)***	***$ (2,661,184)***	***$ (2,661,184)***	***$ (2,661,184)***	***$ (2,661,184)***
Mission Memorial Park (APA - 31 AFY)												
Mission Memorial Park Production (AF)	w	*13.74*	*14.43*	*16.07*	*20.00*	*46.77*	*33.95*			*335.84*		
Mission Memorial Park NSY Over-Production (AF)	x	-	-	-		*15.77*	*2.95*			*18.72*		
Exceeding Natural Safe Yield - Alternative Producer	y	-	-	-	-	$ 46,488	$ 9,608			$ 56,096		$ 56,096
Operating Yield Overproduction Replenishment	z	-	-	-	-	11,626.00	2,401.97			$ 14,028		$ 14,028
Board Approved (5/4/22) Credit Against Assessment						(33,114.00)				$ (33,114)		$ (33,114)
$8,500 Applied to Admin Fund to cover expenses						(8,500.00)						
Mission Memorial Park Unpaid Balance	aa	-	-	-	-	-	-	-	-	$ -	-	$ -
Total	o	***$ -***	***$ -***	***$ -***	***$ -***	***$ 16,500***	***$ 12,010***	***$ (16,500)***	***$ (12,010)***	***$ (0)***	***$ -***	***$ (0)***
Balance of Available Funds								***$ 16,500***	***$ 22,461***	$ 38,961	***$ 16,521***	
Total Replenishment Fund Balance	bb	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,658)**	**$ (49,657,952)**	**$ (49,563,950)**	**$ (49,516,305)**	**$ (49,538,853)**	**$ (49,528,315)**	**$ (49,477,344)**	**$ (49,528,293)**	**$ (49,528,293)**
Replenishment Fund Balance Forward	cc	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,658)**	**$ (49,657,952)**	**$ (49,563,950)**	**$ (49,516,305)**	**$ (49,522,353)**		**$ (49,528,293)**	
Total Replenishment Assessments	dd	$ 274,877	$ 1,196,246	$ 920,540	$ 1,241,706	$ 110,502	$ 59,655	$ -	$ -	$ 38,143,563	$ -	**$ 38,143,563**
Total Paid and/or Credited	ee		$ (49,382,196)			$ (16,500)	$ (12,010)			(87,659,868)		**(87,659,868)**
Total Paid for Replenishment Legal Services	ff							$ (6,049)	(5,940)	(11,989)	(16,521)	**(28,510)**
Grand Total Fund Balance	gg	***$ (3,634,247)***	***$ (51,820,198)***	***$ (50,899,658)***	***$ (49,657,952)***	***$ (49,563,950)***	***$ (49,516,305)***	***$ (49,522,353)***	***$ (49,528,293)***	***$ (49,528,293)***	***$ (49,544,814)***	***$ (49,544,814)***

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: August 20, 2025

SUBJECT: Retroactively Approve RFS No. 2025-04 with Montgomery & Associates

- -

RECOMMENDATIONS:
Retroactively approve RFS No. 2025-04 with Montgomery & Associates.

BACKGROUND:
At the June and July 2025 meetings of the Watermaster TAC there were discussions regarding updating the Seaside Basin groundwater model and, related to this, coordinating with the modeling team working for the Salinas Valley Groundwater Sustainability Agency (SVBGSA) that is developing a seawater intrusion model that will include the Seaside Basin. Georgina King of Montgomery & Associates, the Watermaster's hydrogeologic consultant that is doing groundwater modeling work for the Watermaster, reported that the authorized contract amount to cover General Consulting had been nearly exhausted. This is mainly because more work than expected was required by her and Pascual Benito coordinating with the SVBGSA modeling teams working on the Seawater Intrusion and Salinas Valley Integrated Hydrogeologic Models, and coordinating with Geophysical Imaging Partners regarding the subsurface electromagnetic imaging near Sentinel Well No. 4.

DISCUSSION:
To ensure that Montgomery & Associates has adequate budget to continue providing these services, I issued the attached RFS No. 2025-04 to them. It increases the General Consulting RFS authorization by $7,000. The funds to cover this RFS will come from the Contingency Line Item in the 2025 M&MP Operations Budget. The work related to coordinating with the SVBGSA modeling team, and with Geophysical Imaging Partners, is important to the Watermaster, and needs to proceed without delay.

Under the authority granted to me by the Board many years ago, if time is of the essence I am authorized to execute these types of contracts up to a maximum of $10,000 without prior Board or TAC approval.

The RFS was retroactively approved by the TAC at its July 9, 2025 meeting, and is on today's agenda for retroactive approval by the Board.

ATTACHMENT: Montgomery & Associates RFS No. 2025-04

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: June 14, 2025

RFS NO. 2025-04
(To be filled in by WATERMASTER)

TO: Georgina King
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 of RFS No 2025-01.

Completion Date: All work of this RFS shall be completed not later than December 31, 2025, and shall be performed in accordance with the Schedule contained in Attachment 2 of RFS No. 2025-01.

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

Total Price Authorized by this RFS: $ 7,000.00 (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: Robert Jaques Date: 6-14-25.
WATERMASTER Technical Program Manager

Agreed to by: Cameron Tana Date: 6/16/25
PROFESSIONAL
CAMERON TANA, California Operations Manager for GEORGINA KING

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. The initial RFS to authorize those services in 2025 was provided by RFS No. 2025-01 in the amount of $15,694.00.

Additional work pertaining to Tasks M.1.c, M.1.d, and M.1.e in RFS No. 2025-01, beyond the level contemplated when RFS No. 2025-01 was issued, has arisen that necessitates an increase in the amount authorized for this work.

This RFS No. 2025-04 increases the amount authorized for general hydrogeologic consulting services by $7,000.00, bringing the total authorized amount for this work to $22,694.00.

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: August 17, 2025

SUBJECT: Presentation by Montgomery & Associates of the Draft version of the Updated Seawater Intrusion Response Plan

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RECOMMENDATIONS:
This agenda item is only to present the Draft Updated Seawater Intrusion Response Plan to the Board. Discussion and proposed recommendations are provided in the agenda item after this one, in Item VII.A.2

BACKGROUND:
As one of the tasks in the 2025 Monitoring and Management Program, the Board authorized Montgomery & Associates (M&A) to prepare an update to the Watermaster's 2009 Seawater Intrusion Response Plan (SIRP).

DISCUSSION:
There was an initial discussion of some issues pertaining to updating the SIRP at the TAC's July 9, 2025 meeting. Following that discussion Ms. King of M&A completed preparation of a Preliminary Draft of the Plan. Ms. King made a presentation on it at the TAC's August 13, 2025 meeting. There were questions and answers on various parts of the Plan, and with that input the Preliminary version was edited into a Draft version which Ms. King will present to the Board at today's meeting.

One change that was made as a result of the August 13th meeting was to change the fixed time frames for some of the actions in the 2009 SIRP to "as soon as possible." Making this change will provide some flexibility in the timing of response actions, since it is not always possible to convene TAC and Board meetings in short time windows.

A copy of the Draft Plan was posted to the Watermaster's website in advance of today's meeting, in order to provide additional time for it to be reviewed by interested parties. The full document including its appendices is 86 pages long. A copy of the body-only of the Draft is attached.

ATTACHMENT:
Draft Updated Seawater Intrusion Response Plan (body only)

August 18, 2025

Updated Seawater Intrusion Response Plan
Seaside Basin, Monterey County, California

Prepared for:

Seaside Basin Watermaster

Prepared by:

Montgomery & Associates

1970 Broadway, Suite 225, Oakland, CA 94602

Contents

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Acronyms & Abbreviations

BMAP .....Basin Management Action Plan
mg/L .....milligrams per liter
MPWMD .....Monterey Peninsula Water Management District
NP .....not possible
SBMMP .....Seaside Groundwater Basin Monitoring and Management Program
SIAR .....Seawater Intrusion Analysis Report
SIRP .....Seawater Intrusion Response Plan
TAC .....Technical Advisory Committee
WY.....Water Year

Conversions

1 acre-foot = 325,851 gallons
1 mg/L ≈ 1 part per million

1 BACKGROUND AND PURPOSE

1.1 Introduction and Purpose

This *Seawater Intrusion Response Plan* (SIRP) is the Seaside Groundwater Basin Watermaster's (Watermaster) contingency plan for responding to seawater intrusion in the Seaside Groundwater Basin, if and when it occurs. The first SIRP was finalized in February 2009 (HydroMetrics LLC, 2009a) as part of the Watermaster's implementation of the *Seaside Groundwater Basin Monitoring and Management* Program (SBMMP). Since it had been 15 years since the SIRP was developed, the Technical Advisory Committee (TAC) of the Seaside Basin Watermaster recommended to the Board of Directors in February 2024 to update the SIRP with additional data collected over the past 15 years and reassess indicators of intrusion, response triggers, and actions that take place to respond to seawater intrusion. This document is produced in accordance with the requirements contained in the Amended Decision (California American Water Company v. City of Seaside *et al.*, Superior Court, County of Monterey, Case Number M66343, 2007).

This updated SIRP details the indicators of seawater intrusion and recommended actions to be taken if seawater intrusion is observed. Section 2 evaluates consistency with existing documents that may influence the Watermaster's ability to implement this response plan. Section 3 establishes indicators of seawater intrusion and action levels that trigger response measures. Section 4 describes the proactive Part 1 of the Pumping Distribution Plan, and Section 5 lists recommended actions that should be implemented if seawater intrusion is observed in the Seaside Groundwater Basin.

Actions detailed in this SIRP may have significant financial impacts on the Watermaster's member agencies and the communities they serve. Foreseeable financial impacts might include the following:

- Reduced economic activity due to reduced water available to users
- Costs associated with immediate response monitoring for seawater intrusion verification and public notification
- Cost of installing new monitoring wells and/or pumping redistribution
- Reduced revenue for water suppliers from water users due to reduced water sales

No sources of replacement water are identified in this document. Potential sources of replacement water are identified in the 2019 Basin Management Action Plan (BMAP), which describes supplemental water supplies and management actions that may be implemented to help

prevent seawater intrusion by raising groundwater levels to recover in the Seaside Groundwater Basin.

1.2 Background

Historical and persistent low groundwater elevations caused by pumping in the Seaside Groundwater Basin have led to concerns that seawater intrusion may threaten the coastal subareas' groundwater resources. Previous studies have addressed the potential for, and extent of, seawater intrusion in the Seaside Groundwater Basin. The *Seawater Intrusion Analysis Report, Seaside Groundwater Basin, Monterey County California* (HydroMetrics LLC, 2007 and 2008) (SIAR) provided detailed reviews of seawater intrusion mechanisms, and analyzed historical water quality data for indications of seawater intrusion in the Seaside Groundwater Basin. The geochemical analyses from those SIARs and subsequent SIARs through Water Year (WY) 2024 showed that no seawater intrusion has been detected in the Seaside Groundwater Basin, and there is no indication of seawater intrusion into either of the Basin's principal aquifers – the Paso Robles Formation (shallow) or Santa Margarita Sandstone (deep). Although seawater intrusion has not been detected, it is apparent, based on groundwater level and pumping data, that a potential for seawater intrusion in the Seaside Groundwater Basin exists.

2 CONSISTENCY WITH OTHER DOCUMENTS

The following five documents were reviewed to evaluate consistency of the recommendations in these documents with this updated SIRP:

- Seaside Basin Amended Decision (California American Water Company v. City of Seaside et al., *Superior Court, County of Monterey, Case Number M66343*, 2007)
- *2016 Water Conservation and Standby Rationing Plan, MPWMD Regulation XV* (MPWMD, 2016)
- *Contingency Plan for Seawater Intrusion, Seaside Groundwater Basin* (Bachman, 2005)
- Annual Seaside Groundwater Basin *Seawater Intrusion Analysis Reports* from 2007 through 2018, prepared by HydroMetrics LLC
- Annual Seaside Groundwater Basin *Seawater Intrusion Analysis Reports* from 2019 through 2024, prepared by Montgomery & Associates

The SIAR provide information on groundwater levels, quality, and extractions, but do not include recommended remedial actions. Therefore these documents were not analyzed further. The documents listed in the first three bullets are addressed separately below.

2.1 Seaside Groundwater Basin Amended Decision

The Amended Decision details the legal requirements imposed on the Watermaster as a result of the Seaside Groundwater Basin Adjudication. The requirements in the Amended Decision take precedence over policies or procedures outlined in other reviewed documents.

The Amended Decision included, in part, the requirement to "…develop a plan of action to contain seawater intrusion, should it occur." Additionally, Section III(B)(3)(e) of the Amended Decision requires that any pumping reductions be distributed throughout the impacted subarea in a *pro-rata* (proportional) fashion. The Section III.b.3.e pumping reductions would occur if the Watermaster determined that the Basin's Operating Yield needed to be reduced to prevent Material Injury from occurring. The *Interim Contingency Procedure to Contain Seawater Intrusion*[1] included in Exhibit A to the Amended Decision proposed a pumping reduction methodology that would be applied if seawater intrusion were detected in the Basin and does not use a pro-rata approach. Consequently, this updated SIRP, as was the case in the 2009 SIRP, proposes a pumping reduction plan similar to the one in Exhibit A of the Amended Decision.

[1] https://seasidegroundwaterbasinwatermaster.wpcomstaging.com/wp-content/uploads/2024/02/08-0409-seawater-intrusion-contingency-response-plan-.pdf

2.2 2016 Water Conservation and Standby Rationing Plan

The 2009 SIRP was evaluated for consistency with MPWMD's *Expanded Water Conservation and Standby Rationing Plan* (MPWMD, 1999). In 2016, that plan was replaced with the *2016 Water Conservation and Rationing Plan* (MPWMD, 2016) and is evaluated for consistency with this updated SIRP.

The regulations imposed by MPWMD's *2016 Water Conservation and Rationing Plan* (MPWMD, 2016) state that Stage 1 through Stage 3 water conservation and Stage 4 rationing may apply to water distribution system users and water users within the Monterey Peninsula Water Resources System in response to limited water supply or a water supply emergency. These stages provide, among other benefits, responses to emergency situations where immediate reductions in water use are necessary to ensure public health, safety, or welfare.

The *2016 Water Conservation and Rationing Plan* states that in the event of a Water Supply Emergency, or at the direction of the MPWMD Board of Directors, each owner, operator, or extractor of a private water well, Water Distribution System, or other Water-Gathering Facility shall comply with the provisions of the plan. Unlike in the *Expanded Water Conservation and Standby Rationing Plan* (MPWMD, 1999), percentage reductions are not provided in the 2016 plan but rather each stage has trigger-specific amounts of reduction required.

Since regulatory and emergency triggers are included in the plan, the Watermaster's authority over the Seaside Basin's groundwater pumping makes it a regulatory agency that can direct the percentage of groundwater reduction. As such, there is no conflict between this SIRP and the 2016 Water Conservation and Rationing Plan.

2.3 Previous Contingency Plans for Seawater Intrusion

The 2009 SIRP was informed by several older documents:

- Contingency Plan for Seawater Intrusion, Seaside Basin, developed by Dr. Steve Bachman (2005)
- Interim Contingency Procedure to Contain Seawater Intrusion included in Exhibit A to the Amended Decision (February 2007)
- Watermaster's Interim Seawater Intrusion Contingency Plan (March 2008) used until the 2009 SIRP was developed

These documents were only intended to be applicable until a formal plan to address seawater intrusion was developed. The 2009 SIAR was that plan that superseded and replaced earlier contingency plans.

The 2009 SIRP and this SIRP update use site-specific geochemical indicators of seawater intrusion. Based on the presence of specific seawater intrusion indicators, various actions—including pumping redistribution and reduction—are recommended in this SIRP.

There is no requirement for this updated SIRP to be consistent with previous contingency plans, however they were used as a reference document while developing this updated SIRP.

3 SEAWATER INTRUSION INDICATORS AND TRIGGERS

Seawater intrusion must be detected within the Adjudicated boundary of the Seaside Groundwater Basin, and declared by the Watermaster, before the response plan can be implemented. This section presents general indicators of seawater intrusion and discusses how to identify incipient seawater intrusion in the Seaside Groundwater Basin. A group of positive indicators would trigger a contingency action.

This SIRP has adopted the following terminology for identifying and containing seawater intrusion:

> Indicator: A chemical characteristic or groundwater level that suggests potential seawater intrusion. No one indicator definitively identifies seawater intrusion.
>
> Trigger: A specific group of indicators that, taken together, can identify seawater intrusion.
>
> Contingency Actions: A series of actions that should be implemented if the triggers indicate seawater intrusion is occurring.

Each indicator of seawater intrusion is addressed separately below. Five seawater intrusion indicators have been developed for the monitoring program including:

1. Chloride concentrations and trend analysis
2. Sodium/chloride molar ratio trend analysis
3. Cation and anion distributions on Piper and Stiff Diagrams
4. Chloride concentration maps
5. Induction logging results

Chloride concentration is the only indicator with a threshold value or specific numerical target that indicates seawater intrusion. Threshold values are based on historical groundwater monitoring data collected from nine wells within the Seaside Groundwater Basin (Figure 1). The nine wells represent four well pairs and one unpaired monitoring well. FO-10 Shallow and Deep are removed from this updated SIRP because they are outside the Seaside Basin and are slated for destruction.

In the annual SIARs, electric induction logging of a number of monitoring wells is included as an indicator of potential seawater intrusion. This method measures changes in formation salinity from within a well using an electrical induction tool. Induction logging within the well measures

the fluid conductivity within the adjacent formation up to a distance of three feet from the well casing. This technique can be used in wells that are completed with PVC casings and screens, but not in steel cased wells due to the conductance of steel.

This method has been used as a cost-effective method of detecting seawater intrusion by measuring the electrical conductivity of the formation throughout the depth of the well. If over time, the conductivity steadily increases at a specific zone it could indicate seawater intrusion. One limitation of this method is that it does not provide quantitative concentrations of chloride or other ions that contribute to salinity. However, electric induction logs can be used as an indicator in this updated SIRP, and although it cannot provide a qualitative trigger on its own, it can be used in combination with other indicators to set off a series of contingency actions as described in Section 5.

Induction logging has been performed in the Watermaster's four coastal Sentinel Wells since their completion in 2007. Two additional wells started being logged in 2024. Figure 2 shows the location of wells that are induction logged annually.

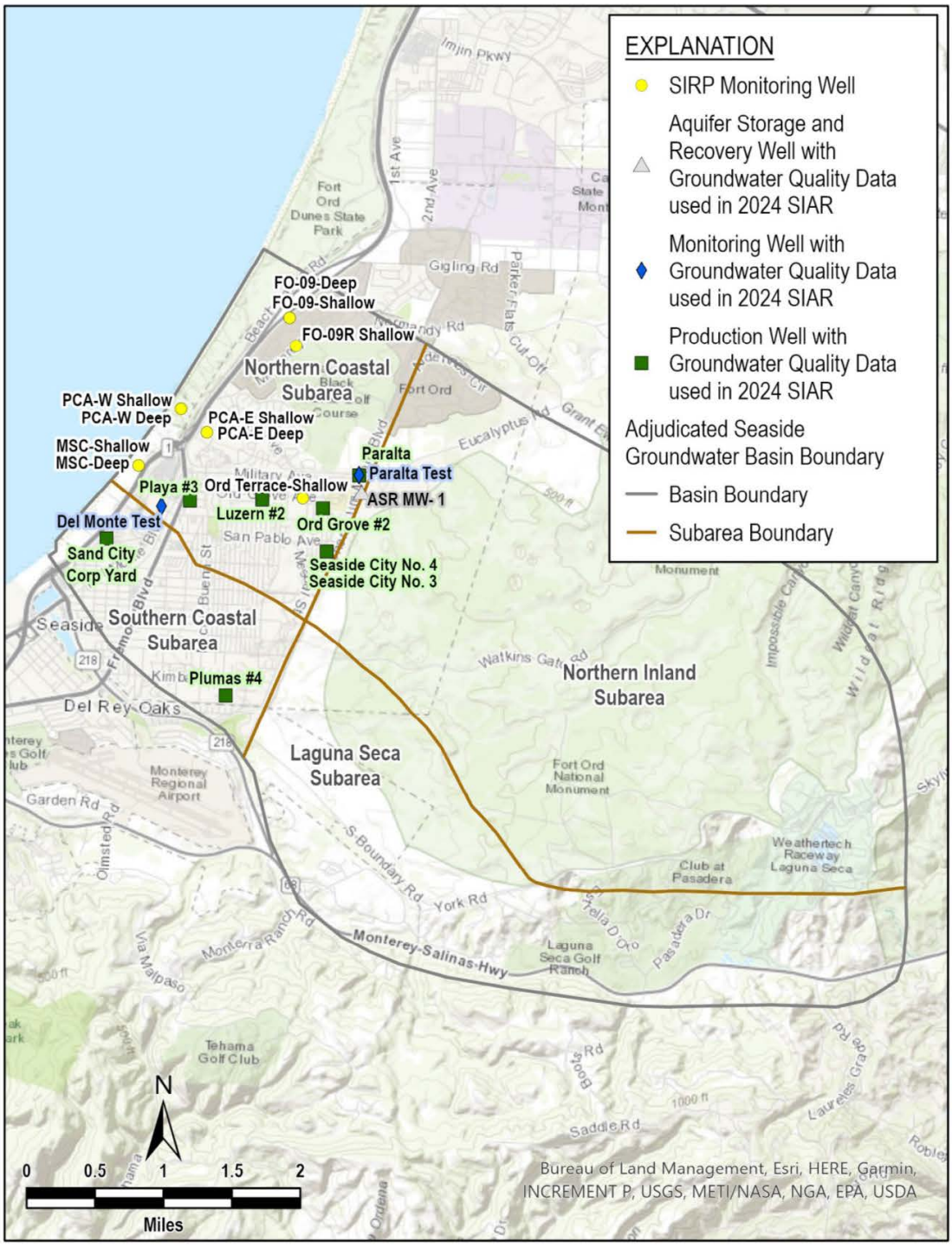

Figure 1. Wells with Historical Water Quality Data

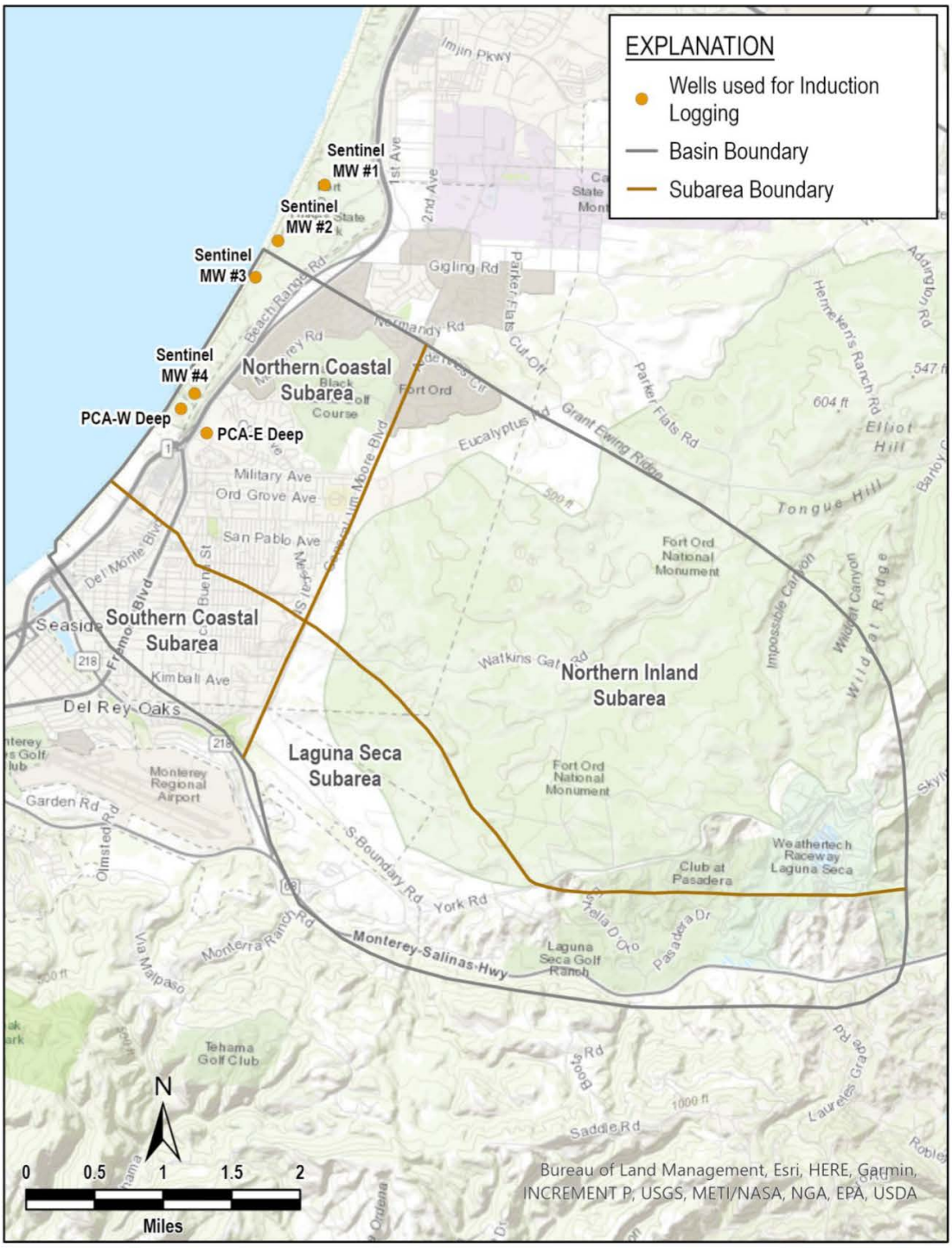

Figure 2. Monitoring Wells with Induction Log Data

3.1 Indicators of Seawater Intrusion

Seawater intrusion is generally identified through chemical analyses of groundwater. No one analysis definitively identifies seawater intrusion. However, by looking at various analyses and through statistical evaluation of historical data, it can be ascertained when fresh groundwater is beginning to mix with seawater. Common geochemical indicators of seawater intrusion are discussed and site-specific data are presented in the following sections. Sections 1.1 – 1.3 of the 2024 *Seawater Intrusion Analysis Report* (Montgomery & Associates, 2024) review geochemical characteristics indicative of seawater intrusion and is provided as Appendix A to this report.

The 10 monitoring wells with historical geochemical data that are statistically analyzed in this section are shown in Table 1. Data collected prior to the release of the Adjudication Decision in March 2006 were analyzed to provide a baseline chemical characterization of the Seaside Groundwater Basin. Where possible, analyses are separated by depth zone. Two depth zones were chosen, following the system of Yates *et al.* (2005). Wells assigned to the shallow depth zone generally correlate to the Paso Robles Formation where it exists. This shallow zone is roughly at the same depth as the Salinas Valley Pressure 400-Foot Aquifer. Wells assigned to the deep zone correlate to the Santa Margarita Sandstone where it exists in the Seaside Groundwater Basin. This deep zone is roughly at the same depth as the Salinas Valley Deep Aquifer.

Most production wells in the Seaside Groundwater Basin have long screened intervals within multiple depth zones. As a result, their water qualities reflect a blend from multiple aquifers. Because of this, production wells are not suitable for indicating seawater intrusion within a particular aquifer or zone because if there was seawater intrusion in a portion of the aquifer being pumped, that concentration could be diluted to the point of not being of concern. Trends in chloride concentration are therefore expected to be muted.

Table 1. Monitoring Wells Chloride Threshold Values and Trend Analysis

Primary Aquifer	Well Location	Chloride Threshold Value[a] (mg/L)	Mann-Kendall Statistical Trend	
			Data through March 2008	Data through Sept 2024
Paso Robles (shallow)	MSC Shallow	62	No Trend	No Trend
	PCA-West Shallow	70	No Trend	**Increasing**
	PCA-East Shallow	73	NP	No Trend
	FO-09-Shallow (destroyed)	67	Decreasing	No Trend
	FO-09R-Shallow (replacement)	-	-	NP
	FO-09-Deep[b]	85	No Trend	**Increasing**
	Basin Wide[b]	85		
Santa Margarita (deep)	MSC Deep	182	Decreasing	No Trend
	PCA-West Deep	186	No Trend	Decreasing
	PCA-East Deep	181	NP	**Increasing**
	Ord Terrace-Shallow[b]	185	NP	No Trend
	Basin Wide[c]	186		

Note: A minimum of 8 to 10 observations are needed for using these statistical methods.

[a] Historical maximum chloride concentrations prior to 1995 are not included in the calculation of Chloride Thresholds.

[b] Aquifer designations are based on groundwater quality as shown in Appendix F.

[c] Basin wide screening criteria is based on maximum chloride screening criteria and applies to any well extracting groundwater from the designated aquifer.

NP = Not possible to determine trend.

3.1.1 Indicator 1: Increasing Chloride Concentrations

Unusually high or steadily increasing chloride concentrations are one of the most commonly used indicators of seawater intrusion. At low chloride concentrations, trends are often as important as absolute concentrations because of natural variations in groundwater chemistry. While chloride concentrations are strongly indicative of seawater intrusion, it often takes time for the increasing chloride trend to be recognizable due to the long-term and relatively slow increase in chlorides during seawater intrusion.

3.1.1.1 High Chloride Concentrations

Chloride concentrations significantly greater than historical average concentrations may indicate seawater intrusion. Graphs showing historical chloride concentrations from the 10 wells analyzed

are included in Appendix B. Average chloride concentrations at each well evaluated in the initial 2009 SIRP were calculated from historical data available through September 2024. Data collected prior to January 1995 are excluded from the calculation of each well's average chloride concentration due to the variable nature of those data. In general, chloride data collected after 1995 fluctuates within a relatively small range compared with data collected prior to 1995. The point at which these large fluctuations stabilize is different for each well; the 1995 cut-off date was chosen for all wells for consistency.

The graphs in Appendix B also show statistically derived chloride threshold values included in the 2009 SIRP and based on data available through March 2008. Although the threshold values seem low in comparison with chloride minimum thresholds used in neighboring SGMA-managed basins, it is the chloride concentrations greater than threshold values in combination with other indicators of seawater intrusion that will indicate seawater intrusion. For additional information regarding the statistical formulas used to calculate the chloride threshold value, refer to Appendix C.

Table 1 presents the threshold chloride concentrations at individual monitoring wells. The threshold values for wells in each aquifer without historical data are set to the highest threshold value for any well in that aquifer: 85 milligrams per liter (mg/L) for the Shallow Aquifer (FO-09 Deep), and 186 mg/L for the Deep Aquifer (PCA-West Deep). No monitoring wells currently show chloride concentrations above threshold values. There are two production wells that are at or exceed the general threshold values of 85 mg/L for the Shallow Aquifer and 186 mg/L for the Deep Aquifer, although neither well has an increasing chloride trend. Both these production wells are the closest public water supply wells to the coast in the Northern Coastal subarea (Figure 1):

- Playa #3 screened in the shallow aquifer has chloride concentrations that range between 100 and 155 mg/L.
- Luzern #2 screened in both the shallow and the deep aquifers typically has chloride ranges between 96 and 186 mg/L.

3.1.1.2 Chloride Concentration Trends

A clear trend of increasing chloride concentrations may indicate seawater intrusion. At low chloride concentrations, trends are often as important as absolute concentrations because of natural variations in groundwater chemistry. Data collected from October 2006 to September 2024 were analyzed for increasing trends using the Mann-Kendall statistical approach, which can be used to show whether chemical concentrations in a monitoring well are increasing, remaining stable, or decreasing. The Mann-Kendall Test can be used with a minimum of four consecutive sampling results. For additional information on the Mann-Kendall Test refer to Appendix C. One

drawback of the Mann-Kendall test is that it is not valid if chloride concentrations have significant seasonal fluctuations. Appendix C presents the detailed methodology and seasonality test for this evaluation and discusses additional trend analyses that would be relevant if future monitoring indicates any seasonal correlation.

Table 1 summarizes the results of the statistical trend analysis. Trends in Table 1 are categorized as increasing, decreasing, no trend, or not possible to determine (NP). Table 1 shows that PCA-West Shallow, FO-09 Deep, and PCA-East Deep have increasing chloride concentration trends, PCA-West Deep has a decreasing trend, five monitoring wells have no trend, and FO-09R Shallow does not have enough data to establish a trend yet.

3.1.2 Indicator 2: Decreasing Sodium/Chloride Molar Ratios

A rapid decline in the molar ratio of sodium to chloride may indicate seawater intrusion. In the early stages of seawater intrusion, sodium often replaces calcium on the aquifer's clay particles through ion exchange before significant chloride increases are observed. This effectively removes sodium from the water, and sodium/chloride molar ratios drop. The ratio of sodium to chloride in groundwater can therefore be used as an early indicator of seawater intrusion. Sodium/chloride molar ratios can also be used to differentiate between seawater intrusion and other sources of salinity. Jones *et al.* (1999) suggest that sodium/chloride molar ratios in advance of a seawater intrusion front will be below 0.86.

3.1.2.1 Historical Sodium/Chloride Molar Ratios

Chemographs showing sodium/chloride molar ratios over time are provided in Appendix D. None of them show a rapid decline in sodium/chloride molar ratios to a level less than 0.86 that is indicative of seawater intrusion.

3.1.2.2 Sodium/Chloride Molar Ratio Trend Analysis

In addition to evaluating increasing chloride concentrations, decreasing sodium/chloride molar ratios are also evaluated using the Mann-Kendall statistical test. Table 2 summarizes the results of the statistical trend analysis. Two wells, MSC Shallow and PCA-East Deep, have downward trends in sodium/chloride molar ratios. The remaining eight monitoring wells have no trends.

Table 2. Sodium/Chloride Molar Trend Analysis

Primary Aquifer	Well Location	Mann-Kendall Statistical Trend	
		Data through March 2008	Data through Sept 2024
Paso Robles (shallow)	MSC Shallow	No Trend	**Decreasing**
	PCA-West Shallow	No Trend	No Trend
	PCA-East Shallow	NP	No Trend
	FO-09 Shallow (destroyed)	Increasing	No Trend
	FO-09R Shallow (replacement)	-	NP
	FO-09 Deep[b]	No Trend	No Trend
Santa Margarita (deep)	MSC Deep	No Trend	No Trend
	PCA-West Deep	No Trend	No Trend
	PCA-East Deep	NP	**Decreasing**
	Ord Terrace Shallow[b]	NP	No Trend

Note: A minimum of 8 to 10 observations are needed for using these statistical methods
[a] Historical maximum chloride concentrations prior to 1995 are not included in the trend analysis
[b] Aquifer designations are based on groundwater quality as shown in Appendix F
NP = Not possible to determine trend

3.1.3 Indicator 3: Visual Inspection of Cation/Anion Ratios

Seawater intrusion is often indicated by graphically analyzing shifts in groundwater quality. Two common graphical techniques for these analyses are Piper diagrams and Stiff diagrams.

3.1.3.1 Piper Diagrams

Piper diagrams plot the relative abundances of individual cations and anions on two trilinear plots, and their combined distribution is plotted on a central diamond. Waters from similar or related sources will generally plot together. The mixture of two waters will generally plot along a straight line between the two end-member types within the central diamond. The trend toward seawater intrusion, however, often plots along a curved path.

An example Piper Diagram showing changes in molar ratios that are indicative of seawater intrusion is included in Appendix E. The indicator of seawater intrusion using Piper diagrams is the water chemistry trending in the direction of the curved arrow on the example Piper diagram.

Appendix E also displays Piper diagrams for each of the monitoring wells in the Seaside Groundwater Basin used to evaluate seawater intrusion. The data on the Piper diagrams have a

color gradient to identify changes more easily over time. There are no strong changes in anions and cations toward seawater, but PCA-West Shallow and PCA-East Deep do show very small changes that appear to be moving in a linear direction.

3.1.3.2 Stiff Diagrams

Stiff diagrams plot the relative abundances of individual cations and anions on a single graph. Cations are plotted on the left side of the graph and anions are plotted on the right side of the graph. Waters with similar chemistries will have similar shaped Stiff diagrams.

Example Stiff diagrams from seawater intruded wells in the Salinas Valley are shown in Appendix A. These figures, along with a short description, are included to demonstrate the utility of Stiff diagrams. The indicator of seawater intrusion using Stiff diagrams is a change in the shape of a stiff diagram toward one of the example seawater intruded Stiff diagrams shown on Figure F-1.

Stiff diagrams for the monitoring wells, grouped by aquifer, are provided in Appendix F. None of the Stiff diagrams show the high chloride spike shown on Figure F-1 that is indicative of seawater intrusion in the example Stiff diagrams.

3.1.4 Indicator 4: Chloride Concentration Maps

In basins experiencing seawater intrusion, chloride concentrations will be highest at the coast. If chloride concentrations have a distribution that can be contoured, annual chloride isoconcentration maps can be generated. This would show if seawater is migrating in from the coast. Since 2007—when the first SIAR was prepared—to September 2024, there has been inconsistent variation in chloride measurements toward the coast to enable contouring to be performed. Therefore, data are simply plotted on chloride concentration maps.

3.1.5 Indicator 5: Induction Logging Results

Multiple years of steadily increasing conductivity in one or more layers of strata in the monitoring wells near the coast indicates that seawater is moving inland at those layers. The induction logging data to date show that there can be some variation from year-to-year in conductivity levels in various zones: sometimes increasing, sometimes decreasing, and sometimes remaining stable. However, if over a multi-year period conductivity is found to be steadily increasing in a given zone, that should be considered to be an indication of seawater intrusion advancing at that depth.

3.1.6 Other Factors

The indicators described above are all geochemical indicators. Groundwater levels are another factor to consider when determining if seawater intrusion is occurring. Without human influence, groundwater flows from areas of high hydraulic head (typically inland) to low hydraulic head (typically at the coast). When the hydraulic gradient is reversed by overpumping, seawater can move inland. Groundwater levels alone do not indicate seawater intrusion but can indirectly show the potential for seawater intrusion. As discussed below, coastal groundwater levels at or near sea level are not sufficient to repel seawater intrusion.

Groundwater elevations for six coastal monitoring wells that protect against seawater intrusion that could impact production wells were determined in 2009 using the Seaside Groundwater Basin groundwater flow model and cross-sectional modeling (HydroMetrics LLC, 2009b). Protective elevations for both the Santa Margarita (deep) and Paso Robles (shallow) aquifers were established for monitoring well pairs with both a shallow and deep completion. Protective elevations for the six wells are shown in Table 3. Groundwater levels below protective elevations have the potential to cause seawater intrusion that may impact production wells.

Table 3. Summary of Protective Elevations at Coastal Monitoring Wells

Subarea	Well	Completion	Protective Elevation, feet above sea level	Currently Above or Below Protective Elevations
Northern Coastal	MSC	Santa Margarita (Deep)	17	below
		Paso Robles (Shallow)	11	below
	PCA-W	Santa Margarita (Deep)	17	below
		Paso Robles (Shallow)	2	above
	Sentinel Well 3	Santa Margarita (Deep)	4	below
Southern Coastal	CDM-MW4	Paso Robles (Shallow)	2	above

Figure 3 through Figure 6 show the historical groundwater elevations at each of these protective elevation monitoring wells. Groundwater levels continue to be below protective elevations in all of these Santa Margarita monitoring wells (MSC deep, PCA-West Deep, and Sentinel Well 3). In WY 2024, groundwater levels at all three Santa Margarita (deep) monitoring wells increased by 2 to 3 feet over the previous year and levels at PCA-West Shallow rose above its protective groundwater elevation. Monitoring well CDM-MW4 and PCA-West Shallow are the only wells with groundwater elevations above protective elevations.

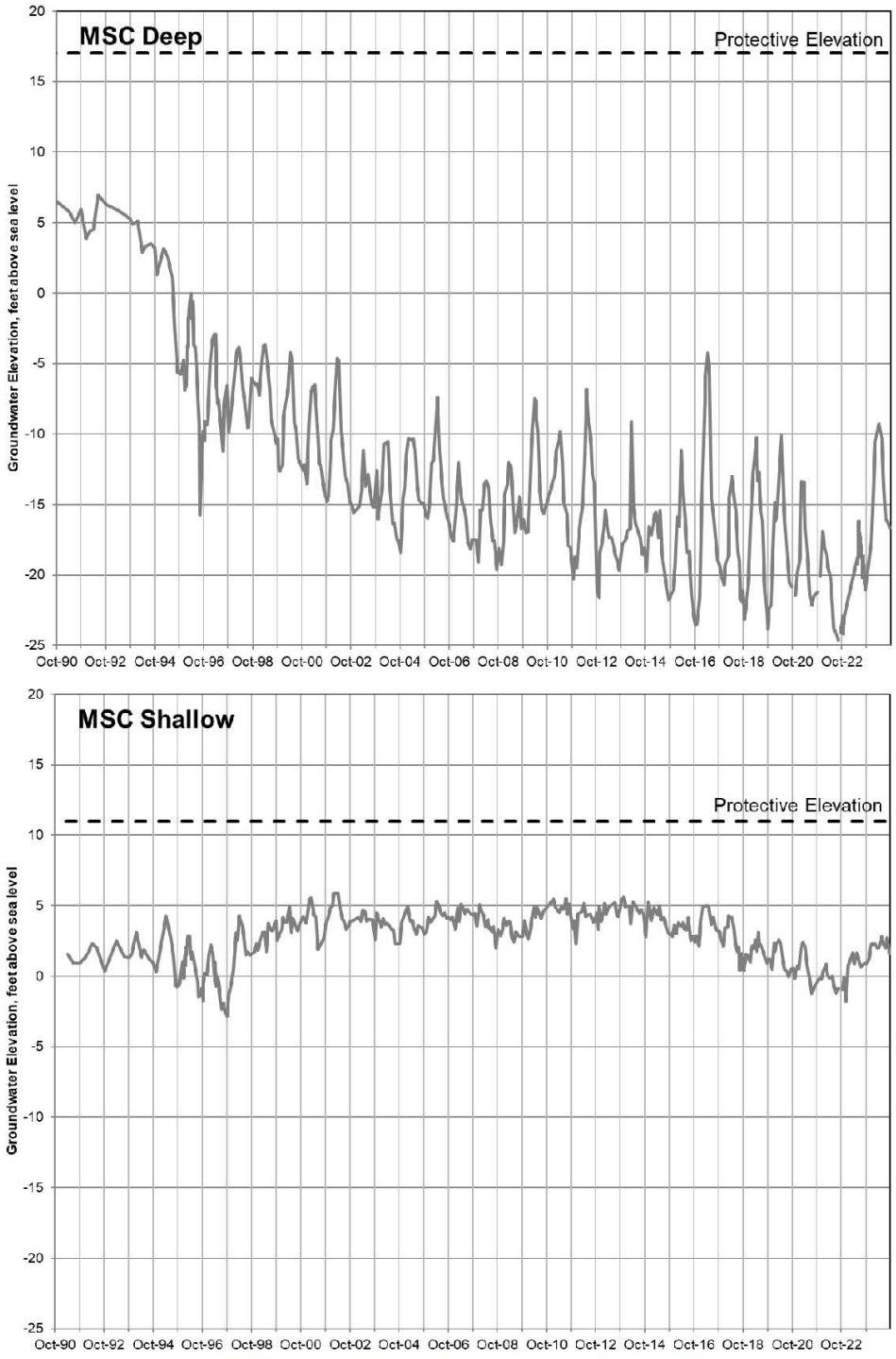

Figure 3. MSC Deep and Shallow Groundwater and Protective Elevations

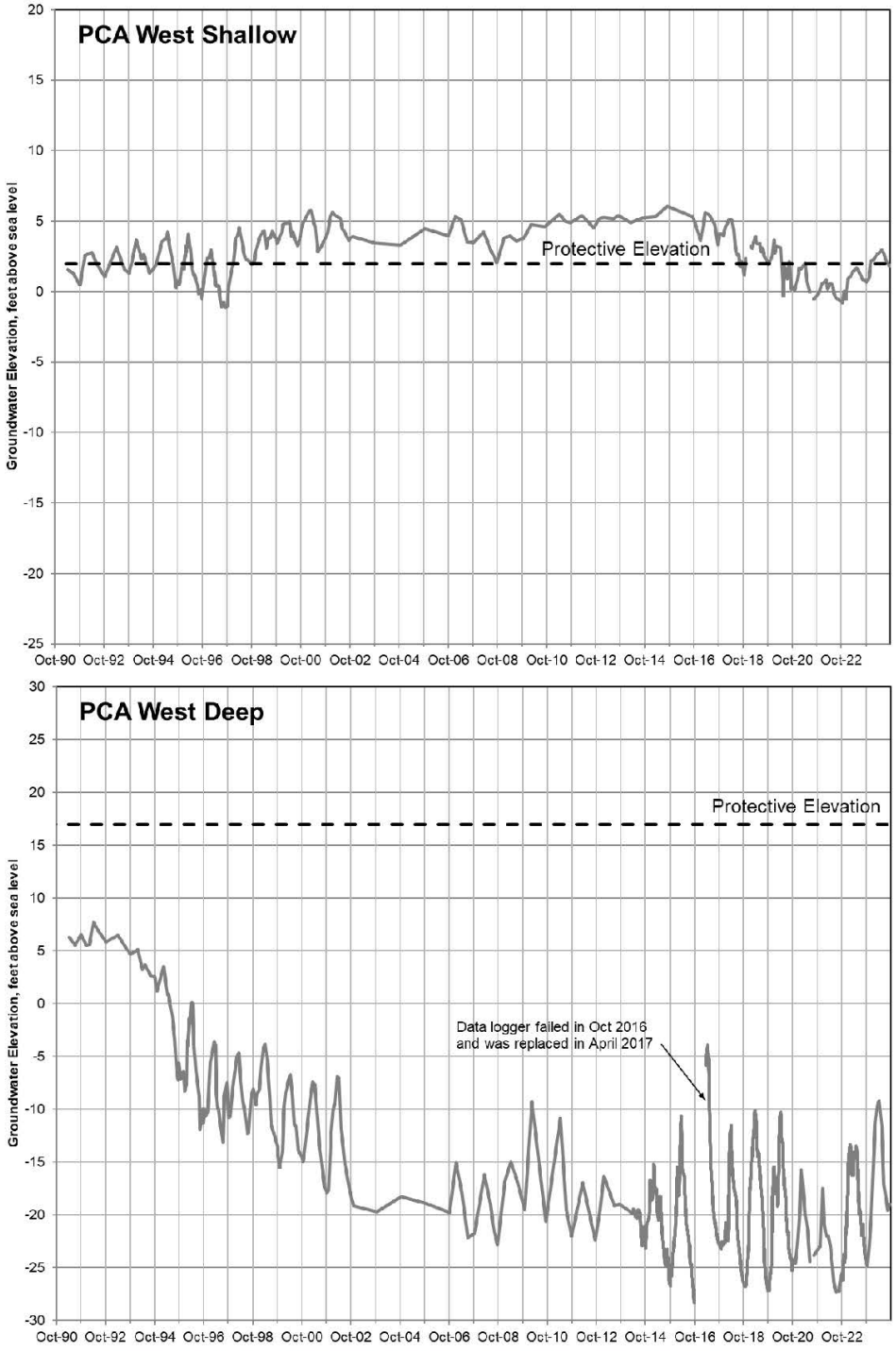

Figure 4. PCA-West Deep and Shallow Groundwater and Protective Elevations

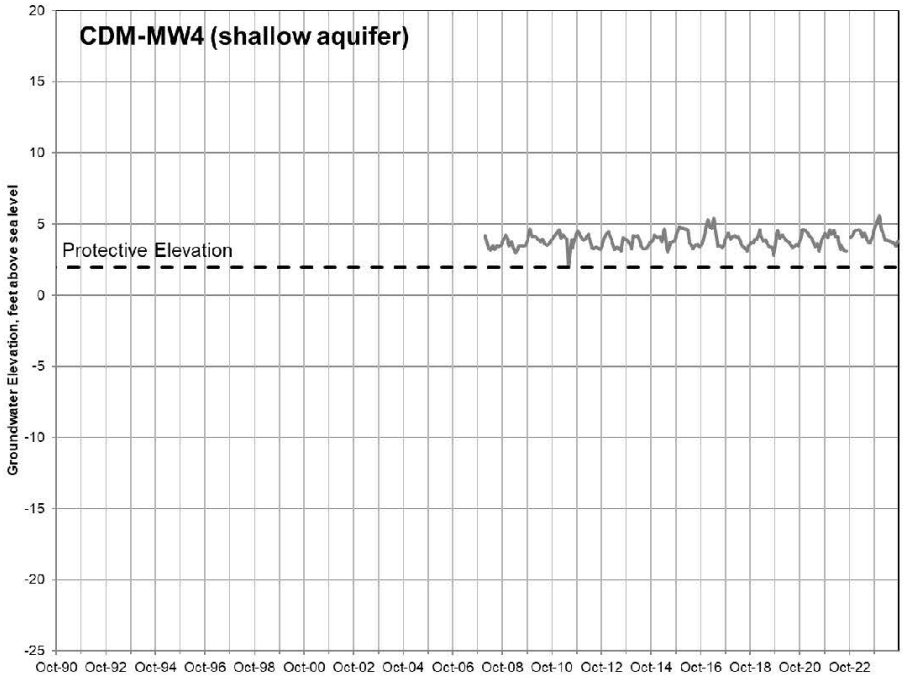

Figure 5. CDM-MW4 Groundwater and Protective Elevations

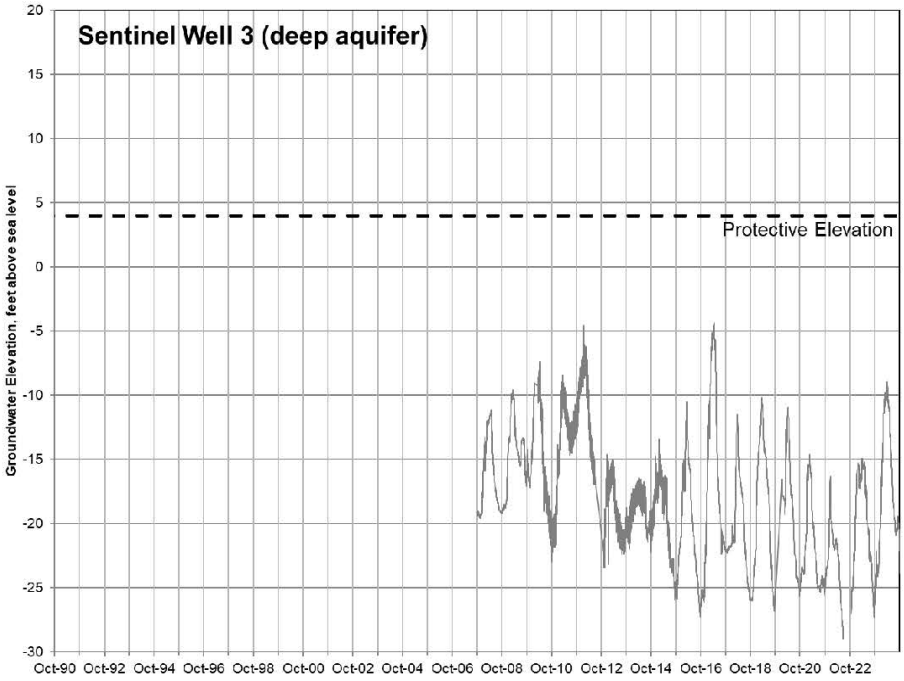

Figure 6. Sentinel Well 3 Groundwater and Protective Elevations

Additional indicators—or revisions to the indicators presented above—may be warranted in the future as more is learned about groundwater quality within the Basin over time. Revisions to indicators may also be warranted if updates to the baseline threshold values appear necessary to respond to any new groundwater management strategies of the Watermaster.

3.2 Contingency Plan Triggers

Since no one indicator definitively identifies seawater intrusion, a combination of indicators is necessary to clearly identify seawater intrusion. The following combination should be used to trigger the actions described in Section 4:

1. Chloride concentrations must be higher than the chloride threshold value shown on Table 1.
2. Sodium/chloride molar ratios must show a rapid drop and be below the 0.86 molar ratio.
3. At least one of the following five trends or qualitative indicators must be apparent:
    a. The Mann-Kendall statistical trend for chloride concentrations is increasing.
    b. Evolution of seawater mixing is observed in Piper diagram(s).
    c. Change of Stiff diagram(s) shape from baseline conditions featuring prominent high chloride spike.
    d. Concentration maps indicate increasing chloride concentrations near the coast.
    e. Induction logging showing steadily increasing conductivity over a period of three or more consecutive years in depth zones correlated with either the Paso Robles or Santa Margarita aquifers.

4 PROACTIVE ACTION - PART 1 OF THE PUMPING REDISTRIBUTION PLAN

The 2009 SIRP had a series of contingency actions that take place only once the Watermaster makes a Declaration of Seawater Intrusion. This updated SIRP includes the same set of actions but splits Action 4: Pumping Redistribution Plan up into two parts (Figure 7).

The first part must be completed as soon as possible after the Seaside Basin groundwater model has been updated in 2026. Should the Watermaster make a Declaration of Seawater Intrusion, having the Part 1 evaluations available allows Part 2 to be implemented quicker. In the future, Part 1 will only need to be updated if there are significant future operational changes to how groundwater is used and managed.

Due to the time sensitive nature of responding to observed seawater intrusion in a timely manner, some evaluations included in the 2009 SIRP pumping redistribution plan activities should be completed proactively before seawater intrusion is declared. This approach provides well pumpers more time to plan for operational changes that need to be implemented quickly if seawater intrusion is declared.

In the context of this Updated SIRP these terms have the following meanings:

- "Impacted Well" means a monitoring or production well that has been intruded by seawater.
- "At Risk Well" means a production well that has the potential to become impacted by seawater intrusion based on its proximity to an Impacted Well(s), local groundwater gradients, and other conditions.

Once the Seaside Basin groundwater model has been updated, proactive evaluations to be completed include:

- **Identify At Risk well(s) where seawater intrusion might occur.** The groundwater model can be used to indicate which wells may be impacted if seawater intrusion is observed at individual monitoring or production wells. The 2022 particle tracking modeling of potential seawater intrusion travel rates from the coast can be leveraged where the same modeling workflow can be used for assessing likely At Risk Wells. Instead of placing particles at the coast as was done in 2022, particles can be placed at all monitoring and production wells to understand the likely path from those wells if they are impacted in the future.
- **Estimate groundwater conditions that protect production wells (activity 4 in 2009 SIRP**). Protective elevations have already been established to determine coastal

groundwater conditions that protect production wells. If protective coastal elevations are not met, production wells can be protected by reversing the hydraulic gradient back toward the ocean. It is assumed that raising groundwater levels at production wells to reverse the gradient will also eventually achieve protective elevations at coastal monitoring wells. Based on below sea level groundwater elevations within the pumping depressions in the Paso Robles (shallow aquifer) and Santa Margarita (deep aquifer), static and pumping groundwater levels need to rise above sea level, which means an increase of at least 30 feet.

- **Evaluate each production wells' influence on potential seawater intrusion at each monitoring and production well.** All production wells in the Seaside Groundwater Basin will be evaluated using the numerical groundwater model or by analytical modeling and ranked by their relative influence on groundwater gradients that may cause seawater intrusion and migration. The hydraulic gradients between wells are a function of the combined effects of the regional flow gradient and the head drawdown from each production well. This allows for the contribution of each well to the magnitude of the gradient between wells to be evaluated individually. Modeling can be used to evaluate how much reduction in pumping at specific wells will reduce the gradients driving seawater intrusion between potentially Impacted and non-impacted well to a degree that sea water intrusion does not spread further. One or more recommended pumping scenarios that achieve the maximum acceptable gradients between Impacted and At Risk well(s) should be developed.

If the Watermaster makes a Declaration of Seawater Intrusion before these evaluations have been completed, the work must be expedited so as to not delay implementation of Part 2 of the pumping redistribution plan.

PART 1 OF PUMPING REDISTRIBUTION PLAN

Proactive or advance evaluations to be completed once the Seaside Basin groundwater model has been updated:

- **Identify At Risk well(s) where seawater intrusion might occur**
- **Estimate groundwater conditions that protect production wells**
- **Identify and evaluate each production wells' influence on potential seawater intrusion at each monitoring and production well**

DECLARATION OF SEAWATER INTRUSION

PART 2 OF PUMPING REDISTRIBUTION PLAN

Initiated immediately after the Declaration of Seawater Intrusion

- **Increase monitoring frequency**

Initiated as soon as possible after the Declaration of Seawater Intrusion:

- **Discontinue or substantially reduce pumping the Impacted and At Risk well(s) per Part 1 of the Pumping Redistribution Plan**
- **Perform land-based geophysical surveys to determine how far inland from the Impacted Well the intrusion extends and to help identify sites to install additional monitoring wells, if required**
- **Identify and/or install additional monitoring wells**

Figure 7. Summary of Part 1 and 2 of the Pumping Redistribution Plan

5 SEAWATER INTRUSION CONTINGENCY ACTIONS

It is not possible to halt and reverse seawater intrusion unless supplemental supplies are available. Until these supplies are secured, the Watermaster should implement containment strategies to reduce the magnitude and extent of seawater intrusion, if it is observed. By containing seawater intrusion, the Watermaster will (1) help preserve productive use of the Seaside Groundwater Basin, and (2) facilitate the restoration of the Seaside Groundwater Basin water quality by limiting the extent and spread of the intrusion. The purpose of this section of the SIRP is to develop a containment strategy and actions that can be implemented if seawater intrusion is observed in the Seaside Groundwater Basin.

5.1 Geographic Area Covered by Contingency Actions

The contingency actions described in Section 4.2 are only triggered by seawater intrusion occurring inside the Seaside Groundwater Basin boundary illustrated on Figure 1.

5.2 Actions Addressing Observed Seawater Intrusion

The specific actions that should be implemented if seawater intrusion is detected, as defined by the triggers in Section 3.2, are as follows.

5.2.1 Action 1: Verification

Wells with chloride concentrations greater than respective chloride threshold values and Sodium/Chloride molar ratios below 0.86 shall be re-sampled as soon as possible. Re-sampling should include the full suite of major cations and anions, which will allow all of the indicators listed in Section 3 to be verified. Laboratory analyses should be conducted with an expedited turnaround time. If re-sampling these wells verifies the presence of seawater intrusion in the Seaside Groundwater Basin by meeting the required triggers (see Section 3.2), Actions 2, 3, Part 2 of action 4, and action 5 should be implemented.

5.2.2 Action 2: Declaration of Seawater Intrusion

If the verification confirms that seawater intrusion has occurred within the Seaside Groundwater Basin, the Watermaster shall issue a Declaration of Seawater Intrusion as soon as possible after verification.

5.2.3 Action 3: Notification

Within 10 calendar days following the Watermaster's Declaration of Seawater Intrusion, all groundwater producers in the Seaside Groundwater Basin, MPWMD, and all other interested

entities within the Seaside Groundwater Basin shall be formally notified. The Watermaster shall notify all parties that the SIRP contingency actions have been triggered and will identify the well(s) that triggered the SIRP contingency actions.

5.2.4 Action 4: Part 2 of the Pumping Redistribution Plan

The pumping redistribution plan is designed to contain observed seawater intrusion and protect production wells until a supplemental water supply is obtained.

5.2.4.1 Part 2 of the Pumping Redistribution Plan

The following activity should be initiated as soon as possible after the Declaration of Seawater Intrusion:

> **Increase monitoring frequency**. The Watermaster should increase the monitoring frequency of the Impacted Well(s), monitoring wells, and At Risk well(s) to evaluate the progress of the seawater intrusion. Each month, groundwater elevations at these wells should be measured, groundwater samples should be collected from these wells and analyzed for major cations and anions, and the groundwater gradient should be analyzed to determine if pumping reductions are having the planned effect.

All of the following activities shall be initiated as soon as possible after the Declaration of Seawater Intrusion:

1. **Discontinue or substantially reduce pumping of the Impacted and At Risk well(s).** If seawater intrusion has been declared for a production well, pumping at this well and other identified production wells should be discontinued or substantially reduced as soon as possible per Part 1 of the Pumping Redistribution Plan. If seawater intrusion has been declared for a monitoring well(s), discontinue or substantially reduce pumping in At Risk wells per Part 1 of the Pumping Redistribution Plan.

2. **Perform land-based geophysical surveys** to determine how far inland the intrusion extends from the Impacted Well. This information can be used to improve travel time estimates to At Risk wells. It also helps to identify sites where additional monitoring well(s) may be beneficial.

3. **Identify and/or install additional monitoring wells (activity 2 in 2009 SIPR).** The Watermaster will evaluate the benefit of installing additional groundwater monitoring wells to evaluate the movement of seawater intrusion toward the At Risk well(s). If this evaluation concludes that monitoring wells should be installed, the Watermaster should pursue installation of these wells as soon as possible.

5.2.5 Action 5: Focus Supplemental Supplies to Halt and Reverse Seawater Intrusion

When a supplemental water supply becomes available for Seaside Groundwater Basin replenishment, the Watermaster should seek to have the supplemental water used strategically to protect the Seaside Groundwater Basin from further seawater intrusion and to restore the Basin to pre-seawater intruded conditions. Supplemental supplies should be used to both offset pumping that causes the observed seawater intrusion and to raise groundwater levels to reverse it.

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SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: September 3, 2025

SUBJECT: Discuss/Provide Input/Suggest Revisions to the Draft Update of the SIRP

RECOMMENDATIONS:
Provide input/direction regarding any changes the Board would like to have made to the Draft Seawater Intrusion Response Plan, so a Final version can be prepared to replace the existing 2009 version.

BACKGROUND:
As discussed in the preceding Agenda item, one of the tasks in the 2025 Monitoring and Management Program is to prepare an update to the Watermaster's 2009 Seawater Intrusion Response Plan (SIRP). A Draft version of that Plan has now been prepared.

DISCUSSION:
There are significant changes proposed in the Draft Updated SIRP compared to the original 2009 SIRP. These include:

1. Adding induction logging as one of the indicators that seawater intrusion may be occurring. The wells closest to the coastline, which include the Sentinel Wells, are where induction logging is being performed. Seawater intrusion is generally identified through chemical analyses of groundwater samples that are collected from monitoring and production wells. No one analysis definitively identifies seawater intrusion. However, by looking at various analyses and through statistical evaluation of historical data, it can be ascertained when fresh groundwater is beginning to mix with seawater. Indicators alone do not confirm the occurrence of seawater intrusion, but can be used in conjunction with other data to help make that determination.
2. Breaking down one of the contingency actions for the Board to take once the Watermaster makes a Declaration of Seawater Intrusion into two parts. The updated SIRP splits Contingency Action 4: *Pumping Redistribution Plan* into two parts:
    a. Part 1 (proactive) to be initiated after the Seaside Basin groundwater model has been updated in 2026, and
    b. Part 2, (reactive) to be initiated after the Board has determined that seawater intrusion is actually starting to occur.

    This two-part approach will provide well pumpers more time to plan for operational changes that will need to be implemented promptly if seawater intrusion is determined to be occurring. Once the work of Part 1 is performed, it should only need to be updated if there are significant future operational changes in how groundwater is used and managed. A rough cost estimate of between $70K to $80K would be required to do the Part 1 work, which will involve using the groundwater model for a number of scenarios.

    This proactive Part 1 was developed in response to the Board's direction, when the contract to update the SIRP was being approved, to identify actions that could be taken before seawater intrusion is actually found to be occurring, rather than doing nothing until that time and then having the response action take longer. There is a considerable cost associated with doing the Part 1 work. Modeling was

done for the Watermaster in early 2022 to predict how quickly seawater intrusion would move inland from the coastline. The modeling considered the same baseline scenario used for the replenishment scenario modeling, which includes the following projects:

1. The Pure Water Monterey project was already in operation
2. In 2024 the Pure Water Monterey Expansion project was assumed to become operational
3. In 2024 the 700 AFY of Cal Am overpumping payback program was assumed to begin, and
4. In 2024 the City of Seaside began using recycled water instead of groundwater to irrigate its golf courses

At this point in time it appears that three of these four projects/programs (numbers 1, 2, and 4) will have occurred by late 2025. The Cal Am payback program (number 3) does not appear to be scheduled to start until its planned desalination plant becomes operational at least several years from now.

Through an analysis of the baseline simulation, the "worst case condition" consisting of a period of prolonged drought with minimal to no ASR injection and reduced infiltration from precipitation, was identified as resulting in the fastest inland intrusion rates, even with all the other projects are still occurring. Under these conditions the modeling predicted that the midpoint of the seawater intrusion front could move inland at a rate of about 250 feet per year. That front could reach the smaller production wells nearest the coast within 4 years and in 11 years could reach the large production wells that are further inland.

What is currently occurring in the Basin may be a worse condition than the one in the simulated baseline scenario, with only 3 of the 4 projects/programs in the baseline scenario expected to be implemented by late 2025, and with groundwater levels still below protective elevations in the Northern Coastal Subarea. So the time for seawater intrusion to reach the production wells could be faster than in the simulated baseline scenario.

In terms of when to perform the Part 1 modeling, there is a strong possibility that the Part 1 modeling could show that, in the absence of a significant replenishment project or installation of an injection barrier, all coastal subarea pumping from production wells screened across the Paso Robles aquifer would have to cease immediately to prevent or at least slow down further inland seawater intrusion once it has been detected. You would want to know this far in advance of actually confirming any intrusion, because the operational response needed might not be a modest or small reduction in pumping of 1 or 2 wells, but a complete cessation of coastal pumping that would dramatically change how groundwater is used and managed in the subbasin. There would be significant costs and appreciable time required to respond to such a situation, as it could require installing new wells and interconnecting pipelines.

Also included in the updated SIRP is the recommendation to evaluate the benefit of installing additional monitoring wells as part of the *Pumping Redistribution Plan,* and to install such additional wells if that is believed to be beneficial. This same recommendation was contained in the original 2009 SIRP, so it is not a new one. However, the cost of installing monitoring wells is significant (the most recently installed one was replacement well FO-9 shallow (585 feet deep) at the City of Seaside golf course, and that cost over $200K. This will be something the Board will want to consider if Part 2 of the *Pumping Redistribution Plan* is implemented.

ATTACHMENT: None

TO: Board of Directors

FROM: Laura Paxton, Administrative Officer

DATE: September 3, 2025

SUBJECT: Discuss/Consider appointing a Watermaster Ad-Hoc Recruitment Committee and directing staff in a recruitment procedure

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RECOMMENDATIONS: It is recommended that the Board appoint an ad-hoc Recruitment Committee to vet candidates and select an individual for the position of Watermaster Administrative Officer

DISCUSSION:
After a rewarding time with Watermaster since 2007, I will be retiring December 31, 2025 close of business.

A letter of retirement resignation was provided to Board Chair Oglesby on July 22, 2025. At that time, he and I discussed a recruitment strategy for board consideration:

1. Consider appointing an Ad-Hoc Watermaster Recruitment Committee
2. AO Paxton to provide a detailed Administrative Officer job description
3. Leverage the City of Seaside's recruitment resources imminently to solicit candidates and process applications
4. Submit qualifying applications to the Recruitment Committee
5. Committee determine top candidates to be interviewed
6. Committee to conduct the interviews and make a selection
7. Repeat steps 3 through 6 if necessary

At the urging of Mayor Oglesby, City of Seaside City Manager, Greg McDanel has agreed to set a date to meet with me to explore using the City's resources to assist Watermaster with the recruitment.

It is recommended that the Board appoint an ad-hoc Recruitment Committee to vet candidates and select an individual for the position of Watermaster Administrative Officer, and direct staff to commence Steps 2 and 3 above, or provide other direction.

FISCAL IMPACT: Unknown

ATTACHMENTS: None

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 2025
(All Values in Acre-Feet [AF])

	Type	Oct	Nov	Dec	Oct-Dec	Jan	Feb	Mar	Jan-Mar	Apr	May	Jun	Apr-Jun	Jul	Aug	Sep	Jul-Sep	Reported Total	Yield Allocation	from WY 2024	for WY 2025
Coastal Subareas					**(533)**				**230**				**303**					**0.09**			
CAW - Coastal Subareas	SPA	240.17	27.59	32.10	**299.86**	444.49	447.56	474.00	**1,366.05**	333.04	309.73	502.96	**1,145.73**	0.00	0.00	0.00	**0.00**	***2,811.64***	1,466.03	1,345.41	2,811.44
Luzern		53.64	6.91	0.00	**60.55**	0.00	9.79	0.00	**9.79**	0.00	0.00	24.26	**24.26**				**0.00**	**94.60**			
Ord Grove		132.32	117.05	87.89	**337.26**	124.28	113.48	126.73	**364.49**	94.91	55.34	125.42	**275.67**				**0.00**	**977.42**			
Paralta		162.68	95.25	87.02	**344.95**	152.20	145.89	159.32	**457.41**	120.00	135.51	166.97	**422.48**				**0.00**	**1,224.83**			
Playa		7.30	0.00	28.35	**35.65**	41.37	35.90	39.30	**116.56**	16.41	4.86	36.70	**57.97**				**0.00**	**210.18**			
Plumas		21.59	2.52	18.19	**42.29**	29.06	26.13	28.50	**83.69**	12.03	12.33	27.76	**52.12**				**0.00**	**178.10**			
Santa Margarita		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**			
Seaside Middle School Well #3		132.19	90.87	88.66	**311.72**	97.58	116.37	120.16	**334.10**	89.69	101.69	121.85	**313.23**				**0.00**	**959.05**			
ASR 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**			
PWM Recovery		(269.55)	(285.00)	(278.00)	**(832.55)**	(242.50)	(520.50)	(373.00)	**(1,136.00)**	(237.00)	(204.00)	(402.00)	**(843.00)**				**0.00**	***(2,811.55)***			
Seaside Municipal	SPA	15.34	12.62	12.12	**40.08**	12.69	14.31	16.61	**43.61**	17.89	18.38	18.16	**54.43**				**0.00**	**138.12**	120.28	46.81	167.09
Inlieu Extraction					**0.00**				**0.00**				**0.00**				**0.00**	**0.00**			
Granite Rock Company	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**				**0.00**	**0.00**	11.35	284.99	296.34
DBO Development No. 30	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**				**0.00**	**0.00**	20.59	506.70	527.29
Calabrese (Cypress Pacific Inv.)	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**				**0.00**	**0.00**	2.76	15.96	18.72
City of Seaside (Golf Courses)	APA	0.00	0.00	0.00	**0.00**	0.22	0.00	0.07	**0.29**	0.00	0.00	0.00	**0.00**				**0.00**	**0.29**	540.00		540.00
Sand City	APA	0.11	0.09	0.08	**0.29**	0.07	0.09	0.08	**0.23**	0.08	0.09	0.11	**0.28**				**0.00**	**0.80**	9.00		9.00
SNG (Security National Guaranty) /	APA	0.00	0.00	0.00	**0.00**	FTR	FTR	FTR	**0.00**	FTR	FTR	FTR	**0.00**				**0.00**	**0.00**	90.00		90.00
MLDC (Mountain Lake Dev. Corp.)	APA	0.00	0.00	0.00	**0.00**	FTR	FTR	FTR	**0.00**	FTR	FTR	FTR	**0.00**				**0.00**	**0.00**	59.00		59.00
Calabrese (Cypress Pacific Inv.)	APA	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**	6.00		6.00
Mission Memorial (Alderwoods)	APA	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**	31.00		31.00
Coastal Subareas Totals					**(492.32)**				**274.18**				**357.44**				**0.00**	**139.29**	**2,356.01**	**2,199.86**	**4,555.87**
Laguna Seca Subarea																					
CAW - Laguna Seca Subarea	SPA	12.43	10.37	9.53	**32.33**	9.47	6.65	7.72	**23.84**	4.10	13.79	9.93	**27.82**	0.00	0.00	0.00	**0.00**	**84.00**	0.00		0.00
Ryan Ranch Unit	06/21/21: Ryan Ranch Wells #7, #8, and #11 physically disconnected from the distribution system.																0.00	0.00			
Hidden Hills Unit/Bay Ridge		12.43	10.37	9.53	32.33	9.47	6.65	7.72	23.84	4.10	13.79	9.93	**27.82**				0.00	84.00			
Bishop Unit 3	05/27/21: Bishop Wells #1 and #3 physically disconnected from the distribution system.																0.00	0.00			
Bishop Unit 1	The Monterey Main to Ryan Ranch & Bishop Intertie was opened on 12/08/20																0.00	0.00			
The Club at Pasadera	APA	22.00	4.00	0.00	**26.00**	1.00	3.00	0.00	**4.00**	23.00	38.00	42.00	**103.00**				**0.00**	**133.00**	251.00		251.00
Laguna Seca Golf Resort (Bishop)	APA	18.40	24.26	0.00	**42.66**	0.00	0.00	4.86	**4.86**	30.19	32.19	40.78	**103.16**				**0.00**	**150.68**	320.00		320.00
York School	APA	2.33	1.36	0.01	**3.70**	0.27	0.01	0.03	**0.31**	2.20	2.43	2.49	**7.12**				**0.00**	**11.13**	32.00		32.00
Laguna Seca County Park	APA	3.41	2.18	1.57	**7.16**	0.59	2.59	2.95	**6.13**	4.07	2.83	0.93	**7.83**				**0.00**	**21.12**	41.00		41.00
Laguna Seca Subarea Totals					**111.85**				**39.15**				**248.93**				**0.00**	**399.92**	**644.00**	**0.00**	**644.00**
Total Production by WM Producers					**-380.48**				**313.32**				**606.37**				**0.00**	**539.22**	**3,000.01**	**2,199.86**	**5,199.87**
									Annual Production from APA Producers									317.01			1,379.00
									Annual Production from SPA Producers									222.20			3,820.87

CAW / MPWMD ASR (Carmel River Basin source water)																		***Previous Balance***	***Total***
Injection	0.00	0.00	0.00	**0.00**	0.00	301.80	335.33	**637.13**	78.51	0.00	0.00	**78.51**	0.00	0.00	0.00	0.00	**715.64**		
(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	0.00	**0.00**	**0.00**		
Net ASR	0.00	0.00	0.00	**0.00**	0.00	301.80	335.33	**637.13**	78.51	0.00	0.00	**78.51**	0.00	0.00	0.00	**0.00**	**715.64**	**3,241.44**	**3,957.08**
Pure Water Monterey (PWM) Injection and Cal-Am Recovery																			
Delivery to Basin (Injection)	269.55	328.83	342.22	**940.61**	377.95	345.81	379.18	**1,102.94**	262.18	298.83	331.44	**892.45**	0.00	0.00	0.00	**0.00**	**2,936.00**		
CAW (Recovery)	(269.55)	(285.00)	(278.00)	**(832.55)**	(242.50)	(520.50)	(373.00)	**(1,136.00)**	(237.00)	(204.00)	(402.00)	**(843.00)**	0.00	0.00	0.00	**0.00**	**(2,811.55)**		
Net PWM	0.00	43.83	64.22	**108.06**	135.45	-174.69	6.18	**(33.06)**	25.18	94.83	(70.56)	**49.45**	0.00	0.00	0.00	**0.00**	**124.45**	**1,157.48**	**1,281.93**
																			5,239.01
																		Previous Balance	***Total***
Injection Operating Reserve	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	163.76	**163.76**	0.00	0.00	0.00	**0.00**	**163.76**	**2,189.19**	**2,352.95**
Injection Drought Reserve	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	0.00	**0.00**	**0.00**		

City of Seaside Golf Course Recycled Water Use/Municipal Potable Water Recovery *2,361AF Max*																		***Previous Balance***	***Total***
In-lieu Storage/Recycled Water Use	38.77	10.25	1.24	**50.26**	5.72	4.19	4.32	**14.23**	46.65	67.02	71.14	**184.81**	0.00	0.00	0.00	**0.00**	**249.30**		
City of Seaside Municipal Extraction	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	0.00	**0.00**	**0.00**		
Net In-lieu	38.77	10.25	1.24	**50.26**	5.72	4.19	4.32	**14.23**	46.65	67.02	71.14	**184.81**	0.00	0.00	0.00	**0.00**	**249.30**	**1,122.88**	**1,372.18**
																			6,611.19

Notes:

1. The Water Year (WY) begins October 1 and ends September 30 of the following calendar year. For example, WY 2025 begins on October 1, 2024, and ends on September 30, 2025.
2. "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).
3. Values shown in the table are based on reports to the Watermaster received by July 15, 2025.
4. 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.
5. "Base Operating Yield Allocation" values are based on Seaside Basin Adjudication decision. These values are consistent with the *Watermaster Producer Allocations Water Year 2024* (see Item VII.F. in 1/3/2024 Board packet).
6. Any minor discrepancies in totals are attributable to rounding.
7. APA = Alternative Producer Allocation; SPA = Standard Producer Allocation; CAW = California American Water.
8. 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.
9. Cal-Am Toro Well #3 Destroyed 09/30/21
10. Rossi Ranch and Bishop systems fed by Monterey Main System as of December 2020 -- these wells eliminated from Cal-Am reporting as of January 15, 2025

SUMMARY OF PURE WATER MONTEREY, AND SALINAS VALLEY AND MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY AGENCY ZOOM MEETINGS IN FEBRUARY 2025

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

180/400-Foot Aquifer Subbasin GSP Implementation Committee Meeting, February 10, 2025:

The item of interest and the principal presentation at this meeting was a discussion of Salinas River Project Alternatives. A lengthy presentation was made by Mr. Dennis Lebow, who is a member of this committee. He is a member of the Salinas Basin Water Alliance and is an agricultural hydrologist. Looking at his credentials on his LinkedIn posting, he reports that his expertise includes:

- Vast experience developing hydro-logic models, analyzing maps and data sets, writing scientific reports, and evaluating water quality.
- Designing databases and developing spatial queries to achieve proper data archiving and retrieval mechanisms.
- Plans, performs, coordinates, and directs comprehensive studies of hydrologic systems

His presentation made the following points:

- Dam releases are proving not to be effective in mitigating seawater intrusion.
- Much of the surface water released from the dams is lost by percolating into the groundwater in the upper Salinas Valley and by evapotranspiration.
- Water transfer pipelines were recommended in Department of Water Resources 1946 study of this part of the Salinas Basin. Those pipelines would be used to move water from the Forebay subarea, to the Pressure and Eastside subareas where groundwater is being over-drafted.
- This there is not a water supply problem in the Basin, there is a water distribution problem.
- The major projects currently being evaluated will be more costly and less effective than a project that would install water transfer pipelines.
- One project that has been considered in the past would be to spread surface water from the of Arroyo Seco river. The Arroyo Seco River has a very short peak runoff period, so a lot of groundwater storage capacity would need to be available in order to capture this water by percolation. However, this is not feasible because it would require first emptying the groundwater storage capacity there so there would be room to store this surface water.
- Pipelines to bypass sections of the Salinas River would improve downstream water quality by reducing fertilizer pollutants such as nitrate and others.
- The redistribution of water would help to mitigate seawater intrusion by delivering water to over-drafted areas, so groundwater pumping there could be reduced. Supplemental projects to distribute this water to where it can be used would still be needed.
- There was brief discussion about CSIP-2 and CSIP-3 (expansions of the current CSIP) as future projects to help accomplish this.

Following this presentation:

- Some attendees expressed concern that DWR will conclude not enough progress is being made fast enough by the SVBGSA, that too many studies and not enough action is being taken.
- There was much discussion about water rights being a big hurdle for many of the proposed projects.

- One member felt that the Salinas Basin Water Alliance was trying to delay progress on implementing the GSP by bringing up the topic of water transfer pipelines.
- A motion by Chris Bunn was made and passed to ask staff and consultants to examine how big an impact there would be from cutting back pumping in each of the Subbasins as well as across the Basin as a whole.
- As a result of this, SVBGSA staff will look at the impacts on seawater intrusion from various things such as reduced pumping, bringing in new water supplies, etc. They will not focus on specific projects to accomplish these things, in order to avoid spending so much time and money on feasibility studies for specific projects,

SVBGSA Advisory Committee Meeting, February 20, 2025:

Items of interest at this meeting included a presentation made by Derrik Williams of Montgomery & Associates on the findings from modeling scenarios that were performed to address seawater intrusion:

- With regard to demand management (a 30% pumping reduction) there is little effect on moving the seawater intrusion front back toward the coast. Even with such a reduction, groundwater levels in the 180 and 400 foot aquifers remain well below sea level.
- With regard to ASR scenarios none of these push back seawater intrusion in either aquifer far enough to meet the GSP's seawater intrusion Minimum Threshold.
- With regard to the Brackish Groundwater Restoration Project:
    - They evaluated three project sizes, small medium and large.
    - These are much more effective at stopping seawater intrusion from moving inland.
    - The projects include inland desalinated water injection wells in "hotspots" located inland from the coast.
    - The medium and large projects do achieve compliance with the seawater intrusion Minimum Threshold, the small project does not.
- One of the agricultural representatives pointed out that if demand management causes a reduction in agricultural water being available in the coastal area, then the crops would be pushed inland where evapotranspiration rates are higher, therefore requiring larger quantities of water for irrigation. They also reported that agriculture could not survive economically if the costs of water that would be provided by the GSP projects are as high as they are currently being projected.
- Sarah Hardgrave reported that an application for funding from federal agencies (such as the Bureau of Reclamation) for the Brackish Water Restoration Project will require that alternatives projects or actions also be analyzed. These could include other projects such as the groundwater transfer projects discussed at the February 10th 180/400-Foot Aquifer GSP Implementation Committee meeting.
- In the upcoming year SVBGSA staff will prepare a funding mechanism study to evaluate how the high costs of some of the GSP projects can be funded.

Monterey Subbasin Implementation Committee Meeting, February 26, 2025:

The largest agenda item at this meeting pertained to the SVBGSA's work on developing a Demand Management program. Other brief items were progress or status reports on projects undergoing feasibility studies, all of which had been presented at the February 20 Advisory Committee meeting . Some topics/comments of interest:

- The Demand Management consultant (ERA Economics) said that they are assisting the SVBGSA with developing answers to these questions:
    - What are baseline economic conditions for water users, and directly/indirectly related industries across the Subbasin, Basin, County, and region?
    - What are the direct, indirect, and induced economic impacts of demand management?
    - What are different options for demand management and how do we identify cost-effective approaches?

    - What are current investments in water conservation practices and how can these inform future program design?
- They will then provide the SVBGSA with an Economic Analysis of Demand Management including:
    - Basin-wide economic framework to evaluate demand management alternatives
    - Baseline conditions and economic impact analysis grounded in outreach to water users and related industries
        - Essential for any future program design
        - Ensure economic impacts represent local and regional implications
    - Quantify costs and benefits of alternatives
        - Farm to region
        - Feasible alternatives
        - Cost effective portfolio
- They are looking at:
    - Voluntary Incentive-Driven Programs
    - Mandatory Programs
    - Hybrid Programs
- Some comments of interest included:
    - One Committee member said that for the Monterey Subbasin demand management is the only feasible action available to work toward sustainability. Another member commented that this Subbasin could also join in with adjacent subbasin(s) in joint projects.
    - The consultant reported that DWR has not established guidelines for Demand Management Programs. Therefore there are no criteria that must be met to satisfy DWR for such programs. He went on to say he felt the work the SVBGSA was doing was comprehensive and that it would be unlikely for DWR to direct the SVBGSA to make changes to its program.
    - There was much discussion about ensuring de minimis users (small water systems not regulated by the State) are included in any demand management actions. Some commented that de minimis users are very watchful of their water usage, while others commented that there were large private water systems that were not being watchful.

SUMMARY OF
PURE WATER MONTEREY, AND
SALINAS VALLEY AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY AGENCY ZOOM MEETINGS
IN MARCH 2025

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

180/400-Foot Aquifer Subbasin GSP Implementation Committee Meeting, March 6, 2025:
The items on the agenda for this meeting were either topics covered at other meetings I attended, or items that would have no direct impact on the Watermaster. Therefore, I did not attend this meeting.

One of the items pertained to a continued effort by some of the Committee members to have other options evaluated that they felt had the potential to bring the subbasin into sustainability at lower cost than the options currently being considered. These consisted of the interbasin water transfer pipeline projects that were discussed at a prior Committee meeting, and interbasin water transfer canals.

SUMMARY OF
PURE WATER MONTEREY, AND
SALINAS VALLEY AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY AGENCY ZOOM MEETINGS
IN APRIL 2025

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

180/400 Foot Subbasin Implementation Committee Special Meeting - April 14, 2025:
The items on the agenda for this meeting were either topics covered at other meetings I attended, or items that would have no direct impact on the Watermaster. Therefore, I did not attend this meeting.

SVBGSA Advisory Committee Meeting, April 17, 2025:
The items on the agenda for this meeting were either topics covered at other meetings I attended, or items that would have no direct impact on the Watermaster. Therefore, I did not attend this meeting.

Monterey Subbasin Implementation Committee Meeting - April 23, 2025:
Items of interest to the Watermaster included reports on Feasibility Studies and Modeling Scenarios. Information from those reports included the following:

- **Feasibility Studies and Modeling Scenarios**

SCENARIO	TAKEAWAYS
No Project Scenario (continued pumping and other activities as they currently are)	Continued groundwater level declines below sea level, seawater intrusion advances, and increased chloride concentrations
Demand Management (pumping reductions of 10 %, 20%, and 30% across entire model area)	Raises groundwater levels but not to protective elevations, does not slow or halt seawater intrusion
Aquifer Storage and Recovery	Helps with seawater intrusion and groundwater levels locally, but not across the basin
Brackish Groundwater Restoration With Desalination Plant	Achieves seawater intrusion minimum threshold, but does not meet the measurable objective

So in summary none of the potential projects that have thus far been evaluated can meet the needs of the Monterey Subbasin. Some other projects that were recently raised for consideration will be evaluated for feasibility (such as intra-basin water transfers as discussed at an earlier meeting). Work is being undertaken to see if combinations of some or all of these projects would be able to meet the needs of this subbasin, and this information will be presented at future meetings.

Water Quality and Operations Committee Meeting - April 23, 2025:
Information provided at this meeting included:

- As of 4/1/25 the PWM Project had injected 2,271AF this year and the amount of water in the Operating Reserve remained at 2,189 AF.

- CSIP demand is likely to increase earlier this year due to the shortage of winter rainfall. Bayonet and Black Horse Golf Course irrigation demands will also depend on rainfall.
- ASR injection began on 2/5/2025 and ended on 4/7/2025. A total of 716 AF was injected this water year. The stored water total is 4,392 AF.
- The underground retention time requirement of a minimum of 4 months was met at all times. The recent retention times again ranged from 5.6 to 7.8 months.
- With regard to water quality there were some minor sampling/analysis variances associated with sodium, boron, and coliform, but all water quality requirements including the log reduction requirements were met at all times.
- Construction of Cal Am's Extraction Wells No. 1 and 2 is still in progress, but is nearing completion. These will increase the extraction capacity to match the increase in water injected from the PWMX Project.
- Cal Am is going through the permitting process for its new well in Carmel Valley (apparently to replace an older well).
- Well ASR4 is being rehabilitated.
- There is no change to the schedule for construction of the PWMX Project. The permit to operate the expansion is expected to be received in August or October of 2025.

SUMMARY OF
PURE WATER MONTEREY, AND
SALINAS VALLEY AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY
AGENCY ZOOM MEETINGS
IN MAY 2025

There were no meetings in May that I attended.

SUMMARY OF PURE WATER MONTEREY, AND SALINAS VALLEY AND MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY AGENCY ZOOM MEETINGS IN JUNE 2025

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

180/400 Foot and Eastside Subbasin Implementation Committees Special Joint Meeting – June 9, 2025:

Items of interest to the Watermaster included reports on studies and modeling Scenarios. Information from those reports included the following:

- **An update on the Brackish Groundwater Restoration Project Feasibility Study**. Some of the key items presented on this included:
  - The modeling work to date assumes a startup of this project in the year 2030. This is overly optimistic and they said they will probably need to update the model to show the project starting operation in 2035 or thereabouts. They said they will really need 5 to 7 years before they would be able to start construction.
  - Notes:
    - For the 180-Foot, 400-Foot, and Deep Aquifers the Measurable Objective (MO) is the line defined by Highway 1.
    - For the 180- and 400- Foot Aquifers the Minimum Threshold (MT) is the 2017 extent of the 500 mg/L chloride isocontour as developed by MCWRA.
    - For the Deep Aquifers the Minimum Threshold is the line defined by Highway 1.
  - The medium-size project meets the minimum threshold.
  - Injection wells are located far inland from the coast.
  - There would be "cleanup" wells inland or additional injection wells to reverse or push back the seawater intrusion that has already occurred there.
  - They will complete the Brackish Water Restoration Project feasibility study in 9 to 12 months.
  - The desalination plant would probably be located near the M1W outfall.
  - They will develop costs for the no-delivery and injection only concept later this year.
  - Two people commented that the desalination plant could be made large enough to serve Cal Am's service area as well as the Salinas Valley's needs by selling the desalinated water to them so that Cal Am would not have to build its own desalination plant.
- **Preparation of a Castroville and Eastside Canals and Alternatives Roadmap**

  The purpose of this work would be to:
  - Develop a project scenario of a maximum diversion of additional supply from Salinas River to mitigate seawater intrusion (as an alternative to Brackish Groundwater Restoration Project).
  - Prepare a summary of conceptual projects with preliminary, high-level evaluation of conditions related to permitting, constructability, effectiveness, costs, stakeholder acceptance and others.
  - Estimate initial upper bound of realistic project scale
  - Estimate range of annual amount of water that could be diverted from the Salinas River considering the current Permit requirements, reservoir operating rules, and potentially other river flow obligations.
  - Develop a 3 Phased framework for evaluating conceptual components that will be used to develop 2 project scenarios. Factors in the framework will include:

    Phase 1:
    - Water rights

- Diversion size/type/location/requirements/constraints
- Storage capacity
- Cost & timeframe
- Environmental permitting
- Social/stakeholder acceptance
- Summary of development and recommendations for the project evaluation and ranking framework.

Phase 2: Use framework to identify and develop 2 project scenarios.
Phase 3: High level feasibility assessment of project scenarios

- **An evaluation of the volume of water that would need to be injected to avoid seawater intrusion undesirable results.** This evaluation had been requested by some of the stakeholders. In this evaluation there would only be injection of water into the groundwater basin, and no delivery of water to end-users. The parameters of this evaluation were:
  - Continuous injection, but no specific water source (Note: no attempt was made in the evaluation to identify what water source could provide the volumes that were evaluated. Potentially it could be from a desalination plant similar to the one that is part of the Brackish Groundwater Restoration Project that included extraction wells as the feedwater source for the desalination plant).
  - No extraction barrier or reduced pumping
  - Initial simulation volumes similar to the Medium Brackish Groundwater Restoration Scenario; two injection volumes evaluated:
    - Injection only of 49,000 AFY using 26 wells
    - Injection only of 76,000 AFY using 27 wells
  - Conclusions from this evaluation:
  - The 76,000 AFY project could meet the Seawater Intrusion Minimum Threshold by 2040
  - The 49,000 AFY project would be unlikely to meet the Seawater Intrusion Minimum Threshold by 2040

Monterey Subbasin Implementation Committee Meeting – June 25, 2025:

Due to a scheduling conflict I did not attend this meeting. However, there were no items of impact to the Watermaster on the agenda. The agenda items included:

- Planning for demand management within the Salinas Valley Groundwater Basin
- Public correspondence
- A survey for a water efficiency pilot program for rural residents (within the Salinas Valley Groundwater Basin), and
- The status of grants that have been issued to or applied for by the SVBGSA

SUMMARY OF
PURE WATER MONTEREY, AND
SALINAS VALLEY AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY AGENCY ZOOM MEETINGS
IN JULY 2025

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

Water Quality and Operations Committee Meeting, July 23, 2025:

Information provided at this meeting included:

- As of mid-June the PWM Project had injected 3,500 AF and 164 AF had to add to the Operating Reserve.
- The underground retention time requirement of a minimum of 4 months was met at all times. The recent retention times again ranged from 5.4 to 7.7 months.
- With regard to water quality there was a minor sampling/analysis variance associated with arsenic in the Paso Robles aquifer, but resampling showed the level was below the 10 µg/L required level. All other water quality requirements including the log reduction requirements were met at all times.
- Construction of Cal Am's Extraction Wells No. 1 and 2 is starting into the construction phase with completion expected in Q2 of 2026. These will increase the extraction capacity to match the increase in water injected from the PWMX Project.
- Cal Am reported that start-up testing of the mercury treatment system for well ASR-4 is about to begin.
- Cal Am is constructing a new well in Carmel Valley (apparently to replace an older well).
- There is no change to the schedule for construction of the PWMX Project. It is now scheduled to be completed in late October 2025, as is the injection well Phase 4. Its RWQCB Permit to Operate is expected to be issued in October 2025.
- The next meeting of this Committee will be in October.

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Stephen L. Vagnini
MontereyCounty Clerk-Recorder
Recorded at the request of:
MONTEREY PENINSULA WATER MAN

2020075321

12/16/2020 02:25:21
Titles: 1 Pages: 49
Fees: $157.00
Taxes: $0.00
AMT PAID: $157.00

Item IX.C.

Recording Requested by:
Monterey Peninsula Water Management District

And When Recorded Mail To:
Monterey Peninsula Water Management District
Post Office Box 85
Monterey, California 93942-0085

NOTICE OF AGREEMENT REGARDING LIMITATION ON USE OF A WATER DISTRIBUTION SYSTEM

NOTICE IS GIVEN that the Monterey Peninsula Water Management District (hereinafter referred to as the Water Management District or "MPWMD"), duly formed as a water district and public entity pursuant to the provisions of law found at Statutes of 1977, Chapter 527, as amended (found at West's California Water Code Appendix, Chapters 118-1 to 118-901), has approved a Water Distribution System (WDS) Permit for the Water Distribution System referenced below as the "Subject System."

NOTICE IS FURTHER GIVEN that the Subject System is comprised of one Unit of the **California-American Water Company, Monterey Division** as follows:

BISHOP UNIT, located in the County of Monterey

The Subject System is located within the jurisdiction of the Water Management District and was previously approved as valid WDS by MPWMD; it is also certified by the State Division of Drinking Water. **California-American Water Company, a California Corporation**, hereinafter referred to as "Owner(s)," is the record Owner of the Subject System.

Owner(s) and the Water Management District each acknowledge and agree that the terms of MPWMD WDS Permit **#M15-03-L3-A for the "CAW/Bishop Unit-McIntosh Amendment**," including all Conditions of Approval associated with that Permit, which are attached hereto and made a part hereof, are requirements of the Subject System. Owner(s) and the Water Management District confirm that the **Bishop Unit** may serve **3.069 Acre-Feet Annually (AFA) metered sales for 30 Connections** to the Recipient Parcel APN: 173-121-004 owned by **Clifton H. McIntosh**; **2.046 AFA metered sales for 15 Connections** to APN: 173-121-005 owned by **The Leonard H. McIntosh Family Trust under Restated Agreement dated March 19, 2009**; **2.558 AFA metered sales for 30 Connections** to APN: 173-121-023 (formerly APN 173-121-006) and **2.558 AFA metered sales for 30 Connections** to APN 173-121-026 (formerly APN 173-121-007) owned by **Henry P. McIntosh, IV and Susan R. McIntosh,** for a total of **10.231 AFA** for these four Parcels. This increases the **System Capacity** (maximum allowed annual production of water by Bishop Unit) to **306 AFY; the Expansion Capacity Limit increases to 559 Connections.**

This Document is signed in counterparts.

Owner(s) acknowledge that the Conditions of Approval for MPWMD WDS Permit **#M15-03-L3-A**, including the limitation on water use referenced above have been voluntarily accepted and are permanent and irrevocable, unless amended by the filing of a subsequent Agreement associated with a new, amended Water Distribution System Permit.

NOTICE IS FURTHER GIVEN that this Agreement is binding and has been voluntarily entered into by Owner(s), and each of them, and constitutes a mandatory condition precedent to receipt of regulatory approval from the Water Management District relating to the Subject Systems. This Agreement attaches to the Subject System and shall bind any successor or assignee of Owner(s).

NOTICE IS FURTHER GIVEN that present and/or future use of water at the Subject System is restricted by Water Management District Rules and Regulations to the water use requirements referenced above. Any Intensification of Use on Parcels within the Subject System, as defined by Water Management District Rule 11, will require prior written authorization and Permit from the Water Management District. Approval may be withheld by the Water Management District, in accord with then applicable provisions of law. Present or future Allocations of water may not be available to grant any Permit to intensify water use at this Site. If any request to intensify water use within the Subject System is approved, Capacity Fees and other administrative fees may be required as a condition of approval.

NOTICE IS FURTHER GIVEN that intensification of water use in the Subject System that occurs without the advance written approval of the Water Management District is a violation of Water Management District Rules and may result in a monetary penalty for each offense as allowed by Water Management District Rules. Each separate day, or portion thereof, during which any violation occurs or continues without a good faith effort by the Responsible Party to correct the violation shall be deemed to constitute a separate offense. All Water Users within the jurisdiction of the Water Management District are subject to the Water Management District Rules, including Rules 11, 20, 21, 23, 24, and 110.

The Owner(s) and Water Management District each intend that this Notice of Agreement acts as a limitation upon the Subject System, and that it shall be irrevocable under its terms. This document shall be enforceable by the Water Management District or any public entity that is a successor to the Water Management District.

The Owner(s) elect and irrevocably covenant with the Water Management District to abide by the conditions of this Notice of Agreement to enable issuance of MPWMD WDS Permit **#M15-03-L3-A**. But for the limitations and notices set forth herein, issuance of this Water Permit would otherwise be withheld and found to be inconsistent with the Water Management District Rules and Regulations.

This Notice of Agreement is placed upon the Subject System. Any transfer of ownership of the Subject System, or an interest therein, is subject to this Notice of Agreement. This Notice of Agreement shall have no termination date unless amended by the filing of a subsequent Agreement.

If any provision of this Notice of Agreement is held to be invalid, or for any reason becomes unenforceable, no other provision shall thereby be affected or impaired.

The undersigned Owner(s) agree with and accepts all terms of this document stated above, and requests and consents to recordation of this Notice of Agreement Regarding Limitation on Use of a Water Distribution System. The Owner(s) further agree to notify any present and future Owner(s) of the Subject System of the terms and conditions of this document.

OWNER(S) agree to recordation of this Notice of Agreement Regarding Limitation of Use of a Water Distribution System Permit in the Recorder's Office for the County of Monterey. Owner(s) further unconditionally accept the terms and conditions stated above.

(Signatures must be notarized)

California-American Water Company, a California Corporation

By: _____ **Dated:** 10/16/20
Ian Crooks, Vice President, Engineering AKA Ian C. Crooks

Attest:

By: See attached (Exhibit 1)
Kathryn Horning, Assistant Secretary

By:_____ **Dated:** _____
David J. Stoldt, General Manager
Monterey Peninsula Water Management District

ATTACHMENTS: Copies of signed WDS Permit, Final Amended Conditions of Approval for Bishop Unit (with attachments), signed Indemnification Agreement, and signed Acceptance of Conditions form

- Attachment A: Copies of signed WDS Permit
- Attachment B: Final Amended Conditions of Approval for Bishop Unit (with attachment)
- Attachment C: Signed Indemnification Agreement
- Attachment D: Signed Acceptance of Conditions Form

FORNIA ALL-PURPOSE ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of San Diego

On Oct 16, 2020 (Date) before me, D. Peacock (Here Insert Name and Title of the Officer), Notary Public

personally appeared Ian C. Crooks (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf-of which the person(s) acted, executed the instrument.

JAS1 D. PEACOCK COMM. # 2196990 NOTARY PUBLIC • CALIFORNIA SAN DIEGO COUNTY My Commission Expires MAY 26, 2021 JAS1

Place Notary Seal and/or Stamp Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature D. Peacock (Signature of Notary Public)

Notary Seal Information:
D. Peacock
Comm# 2196990
Notary Public California
San Diego County
My Commission Expires
May 26, 2021

SEASIDE GROUNDWATER BASIN WATERMASTER Item IX.D.
Replenishment Ad Hoc Committee
REGULAR MEETING MINUTES - *DRAFT*
Wednesday, July 23, 2025 in person (and virtual for public)
1 Pendergrass Way, Sand City, CA 93955

CALL TO ORDER – Council Member Shirley called the meeting to order at 2:04 p.m.

ROLL CALL
City of Del Rey Oaks – Council Member Kim Shirley (Chair)
Coastal Subarea Landowner Group – Director Paul Bruno
California American Water (CAW) – Director Tim O'Halloran
Monterey Peninsula Water Management District (MPWMD) –George Riley (Alternate for MPWMD Board Member Alvin Edwards)
Laguna Seca Subarea Landowner Group – Director John Gaglioti

Others Present:
Bob Jaques, Watermaster Technical Program Manager (TPM)
Laura Paxton, Administrative Officer (AO)
Alex Dominguez, Legal Counsel*
Mike McCullough, MPWMD
Jon Lear, MPWMD
Patrick Breen, Marina Coast Water District (MCWD)
Kevin Dayton
Maureen Hamilton, MPWMD*
Alvin Edwards, MPWMD*
David Pezzini, CAW*
Sara Reyes*
An asterisk (*) signifies virtual attendance.

PUBLIC COMMUNICATIONS – There were no public communications.

REVIEW OF AGENDA and ANNOUNCEMENTS – There were no requested changes to the agenda and no announcements.

ACTION ITEMS

1. **Approve Minutes of October 7, 2024 Committee Meeting**

   It was moved by Director Bruno, seconded by Director O'Halloran, and unanimously approved 5-0 to approve the minutes of the committee meeting held October 7, 2024.

2. **Discuss/Consider Proposed Four-Point Strategy to Raise Groundwater Levels Toward Preventing Seawater Intrusion into the Seaside Groundwater Basin**

   AO Paxton reviewed the item transmittal and the members discussed each point individually.

   Point #1. No Alternative Producer Underproduction Added to Standard Producer Allocations

   The concept in the Decision behind the transfer of unused Alternative Producer allocations to Standard Producer allocations was to allow production, first by Alternative Producers then by Standard Producers, of the full acre-feet per year (AFY) of groundwater allowed to be

withdrawn from the Basin under the terms of the Decision. Now that ramp down to 3,000 AFY has been achieved with no or minimal overproduction of Operating Yield by Standard Producers with alternative water sources are on line, staff requested the committee consider ending the transfer of unpumped Alternative Producer production allocations to Standard Producers at the end of each Water Year. As long as Standard Producers are agreeable to it, it would increase the amount of in-lieu groundwater on record of the 3,600AFY of replenishment needed to achieve protective groundwater levels.

The two parties with a history of extractions exceeding their allocations (Cal Am and City of Seaside) incurring Replenishment Assessment Fees have accumulated significant amounts of Replenishment Assessment credits allowed per the terms of the Decision that are available to offset any further overproduction fees. Director Bruno felt, and Director O'Halloran concurred, that adopting this policy would not change extraction amounts or increase the amount of water in the basin—it would only label Alternatives' underproduction as replenishment until ultimately used during drought years and offset by Standard Producers' replenishment credits.

The committee recommended that the Board consider proposed Point #1.

Point #2. Reduce the Natural Safe Yield of the Basin

The current Natural Safe Yield of the Basin is 3,000AFY. In the updated Basin Management Action Plan (BMAP) dated July 2019, the Natural Safe Yield is estimated at 2,370 acre-feet per year. The Watermaster could propose this 2019 figure as the updated Natural Safe Yield or could perform an updated analysis. In either scenario, a reduced Natural Safe Yield would consequently reduce the amount of water actually extracted from the Basin thereby resulting in approximately 630 acre-feet per year of additional Basin replenishment toward protective groundwater levels. Watermaster had discussed lowering the Natural Safe Yield in 2019 but refrained while waiting for SVBGSAs to develop their plans.

Committee members discussed how the Watermaster determines the Natural Safe Yield and the water levels in the Basin. Watermaster has specific court-defined boundaries with a Natural Safe Yield determined for the entire Basin that may not necessarily reflect the hydraulic movement of water within the basin—especially movement of "mounded" groundwater ridges or "flow divides" caused by factors such as precipitation and pumping amounts and locations in the Basin and in adjacent basins. When the movement of flow divides is taken into account, a determination of Natural Safe Yield for the Basin is technically deficient. The situation with the Seaside Basin is not unusual; all subbasins of the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) have defined boundaries even though they also have flow between basins and flow divides.

Like proposed Point #1, Director Bruno felt proposed Point #2 (changing the Natural Safe Yield) would not change extraction amounts or increase the amount of water in the basin—it would only redefine water calculations on paper, likely provoking parties to hire legal counsel and waste money. Further, he surmised that the City of Seaside and CAW would pump as needed regardless of Natural Safe Yield and use Replenishment Assessment credits if necessary.

The committee did not make any decisions concerning a recommendation to the Board on proposed Point #2.

Point #3. Basin Storage Sustainability Contribution

Committee members discussed whether parties that store water in the basin should pay Watermaster, with water, for the benefit of a natural storage infrastructure that Watermaster and surrounding groundwater sustainability agencies have documented has groundwater losses occurring.

While parties that use the basin through the Pure Water Monterey (PWM) and Aquifer Storage and Recovery (ASR) projects will not want to incur the additional expense of "leaving back" a portion of stored water in the Basin, it is a legitimate charge commonly used by basins in Southern California and would provide in-lieu replenishment toward protective elevations against seawater intrusion into the Basin. In addition, it may encourage future projects using Basin storage to design projects that account for the required contribution.

CAW noted that it does not have a choice on storing water and extracting it. In dry years, it will need to use that stored water with no room for leave back.

The committee recommended that the Board consider proposed Point #3 and deliberate on what percentage would be in the public interest, taking into account percentages used by Watermasters of other basins.

Point #4. California American Water Monterey Peninsula Water Supply Project

CalAm is required to replenish the quantity of groundwater it has produced in excess of its rights in the period since the Basin was adjudicated. A 2014 agreement between Cal Am and the Watermaster established a replenishment schedule of 25 years at a replenishment rate of 700 acre-feet per year upon completion and implementation of the Monterey Peninsula Water Supply Project (MPWSP). This is possible because the planned capacity of the desalination plant is designed for 2050 projections of demand and there will be available capacity to produce desalinated water for replenishment.

The committee did not make a recommendation on proposed Point #4.

Committee members thanked staff for the thoughtful recommendations, noting such deliberations are important for the purposes of the Watermaster.

3. INFORMATIONAL – MPWMD Water Supply Planning Committee Meeting Item: Consider Recommendation to Board to Enter into Agreement with Marina Coast Water District for Aquifer Storage and Recovery Cooperation

Committee members considered the July 7, 2025, MPWMD Water Supply Planning Meeting Action Item and discussed whether Monterey Peninsula Water Management District (MPWMD) may enter into an agreement with Marina Coast Water District (MCWD) for water storage in the basin without involvement of Watermaster. The staff report by David Stoldt for the item declared that "the power of the Watermaster to enjoin unauthorized storage is limited to storage by Producers, and does not extend to storage by the District. However, the District has traditionally worked cooperatively with the Watermaster as to the nature and scope of its storage activities, and has participated in two storage and recovery agreements…The Parties will endeavor to negotiate a Storage and Recovery Agreement with the Watermaster. However,

if such Agreement is not forthcoming, MPWMD will store on behalf of MCWD under its rights protected by the Superior Court adjudication decision." The MPWMD board vote on July 21, 2025, to proceed with an agreement was made under the assumption that Watermaster didn't need to be involved.

Without an agreement, MPWMD and MCWD would be able to avoid paying a "drop charge" or an offset or "sustainability contribution" to the Watermaster based on a percentage of stored water extracted.

TPM Jaques noted that Watermaster storage agreement(s) would be necessary for the MCWD to inject into the Basin through the ASR infrastructure. He made a point that introduction of new water sources to an aquifer could cause chemical reactions. Water would initially come from groundwater, but could include desalinated water and water from other sources in the future. The MPWMD board has already agreed to a groundwater/geochemical investigation.

Public Comment:
Patrick Reem, MCWD addressed the board stating that the agency is providing a storage proposal to the Watermaster within the next two months. Contrary to insinuations that MCWD could extract water to store in the Seaside basin from a well drilled ten feet from its boundary with the Seaside basin, this water will be extracted from wells closer to the 180-400 foot "Pressure" basin to account for Monterey basin water flowing into that basin.

Jon Lear, MPWMD noted that if the discussed water storage agreement moves forward, MPWMD would have to go to the State Water Resource Control Board Division of Drinking Water to change its permit on water source.

OTHER BUSINESS

George Riley asked Watermaster to fulfill an old request for a report on what Watermasters for other basins are doing to obtain revenue.

George Riley asked Watermaster to develop a reporting "dashboard" to show reserves being created in the basin from PWM and ASR; staff responded that the Watermaster Production Report provided quarterly to the Board has that information.

It was noted that all stored water in the basin beyond mandatory operating reserves will eventually be extracted during drought periods, as pumping from the Carmel River is limited and will continue to ramp down—PWM and ASR stored water is not in the Basin as permanent replenishment.

ADJOURNMENT – There being no further business, the meeting was adjourned at 3:43 p.m.

Respectfully submitted by Laura Paxton, Board Secretary

WATER SUPPLY PLANNING COMMITTEE

ITEM: ACTION ITEM

2. CONSIDER RECOMMENDATION TO BOARD TO ENTER INTO AGREEMENT WITH MARINA COAST WATER DISTRICT FOR AQUIFER STORAGE AND RECOVERY COOPERATION

Meeting Date:	**July 7, 2025**	**Budgeted:**	**N/A**
From:	**David J. Stoldt General Manager**	**Program/ Line Item No.:**	**N/A**
Prepared By:	**David J. Stoldt**	**Cost Estimate:**	**N/A**

General Counsel Approval: N/A
Committee Recommendation: N/A
CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

SUMMARY: The Marina Coast Water District (MCWD) has requested that MPWMD consider making its Aquifer Storage and Recovery (ASR) facilities available to inject MCWD water to the Seaside Groundwater Basin when not in use for MPWMD's own ASR program.

- Under its permits MPWMD can only inject Carmel River water from December through May, meaning that there is available capacity in the June to November period. There may also be surplus capacity in winter months during dry years when Carmel River permit conditions cannot be met.

- MPWMD retains its statutory right to store water in the basin for the benefit of the District. The Court found that this right is preserved and does not conflict with the Physical Solution under the adjudication. The power of the Watermaster to enjoin unauthorized storage is limited to storage by Producers, and does not extend to storage by the District. However, the District has traditionally worked cooperatively with the Watermaster as to the nature and scope of its storage activities, and has participated in two storage and recovery agreements.

- MCWD has committed to serve water to developments in the former Fort Ord within the MPWMD jurisdiction, including Monterey (65 AFY), Del Rey Oaks (242.5 AFY), and Seaside (1,012 AFY). While these allocations are ostensibly sourced from the Salinas Valley Groundwater Basin, the place of use is generally within MPWMD boundaries. Until those developments are built out, MCWD could store water to build up reserves.

MPWMD may choose to do this solely as a mutual form of cooperation, although there are potential benefits to the groundwater basin, as well as to jurisdictions served by MCWD that are also constituents of MPWMD. There is a potential cost-sharing benefit to MPWMD should an

additional injection well be desired.

If MPWMD chooses to move forward, an agreement would be developed that would include terms and conditions as outlined in **Exhibit 2-A**.

RECOMMENDATION: The Committee should consider a recommendation to the Board to enter into an agreement with Marina Coast Water District for Aquifer Storage and Recovery cooperation.

EXHIBITS

2-A General Terms and Conditions of a Cooperation Agreement

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EXHIBIT 2-A

General Terms and Conditions of a Cooperation Agreement

- Recitals

- Definitions

- Injection Facilities: Injection will occur at the Santa Margarita ASR wells 1 and 2 (the "Point of Delivery.") MPWMD shall retain exclusive ownership of all injection facilities. The Parties may agree to cost-share on any future injection wells.

- Extraction Facilities: MCWD will be solely responsible for developing extraction (production) facilities, or contracting with others for extraction. MPWMD will make its Santa Margarita water treatment facility available, subject to agreement with California American Water, as a possible option for treatment if extraction configuration supports it.

- Operations: MPWMD will be responsible for injection operations under its permit with the Regional Water Quality Control Board. MCWD will be responsible for extraction and treatment as regulated by the State Water Resource Control Board Division of Drinking Water.

- Water Rights: MCWD will represent that it owns the water designated for storage and is authorized to request storage.

- Storage Rights: The Parties will endeavor to negotiate a Storage and Recovery Agreement with the Watermaster. However, if such Agreement is not forthcoming, MPWMD will store on behalf of MCWD under its rights protected by the Superior Court adjudication decision.

- Measurement: All water furnished pursuant to the Agreement shall be measured by MPWMD at the Point of Delivery. Such measurement shall be with equipment chosen by MPWMD, installed by MPWMD on MPWMD facilities, and approved by MCWD in writing. All measuring equipment shall be installed, maintained, repaired and replaced by MPWMD. Measurement records of injection will be provided by MPWMD to MCWD monthly during injection operations.

- Water Quality Guarantee: All water delivered by MCWD to MPWMD to the Point of Delivery must meet the water quality requirements set forth in Applicable Law, including the Watermaster. MCWD will provide sufficient information to demonstrate that the water quality characteristics of the water being proposed for storage will meet all of the requirements imposed by any regulatory agency or agencies and the Watermaster. If at any time MCWD fails to meet the Water Quality Guarantee, MCWD shall give MPWMD immediate notice thereof and shall promptly meet with MPWMD to discuss the circumstances of such failure and a proposed action plan for remediation. Subject to such notice, MPWMD may immediately cease injection.

- Costs: MCWD will pay all costs associated with the operation of the ASR facilities on behalf of MCWD, including administration, operation, regulatory compliance, maintenance, repair, replacement, insurance, and depreciation. MPWMD will invoice MCWD monthly during injection operations.

- Water Charges: The Parties shall not impose any fee or other expense upon each other, except as provided for under “Costs,” above. However, the Parties will have the right to purchase water from each other at a rate (charge) to be determined at such time.

- Permits: The Parties agree to cooperate in acquisition of all regulatory permits and approvals required to undertake this agreement, including CEQA.

- Planning and Construction: The Parties may cooperate and share costs of planning and construction of any additional facilities.

- Term: 20 years

- Events of Default: TBD

- Assignment: TBD

- Arbitration: TBD