SEASIDE GROUNDWATER BASIN WATERMASTER
REGULAR MEETING OF THE BOARD OF DIRECTORS

Wednesday, December 2, 2020 – 2:00pm
Draft Agenda

IN KEEPING WITH GOVERNOR NEWSOM'S EXECUTIVE ORDERS N-29-20 AND N-35-20, THE WATERMASTER REGULAR BOARD MEETING WILL NOT BE HELD IN PERSON. YOU MAY ATTEND AND PARTICIPATE IN THE MEETING BY JOINING FROM A PC, MAC, IPAD, IPHONE OR ANDROID DEVICE (NOTE: ZOOM APP MAY NEED TO BE DOWNLOADED FOR SAFARI OR OTHER BROWSERS PRIOR TO LINKING) AT THIS WEB ADDRESS:
https://us02web.zoom.us/j/89548594753?pwd=RTk2R05lSEtaeTlYbTQ1MGZ0NGRCZz09
If joining the meeting by phone, dial either of these numbers: +1 408 638 0968 US (San Jose) or **+1 669 900 6833 US (San Jose)**
If problems are encountered joining the meeting via the link above, try using the following information in your Zoom screen:
Meeting ID: 895 4859 4753 **Password:** 962368

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

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC COMMUNICATIONS

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

IV. REVIEW OF AGENDA

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

V. MINUTES - Approve Minutes of Regular Board meeting held September 2, 2020 3

VI. CONSENT CALENDAR

A. Consider Approving the Board and TAC schedule of meetings for 2021 7
B. Consider Approving Summary of Payments made August 2020 through October 2020 totaling **$33,315.50** 9
C. Consider Approving Fiscal Year 2020 Financial Reports through October 31, 2020 13
D. Receive Report on Virus Removal in Pure Water Monterey Advanced Water Treatment Plant 17

VII. ORAL PRESENTATION – Georgina King, Montgomery & Associates to make a presentation on the Seawater Intrusion Analysis Report (SIAR for 2020)

VIII. NEW BUSINESS

A. Consider Approving the Seawater Intrusion Analysis Report for 2020 and Increasing the Monitoring Frequency of Monitoring Wells FO-9 and FO-10. The Executive Summary is included in the Board agenda packet. The complete SIAR is posted on the Watermaster website at http://www.seasidebasinwatermaster.org 21

B. Discussion/Consider Adopting for Water Year 2021 a Declaration regarding the Unavailability of Artificial Replenishment Water (Water Year 2021 Production Allocations and Basin Storage Allocations attached) 27

C. Discussion/Consider Approving the Watermaster Annual Report for Water Year 2020. The body of the Draft 2020 Annual Report is included in the Board agenda packet. The complete Draft version is posted on the Watermaster website at http://www.seasidebasinwatermaster.org 33

D. Consider Approving the Professional Service Contract with Baker Manock & Jensen PC Attorneys at Law to provide legal services to Watermaster 55

IX. OLD BUSINESS

A. Direct Staff regarding obtaining additional water to recharge the Basin in order to raise groundwater levels 81

X. INFORMATIONAL REPORTS (No Action Required)

A. Technical Advisory Committee (TAC) minutes from August 12, 2020 meeting..... 83
and November 18, 2020 meeting (draft version) 87

B. Budget and Finance Committee draft minutes from November 5, 2020 meeting 99

C. Watermaster report of production of the Seaside Basin through Water Year 2020 (October 1, 2019 – September 30, 2020) 101

D. Replenishment Fund Assessment calculations and 2020 Standard Producer Assessments 102

XI. DIRECTOR'S REPORTS

XII. STAFF COMMENTS

XIII. NEXT REGULAR MEETING DATE – Wednesday, January 6, 2021 - 2:00 P.M.

XIV. ADJOURNMENT

This agenda was forwarded via e-mail to the City Clerks of Seaside, Monterey, Sand City and Del Rey Oaks; the Clerk of the Monterey Board of Supervisors, the Clerk to the Monterey Peninsula Water Management District; the Clerk at the Monterey County Water Resources Agency, Monterey One Water and the California American Water Company for posting on November 24, 2020 per the Ralph M. Brown Act, Government Code Section 54954.2(a).

SEASIDE GROUNDWATER BASIN WATERMASTER (Watermaster)
REGULAR MEETING MINUTES

Via Zoom Teleconference
September 2, 2020

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

II. ROLL CALL

City of Seaside – Mayor Ian Oglesby
Coastal Subarea Landowner – Director Paul Bruno – Chair
Laguna Seca Subarea Landowner – Director Wesley Leith
City of Sand City – Mayor Mary Ann Carbone
California American Water (CAW) – Director Christopher Cook
City of Monterey – Council Member Dan Albert
Monterey Peninsula Water Management District (MPWMD) – Director George Riley
Monterey County/Monterey County Water Resources Agency – Supervisor Mary Adams

Absent: City of Del Rey Oaks – Council Member John Gaglioti

Others Present
Watermaster Technical Program Manager – Robert Jaques
Watermaster Administrative Officer – Laura Paxton
Tim O'Halloran, Engineering Manager, CAW
Jonathan Lear, Water Resources Manager, MPWMD
Maureen Hamilton, Water Resources Engineer, MPWMD
Mike McCullough, External Affairs, Monterey One Water
Patrick Breen, Water Resources Manager, Marina Coast Water District
Aiko Yamakawa, Attorney, CAW
Alison Imamura, Associate Engineer, Monterey One Water

III. PUBLIC COMMUNICATIONS: None

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

V. APPROVAL OF MINUTES

It was moved by Director Riley and seconded by Supervisor Adams to approve the minutes of the Regular Board meeting held February 5, 2020. Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

VI. CONSENT CALENDAR

A. Consider approving Summary of Payments January through July 2020 totaling $118,824.66
B. Consider approving Fiscal (Calendar) Year 2020 Financial Reports through July 31, 2020
C. Consider approving a 2020 budget transfer of $5,000 from Monitoring and Management – Operations Fund *Evaluate Replenishment Scenarios* line-item to *Program Administration* line-item to cover anticipated additional consulting assistance needed from Montgomery & Associates in the remainder of 2020
D. Consider approving a 2020 budget transfer of $10,000 from Monitoring and Management – Operations Fund *Contingency* line-item to *Technical Program Manager* line-item
E. Direct staff to seek grant assistance to fund recharge of the Seaside Groundwater Basin

Moved by Council Member Albert and seconded by Mayor Carbone to approve the consent calendar as presented. Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

IX. ORAL PRESENTATION: None

X. NEW BUSINESS:

A. Consider approving 2021 Annual Budgets January 1, 2021 through December 31, 2021.

Ms. Paxton gave highlights of the proposed 2021 Administrative Fund Budget. Director Riley requested to be kept apprised of the process for obtaining Watermaster legal services.

Moved by Council Member Albert and seconded by Director Cook to approve the 2021 Administrative Fund Budget as presented. Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

Mr. Jaques gave highlights from his transmittal to the board on the proposed 2021 Monitoring and Management Work Plan and Operations Fund Budget.

Moved by Director Riley and seconded by Council Member Albert to approve, as presented, the 2021 Monitoring and Management Work Plan; Operations Fund Budget; and Capital Fund Budget (unfunded). Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Mayor Oglesby – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

B. Consider approving Professional Service Contracts for Fiscal Year 2021.

Mr. Jaques gave highlights from his transmittal to the board.

Moved by Mayor Carbone and seconded by Supervisor Adams to approve, as presented, the 2021 Professional Services Contracts:

1. **Two Contracts with Montgomery & Associates, Inc.: $17,320 for providing ongoing and as-requested general hydrogeologic consulting services; and $26,310 to prepare the Seawater Intrusion Analysis Report (SIAR) for 2021**
2. **Two Contracts with MPWMD: $51,118 and $3,915, both pertaining to monitoring and other 2021 M&MP work** *(with correction to "Detailed Scope of work for RFS No. 2021-01," changing the date in the first sentence to September 2, 2020)*
3. **Two Contracts with Martin Feeney: $4,000 to provide on-call/as-requested hydrogeologic consulting services; and $18,000.56 to perform 2021 Sentinel Wells induction logging** *(with correction to "Detailed Scope of work for RFS No. 2021-01," changing the date in the first sentence to September 2, 2020)*
4. **One Contract with Todd Groundwater: $4,000 to provide on-call/as-needed hydrogeologic consulting services in 2021.**

Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Mayor Oglesby – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

C. Consider Approving the Proposed Replenishment Assessment Unit Costs for Natural Safe Yield and Operating Yield Overproduction for Water Year October 1, 2020 through September 30, 2021.

Mr. Jaques gave highlights from his transmittal to the board. Information was not available for all current project costs; adjustments may be needed once current information is received.

Moved by Director Riley and seconded by Council Member Albert to adopt a Replenishment Assessment Natural Safe Yield Unit Cost of $2,947 per acre-foot and an Operating Yield Unit Cost of $737 per acre-foot for Water Year 2021. Director Cook – Aye; Council Member Albert – Aye; Mayor Carbone – Aye; Mayor Oglesby – Aye; Supervisor Adams – Aye; Director Riley – Aye; Director Bruno – Aye; Director Leith – Aye.

D. Discussion of Projected Impacts to Seaside Basin Groundwater Levels Resulting from the Monterey Peninsula Water Supply Project or an Expansion of the Pure Water Monterey Project.

Mr. Jaques gave highlights from the corresponding board transmittal and summarized information from the attachments: a staff report titled *Impacts of Possible Groundwater Replenishment Scenarios*; and excerpts from prior reports and agenda transmittals. He found that previous modeling indicates injecting on the order of 1,000 acre-feet per year of additional water into the Seaside Basin for 25 years, along with the existing original Pure Water Monterey (PWM) Project and either the desalination plant or the PWM Expansion Project, may be necessary to achieve protective groundwater elevations at all Basin locations within 25 years.

Director Riley stated the purpose of developing water supplies is to provide potable water to the public, not to protect the Basin. Watermaster is challenged with trying to protect the Basin by leveraging developing water supply sources. Director Cook noted PWM, Aquifer Storage and Recovery (ASR), and PWM Expansion (if completed) all store water in the Basin. He felt prevention of seawater intrusion from contaminating stored potable water disallows prioritizing supply over Basin health. Director Bruno felt Seaside Basin protection would not be addressed—especially since the Basin and its damage is underground and cannot be seen by the public—until potable supply need is fulfilled. Therefore, any form of supply is important in addressing Basin health.

Director Riley encouraged a discussion on strategy of use if projects produce more than is demanded. There would, however, be a cost for the "extra" water: Watermaster should consider fronting the cost of protective water and develop a financial plan, or at the least have staff investigate financing options. Council Member Albert felt Watermaster's charge was not financial but managerial, oversight of the Basin to avoid harm.

Director Riley noted his support of a desalination plant 15+ years from now. Supervisor Adams noted her support of a desalination project developed decades from now on a regional scale that would benefit the entire County.

Mr. Jaques reminded the board that the Decision allows CAW credit against its Replenishment Assessment (RA) balance for funds expended to develop a water supply project. Once the desalination plant is operational, regardless of the credit on the RA books, CAW is contracted with Watermaster to pay back to the Basin, 700 AFY over 25 years, all the water it has overproduced since conception of Watermaster in 2006. This pay back would be in jeopardy if the CAW desalination plant is not built.

XI. OLD BUSINESS: None

XII. INFORMATIONAL REPORTS:

- **A.** Technical Advisory Committee minutes from March 11, June 10, and July 8, 2020 meetings
- **B.** Budget and Finance Committee draft minutes from August 18, 2020 meeting
- **C.** Watermaster report of production of the Seaside Basin through the 3rd quarter of Water Year 2020 (October 1, 2019 – June 30, 2020)
- **D.** Correspondence expressing support of the Monterey Peninsula Water Supply Project

XIII. DIRECTOR'S REPORTS: None

XIV. STAFF COMMENTS: Mr. Jaques inquired whether the level of detail in the agenda packets is what the board desires, or rather summaries with links to voluminous documents provided on the Watermaster website. Director Bruno would like the transmittals/staff reports provided as print-alone documents with back up documents provided for non-printed reading. Director Cook requested TAC information that comes before the board be 5-minute presentations with simplified graphs and charts.

XV. NEXT MEETING DATE: The next meeting of the Watermaster board is scheduled for Wednesday, October 7, 2020.

XVI. There being no further business, Chair Bruno adjourned the meeting at 3:14 p.m.

SEASIDE GROUNDWATER BASIN
WATERMASTER

2021
SCHEDULE OF REGULAR MEETINGS

	BOARD	TAC
JANUARY	6	13
FEBRUARY	3	10
MARCH	3	10
APRIL	7	14
MAY	5	12
JUNE	2	9
JULY	7	14
AUGUST	4	11
SEPTEMBER	1	8
OCTOBER	6	NONE
NOVEMBER	3	10
DECEMBER	1	8

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Laura Paxton, AO

DATE: December 2, 2020

SUBJECT: Summary of Payments made from August through October 2020

RECOMMENDATIONS:

Consider approving payment of bills submitted and authorized to be paid August - October 2020

Summary of Payments Made August 2020

Paxton Associates (Administrative Officer (AO))

July 26, 2019 through August 25, 2020 — 51 — **$ 5,100.00**

Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Discuss CAW Bishop wheeling. Schedule Budget/Finance Committee teleconference meeting; prepare meeting transmittals/packet; attend 8/18 meeting; prepare minutes. Prepare draft 2021 Admin and Replenishment budgets. Prepare for/attend 8/12 TAC teleconference meeting. Draft agenda for 9/2 board meeting and packet. Pasadera inquiry re: purchase of property. MCWD stakeholder correspondence & compile list of SGMA committees where Jaques represents Watermaster. Norgaard call re: allocation at new construction meters. Collect/follow up/post production and level reporting. Routinely picked up mail from PO Box; reconciled accounts to the City of Seaside Watermaster accounts; prepared financial reports; processed invoices; reviewed and posted items to web site.

Robert Jaques (Technical Program Manager)

August 1, 2020 through August 31, 2020 — 29.5 — **4,425.00**

Responded to emails, telephone inquiries, and other correspondence on a variety of Watermaster issues. Prepare TAC 8/12 meeting agenda packet; attend TAC meeting; prepare minutes. Prepare for/attend 8/18/20 Budget/Finance Committee meeting. Prepare for/attend SVBGSA Advisory/TAC meetings & webinar 8/10, 8/20 & 8/24. Prep/attend MCWDGSA stakeholder meeting 8/25. Prepare 9/2 board meeting transmitals. Provide edits to re: CAW MPWSP per board chair request. review legal services RFP. PWM WQ & Ops Committee meeting 8/12. Prepare 2021 Ops budget/RFSes. Update 2021 RA unit cost. Review PWM virus removal. Prepare info re: MPWSP for Herald commentary per board chair. Review Parks&Rec right of entry for WM induction logging; amend Feeney contracts to meet requirements. Review Monterey Subbasin GSP chapters 1-4; send commnets to MCWD. Review CAW advice letter to CPUC and respond.

Montgomery & Associates (Technical Consultant)

July 1, 2020 - August 31, 2020 — 1.0 — **210.00**

RFS 2020-01General Hydrogeologic Consulting

Prepare for Monterey Subbasin Committee meeting and September presentation by Seaside Watermaster; and review Mission Memorial well's importance as a monitoring well as a data point for the SIAR.

Total for August 2020 — **$ 9,735.00**

Summary of Payments Made September 2020

Paxton Associates (Administrative Officer (AO))

August 26, 2020 through September 25, 2020	33.5	**$**	**3,350.00**

Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Compile/distribute agenda packet for 9/2 board meeting; attend meeting; prepare minutes. Follow up w/Mission Memorial data collection payment. Finalize legal RFP recipient list; distribute via email and regular mail. Provide CAW 700AF repayment agreements to Jaques. Cancel 10/7 board meeting. Collect/follow up/post production and level reporting. Routinely picked up mail from PO Box; reconciled accounts to the City of Seaside Watermaster accounts; prepared financial reports; processed invoices; reviewed and posted items to web site.

Robert Jaques (Technical Program Manager)

September 1, 2020 through September 30, 2020	18.5		**2,775.00**

Responded to emails, telephone inquiries, and other correspondence on a variety of Watermaster issues. Prepare board meeting agenda transmittals. Prep/attend 9/2 board meeting. Prepare for/attend SVBGSA Advisory/TAC meetings 9/3, 9/4, 9/28, 9/30. PWM WQ & Ops Committee meeting 9/9. Review CAW RA credit agreement. Review/sign revised State Parks&Rec right of entry permit for induction logging access. Prepare monthly summary report to board re: MCWDGSA & M1W PWM meetings. Prepare remarks for CAW CCC meeting. Provide info to CAW re: replenishment water needed to protect basin against SWI.

Montgomery & Associates (Technical Consultant)

September 1, 2020 through September 30, 2020	4.0		**800.00**
RFS 2020-01General Hydrogeologic Consulting			

Revise slides for Monterey Subbasin TAC meeting; plan Zoom call logistics with B. Jaques and SVGSA staff; and prepare for and present at Monterey Subbasin TAC meeting.

Total for September 2020	**$**	**6,925.00**

Summary of Payments Made October 2020

Paxton Associates (Administrative Officer (AO))

September 26, 2020 through October 25, 2020	45.5	**$**	**4,550.00**

Responded to telephone inquiries, e-mail, and other correspondence as needed regarding the Seaside Basin. Follow up w/City of Sand City re: data collection payment. Process collection services payments from Sand City & Mission; deposit at City of Seaside. Water production/levels/quality ot Lear. Discuss carryover basis w/Stoldt. CAW conference call re: long-term allocation issues. Locate MPWMD 1,494 calculation document. Comprehensive website update. Collect legal proposals; develop recruitment process. SNG quality reporting issue & correspondence w/Ghandour. Cancel 11/4 board meeting. Collect/follow up/post production and level reporting for year end; add PWM injection/extraction to report. Routinely picked up mail from PO Box; reconciled accounts to the City of Seaside Watermaster accounts; prepared financial reports; processed invoices; reviewed and posted items to web site.

Robert Jaques (Technical Program Manager)

October 1, 2020 through October 31, 2020	31.5		**4,725.00**

Responded to emails, telephone inquiries, and other correspondence on a variety of Watermaster issues. Begin preparing 2020 Annual Report. Prepare for/attend SVBGSA Advisory/TAC meetings 10/15, 10/26. Finalize 2021 contracts. Telecon CAW re: long-term allocation/ramp down issues; prepare background info. Review originating court Decision documents re: allocations. Review SVBGSA GSP mapping documents. Provide TAC minutes to AO for web posting. Review CAW MPWSP documents. Prepare monthly summary report to board re: SVBGSA meetings; submit completed survey to SVBGSA. Review legal services proposals and discuss w/AO.

Montgomery & Associates (Technical Consultant)

October 1, 2020 - October 31, 2020	43.5		**5,900.00**
RFS 2020-012 Seawater Intrusion Analysis Report			

Request groundwater level, quality and production data from MPWMD, L. Paxton, Fort Ord Reuse Authority, and MCWRA; follow up on missing data; compile all data in correct formats; plot hydrographs, piper and stiff diagrams, and chemographs; correct transducer data for drift; and senior review of water quality data.

Martin B. Feeney, PG, CHg - Consulting Hydrogeologist

March 15, 2020 through November 4, 2020 RFS 2020-02	6		**1,200.00**

Hydrogeologic consulting: Discussions with State Parks/MCWD about access. Preparation of memo regarding induction tool change.

Cypress Pacific Investors LLC (Calabrese)

Refund of well quality sampling/analysis fee - well not producing in WY 2020		**280.50**
Total for October 2020	**$**	**16,655.50**
Grand Total August - October 2020	**$**	**33,315.50**

Seaside Groundwater Basin Watermaster

Budget vs. Actual Administrative Fund

Fiscal Year (January 1 - December 31, 2020)
Balance through October 31, 2020

	2020 Adopted Revised Budget	Contract Amount	Year to Date Revenue / Expenses
Available Balances & Assessments			
Dedicated Reserve	-		-
FY (Rollover)	37,000.00		37,097.87
Admin Assessments	63,000.00		63,000.00
Available	**100,000.00**		**100,097.87**
Expenses			
Contract Staff	50,000.00	50,000.00	35,000.00
Legal Advisor	25,000.00		
Filing fees and postage			-
Total Expenses	**75,000.00**	**50,000.00**	**35,000.00**
Total Available	25,000.00		
Dedicated Reserve	25,000.00		25,000.00
Net Available	**-**		**40,097.87**

Seaside Groundwater Basin Watermaster 12/2/20

Budget vs. Actual Monitoring & Management - Operations Fund

Fiscal Year (January 1 - December 31, 2020)

Balance through October 31, 2020

	2020 Amended Budget	Contract Encumbrance	Year to Date Revenue/Expenses
Available Balances & Assessments			
Operations Fund Assessment	$ 164,000.00	$ -	$ 163,966.99
Pass Through	-	3,915.00	1,024.50
Cost Share Reimbursement	-	-	-
FY 2019 Rollover	51,967.00	-	168,250.62
Total Available	**$ 215,967.00**	**$ 3,915.00**	**$ 333,242.11**
Appropriations & Expenses			
GENERAL			
Technical Project Manager*	$ 60,000.00	$ 60,000.00	$ 44,625.00
Contingency @ 10% (not including TPM)	5,088.00	-	-
Total General	**$ 65,088.00**	**$ 60,000.00**	**$ 44,625.00**
CONSULTANTS (Montgomery; Web Site Database)			
Program Administration	$ 13,000.00	$ 15,400.00	$ 12,670.00
Production/Lvl/Qlty Monitoring	2,400.00		
Basin Management	30,000.00		-
Seawater Intrusion Analysis Report	24,130.00	24,130.00	5,900.00
Total Consultants	**$ 69,530.00**	**$ 39,530.00**	**$ 18,570.00**
MPWMD			
Production/Lvl/Qlty Monitoring	$ 52,906.00	52,906.00	15,486.00
Pass Through 2018	-	3,915.00	1,116.00
Basin Management	-		-
Seawater Intrusion	1,192.00	1,192.00	-
Direct Costs	-	-	-
Total MPWMD	**$ 54,098.00**	**$ 58,013.00**	**$ 16,602.00**
CONTRACTOR (Martin Feeney)			
Hydrogeologic Consulting Services	$ 4,000.00	4,000.00	1,200.00
Production/Lvl/Qlty Monitoring	19,251.00	19,250.56	9,985.66
	$ 23,251.00	**$ 23,250.56**	**$ 11,185.66**
CONTRACTOR (Todd Groundwater)			
Hydrogeologic Consulting Services	**$ 4,000.00**	**$ 4,000.00**	-
Total Appropriations & Expenses	**$ 215,967.00**	**$ 184,793.56**	**$ 90,982.66**
Total Available	**-**		**242,259.45**

*As amended 9/2/20 $10,000 budget transfer from Contingency to Technical Program Manager

Seaside Groundwater Basin Watermaster — **ITEM VI.B.**

Replenishment Fund — 12/2/20

Water Year 2020 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2020) — Page 1

Balance through October 31, 2020

Replenishment Fund	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Assessments:	WY 05/06	WY 06/07	WY 07/08	WY 08/09	WY 09/10	WY 10/11	WY 11/12	WY 12/13	WY 13/14
Unit Cost:	$1,132 / $283	$1,132 / $283	$2,485 / 621.25	$3,040 / $760	$2,780 / $695	$2,780 / $695	$2,780 / $695	$2,780 / $695	$675.50
Cal-Am Water Balance Forward	**$ -**	**$ 1,641,004**	**$ 4,226,710**	**$ (2,871,690)**	**$ (2,839,939)**	**$ (3,822,219)**	**$ (6,060,164)**	**$ (8,735,671)**	**$ (6,173,771)**
Cal-Am Water Production	**3710.0 AF**	**4059.9 AF**	**3862.9 AF**	**2966.0 AF**	**3713.5 AF**	**3416.0 AF**	**3070.9 AF**	**3076.6 AF**	**3232.1 AF**
Exceeding Natural Safe Yield Considering Alternative Producers	2,106,652	2,565,471	5,199,014	3,773,464	4,112,933	3,187,854	2,280,943	2,380,842	2,790,539
Operating Yield Overproduction Replenishment	-	20,235	8,511	-	-	-	154,963	181,057	281,012
Total California American	**$ 2,106,652**	**$ 2,585,706**	**$ 5,207,525**	**$ 3,773,464**	**$ 4,112,933**	**$ 3,187,854**	**$ 2,435,907**	**$ 2,561,899**	**$ 3,071,550**
CAW Credit Against Assessment	(465,648)		(12,305,924)	$ (3,741,714)	(5,095,213)	(5,425,799)	(5,111,413)	-	-
CAW Unpaid Balance	***$ 1,641,004***	***$ 4,226,710***	***(2,871,690)***	***$ (2,839,939)***	***$ (3,822,219)***	***$ (6,060,164)***	***$ (8,735,671)***	***$ (6,173,771)***	***$ (3,102,221)***
City of Seaside Balance Forward	**$ -**	**$ 243,294**	**$ 426,165**	**$ 1,024,272**	**$ 1,619,973**	**$ 891,509**	**$ (110,014)**	**$ (773,813)**	**$ (1,575,876)**
City of Seaside Municipal Production	**332.0 AF**	**387.7 AF**	**294.3 AF**	**293.4 AF**	**282.9 AF**	**240.7 AF**	**233.7 AF**	**257.7 AF**	**223.6 AF**
Exceeding Natural Safe Yield Considering Alternative Producers	219,689	174,082	402,540	465,300	314,721	141,335	163,509	236,782	142,410
Operating Yield Overproduction Replenishment	12,622	85	4,225	16,522	20,690	-	1,689	27,007	3,222
Total Municipal	232,310	174,167	406,764	481,823	335,412	141,335	165,198	263,788	145,631
City of Seaside - Golf Courses									
Exceeding Natural Safe Yield - Alternative Producer	-	-	131,705	69,701	-	-	-	-	-
Operating Yield Overproduction Replenishment	-	-	32,926	17,427	-	-	-	-	-
Total Golf Courses	-	-	164,631	87,128	-	-	-	-	-
Total City of Seaside*	**$ 232,310**	**$ 174,167**	**$ 571,395**	**$ 568,951**	**$ 335,412**	**$ 141,335**	**$ 165,198**	**$ 263,788**	**$ 145,631**
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737				
In-lieu Credit Against Assessment	-		-	$ -	(1,079,613)	(1,142,858)	(828,996)	(1,065,852)	(1,459,080)
City of Seaside Unpaid Balance	***$ 243,294***	***$ 426,165***	***$ 1,024,272***	***$ 1,619,973***	***$ 891,509***	***$ (110,014)***	***$ (773,813)***	***$ (1,575,876)***	***$ (2,889,325)***
Total Replenishment Fund Balance	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**	**$ (5,991,546)**
Replenishment Fund Balance Forward	-	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**
Total Replenishment Assessments	2,349,946	2,768,576	5,805,632	4,369,165	4,464,082	3,329,189	2,601,104	2,825,688	3,217,182
Total Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(5,940,409)	(1,065,852)	(1,459,080)
Grand Total Fund Balance	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**	**$ (5,991,546)**

Seaside Groundwater Basin Watermaster

Replenishment Fund

Water Year 2020 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2020)

Balance through October 31, 2020

2015	2016	2017	2018	2019	2020	Totals WY 2006 Through 2020	Budget WY 2021	Projected Totals Through WY 2021
WY 14/15	WY 15/16	WY 16/17	WY 17/18	WY 18/19	WY 19/20		WY 20/21	
$675.50	$675.50	$2,872 / $718	$2,872 / $718	$2,872 / $718	$2,872 / $718		$2,947 / $737	
$ (3,102,221)	**$ (676,704)**	**$ (676,704)**	**$ (491,747)**	**$ (48,797,949)**	**$ (47,979,851)**		**$ (46,855,120)**	
2,113,414	-	184,957	1,075,995	818,097	959,859	$ 33,550,035	100,000	$ 33,650,035
312,103	-	-	-	-	164,872	1,122,753	20,000	1,142,753
$ 2,425,516		**$ 184,957**	**$ 1,075,995**	**$ 818,097**	**$ 1,124,731**	**$ 34,672,787**	**$ 120,000**	**$ 34,792,787**
-	-		(49,382,196)	-	-	(81,527,907)	-	(81,527,907)
$ (676,704)	***$ (676,704)***	***$ (491,747)***	***$ (48,797,949)***	***$ (47,979,851)***	***$ (46,855,120)***	***$ (46,855,120)***	***$ (46,735,120)***	***$ (46,735,120)***
$ (2,889,325)	**$ (3,346,548)**	**$ (3,232,420)**	**$ (3,142,500)**	**$ (3,022,249)**	**$ (2,919,806)**		**$ (2,802,831)**	
223.6 AF	**185.01 AF**							
69,630	102,330	87,512	93,225	79,893	92,089	$ 2,785,045	100,000	$ 2,885,045
38	11,959	2,409	27,026	22,550	24,886	174,929	10,000	184,929
69,667	114,290	89,920	120,251	102,443	116,975	2,959,974	110,000	3,069,974
-	-	-	-	-	-	201,406	-	201,406
-	-	-	-	-	-	50,353	-	50,353
-	-	-	-	-	-	251,759	-	251,759
$ 69,667	**$ 114,290**	**$ 89,920**	**$ 120,251**	**$ 102,443**	**$ 116,975**	**$ 3,211,733**	**$ 110,000**	**$ 3,321,733**
						88,887		88,887
(526,890)	(162)	-	-	-	-	(6,103,451)	-	(6,103,451)
$ (3,346,548)	***$ (3,232,420)***	***$ (3,142,500)***	***$ (3,022,249)***	***$ (2,919,806)***	***$ (2,802,831)***	***$ (2,802,831)***	***$ (2,692,831)***	***$ (2,692,831)***
$ (4,023,252)	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**	**$ (49,657,951)**	**$ (49,657,951)**	**$ (49,427,951)**	**$ (49,427,951)**
$ (5,991,546)	**$ (4,023,252)**	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**		**$ (49,657,951)**	
2,495,183	114,290	274,877	1,196,246	920,540	1,241,706	37,973,407	230,000	**38,203,407**
(526,890)	(162)	-	(49,382,196)	-	-	(87,631,358)	-	**(87,631,358)**
$ (4,023,252)	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**	**$ (49,657,951)**	**(49,657,951)**	**$ (49,427,951)**	**$ (49,427,951)**

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: December 2, 2020

SUBJECT: Virus Removal in the Pure Water Monterey (PWM) Advanced Water Treatment Plant (AWT)

- -

RECOMMENDATIONS:
This is provided for information only. No action is required.

BACKGROUND:
The PWM AWT is producing highly treated recycled water that is being injected into the Seaside Basin for future removal by Cal Am production wells for use in serving its customers. With the public's concern about Corona virus transmission, I performed a review of the virus removal effectiveness of the PWM AWT. This agenda transmittal provides information on the findings of this review.

DISCUSSION
Under the State's groundwater replenishment regulations, projects such as PWM must submit an Engineering Report that provides a detailed description of how the AWT will be operated and demonstrate how it will comply with those regulations. Below are excerpts from that Engineering Report pertaining to the control (reduction) of pathogenic microorganisms including viruses.

The State's virus reduction requirement for groundwater replenishment projects is 12-logs or more of reduction. In order to achieve these the AWT must utilize at least three separate treatment processes. Each treatment process is only allowed to receive up to a 6-log reduction credit, and at least three processes must achieve at least a 1.0-log reduction credit. Additionally, up to 1-log of virus removal credit can be earned for each month the water is retained underground.

The AWT facility treatment train includes ozone, membrane filtration (MF), reverse osmosis (RO), and ultraviolet with hydrogen peroxide advanced oxidation process (UV/H_2O_2). The log reduction values achieved by each unit process are described below.

Ozone
Ozone provides pathogen inactivation. Although ozone has a disinfection capability, no log reduction value credit is being pursued for the ozone process at this time. If additional pathogen inactivation credit is needed for redundancy, ozone reduction credit may be pursued in the future.

Membrane Filtration
Although tests confirm that virus removal of between 0.5 to 1-log reduction is typical of this process, no credit is currently being pursued for virus removal for the AWT.

Reverse Osmosis

The reverse osmosis process performance for pathogen removal will be confirmed by measuring a surrogate parameter (i.e., conductivity or total dissolved solids) that demonstrates the reverse osmosis membrane integrity. Log reduction values of these parameters are used as a conservative estimate of pathogen removal.

Most potable reuse advanced treatment facilities measure total organic carbon or electrical conductivity (an indicator of total dissolved solids) reduction as surrogates for pathogen log reduction. However, studies at the City of San Diego's North City Demonstration Pure Water Facility showed that strontium rejection provided a conservative assessment of virus rejection.

PWM will monitor rejection of all three surrogate parameters-strontium, total organic carbon, and conductivity-across the reverse osmosis membranes, and apply a three-tiered approach for calculating applicable virus log reduction for the reverse osmosis system. The first tier of pathogen credit will be based on strontium rejection. The second tier of pathogen credit will be based on total organic carbon rejection. The third tier of pathogen credit will be based on continuous on-line electrical conductivity monitoring. Log reduction will be reported for all three surrogates and the surrogate that provides the largest log reduction will be used for calculating pathogen log reduction values. The expected minimum pathogen log reduction value for each surrogate is (1) at least 2.5-log for strontium rejection, (2) 1.5-log for total organic carbon rejection, and (3) 1.0-log for electrical conductivity rejection. The Engineering Report provides justification for use of this approach.

Advanced Oxidation

The advanced oxidation process using ultraviolet and hydrogen peroxide had its pathogen removal effectiveness determined through testing. The virus log removal credits being pursued for this process are 6-logs.

U.S. EPA's *Ultraviolet Disinfection Guidance Manual* specifies the ultraviolet dose requirements for achieving up to 4-logs of virus removal. The AWT's ultraviolet dose will be more than six times the dose listed in that manual to achieve 4-logs of removal, and will easily be able to achieve a 6-log removal.

Chlorine Disinfection

Chloramines are used for disinfection. At this time no pathogen inactivation credit for final disinfection with chlorine is being pursued. However, PWM may pursue disinfection credit in the future.

Subsurface Pathogen Reduction Credit

The AWT qualifies for a virus reduction credit associated with the time that product water remains underground (from injection to extraction). Preliminary estimates suggest that product water injected into the Santa Margarita aquifer via deep injection wells will remain underground for at least one year prior to extraction. Product water injected in the Paso Robles aquifer via the vadose zone wells will remain underground even longer. In order to evaluate the underground retention time under the full range of dynamic hydraulic conditions at the injection facilities area, a groundwater flow model was applied to the analysis.

When a numerical model such as the Watermaster's groundwater model is used to demonstrate the underground retention time, the reduction credit has to be reduced to only 0.5-log removal per month to account for uncertainty in the method of analysis.

Based on the results of the modeling, injected water will remain in the groundwater system for at least six months before extraction. Accordingly, a 5.4-log virus reduction credit for the underground retention time is being pursued. This is because the fastest travel time between a point of injection and the nearest extraction well was found by the model to be approximately 10.8 months. With a virus reduction credit of 0.5-log per month, a 5.4-log reduction credit is derived. The analysis that supports the 5.4-log virus reduction credit is highly conservative.

In order to validate a six-log virus reduction credit, a tracer test is needed. Within the first three months after project start up, the underground retention time will be confirmed through tracer testing. If tracer testing shows that the water will remain underground for 12 or more months before extraction, a 6-log virus reduction credit may be requested at that time. Tracer testing had been started and was still in progress when this Agenda Transmittal was prepared.

AWT Virus Removal Effectiveness Summary

Process	Treatment Confirmation	Virus Log Reduction Credit
Ozone	Credit not pursued at this time	0
Microfiltration	Credit not pursued at this time	0
Reverse Osmosis	Strontium, total organic carbon, and conductivity testing	2.5
Advanced Oxidation Process	Ultraviolet dose monitoring	6
Chlorine Disinfection	Credit not pursued at this time	0
Underground Residence Time in Aquifer	10.8-month underground retention time	5.4
Total Expected Credit		**13.9**
Required Credit		**12**

FINDINGS

Based on this Engineering Report, the PWM AWT will exceed the State's groundwater replenishment requirements for virus removal.

The monitoring reports filed with the Regional Water Quality Control Board by M1W to demonstrate compliance have shown that the Virus Log Reductions actually achieved are always well over 12, and normally close to 13.

ITEM VIII.A
12/2/20

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: December 2, 2020

SUBJECT: Consider Approving the Seawater Intrusion Analysis Report (SIAR) for WY 2020, and Increasing the Monitoring Frequency of Monitoring Wells FO-9 and FO-10

- -

RECOMMENDATIONS:
It is recommended that the Board approve:

1. The Seawater Intrusion Analysis Report for WY 2020,
2. Performing quarterly monitoring of Monitoring Wells FO-9 and FO-10, and
3. A budget transfer from the Monitoring and Management Program Contingency line-item not-to-exceed $4,000 to cover the costs of this additional monitoring

BACKGROUND:
Montgomery & Associates (formerly HydroMetrics) has prepared the Seawater Intrusion Analysis Report (SIAR) for Water Year 2020. The Executive Summary from the WY 2020 SIAR is attached. The complete SIAR is lengthy, so rather than including it in this agenda packet it has been posted on the Watermaster's website so Board members and members of the public wishing to review the entire document can do so.

The SIAR examines the "health" of the Basin with regard to whether or not there are any indications that seawater intrusion is either occurring or is imminent. At its November 18, 2020 meeting the TAC reviewed a Draft version of the 2020 SIAR and recommended some revisions to it before it was sent to the Board for approval. The Final version that is posted on the Watermaster's website, and the Executive Summary that is attached, reflect these revisions.

DISCUSSION
Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. In Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing increasing chloride concentrations. One of these is north of and outside of the Seaside Basin (monitoring well FO-10 Shallow), and the other is just inside the northern boundary of the Seaside Basin in the Northern Coastal Subarea (monitoring well FO-9 Shallow). However, none of the Watermaster's Sentinel Wells, located closer to the coastline than monitoring wells FO-9 and FO-10, detected seawater intrusion in the shallow aquifer in their induction logs. The sampling frequency for monitoring wells FO-9 Shallow and FO-10 Shallow should be increased to quarterly to establish if their chloride concentrations are true trends, or anomalous. Since the Sentinel Wells have not detected an increase in salinity, if seawater is starting to impact the FO-9 Shallow and FO10-Shallow monitoring wells, it may be coming from the north

out of the Monterey Subbasin where there is already seawater intrusion, rather than directly inland from the coastline of the Seaside Basin.

Seawater intrusion is not occurring in any other location in the Seaside Basin being monitored. However, both the Paso Robles and Santa Margarita aquifers, the primary water production aquifers in the basin, are at risk of seawater intrusion, because portions of both of those aquifers have groundwater levels that are below sea level.

Due to its distance from the coast, seawater intrusion is not an issue of concern in the Laguna Seca subarea. However, groundwater levels in the eastern Laguna Seca subarea have historically been declining in both the shallow and deep aquifers despite triennial reductions in allowable pumping. The cause of the declines is due in part to the Natural Safe Yield of the subarea being too high and in part due to the influence of wells to the east of the Seaside Basin. Since 2014, however, the rate of decline is less and now appears close to stabilizing.

FISCAL IMPACTS:

Currently, Monitoring Well FO-9 is monitored twice per year and Monitoring Well FO-10 is monitored once per year. There will be labor and laboratory costs associated with increasing the monitoring frequency of these wells to a quarterly basis. These costs are expected to be less than $2,000 during WY 2021. In addition, a well sampling pump will need to be installed at Monitoring Well FO-10 at a cost of approximately $2,000. Therefore, the total Fiscal Impact of performing this additional monitoring should be not more than $4,000. This can be funded by a transfer from the 2021 Monitoring and Management Program's Contingency line-item which has $20,370 in it.

ATTACHMENTS:

Executive Summary of the WY 2020 Seawater Intrusion Analysis Report
(The complete SIAR is posted on the Watermaster's website at http://www.seasidebasinwatermaster.org/, for review by those who wish to examine the entire document, including all of its attachments.)

Executive Summary

This report fulfills part of the annual reporting requirements contained in the Seaside Groundwater Basin Adjudication (California American Water v. City of Seaside, Monterey County Superior Court, Case Number M66343). The annual report addresses the potential for, and extent of, seawater intrusion in the Seaside Groundwater Basin.

Seawater intrusion may occur under basic hydrogeologic conditions as a wedge beneath fresh groundwater, or in more complex hydrogeology with various intrusion interfaces among the different aquifers. Continued pumping in excess of recharge and fresh water inflows, coastal groundwater levels well below sea level, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin.

Seawater intrusion is typically identified through regular chemical analyses of groundwater which can identify geochemical changes in response to seawater intrusion. No single analysis definitively identifies seawater intrusion, however by looking at various analyses we can ascertain when fresh groundwater mixes with seawater. At low chloride concentrations, it is often difficult to identify incipient seawater intrusion. This is due to the natural variation in fresh water chemistry at chloride concentrations below 1,000 milligrams per liter (mg/L). Mixing trends between groundwater and seawater are more easily defined when chloride concentrations exceed 1,000 mg/L. Common geochemical indicators of seawater intrusion are cation and anion ratios, chloride trends, sodium/chloride ratios, and electric induction logging.

Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. In Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing increasing chloride concentrations. One of these is north of and outside of the Seaside Basin (monitoring well FO-10 Shallow), and the other is just inside the northern boundary of the Seaside Basin in the Northern Coastal Subarea (monitoring well FO-9 Shallow). However, none of the Watermaster's Sentinel Wells, located closer to the coastline than monitoring wells FO-9 and FO-10, detected seawater intrusion in the shallow aquifer in their induction logs. The sampling frequency for monitoring wells FO-9 Shallow and FO-10 Shallow should be increased to quarterly to establish if their chloride concentrations are true trends, or anomalous. Since the Sentinel Wells have not detected an increase in salinity, if seawater is starting to impact the FO-9 Shallow and FO10-Shallow monitoring wells, it may be coming from the north out of the Monterey Subbasin where there is already seawater intrusion, rather than directly inland from the coastline of the Seaside Basin. Although seawater intrusion is not occurring in any other location in the Seaside Basin being monitored, there are ongoing detrimental groundwater conditions that pose a potential threat of seawater intrusion as described below.

Both the Paso Robles and Santa Margarita aquifers in the Seaside Groundwater Basin are susceptible to seawater intrusion. The Paso Robles aquifer is in direct hydrogeologic connection with Monterey Bay, and seawater will eventually flow into it if inland groundwater levels continue to be below sea level. The Santa Margarita aquifer may not be in direct connection with Monterey Bay. If that is the case, then seawater intrusion will take longer to appear because the pathway for seawater into that aquifer will be longer as seawater would need to move through the clay rich deposits adjacent to that aquifer before entering the aquifer itself and thereafter make its way into Santa Margarita production wells. It is not if, but when, seawater intrusion into these aquifers will occur if protective water elevations are not achieved.

- Deep groundwater in the Northern Coastal subarea remains below sea level. The Water Year 2020 2nd quarter (winter/spring) deep aquifer coastal groundwater levels are more than 20 feet below sea level and the 4th quarter (summer/fall) levels are more than 30 feet below sea level. The pumping depression in the Northern Coastal subarea shrunk slightly because CAWC pumped almost 800 acre-feet less than last year in the subarea.
- Groundwater levels remain below protective elevations in all deep target monitoring wells (MSC Deep, PCA-W Deep, and sentinel well SBWM-3). Currently, MSC Shallow and PCA-W Shallow are two of three shallow wells with groundwater levels below their respective protective elevations.

Data that indicate that seawater intrusion is not occurring are described in the bulleted items below:

- Most groundwater samples for Water Year 2020 from depth-discreet monitoring wells generally plot in a single cluster on Piper diagrams, with no water chemistry changes towards seawater. Increased chloride in recent samples at FO-9 Shallow and FO-10 Shallow has shifted how these wells plot on Piper diagrams towards a chlorinated water type, however they still generally plot between sodium-chloride and sodium-bicarbonate type waters.
- In some production wells, groundwater quality plots differently on Piper diagrams than the monitoring wells. This may be a result of mixed water quality from both shallow and deep zones in which these wells are perforated. None of the production wells' groundwater qualities are indicative of seawater intrusion.
- None of the Stiff diagrams for monitoring and production wells show the characteristic chloride spike that typically indicates seawater intrusion in Stiff diagrams. The Stiff diagrams for monitoring wells FO-9 Shallow and FO-10 Shallow show a slightly different shape than other shallow wells because of their increased chloride.
- Chloride concentration trends were stable for most monitoring wells, except FO-9 Shallow and FO-10 Shallow. Monitoring well FO-09 Shallow has experienced increased chloride concentrations in all three samples taken during Water Year 2020, in addition to increases observed in the three samples taken last water year. The increase in concentrations between Water Years 2019 and 2020 is around 13 mg/L, which is greater than fluctuations observed historically over its period of record. Monitoring well FO-10 Shallow experienced a 48 mg/L increase in chloride concentrations in the sample taken this year. The elevated concentrations in themselves do not indicate seawater intrusion, however, these wells should both be

monitored quarterly over the next year to determine if the increasing chloride concentrations are temporary or not.

- Sodium/chloride molar ratios in most monitoring wells remained constant or increased over the past year. Monitoring well FO-09 Shallow experienced an increase in chloride as mentioned above, and its sodium/chloride ratio of 0.82 in Water Year 2020 is just above its historical minimum of 0.81. Monitoring well FO-10 Shallow also experienced an increase in chloride over the last year and currently has a sodium/chloride ratio of 0.79. Sodium/chloride ratios at both of these wells are below the 0.86 ratio that may identify seawater intrusion as the source of chloride as opposed to a domestic wastewater source.
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing towards the coast. However, northern monitoring wells FO-9 Shallow and FO-10 Shallow have recently increased chloride concentrations, but at concentrations still less than 100 mg/L. The deep aquifer maps show that the highest chloride concentrations are limited to coastal monitoring wells PCA-West Deep and MSC Deep, but these are not indicative of seawater intrusion since their concentrations are less than 155 mg/L and they do not have increasing trends.
- Induction logging data at the coastal Sentinel Wells do not show historical or recent changes over time that are indicative of seawater intrusion.

Due to its distance from the coast, seawater intrusion is not an issue of concern in the Laguna Seca subarea. However, groundwater levels in the eastern Laguna Seca subarea have historically declined at rates of 0.6 feet per year in the shallow aquifers, and up to four feet per year in the deep aquifers. These declines have occurred since 2001, despite triennial reductions in allowable pumping. The cause of the declines is due in part to the Natural Safe Yield of the subarea being too high and in part due to the influence of wells to the east of the Seaside Basin. Although there was some stabilization in groundwater levels between Water Years 2014 and 2016, groundwater levels are continuing to decline. The rate of decline now, however, is less than 0.6 feet per year.

Native groundwater production in the Seaside Groundwater Basin for Water Year 2020 was 3,323.1 acre-feet, which is 52.9 acre-feet more than Water Year 2019. The amount of native groundwater pumped in Water Year 2020 is 36.9 acre-feet less than the Decision-ordered Operating Yield of 3,360 acre-feet per year that is required between October 1, 2017 and September 30, 2020. The Decision-ordered Operating Yield for Water Year 2021 will be 3,000 acre-feet.

Based on recent corresponding increases in chloride concentrations at monitoring wells FO-9 Shallow and FO-10 Shallow, both in relatively close proximity to known intrusion in the Salinas Valley, the following is recommended:

1. Monitoring well FO-10 Shallow be immediately resampled to confirm the 48 mg/L chloride increase. A sample was collected on November 10, 2020 and results are expected within a month.

2. Monitoring wells FO-9 Shallow and FO-10 Shallow's sampling frequency be increased to quarterly and that their groundwater quality results be reviewed after

each sampling event to identify if the recent increases are part of natural fluctuations or an ongoing increasing trend. Monitoring well FO-9 Shallow is currently monitored on a semi-annual basis, increased from annual sampling, because an increasing chloride trend had previously been observed. Monitoring well FO-10 Shallow is currently monitored on an annual basis.

With the exception of monitoring wells FO-09 Shallow and FO-10 Shallow, data analyzed for this report did not deviate significantly from historical data. Therefore, besides increased sampling frequency recommended for FO-09 Shallow and FO-10 Shallow, there are no additional recommendations on sampling frequencies.

As projects that recharge and recover water in the Basin are implemented, groundwater levels and thus groundwater flow directions will change, and possibly groundwater quality too. It is therefore important that data from new monitoring wells are reported to the Watermaster and taken into consideration in future SIARs. Watermaster staff worked in 2020 to identify monitoring wells associated with Pure Water Monterey that would be beneficial to the SIAR. Data from these wells have not yet been incorporated into the SIAR.

ITEM VIII.B.
12/2/2020

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Laura Paxton, Administrative Officer

DATE: December 2, 2020

SUBJECT: Watermaster Declaration of **NO** Replenishment Water Available for Water Year 2021

PURPOSE: To notify all Seaside Groundwater Basin producers that the Watermaster has declared for Water Year 2021 that **NO** Artificial Replenishment Water is available to offset Over-Production in excess of Basin Operating Yield

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RECOMMENDATION:
Consider approving the Declaration of No Artificial Replenishment Water Available for Water Year 2021.

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

Watermaster has determined that there is no foreseeable replenishment water available for Water Year 2021. As ordered by the Court at the January 12, 2007 hearing, a sixth and final full triennial 10% reduction in Operating Yield will be in effect for the entire Water Year 2021. *(Commencing with the fourth Water Year, and triennially thereafter the Operating Yield for both Subareas will be decreased by ten percent (10%) until the Operating Yield is equivalent of the Natural Safe Yield.)*

The 2020 Declaration of Useable Storage Space in the Basin is attached listing Standard Producer Allocations of Storage Space, revised to account for storage space recalculated in the updated Basin Management Action Plan finalized in 2019. (The Court declared in Section III F of the adjudication Decision that Carryover of a Standard Producer's unproduced allocation is limited to the total amount of the Standard Producer's Storage Allocation, and that in no circumstance may the sum of a Producer's Storage Credits and Carryover Credits exceed the Producer's available Storage Allocation.) Only Standard Producers are allocated storage space.

If replenishment water becomes available in Water Year 2021, a revised Declaration will be issued. (Item IX.A. of today's meeting is in regards to obtaining additional replenishment water.)

ATTACHMENTS
1) 2021 Declaration of Unavailability of Replenishment Water with production limits
2) 2020 (and past 2018 for comparison) Declaration of Useable Storage Space in the Basin

NOTICE TO ALL SEASIDE GROUNDWATER PRODUCERS:

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

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

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

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

1. Watermaster has not secured water for adding an equivalent amount of Non-Native water to the Basin on an annual basis.
2. The Watermaster has not secured reclaimed water in an equivalent amount.
3. The Watermaster has not secured Non-Native water or reclaimed water that results in the decrease in Production of Native Water required by the Decision.
4. The firm contracted by Watermaster for technical analyses continued to report in 2019 that Groundwater levels within the Santa Margarita and Paso Robles aquifers are not at sufficient levels to ensure a positive offshore gradient to prevent seawater intrusion, so the requirement for this item continues to not be met.

Section III.L.3.j.iii: Watermaster declares that for Water Year 2021 Artificial Replenishment Water is not available to offset Operating Yield Over-Production and producers are limited in production to the following quantities of water:

<u>Coastal Subarea Alternative Producers:</u>

Seaside (Golf)	540.00 acre-feet
SNG	149.00 acre-feet
Cypress (Calabrese)	6.00 acre-feet
Mission Memorial (Alderwood)	31.00 acre-feet
Sand City	9.00 acre-feet

Laguna Seca Subarea Alternative Producers:

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

Coastal Subarea Standard Producers:

California American Water.....	1,471.50 acre-feet*
Seaside (Municipal)	120.28 acre-feet**
Granite Rock	233.35 acre-feet***
D.B.O. Development 30	422.24 acre-feet****
Cypress (Calabrese)	16.08 acre-feet*****

Laguna Seca Subarea Standard Producers:

California American Water.....	0.0 acre-feet

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* Total is the 2021 base allocation of 1,466.03 acre-feet, plus transferred credits of 3.17 & 2.31 acre-feet. California American Water has a positive balance of 845.93 acre-feet of stored water credit at WY-end 2020 from Basin extractions exceeding injections since WY 2010 under the CAW/MPWMD ASR Program, formalized through a Storage Agreement in 2012.

** Total is the 2021 base allocation of 120.28 acre-feet.

*** Total includes 194.88 acre-feet of "free" carryover and 27.12 acre-feet of "not-free" carryover credit from previous water years, plus the 2021 base allocation of 11.35 acre-feet.

**** Total includes 364.98 acre-feet of "free" carryover plus 38.98 acre-feet of "not-free" carryover credit from previous water years, minus 2.31 in transferred water rights, plus the 2021 base allocation of 20.59 acre-feet.

***** Total includes 14.91 acre-feet of "free" carryover and 1.58 acre-feet of "not-free" carryover credit from previous water years, minus 3.17 acre-feet in transferred water rights, plus the 2021 base allocation of 2.76 acre-feet.

Note: Carryover is not capped for D.B.O. Development 30 and Granite Rock in Water Year 2021 due to recalculation of *Total Useable Storage Space* in the *2018 Basin Management Action Plan* update finalized in 2019. (See allocation of recalculated total useable storage space next page.)

NOTICE TO ALL SEASIDE GROUNDWATER PRODUCERS

Pursuant to Section III.3.L.3.j.xix of the Amended Decision Filed February 2, 2007 in the Superior Court of the State of California, in and for the County of Monterey, Case No. M66343 (the "Decision"), the Seaside Basin Watermaster hereby Declares that the Total Usable Storage Space in the Seaside Groundwater Basin ("Basin") is as follows:

Total Usable Storage Space in the Coastal and Northern Inland Subareas is 75,610 acre-feet.
Total Usable Storage Space in the Laguna Seca Subarea is 28,560 acre-feet.
Total Usable Storage Space in the entire Seaside Groundwater Basin is 104,170 acre-feet.

Pursuant to Section III.B.3.b of the Decision, Alternative Producers do not receive a storage allocation, only Standard Producers receive such an allocation. Pursuant to Section III.H.2 of the Decision, the Seaside Basin Watermaster further Declares that the Total Usable Storage Space in the Basin shall be allocated to the Standard Producers, who are identified in the Decision, as follows:

	Current Allocation (Using Table 1 of the Decision)		
Producer	**Operating Yield Allocation Percentage (1)**	**Usable Storage Allocation Percentage (2)**	**Useable Storage Allocation Acre-Feet**
Coastal and Northern Inland Subareas			
California American Water (3)	77.55%	90.44%	68,382
City of Seaside (Municipal)	6.36%	7.42%	5,610
Granite Rock Company	0.60%	0.70%	529
DBO Development No. 27	1.09%	1.27%	960
Calabrese (Cypress Pacific Investors LLC)	0.15%	0.17%	129
SUBAREAS TOTAL	**85.75%**	**100.00%**	**75,610**
Laguna Seca Subarea			
California American Water (3)	45.13%	100.00%	28,560
SUBAREA TOTAL	**45.13%**	**100%**	**28,560**
BASIN TOTAL		**100%**	**104,170**

Footnotes:
(1) From Table 1 on page 19 of the Decision.
(2) Calculated as each Standard Producer's percentage of the total Standard Producers' operating yield allocation percentages within each subarea.
(3) CAW's Usable Storage Allocation is subject to the provisions and requirements of Section III.H.3 of the Decision.

Pursuant to Section III.H.6 of the Decision, no Producer may store water in the Basin without first executing with the Watermaster a Storage and Recovery Agreement.

Nov 2, 2019

NOTICE TO ALL SEASIDE GROUNDWATER PRODUCERS

Pursuant to Section III.3.L.3.j.xix of the Amended Decision Filed February 2, 2007 in the Superior Court of the State of California, in and for the County of Monterey, Case No. M66343 (the "Decision"), the Seaside Basin Watermaster hereby Declares that the Total Usable Storage Space in the Seaside Groundwater Basin ("Basin") is as follows:

Total Usable Storage Space in the Coastal and Northern Inland Subareas is 31,770 acre-feet.
Total Usable Storage Space in the Laguna Seca Subarea is 20,260 acre-feet.
Total Usable Storage Space in the entire Seaside Groundwater Basin is 52,030 acre-feet.

Pursuant to Section III.B.3.b of the Decision, Alternative Producers do not receive a storage allocation, only Standard Producers receive such an allocation. Pursuant to Section III.H.2 of the Decision, the Seaside Basin Watermaster further Declares that the Total Usable Storage Space in the Basin shall be allocated to the Standard Producers, who are identified in the Decision, as follows:

	Current Allocation (Using Table 1 of the Decision)		
Producer	**Operating Yield Allocation Percentage (1)**	**Usable Storage Allocation Percentage (2)**	**Useable Storage Allocation (acre-feet)**
Coastal and Northern Inland Subareas			
California American Water(3)	77.55%	90.44%	28,733
City of Seaside (Municipal)	6.36%	7.42%	2,357
Granite Rock Company	0.60%	0.70%	222
DBO Development No. 27	1.09%	1.27%	404
Calabrese (Cypress Pacific Investors LLC)	0.15%	0.17%	54
SUBAREAS TOTAL	**85.75%**	**100.00%**	**31,770**
Laguna Seca Subarea			
California American Water (3)	45.13%	100.00%	20,260
SUBAREA TOTAL	**45.13%**	**100%**	**20,260**
BASIN TOTAL		**100%**	**52,030**

Footnotes:
(1) From Table 1 on page 19 of the Decision.
(2) Calculated as each Standard Producer's percentage of the total Standard Producers' operating yield allocation percentages within each subarea.
(3) CAW's Usable Storage Allocation is subject to the provisions and requirements of Section III.H.3 of the Decision.

Pursuant to Section III.H.6 of the Decision, no Producer may store water in the Basin without first executing with the Watermaster a Storage and Recovery Agreement.

Nov 2, 2018

ITEM VIII.C
12/2/20

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: December 2, 2020

SUBJECT: Discussion/Consider Approving Watermaster Annual Report for WY 2020

RECOMMENDATIONS:
It is recommended that the Board approve the Watermaster Annual Report for WY 2020.

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

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

DISCUSSION:
A Preliminary Draft Annual Report was presented to the TAC for its review and input at the TAC's November 18, 2020 meeting. The TAC did not request any revisions, and recommended that the Report be forwarded to the Board for its approval. Attached is the body of the Draft 2020 Annual Report. The complete Draft version is posted on the Watermaster's website at http://www.seasidebasinwatermaster.org/.

The Draft version of the Annual Report will be made into a Final version, reflecting any comments or recommendations from the Board at today's meeting. The Final version will be submitted to the Court not later than the January 15, 2021 submittal deadline established by the Court.

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

ATTACHMENTS:
Body of the Draft version of the Watermaster 2020 Annual Report.

SEASIDE BASIN WATERMASTER

DRAFT

ANNUAL REPORT – 2020

November 21, 2020

Note: This is a Draft of the Annual Report. It will be reviewed by the Watermaster's Board of Directors at its December 2, 2020 meeting. Any revisions that result from that meeting will be incorporated into a Final version of the Annual Report, which will be submitted to the Court as required by the Adjudication Decision.

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SEASIDE BASIN WATERMASTER

ANNUAL REPORT – 2020

Integral to the Superior Court Decision (Decision) rendered by Judge Roger D. Randall on March 27, 2006 is the requirement to file an Annual Report. This 2020 Annual Report is being filed on or before January 15, 2021, consistent with the provisions of the Decision, as amended by the Order Amending Judgment filed March 29, 2018.

This Annual Report addresses the specific Watermaster functions set forth in Section III. L. 3. x. of the Decision. In addition, this Annual Report includes sections pertaining to:

- Water quality monitoring and Basin management
- Information that the Watermaster would otherwise include within a Case Status Conference Statement, including:
    - A summary of basin conditions and important developments concerning the management of the Basin
    - Planned near- and long-term actions of the Watermaster
    - Information concerning the status of regional water supply issues
    - Management activities that may bear on the Basin's wellbeing.

A. Groundwater Extractions

The schedule summarizing the Water Year 2020 (WY 2020) groundwater production from all the producers allocated a Production Allocation in the Seaside Groundwater Basin is provided in Attachment 1, "Seaside Groundwater Basin Watermaster, Reported Quarterly and Annual Water Production from the Seaside Groundwater Basin for all Producers Included in the Seaside Basin Adjudication During Water Year 2020." Water Year 2020 is defined as beginning October 1, 2019 and ending on September 30, 2020.

B. Groundwater Storage

Monterey Peninsula Water Management District (MPWMD), in cooperation with California American Water (CAWC), operates the Seaside Basin Aquifer Storage and Recovery (ASR) program. Under the ASR program, CAWC diverts water from its Carmel River sources during periods of flow in excess of NOAA-Fisheries' bypass flow requirements, and transports the water through the existing CAWC distribution system for injection and storage in the Seaside Basin at the MPWMD's Santa Margarita ASR site and CAWC's Seaside Middle School ASR site. During WY 2020, 917 acre-feet was diverted and stored in the Seaside Basin under the ASR program. Rainfall in the area was about 83% of normal, and Carmel River flow was about 69% of normal.

Based upon production reported for WY 2020, the following Standard Producers are entitled to Free and Not-Free Carryover Credits to 2021 in accordance with the Decision, Section III. H. 5:

Producer	Free Carryover Credit (Acre-feet)	Not-Free Carryover Credit (Acre-feet)
Granite Rock	194.88	27.12
DBO Development	364.98	38.98 (-2.31 transfer)

Calabrese (Cypress)	14.91	1.58 (-3.17 transfer)
CAWC	00.00	00.00 (+5.48 transfer)
City of Seaside Muni	00.00	00.00

During Water Year 2020 the Watermaster did not indirectly engage in In-lieu Replenishment of the Basin. No non-native water was made available to the Basin during Water Year 2020 under the April 7, 2010 Memorandum of Understanding and Agreement entered into by Watermaster with the City of Seaside for its golf course irrigation program creating in-lieu replenishment water.

C. Amount of Artificial Replenishment, If Any, Performed by Watermaster

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

During Water Year 2020 the Watermaster did not indirectly engage in In-lieu Replenishment of the Basin. No non-native water was made available to the Basin during Water Year 2020 under the April 7, 2010 Memorandum of Understanding and Agreement entered into by Watermaster with the City of Seaside for its golf course irrigation program creating in-lieu replenishment water.

As reported in the 2019 Annual Report, on September 4, 2019 the City of Seaside filed a motion with the Court seeking the Court's approval of the City's request for a Storage and Recovery Agreement for in-lieu storage and recovery of water. On October 25, 2019 the Court approved the City's request. Court documents pertaining to the City's request were contained in Attachment 15 of the 2019 Annual Report. On February 5, 2020 the Watermaster executed a Storage and Recovery Agreement with the City of Seaside, a copy of which is included in Attachment 7.

D. Leases or Sales of Production Allocation and Administrative Actions

As reported in the 2019 Annual Report, in WY2019 a transfer or assignment of water allocation was activated, as provided for in the Cypress Pacific Investors (CPI), successor to Muriel L. Calabrese 1987 Trust, front-loading delivery of water agreement that is contained in Attachment 14. Per the agreement, CPI leases to California American Water Company (CAWC) 8.0 AF of water (subject to reduction per the formulas in the Decision) for the purpose of producing such water from, or moving the production of such water to, the inland wells operated by CAWC and for delivery of such water by CAWC to one or more CPI properties. In Water Year 2016-17 CPI assigned its entire Standard Production Allocation water right to CAWC effective October 1, 2016.

As discussed in Attachment 13 of the 2018 Annual Report, in 2019 Security National Guarantee (SNG) indicated it intended to convert a portion of its Alternative Production Allocation to Standard Production. However, SNG subsequently decided not to make such a conversion.

During WY 2020 the Watermaster Board did not make any revisions to its *Rules and Regulations*.

During WY 2020 the Watermaster Board was comprised of the following Members and Alternates:

MEMBER	ALTERNATE	REPRESENTING
Director Paul Bruno	N/A	Coastal Subarea Landowner
Christopher Cook	Tim O'Halloran	California American Water
Wesley Leith	N/A	Laguna Seca Subarea Landowner
Director George Riley	Director Molly Evans	MPWMD
Mayor Mary Ann Carbone	Awaiting	City of Sand City
Supervisor Mary Adams	Supervisor Jane Parker	Monterey County (MCWRA)
Councilmember John Gaglioti	Mayor Alison Kerr	City of Del Rey Oaks
Councilmember Dan Albert	Mayor Clyde Roberson	City of Monterey
Mayor Ian Oglesby	Council Member Jon Wizard	City of Seaside

E. Use of Imported, Reclaimed, or Desalinated Water as a Source of Water for Storage or as a Water Supply for Lands Overlying the Seaside Basin

The CAWC/MPWMD ASR Program operated in WY 2020 and 917 acre-feet of water was injected into the Basin as Stored Water Credits and 806 acre-feet was extracted.

As reported in the 2019 Annual Report, the Watermaster issued a Storage and Recovery Agreement to CAWC and MPWMD governing the injection and recovery of water from PWM. A copy of the agreement was included in Attachment 13 of the 2019 Annual Report. The quantities of water that were stored and recovered in accordance with that Agreement are reported in Attachment 10.

F. Violations of the Decision and Any Corrective Actions Taken

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

The Watermaster made its declaration regarding the availability of Artificial Replenishment Water, and the Total Usable Storage Space of the Basin, for WY 2020 at its Board meeting of December 4, 2019. Copies of these declarations are contained in

Attachment 2. No water production reductions were implemented in WY 2020. However, in WY 2021 the Watermaster plans to implement a final ramp-down in production to achieve the Basin's Decision-established Natural Safe Yield of 3,000 AFY.

Total pumping for WY 2020 did not exceed the Operating Yield (OY) of the Basin, and exceeded the Natural Safe Yield (NSY) of the Basin by 323.14 acre-feet.

California American Water reported annual pumping quantities that exceeded its Standard Production NSY allocation by 334.21 acre-feet, and reported annual pumping quantities that exceeded its Operating Yield allocation by 229.63 acre-feet. The Watermaster will assess California American Water a Replenishment Assessment for this over production, as further described in Section H, below.

The City of Seaside reported annual pumping quantities that exceeded its Standard Production NSY allocation by 32.06 acre-feet, and reported annual pumping quantities that exceeded its Operating Yield allocation by 34.66 acre-feet. The City of Seaside did not exceed its Alternative Production NSY. The Watermaster will assess the City of Seaside a Replenishment Assessment for these over productions, as further described in Section H, below.

G. Watermaster Administrative Costs

The total estimated Administrative costs through the end of Fiscal Year 2020 amounted to $75,000 including a $25,000 dedicated reserve. Costs include the Administrative Officer salary and legal counsel fees. The "Fiscal Year 2020 Administrative Fund Report" and "Fiscal Year 2020 Operations Fund Report" are provided in Attachment 3.

H. Replenishment Assessments

At its meeting of September 2, 2020, the Watermaster Board determined that beginning with WY 2021 the Natural Safe Yield Replenishment Assessment unit cost should be updated to $2,947 per acre-foot, and the Operating Yield Replenishment Assessment unit cost should be updated to $737 per acre-foot. The Agenda transmittal which explains the basis of calculation for these new unit costs is contained in Attachment 4.

Alternative and Standard Producers report their production amounts from the Basin to the Watermaster on a quarterly basis. Based upon the reported production for WY 2020, CAWC's Replenishment Assessment for Overproduction in excess of its share of the Natural Safe Yield is $959,859, and for overproduction in excess of its share of the Operating Yield is $164,872.

Based upon the reported production for WY 2020, the City of Seaside's Replenishment Assessment for its Municipal System for Overproduction in excess of its share of the Natural Safe Yield is $92,089, and for overproduction in excess of its share of the Operating Yield is $24,886. The City of Seaside did not exceed its Alternative Production Allocation for its Golf Course System production. A summary of the calculations for Replenishment Assessments for WY 2020 is contained in Attachment 5.

I. All Components of the Watermaster Budget

The Watermaster budget has four separate funds: Administrative Fund; Monitoring & Management–Operations; Monitoring and Management–Capital Fund and; Replenishment Fund. Copies of the budgets for Fiscal Year 2021 are contained in

Attachment 6.

The Watermaster Board is provided monthly financial status reports on all financial activities for each month with year-to-date totals.

J. Water Quality Monitoring and Basin Management

Water Quality Analytical Results

Groundwater quality data continued to be collected and analyzed on a quarterly basis during WY 2020 from the enhanced network of monitoring wells. The low-flow sampling method implemented in 2009 continued to be used in 2020 and is expected to continue to be used in the future to improve the efficiency of sample collection.

As discussed in the 2013 Annual Report, the Watermaster reduced the frequency of water quality sampling at SBWM-MW5 (the shallow and deep monitoring wells located in the Northern Inland Subarea at Camp Huffman) to once every 3 years beginning in WY 2014. This was based on the January 2010 well construction report in which the well installation hydrogeologic consultant (Martin Feeney) recommended doing initial sampling annually for several years, then reducing the frequency of sampling once it was felt that the water chemistry had been established. Mr. Feeney suggested going to once every five years after initial water quality had been established. Starting with WY 2014 the Watermaster elected to go to once every three years as a more conservative approach.

In July 2020 the Watermaster reviewed the water quality sampling data from SBWM-MW5 for the period from WY 2013 to WY 2020. This review found that there were four sets of water quality sampling data from these shallow and deep wells, and that the sampling data was similar at each sampling event, demonstrating that an adequate baseline had been established. Based on this finding, the Watermaster determined that it was reasonable to reduce the sampling frequency to once every 5 years. Therefore, the next samples from SBWM-MW5 will be collected in WY 2022.

No modifications to the quarterly data collection frequency from the enhanced network of monitoring wells were made during WY 2020.

In prior years a separate water quality and water level report was prepared for the Watermaster by MPWMD, and included in the Annual Reports. Since this data is primarily used to prepare the Seawater Intrusion Analysis Report, beginning in 2019 the data was provided by MPWMD to Montgomery & Associates. Montgomery & Associates uses that data to prepare the water quality and water level report which is included as an attachment to the SIAR. The SIAR is further discussed below.

Monitoring and Management Program Work Plan for the Upcoming Year

The 2021 Monitoring and Management Program (M&MP) Work Plan contained in Attachment 9 includes the types of basin management activities conducted in prior years as well as revisions approved by the Board at its September 2, 2020 meeting.

Other than small changes due to changes in hourly rates for some of the consultants, the following are the principal differences between the 2020 M&MP and the 2021 M&MP, and their respective budgets:

Technical Program Manager: Due to the voluminous amount of agenda materials from, and meetings being held by, the Salinas Valley Basin Groundwater Sustainability Agency's committees that the Technical Program Manager serves upon representing the Watermaster, and the increasing work associated with working toward obtaining replenishment water to protect the Seaside Basin against the threat of seawater intrusion, the Board increased the 2021 budget line-item for the Technical Program Manager by $10,000 from $50,000 to $60,000.

Tasks M.1.c, M.1.d, and M.1.e (On-call/as-needed Consulting Services): In 2020 a greater amount of assistance was needed from Montgomery and Associates in evaluating a number of different issues that have come before the TAC, than has been the case in prior years. Consequently, it was necessary to authorize an additional $5,000 to them in the fall of 2020, in order to ensure that funds were available for them to continue providing those services through the rest of 2020. In 2021 there will be some hourly rate increases for the Montgomery and Associates staff that will likely be the ones to provide on-call/as-needed hydrogeological consulting services under Tasks M.1.c, M.1.d, and M.1.e (Derrik Williams and Georgina King). It is anticipated that there may be an ongoing need for this higher level of services in 2021, and therefore their on-call consulting services allowance was increased by $4,000 for this line-item budget amount.

Task M.1.g (SGMA Documentation Preparation): Although the scope of work for this Task is unchanged from 2020, in 2021 there will be some hourly rate increases for the Montgomery and Associates staff that perform this work. Therefore, the amount provided for 2021 is slightly increased from 2020 amount.

Task I.2.b.3 (Collect Quarterly Water Quality Samples): The proposed cost for the induction logging work that is performed by Mr. Feeney and his subcontractor is lower than it was in 2020 because less maintenance work on the Sentinel wells is anticipated in 2021. Thus far, the State Department of Parks and Recreation has been authorizing the induction logging of the Sentinel Wells which are located within the Fort Ord Dunes State Park. with minimal requirements. However, they have recently determined that they need to issue a formal Right-of-Entry Permit to perform this work. The 2021 proposed cost includes a $50 annual cost to obtain this Permit. The Permit will likely need to be renewed at that cost each year.

Task I.2.b.7 (CASGEM Data Submittal for Watermaster's Voluntary Wells): MPWMD has been able to reduce the amount of time needed to format and submit this data to DWR in 2021 to comply with the SGMA requirements for adjudicated basins. Consequently, the number of hours provided for this Task in 2021 has been significantly reduced from the number of hours required in 2020.

Task I.3.a.3 (Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions): Included in Task I.3.a.3 is $50,000 to perform some new modeling work pertaining to injection of water to raise groundwater levels. This additional work was initially proposed for 2020, but was removed based on input from Todd Groundwater and Montgomery & Associates that pointed out that if all the water injected by the PWM and desalination plant projects is subsequently extracted, there would be little if any net increase in groundwater levels. Reinstating that work is proposed for 2021 in order to work on getting additional water above and beyond that which would be injected by the desalination plant or the PWM Expansion Project

(depending on which of these moves forward to construction) and not extracted, in order to raise groundwater levels to protective elevations Basinwide.

Task I.4.c (Annual Report- Seawater Intrusion Analysis): The scope of work for this Task in 2021 adds making a presentation of the SIAR to the Board of Directors as well as to the TAC. However, it is expected that those presentations will be made remotely (either via teleconference or Zoom) rather than in person, so there is only a minor cost change for this part of the work. Also, in 2021 there will be some hourly rate increases for the Montgomery and Associates staff that perform this work. Therefore, the amount proposed for 2021 is slightly increased from the 2020 amount.

There are no Capital Projects anticipated in 2021.

Basin Management Database

Pertinent groundwater resource data obtained from a number of sources has been consolidated into the Watermaster's database to allow more efficient organization and data retrieval. No modifications or enhancements to the database are planned in FY 2021.

Enhanced Monitoring Well Network

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

Basin Management Action Plan (BMAP)

The BMAP constitutes the basic plan for managing the Seaside Groundwater Basin. The BMAP identifies both short-term actions and long-term strategies intended to protect the groundwater resource while maximizing the beneficial use of groundwater in the basin. It provides the Watermaster a logical set of actions that can be undertaken to manage the basin to its Safe Yield.

The Watermaster's first BMAP was completed in 2009 and was approved by the Watermaster Board at its February 2009 meeting. The Executive Summary from that BMAP was contained in Attachment 9 of the 2009 Annual Report, and the complete document is posted on the Watermaster's website at: http://www.seasidebasinwatermaster.org/Other/BMAP_FINAL_5-Feb-2009.pdf.

Over the nine years since the 2009 BMAP was completed, the Watermaster collected much groundwater level and quality data, and conducted various studies to improve the understanding of the basin. This improved understanding was incorporated into a 2019 Updated BMAP to facilitate ongoing responsible management of the groundwater resource. The Watermaster Board approved the 2019 Updated BMAP at its June 5, 2019 meeting. The Executive Summary from that document was contained in Attachment 7 of the 2019 Annual Report, and the complete document is posted on the Watermaster's website at: http://www.seasidebasinwatermaster.org/Other/BMAP%20Final_07192019.pdf .

One of the findings in the Updated BMAP is that the Natural Safe Yield (NSY) of the Basin is 2,370 AFY, which is lower than the Adjudication Decision's initially-established 3,000 AFY. Another finding was that the Total Usable Storage Space of the Basin was increased from 52,030 acre-feet to 104,170 acre-feet as reported on page 52 of the BMAP partly due to an error in the 2009 estimate as the deficit volume was subtracted, thereby resulting in a lower combined volume than it should have been; and partly because a different protective elevation contour map was used in this updated estimation.

Attachment 10 of the 2019 Annual Report contains a Memo titled "Seaside Groundwater Basin Natural Safe Yield Allocations to Producers." The Memo describes how the Adjudication Decision allocated water rights to each of the Producers (both Standard and Alternative Producers), and the water rights that each Producer would have after all of the Adjudication Decision-required ramp-downs in pumping have been completed. The Memo also briefly describes the water rights impacts that would result from lowering the NSY of the Basin from 3,000 AFY to 2,370 AFY.

As discussed in the Memo, the approach used to make these calculations is based on the assumption that the Adjudication Decision contemplated that all of the Basin's NSY comes from the Laguna Seca and the Coastal Subareas, and that none of it comes from the Northern Inland Subarea. Two options for arriving at the water rights for each Producer are presented in the Memo. As noted in the Memo, there are some inconsistencies in the Adjudication Decision which complicate the calculation of water rights after the Adjudication Decision-mandated ramp-downs in pumping are completed.

The Memo contains a set of ramp-down calculations for a basin-wide NSY of 3,000 AFY, because 3,000 AFY had been the ramp-down figure that was developed when CAWC was sizing its Monterey Peninsula Water Supply Project. That analysis led to the conclusion that CAWC's ultimate water right in the Basin would be 1,474 AFY, based on a basin-wide Natural Safe Yield of 3,000 AFY. This calculation approach was approved by Judge Randall in his Order dated 9 February 2007. Therefore, it was appropriate to include the ramp-down analysis leading to CAWC's 1,474 AFY of ultimate water right. Also contained in the Memo is a set of ramp-down calculations for a basin-wide NSY of 2,913 AFY, based on a slightly different interpretation of the Adjudication Decision.

The Memo provided to the Watermaster Board all of the necessary background information and calculations for use in determining which of the two ramp-down figures (3,000 AFY or 2,913 AFY) should be used when the next (and presumably final) ramp-down occurs in WY 2021. At its meeting of June 5, 2019, the Watermaster Board determined that there should be a final ramp-down to 3,000 AFY in WY 2021 and that water allocations to each Producer should be assigned as shown in Table 7 of Attachment 10 in the 2019 Annual Report, after all pumping ramp-downs have been completed. The Board reached this decision in part because ramping-down to 3,000 AFY would cause less hardship on the Alternative Producers by not requiring them to ramp-down along with the Standard Producers, and because ramping down to 2,913 AFY would provide negligible additional benefit and would require both the Standard and Alternative Producers to ramp-down.

In conjunction with updating the BMAP, Montgomery & Associates and Todd Groundwater (a hydrogeologic consultant the Watermaster used to perform a peer review

of a draft version of the Updated BMAP) recommended that at some point in the future the Watermaster change to a different approach (Sustainable Yield) rather than continuing to use the Natural Safe Yield approach that was used in the Adjudication Decision, for basin management purposes. Attachment 11 in the 2019 Annual Report contains a discussion of the pros and cons of using the Sustainable Yield approach vs. the Natural Safe Yield approach. The Watermaster Board considered the information contained in that attachment at its June 5, 2019 meeting and made the following determinations:

- A Sustainable Yield analysis should not be performed at this time.
- The concept of using the Sustainable Yield approach to replace the Natural Safe Yield approach should be revisited after the Groundwater Sustainability Plan for the Monterey Subbasin of the Salinas Valley Groundwater Basin has been completed, and its impacts on the Seaside Groundwater Basin have been determined.
- If something is learned, or events occur, that would warrant performing a Sustainable Yield analysis sooner, the Board should revisit the decision at that time.

Development of the Groundwater Sustainability Plan for the Monterey Subbasin was started in 2020 and is expected to be completed in late 2021 or early 2022. Following completion of that Groundwater Sustainability Plan, the Watermaster intends to revisit the issue of changing to the Sustainable Yield approach.

Seawater Intrusion Response Plan

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

The Final SIRP was approved by the Watermaster Board in 2009 and a summary of the Seawater Intrusion Contingency Actions from the SIRP were contained in Attachment 10 of the 2009 Annual Report. The complete document may be viewed and downloaded from the Watermaster's website at: http://www.seasidebasinwatermaster.org/. No modifications to the SIRP were made in 2020.

Seawater Intrusion Analysis Report

The Seawater Intrusion Analysis Report (SIAR) examines the "health" of the Basin with regard to whether or not there are any indications that seawater intrusion is either occurring or is imminent. Previous SIARs have stated that depressed groundwater levels, continued pumping in excess of recharge and freshwater inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin.

The Watermaster retained Montgomery & Associates to prepare the WY 2020 SIAR required by the M&MP. The WY 2020 SIAR provided an analysis of data collected during that Water Year.

Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. However, the 2020 SIAR reported that in Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing increasing chloride concentrations. These are monitoring wells FO-9

Shallow and FO-10 Shallow. These wells are both in relatively close proximity to known intrusion in the Salinas Valley, but are inland of the Watermaster's four Sentinel Wells where induction logging showed no indication of seawater intrusion. Based on these chloride concentration increases, the SIAR recommended that:

- Monitoring well FO-10 Shallow be immediately resampled to confirm the 48 mg/L chloride increase that was found in the last 2020 sample taken from this well. As of the date of preparation of this annual report the resampling results had not yet been received.

- Monitoring wells FO-9 Shallow and FO-10 Shallow's sampling frequency be increased to quarterly and that their groundwater quality results be reviewed after each sampling event to identify if the recent increases are part of natural fluctuations or an ongoing increasing trend. Monitoring well FO-9 Shallow is currently monitored on a semi-annual basis, increased from annual sampling, because an increasing chloride trend had previously been observed. Monitoring well FO-10 Shallow is currently monitored on an annual basis.

The SIAR is lengthy, but the full *Executive Summary Section* from it is provided in Attachment 8. A complete copy of the document is posted for viewing and downloading from the Watermaster's website at: http://www.seasidebasinwatermaster.org/. All recommendations contained in the SIAR are being or will be carried out and are included in the budgeted activities contained in Attachment 6 and described in Attachment 9.

Geochemical Impact Assessments

When new sources of water are introduced into an aquifer, with each source having its own unique water quality, there can be chemical reactions that may have the potential to release minerals into solution which have previously been attached to soil particles, such as arsenic or mercury, and thus into the water itself. This has been experienced in some other locations where changes in water quality occurred as a result of water being injected into an aquifer.

MPWMD's consultant (Pueblo Water Resources) has been using geochemical impact assessments to predict the effects of injecting Carmel River water into the Seaside Groundwater Basin under the ASR program. As discussed in the 2018 Annual Report under the heading titled "Monitoring and Management Program Work Plan for the Upcoming Year," in order to predict whether there will be groundwater quality changes that will result from the introduction of desalinated water, additional ASR water (under the Monterey Peninsula Water Supply Project), and advanced wastewater treatment (AWT) water under the Pure Water Monterey Project (PWM) geochemical impact assessments have been, or will be, performed by Pueblo Water Resources for use in the areas of the Basin where injection of these new water sources will occur. A description of this work was provided in Attachment 11 of the 2018 Annual Report.

In 2019 an assessment of the geochemical impacts of injecting AWT water from the PWM was performed. A Technical Memorandum describing that work is contained in Attachment 12 of the 2019 Annual Report. The assessment found that if the quality of the PWM AWT water is maintained within the ranges set forth in the Division of Drinking Water (DDW) Operations Report, there will be no adverse geochemical impacts on the aquifers within the Seaside Basin.

In 2020 no additional geochemical impact assessments needed to be performed, since the Monterey Peninsula Water Supply Project was still in the process of obtaining the permits necessary to move forward with that project.

Sustainable Groundwater Management Act (SGMA)

As reported in the 2015 Annual Report the Watermaster Board determined that the Watermaster should monitor the development of the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) and the State Department of Water Resources' (DWR) development of SGMA regulations with the intent to collaborate with these entities as appropriate.

At the State Level:

During 2020 DWR did not issue any new regulations, or revisions to prior regulations, that impacted the Seaside Groundwater Basin or the Watermaster. In March of 2020 the Watermaster submitted to DWR the reporting information required of it, as an adjudicated basin, under SGMA.

At the Monterey County level:

As reported in the 2018 Annual Report, the SVBGSA, the Marina Coast Water District (MCWD), and the City of Marina all submitted Notifications with DWR to serve as the GSA for overlapping portions of the Monterey and/or the 180/400-foot aquifer subbasins. The SVBGSA, MCWD, and the City of Marina embarked on processes to address and resolve these overlaps.

In its notification to DWR, the City of Marina proposed becoming the GSA for the portion of the 180/400-foot Subbasin lying within the City's jurisdictional boundaries. However, since this overlapped with the SVBGSA's proposal to be the GSA for that area, DWR concurred with the SVBGSA's proposal, as authorized by SGMA, to have the County of Monterey be the GSA for that area. The County then delegated authority to prepare the Groundwater Sustainability Plan (GSP) for that area to the SVBGSA. The SVBGSA submitted its GSP for the 180/400-foot Subbasin to DWR in January 2020.

With regard to the proposals by both MCWD and the SVBGSA to be the GSA for portions of the Monterey Subbasin, the result was agreement between the MCWD GSA and the SVBGSA to break the Monterey Subbasin into two Management Areas, described as follows:

- Marina-Ord Area: This Management Area consists of the lands within the City of Marina and the former Fort Ord. The MCWD GSA will be the GSA for this Management Area.
- Corral de Tierra Area: This Management Area consists of the remainder of the subbasin, which are generally south of State Route 68 and includes a parcel

located between the City of Marina and the former Fort Ord. The SVBGSA will be the GSA for this Management Area.

The MCWD GSA and the SVBGSA agreed to work together to develop a single GSP for the Monterey Subbasin, as required by SGMA, with each of these two entities preparing the portion of that GSP to address their respective Management Areas.

In 2020 MCWD began development of a GSP for the Marina-Ord Area portion of the Monterey subbasin. DWR determined that this subbasin is not critically overdrafted and therefore has a GSP submittal deadline two years later (January 2022) than the deadline for critically overdrafted subbasins. The Watermaster is participating in the stakeholder group the MCWD GSA has formed to provide input during development of this GSP.

In 2020 the SVBGSA began development of a GSP for the Corral de Tierra Area portion of the Monterey subbasin. DWR determined that this subbasin is not critically overdrafted and therefore has a GSP submittal deadline two years later (January 2022) than the deadline for critically overdrafted subbasins. The Watermaster is participating in the Monterey Subbasin GSP Committee that the SVBGSA has formed to provide input during development of this GSP. In 2020 the Watermaster's Technical Program Manager, jointly with Montgomery & Associates, made a PowerPoint presentation to that Committee describing issues of mutual concern between the Corral de Tierra area and the Seaside Groundwater Basin. The presentation highlighted the impacts that pumping in the Corral de Tierra area is having on groundwater levels in the Laguna Seca Subarea of the Seaside Basin.

In addition, the Watermaster is participating in the development of the SVBGSA's other GSPs through its membership on the SVBGSA's Advisory Committee.

The Watermaster's participation in these committees and stakeholder groups will help to ensure that there is close coordination between the SVBGSA, MCWD GSA, and the Watermaster on matters of mutual interest.

K. Information that the Watermaster Would Otherwise Include within a Case Status Conference Statement

This Section was added to the Annual Report beginning in 2018 year as directed by the Court in its Order Amending Judgment filed March 29, 2018. It is formatted to contain the topic headings below, which were requested by the Court in its March 29, 2018 Order.

<u>Summary of Basin Conditions and Important Developments Concerning the Management of the Basin</u>

The condition of the Basin is discussed in the *Water Quality*, *Seawater Intrusion Analysis Report*, and *Basin Management Action Plan* subheadings in Section J of this Annual Report.

In summary, the *2020 Seawater Intrusion Analysis Report*, which analyzes the water quality data collected under the Watermaster's sampling program, reported that while seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin, in Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing

increasing chloride concentrations. That report contained recommendations for investigating this, and those recommendations will be implemented during WY 2021. The 2019 updated *Basin Management Action Plan* found that in spite of recent pumping at levels less than the Decision-established Natural Safe Yield of 3,000 AFY, water levels in some portions of the Basin are continuing to drop. It is expected that once the MPWSP becomes operational, or if that project is not constructed but an expansion of the PWM project is constructed, and CAWC is able to further reduce its pumping from the Basin by 700 AFY through its 25-year overpumping repayment program, the rate of drop in groundwater levels will be at least partially mitigated.

Planned Near and Long-term Actions of the Watermaster

Near-term actions are described in the 2020 Monitoring and Management Program discussed in Section J and Attachment 9 of this Annual Report.

Long-term actions will include:

- Continuing to carry out the duties and responsibilities assigned to the Watermaster by the Decision
- Continuing to coordinate with the Monterey County Water Resources Agency in their development of an updated hydrogeologic model of the Salinas Valley Basin, as discussed under the *Coordination of Watermaster's Seaside Groundwater Model with Salinas River Basin Model* subheading in Section J of the 2018 Annual Report (Note: In 2020 completion of this model was delayed and was still being completed as of the date of preparation of this 2020 Annual Report. The Watermaster will continue to coordinate with the Monterey County Water Resources Agency on this, once the model is completed and promulgated.)
- Continuing to coordinate with the Salinas Valley Basin Groundwater Sustainability Agency to develop measures to aid in groundwater management of the Laguna Seca Subarea, as discussed under the *Sustainable Groundwater Management Act* subheading in Section J of this Annual Report.

Information Concerning the Status of Regional Water Supply Issues

MPWSP

Implementation of the Monterey Peninsula Water Supply Project (MPWSP) continues to be vigorously pursued by California American Water.

In mid-November 2019 the California Coastal Commission held a hearing on CAWC's application for a Coastal Development Permit for construction of the portions of the MPWSP located within the coastal zone. The Commission received public input at that hearing but deferred taking action on the application until early 2020. That action was originally scheduled for the Commission's May 2020 meeting, but was rescheduled to a September 2020 meeting by Commission staff, who stated that they needed more time to adequately evaluate all of the documents that had been submitted. Just prior to the scheduled September 2020 Commission meeting date, CAWC decided to withdraw its application in order to see if it could negotiate with the opposing parties' modifications to the project that would address their concerns and objections. CAWC stated it intended to resubmit its application within a few months. On November 5, 2020 CAWC formally resubmitted its application for a Coastal Development Permit with the Coastal

Commission. Approval by the Coastal Commission is the last major permit needed to allow construction of the project to begin.

Detailed quarterly update reports on the MPWSP are posted on the MPWSP website at https://www.watersupplyproject.org. However, the second quarter 2020 update on that website (the most recent update as of the date of preparation of this 2020 Annual Report) did not provide any updated information regarding CAWC resubmitting its application, and did not provide any updated schedule for the project. The last update of the schedule appears to have been made when CAWC anticipated getting its Coastal Development Permit approved in December 2018. If the Coastal Commission approves the Coastal Development Permit in the first quarter of 2021, and if the same time periods for implementation of the project which are shown on the last updated schedule are accurate, the MPWSP could become operational in the fall of 2023.

PWM

Construction work on Monterey One Water's (M1W) Pure Water Monterey (PWM) recycled water project in Marina was completed in late 2019, and the Advanced Water Treatment plant began producing water in early 2020. Water began being injected into the Seaside Groundwater Basin in February 2020. M1W experienced some problems with the shallow injection wells (called vadose zone injection wells) shortly after it began injecting water into the Basin. It was found that some subsidence was occuring at these shallow wells, and also that it was not possible to inject the amounts of water in these shallow wells that was expected. As a result, M1W is performing rehabilitation of the wells where subsidence was occurring, and is designing two additional deep injection wells in order to bring the PWM injection capacity up to the intended levels. Those new deep injection wells are planned to be completed in late 2021, at which time the PWM project is expected to be able to inject approximately 3,500 AFY of advanced treated recycled water into the Seaside Basin for subsequent recovery and service to CAWC customers.

Public Buyout of CAWC Water System

Voters approved Measure J in the November 2018 general election. That Measure instructed the Monterey Peninsula Water Management District to undertake a feasibility study on the public takeover of California American Water's Monterey Water System.

At its November 2019 meeting MPWMD reviewed and discussed a preliminary valuation assessment and cost of service evaluation regarding the feasibility of securing and maintaining public ownership of CAWC's Monterey Water System. The preliminary valuation assessment consisted of completion of a preliminary desktop valuation assessment of the Monterey Water System to estimate the cost required to be incurred to acquire the Monterey Water System. The cost of service analysis was completed to compare the cost of public ownership, operation, and maintenance of the Monterey Water System (i.e. the public ownership scenario) with a status quo scenario, which is the anticipated cost of continued ownership, operation, and maintenance of the system by CAWC. The cost of service analysis was compared in terms of the annual Monterey Water System revenue requirements and typical residential customer bill impacts associated with the various scenarios that were developed.

The preliminary valuation assessment and cost of service evaluation concluded that acquisition of the Monterey Water System by MPWMD appeared to be economically

feasible. Economic feasibility was assessed by comparing the estimated revenue requirements of the water system under MPWMD ownership versus CAW ownership, which indicated significant revenue requirement savings could be achieved under the MPWMD ownership scenarios.

In order to prepare the MPWMD Board to consider in the future a Resolution of Public Necessity for the potential acquisition of CAWC's Monterey Water System, the Monterey County Local Agency Formation Commission (LAFCO) must allow MPWMD to activate certain latent powers authorized by its legislation, as well as consider annexation of approximately 56 parcels to MPWMD. LAFCO will require CEQA findings, action by MPWMD, and a filing of a Notice of Determination with the State. As a step toward fulfilling CEQA requirements, at its October 29, 2020 meeting the MPWMD Board certified a Final Environmental Impact Report (FEIR) for the Potential Acquisition of Monterey Water System and District Boundary Adjustment. Certification of this FEIR does not commit MPWMD to a hearing on a Resolution of Necessity or a condemnation proceeding, both of which would be required steps in the public acquisition process.

Management Activities that May Bear on the Basin's Wellbeing

1. *Water Conservation***.** From a water conservation standpoint, customers of CAWC are doing an exceptional job. CAWC's Monterey system has one of the highest levels of voluntary conservation in the state. There has essentially been no back-off in conservation following the end of mandatory conservation that occurred after the wet winter of 2016-2017.

2. *Storm Water and Recycled Water*. Storm water and recycled water are both components of the Pure Water Monterey (PWM) project that is being implemented by Monterey One Water. CAWC has already contracted to receive 3,500 AFY of PWM recycled water for injection into, and recovery from, the Seaside Basin. Monterey One Water, in coordination with others, is looking at the potential to expand the delivery capacity of the PWM project by using additional sources of recycled water and storm water, and in late 2019 completed preparation of a Supplemental Environmental Impact Report (SEIR) to fulfill the CEQA requirements for such an expansion. However, at its April 2020 meeting the M1W Board voted not to certify the SEIR. Although further consideration of that matter may occur at some point in the future, M1W staff reported that at the time of preparation of this 2020 Annual Report, no action by M1W was in progress or scheduled to resume consideration of that matter, and certification had still not occurred.

At its October 19, 2020 meeting, the MPWMD Board of Directors considered seeking to become the lead agency for the expansion project, in order to move forward with getting the SEIR certified. At that meeting, on a split vote, the Board determined not to pursue becoming the lead agency. From the discussion of Board members at that meeting, it appeared that this issue might again come before them for consideration, depending on future actions by M1W and on the outcome of the November 3, 2020 general election in which several seats on the MPWMD Board were up for election.

3. *Sustainable Groundwater Management Act*. Coordination between the Watermaster and the SVBGSA and the MCWD GSA is ongoing and is discussed in more detail above

under Section J of this Annual Report. That coordination will aid in groundwater management of the Laguna Seca and Corral de Tierra subareas.

4. Climate Change. Higher seawater levels could exacerbate seawater intrusion concerns, which punctuates the importance of monitoring and long-term management to avoid seawater intrusion. From a water supply perspective, reliance on groundwater with sustainable management is ideal because the resource is a reservoir and therefore not subject to sharp fluctuations in availability resulting from year-to-year precipitation amounts as is the case with surface water supplies. Updating of the Watermaster's *Groundwater Model* in 2018 (discussed in Section J of the 2018 Annual Report) and *Basin Management Action Plan* in 2019 (discussed in Section J of the 2019 Annual Report) incorporated projected impacts from climate change and sea level rise.

5. *New Technical Issues or Activities.*

- Stormwater Projects Being Evaluated in the Monterey Peninsula Stormwater Resource Plan (SWRP).

As reported in the 2018 Annual Report, Monterey One Water as the lead entity coordinated the development of a Stormwater Resource Plan (SWRP) for the Monterey Peninsula, Carmel Bay, and South Monterey Bay (Monterey Peninsula) Integrated Regional Water Management Plan (IRWMP) area.

The purpose of the SWRP is to identify opportunities to capture stormwater that could be utilized as new water supply sources for the Monterey Peninsula and provide additional water quality and environmental benefits. Some of those projects have the potential to minimally benefit the Seaside Basin, and are discussed in the 2019 Updated Basin Management Action Plan.

Of the seven priority projects that were identified in the Stormwater Resource Plan, at this time one project has been scheduled to receive funding to proceed. The Del Monte Manor project for the City of Seaside is lined up to receive IRWMP funds later this year and move forward with their Final Design, Environmental Review, and then Construction.

In addition, the City of Sand City has also been awarded IRWMP funds to proceed with their Green Streets initiative in downtown Sand City. Although this project was not a top priority project in the Stormwater Resource Plan, it was a project identified in the plan and was eligible for State funding.

The City of Monterey is awaiting the appropriate funding opportunity to proceed with the Hartnell Gulch stormwater diversion project.

- Reduction in Pumping in the Laguna Seca Subarea

In late 2020 CAWC completed construction of an intertie pipeline that will enable it to serve the customers in its Bishop and Ryan Ranch Units in the Laguna Seca Subarea with water from its Main System. Once this pipeline is placed into service, expected to occur before the end of 2020, CAWC will discontinue pumping from the Laguna Seca Subarea to serve those customers. This is expected to reduce total pumping from the Laguna Seca Subarea by about 28%.

L. Conclusions and Recommendations

The Seaside Basin Watermaster Board has worked diligently to meet all of the Court's established deadline dates. All of the Phase 1 Scope of Work activities, which are described in the "Implementation Plan for the Seaside Basin Monitoring and Management Program" dated March 7, 2007, have been completed. At the Watermaster Board meeting held on September 2, 2020 the Board adopted the FY 2021 budgets contained in Attachment 6, which support carrying out all elements of the 2021 Seaside Groundwater Basin Monitoring and Management Program (M&MP). The M&MP is contained in Attachment 9 and describes the activities that the Watermaster plans to conduct during Fiscal Year 2021.

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

As of the date of preparation of this 2020 Annual Report no future status conferences with the Court have been scheduled.

LISTING OF ACRONYMS USED IN THIS ANNUAL REPORT

AF - acre-feet
ASR - Seaside Basin Aquifer Storage and Recovery program
Basin - The adjudicated Seaside Groundwater Basin
BLM - Bureau of Land Management
BMAP - Basin Management Action Plan
CASGEM - California Statewide Groundwater Elevation Monitoring
CAWC - California American Water Company
Decision - Decision filed February 9, 2007 by the Superior Court in Monterey County under Case No. M66343 - California American Water v. City of Seaside et al.
DWR - California State Department of Water Resources
GSA - Groundwater Sustainability Agency
GSP - Groundwater Sustainability Plan
LSSA - Laguna Seca Subarea
M1W - Monterey One Water (formerly Monterey Regional Water Pollution Control Agency)
MCWD - Marina Coast Water District
MPWMD - Monterey Peninsula Water Management District
MPWSP - Monterey Peninsula Water Supply Project
M&MP - Monitoring and Management Program
NSY - Natural Safe Yield
PWM - Pure Water Monterey Project
SGMA - Sustainable Groundwater Management Act
SIAR - Seawater Intrusion Analysis Report
SIRP - Seawater Intrusion Response Plan
SVBGSA - Salinas Valley Basin Groundwater Sustainability Agency
SWRCB - State Water Resources Control Board
TAC - Technical Advisory Committee
USGS - United States Geological Survey
WY - Water Year

TO: Board of Directors

FROM: Laura Paxton, Administrative Officer

DATE: December 2, 2020

SUBJECT: Professional Service Contract for Watermaster Legal Services

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RECOMMENDATIONS:
It is recommended that the board enter into a Professional Service Contract with Baker Manock & Jensen PC Attorneys at Law to provide legal services to Watermaster.

BACKGROUND:
From time to time, legal matters have arisen that are beyond the ability of Watermaster staff or counsel of Watermaster parties to rectify. Russ McGlothlin was providing legal services to Watermaster while with the firm of Brownstein Hyatt Farber & Schreck; when he accepted a position with a Southern California firm, his fees became cost prohibitive ($700-$900/hour). The Watermaster board directed staff at its June 5, 2019 meeting to issue a request for proposals (RFP) for Watermaster legal services (Attached). Staff distributed the RFP to nine prospects in September with a closing date of October 9, 2020. Two legal firms submitted proposals to provide services (Attached). The following table summarizes the responses to the RFP.

Responders	Location	Proposal
Baker Manock & Jensen PC	Fresno, CA	$200 - $300/hour
O'Laughlin & Paris LLP	Sacramento, CA	$300 - $400/hour

Proposal from Baker Manock & Jensen PC noted that lead attorney Campbell will provide two in-person meetings per year without charging travel expense or time. Partners would be billed at $300/hour and associates would be billed at $200/hour. Professional indemnity limits of $15,000,000 each claim and $30,000,000 aggregate.

Proposal from O'Laughlin & Paris LLP noted no charge for paralegal or secretary services and overhead such as postage, reproduction, or mileage. Professional liability $1,000,000 each claim and $2,000,000 aggregate.

DISCUSSION
The Budget and Finance Committee, at its November 5, 2020 meeting, favored the fees, experience and qualifications presented in the proposal from Baker Manock & Jensen PC. The committee directed staff to interview lead attorney, Chris Campbell and voted unanimously to recommend the board enter into contract with Baker Manock & Jensen PC to provide legal services to Watermaster if the interview is positive.

Staff interviewed Mr. Campbell via teleconference on November 10th and feels Mr. Campbell would meet the needs of Watermaster. His range of water counseling is extensive. He fully understands the slim budgets of watermaster agencies and staff feels he will strive to give the best counsel at the best rate.

FISCAL IMPACT:
Estimated from Russ McGlothlin legal expenses 2015 – 2019, the 2021 Administrative Fund budget includes $25,000 to cover four to five hours of service per month at a rate of $450/hour.

ATTACHMENTS:
Budget and Finance Committee November 5, 2020 draft meeting minutes.
Watermaster Draft Professional Services Agreement with Baker Manock & Jensen PC
Watermaster RFS 2021-01 with Baker Manock & Jensen
Baker Manock & Jensen PC Engagement Letter to Watermaster

D-R-A-F-T MINUTES
Seaside Groundwater Basin Watermaster
Budget and Finance Committee Meeting
Via Zoom Teleconference
November 5, 2020

Attendees: BFC Members
City of Seaside – Victor Damiani, Chair
California American Water – Chris Cook
City of Sand City – Mayor Mary Ann Carbone
Coastal Subarea Landowners – Paul Bruno

Watermaster
Administrative Officer – Laura Paxton
Technical Program Manager – Robert Jaques

Others:
Director George Riley, Monterey Peninsula Water Management District

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Chair Damiani called the meeting to order at 11:00 a.m.

1. **Consider recommendation to the Watermaster Board of Directors whether to proceed with recruitment process with one of the two legal firms that responded to the Request for Proposal for Watermaster Legal Services.**

   Director Bruno called out that although a range of fees was proposed by Baker Manock & Jensen PC (BMJ) with the high end of $450 the rate for lead attorney Christopher Campbell, a fee schedule of $300 for partners and $200 for associates assigned to Watermaster was also given. In comparing the two proposals received, the cost advantage of lead attorney attendance at two in-person meetings per year at no charge offered by BMJ, and being the larger of the two firms with more extensive insurance coverage, Director Bruno favored BMJ over O'Laughlin & Paris LLP (OP). Mayor Carbone also favored the apparent cost advantage of BMJ. The merits of a larger firm (BMJ having 36 attorneys versus OP having 6) with a greater knowledge base to draw from was discussed. Chair Damiani considered that a smaller firm might offer more personal service. Director Cook was impressed with Christopher Campbell's background and education. In response to Chair Damiani inquiring of the applicable experience of each firm for Watermaster needs, Technical Program Manager Jaques felt BMJ had more experience with established adjudicated groundwater basins as compared with OP with more experience in developing groundwater sustainability agencies and plans per the Sustainable Groundwater Management Act.

   Director Cook requested Christopher Campbell be interviewed by staff to determine if he speaks eloquently and precisely to the needs of Watermaster. Chair Damiani suggested interviewing OP as well and Director Bruno concurred, *if* the interview with BMJ did not meet expectations.

   Staff responded to Director Riley's inquiry of possible legal issues forthcoming, with nothing currently pressing. In the interest of cost, Director Bruno recommended using expert legal counsel to render opinion, and continue to use Watermaster party attorneys for routine administrative processes such as filing the annual report to court by December 15th.

   Moved by Director Cook and seconded by Mayor Carbone to have staff interview Chris Campbell of Baker Manock & Jensen PC and, if found suitable to deliver services, recommend to the board to contract with Baker Manock & Jensen PC for Watermaster legal services. Carbone – Aye; Cook – Aye; Bruno – Aye; Damiani – Aye

The meeting ended at 11:20 a.m.

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT TO PROVIDE PROFESSIONAL SERVICES is made and entered into on December 2, 2020 by and between SEASIDE GROUNDWATER BASIN WATERMASTER, hereinafter referred to as "WATERMASTER," and BAKER MANOCK & JENSEN PC, hereinafter referred to as "PROFESSIONAL," as follows:

SECTION I: ADHERENCE TO TERMS OF AGREEMENT

WATERMASTER intends to literally interpret and strictly apply all terms and conditions of this Agreement. All approvals which are required to be in writing must be in writing to be valid and binding. PROFESSIONAL is encouraged to raise to WATERMASTER any questions with regard to interpretation or applicability of any provision of this Agreement before undertaking the work.

SECTION II: EMPLOYMENT

WATERMASTER hereby employs PROFESSIONAL, as an independent contractor to furnish the professional services covered by this Agreement, and the Requests for Service issued under it, in accordance with the terms and conditions set forth below, and PROFESSIONAL hereby accepts such employment.

SECTION III: WORK ASSIGNMENTS

It is the intent of WATERMASTER and PROFESSIONAL to authorize the performance of work under this Agreement by executing a series of written work assignments setting forth the specific description, scope, and costs of the work to be performed. Such assignments shall be called "Requests For Service" (RFS) and shall be numbered consecutively. Each RFS, upon execution by PROFESSIONAL and by WATERMASTER, shall become and be considered as a part of this Agreement, and all provisions herein shall apply to said RFSs. The RFS form to be used is contained in Attachment A to this Agreement.

SECTION IV: TIME OF PERFORMANCE

A. General - Time is of the essence on the work of the RFSs issued under this Agreement. Therefore, PROFESSIONAL shall perform its services in a timely manner. Specific performance times shall be specified for

each individual RFS under this Agreement. PROFESSIONAL shall make every reasonable effort, including assigning of additional personnel to the work and/or working overtime, to complete the authorized work within these stipulated time periods. The taking of such additional measures to complete the work within the stipulated time periods will not entitle PROFESSIONAL to additional compensation, if the work is being performed under the Lump Sum Payment Method, except as provided for in Section V, Paragraph B.

B. Subcontracted Services - For subcontracted services PROFESSIONAL shall contract for and schedule such services in a timely fashion in accordance with the requirements of the work, and shall be fully responsible for the performance and quality of all work performed by its subcontractors.

C. Extensions of Time - The time of performance established for a particular RFS may be extended at any time prior to completion of the work by mutual agreement in writing between WATERMASTER and PROFESSIONAL.

SECTION V: COMPENSATION

A. General - WATERMASTER and PROFESSIONAL shall negotiate the costs and fees for each specific RFS. The method of payment of said costs and fees shall be either on a lump-sum basis, on a cost-plus-a-fixed-fee basis, or on a time-and-expense basis. The method of payment will depend on the specific conditions, the scope of work, and the services to be performed for each specific RFS.

B. Projected Cost Overruns Under Cost-Plus-a-Fixed-Fee or Time-and-Expense Payment Methods - If, at any time in the performance of the work of a specific RFS under the Cost-Plus-a-Fixed-Fee or Time-and-Expense payment methods, PROFESSIONAL has reason to believe that the costs which it expects to incur to complete the work of that RFS will exceed the total amount authorized for that RFS, PROFESSIONAL shall notify WATERMASTER in writing to that effect. The notice shall:

(1) State the reason(s) why PROFESSIONAL anticipates a cost overrun;

(2) State the estimated amount of additional funds beyond the total amount currently authorized that will be required to complete the work authorized by the RFS; and

(3) Provide recommendations of how the overrun can be avoided;

If, after such notification, additional funds are not allotted, WATERMASTER will, if required in writing by PROFESSIONAL, terminate the work of that particular RFS pursuant to the provisions in Section VI, TERMINATION.

C. Lump-Sum Payment Method - WATERMASTER may elect to pay PROFESSIONAL a lump sum Total Price amount to be determined for a specific RFS. In addition to this lump sum amount, a Special Services allowance, as defined in this section, may also be established.

1. Lump Sum Total Price - PROFESSIONAL shall perform all work authorized by a lump sum type of RFS for the lump sum Total Price amount. No additional payments for said work will be requested by PROFESSIONAL or authorized by WATERMASTER, unless both parties agree that there is additional work, beyond the scope of services authorized by the RFS, which must also be performed. Before any such additional work is undertaken, WATERMASTER and PROFESSIONAL shall execute a separate amendment to the RFS setting forth the scope and costs of the additional work to be performed.

2. Special Services Allowance - To cover unforseen circumstances, WATERMASTER and PROFESSIONAL may negotiate a Special Services allowance. PROFESSIONAL shall provide WATERMASTER with written notification stating the reasons for requiring the utilization of any or all of the Special Services allowance. No utilization of any portion of the allowance shall occur without the prior written approval of the WATERMASTER. Special Services costs will be charged in accordance with the Time-and-Expense Payment Method as defined in Paragraph D

of this section.

D. Cost-Plus-A-Fixed-Fee Payment Method - WATERMASTER may elect to pay PROFESSIONAL on a cost-plus-a-fixed-fee basis which shall be the sum of (1) Direct Salaries, (2) Overhead Costs, (3) Direct Non-Salary Expenses, and (4) A Fixed Fee.

1. Direct Salaries - Shall be the amount paid by PROFESSIONAL to its employees for time directly chargeable to a given RFS, exclusive of costs for fringe benefits for said employees and other payroll costs not paid to the employee.

2. Overhead Cost - Shall be a percentage of the Direct Salaries. The percentage to be charged shall be negotiated between WATERMASTER and PROFESSIONAL, and it shall be stipulated in each RFS for which this type of payment method will be used.

3. Direct Non-Salary Expenses - Shall be all identifiable costs directly chargeable to each RFS including, but not limited to: travel and subsistence expenses; work subcontracted to others; reproduction of plans, specifications, reports and other documents; equipment rental; and, drafting and stenographic supplies used in the work. The chargeable rate for automobile mileage for the work to be performed under this shall be stated in the RFS.

4. Fixed Fee - Shall be a fixed amount for interest on invested capital, readiness to serve, and profit. A fixed fee shall be established for each specific RFS for which the cost-plus-a-fixed-fee payment method will be used. This fixed fee will not change regardless of whether the Total Estimated Cost is greater than or less than the actual costs, unless both parties agree that there has been a change in scope. In such instance, the fixed fee will be renegotiated.

5. Total Estimated Cost - Is the sum of categories (1), (2), and (3) above.

6. Total Price - Is the sum of categories (1), (2), (3), and (4) above.

7. Invoices - Invoices shall include the costs incurred in categories (1), (2), and (3), plus a proportionate amount of the category (4) Fixed Fee.

E. Time-and-Expense Payment Method - For tasks for which the scope of work is not readily definable, WATERMASTER may elect to pay PROFESSIONAL on a time-and-expense basis in accordance with the PROFESSIONAL's most current Standard Schedule of Compensation. The hourly rates set forth in the Standard Schedule of Compensation shall be inclusive of all direct and indirect salary costs, overhead, fringe benefits, profit, and other costs, and shall reflect the total hourly charge for each listed job category. Other direct non-salary expenses for the performance of work authorized under the Time-and-Expense Payment Method shall be all identifiable costs directly chargeable to each RFS including, but not limited to: travel and subsistence expenses; work subcontracted to others; reproduction of plans, specifications, reports and other documents; equipment rental; and, drafting and stenographic supplies used in the work. The chargeable rate for automobile mileage for the work to be performed under this Agreement shall be stated in the RFS. Direct non-salary expenses shall be compensated for at their actual cost, unless otherwise stated in the RFS, providing they have been authorized in advance by WATERMASTER. A Total Price, which may not be exceeded without WATERMASTER's prior written approval, will be established for each specific RFS for which this payment method will be used.

F. Terms of Payment - PROFESSIONAL shall invoice WATERMASTER monthly for work completed during the previous month, unless a different invoicing frequency is agreed to by both parties to this Agreement. All invoices shall be due and payable within thirty (30) days of the date of receipt by WATERMASTER, provided all costs included in the invoice are adequately supported by documentation accompanying the invoice. If payment is not made within sixty (60) days of the date of receipt by WATERMASTER, interest on the unpaid balance will accrue beginning with the sixty-first day at the rate of 1.0 percent per month, or the maximum interest rate permitted by law, whichever is the lesser. Such interest shall become due and payable at the time said overdue payment is made.

G. Penalty for Late Performance - The PROFESSIONAL is not responsible for delays in the schedule caused by events outside PROFESSIONAL's reasonable control. However, in the event PROFESSIONAL fails to properly complete work within thirty (30) days of the date such work is due (pursuant to schedules developed in accordance with Section IV of this Agreement), because of events within PROFESSIONAL's reasonable control, WATERMASTER SHALL reduce the total compensation established for the work of that RFS by ten percent (10%). Said reduction shall be deemed liquidated damages for the untimely performance of work required by this Agreement. PROFESSIONAL shall be deemed to have waived any claim for such amount by reason of his failure to perform in a timely fashion.

SECTION VI: TERMINATION

Notwithstanding the above, WATERMASTER reserves the right to terminate any RFS to this Agreement at any time prior to the completion of the services to be furnished by PROFESSIONAL under said RFS by giving a written Notice of Termination to PROFESSIONAL, in which event WATERMASTER shall pay PROFESSIONAL only for work done and direct costs incurred by PROFESSIONAL under said RFS prior to receipt of such notice of termination. Such costs will include reasonable costs to bring the work to a halt, and costs to deliver to WATERMASTER the documentation described in the following paragraph. Termination of a particular RFS will not affect any other operative RFS.

Upon receipt of a Notice of Termination, PROFESSIONAL shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) deliver to WATERMASTER all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by PROFESSIONAL in performing work under this Agreement, whether completed or in process.

Upon termination WATERMASTER may take over the work and prosecute the same to completion by agreement with another party or otherwise. Any work taken over by WATERMASTER for completion will be completed at WATERMASTER's risk, and WATERMASTER will hold harmless PROFESSIONAL from all claims and damages arising out of improper use of PROFESSIONAL's work.

SECTION VII: WATERMASTER LIABILITY

PROFESSIONAL understands that this Agreement is with WATERMASTER alone, and that none of the members of WATERMASTER are liable for any sums which may be payable hereunder, or for any debts of WATERMASTER.

SECTION VIII: CHANGES

WATERMASTER may, at its discretion and from time to time, revise, correct, or modify the work to be performed under an RFS. All such changes shall be made formally and in writing to PROFESSIONAL. PROFESSIONAL shall comply with such changes. Should PROFESSIONAL determine that said changes will result in an increase or decrease in costs to PROFESSIONAL, these costs shall be evaluated by WATERMASTER and PROFESSIONAL for negotiation as to adjustment in the compensation due PROFESSIONAL, and written agreement as to said adjustment shall be reached between the parties prior to commencement of any work that will cause an increase or decrease in PROFESSIONAL's costs. Any increased costs in excess of the Total Price incurred by PROFESSIONAL prior to execution of a written agreement covering said increased costs shall not be compensable.

SECTION IX: DUTIES OF WATERMASTER

WATERMASTER agrees to perform duties in connection with this Agreement and RFS issued under it as follows:

A. To assist PROFESSIONAL in obtaining any available information concerning location and details of facilities under control of WATERMASTER that may affect the work of an RFS, and to render reasonable assistance to PROFESSIONAL;

B. To examine within a reasonable time so as not to delay the work of PROFESSIONAL, all studies, reports, sketches, drawings, specifications, cost estimates, proposals and other documents presented by PROFESSIONAL to WATERMASTER for such purpose;

C. To give prompt written notice to PROFESSIONAL whenever WATERMASTER observes or otherwise becomes aware of any defect in the work of PROFESSIONAL;

SECTION X: DATA FURNISHED BY WATERMASTER

For the purpose of aiding PROFESSIONAL in the performance of its obligations under this Agreement and RFS issued under it, WATERMASTER shall furnish PROFESSIONAL all relevant data in its possession and shall render all reasonable assistance to PROFESSIONAL in connection with its performance hereunder. WATERMASTER is responsible for the reasonable correctness of data so furnished, but it shall likewise be the responsibility of PROFESSIONAL to apply reasonable caution in its use and interpretation of the data and to promptly advise WATERMASTER of any incorrectness or suspected incorrectness in the data furnished.

WATERMASTER shall provide to PROFESSIONAL in a timely manner all materials, decisions, and direction which are necessary to the progress of the work and which are basically the prerogative of WATERMASTER, but which PROFESSIONAL is not required to determine or provide under the terms of this Agreement.

SECTION XI: RESPONSIBILITIES OF PROFESSIONAL

PROFESSIONAL is employed to render a professional service only, and any payments made to him are compensation solely for such services as he may render and recommendations he may make in carrying out the work. PROFESSIONAL shall follow professional practices to make findings, opinions, factual presentations, and professional advice and recommendations.

PROFESSIONAL's review or supervision of work prepared or performed by other individuals or firms employed directly by WATERMASTER shall not relieve those individuals or firms of complete responsibility for the adequacy of their work.

PROFESSIONAL shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports and other services furnished by PROFESSIONAL under this Agreement. PROFESSIONAL shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in his designs, drawings, specifications, reports and other services.

PROFESSIONAL shall perform such professional services as may be necessary to accomplish the work required to be performed under this Agreement

and in accordance with this Agreement.

Approval by WATERMASTER of drawings, designs, specifications, reports, and incidental engineering work or materials furnished hereunder shall not in any way relieve PROFESSIONAL of responsibility for the technical adequacy of his work. Neither WATERMASTER's review, approval or acceptance of, nor payment for, any of the services rendered under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

PROFESSIONAL shall be and remain liable in accordance with applicable law for all damages to WATERMASTER caused by PROFESSIONAL's negligent performance of any of the services furnished under this Agreement. The only exception in this regard will be for errors, omissions or other deficiencies to the extent attributable to WATERMASTER, WATERMASTER-furnished data or any third party not under the control of PROFESSIONAL. PROFESSIONAL shall not be responsible for any time delays in the project caused by circumstances beyond PROFESSIONAL's control.

SECTION XII: SUBCONTRACT

WATERMASTER has entered into this Agreement in order to receive the professional services of PROFESSIONAL. PROFESSIONAL will therefore not make an assignment to a third party of all or any portion of the services required of PROFESSIONAL under this Agreement and RFSs thereto without first obtaining the written consent of WATERMASTER. PROFESSIONAL may, however, make use of the part-time assistance of other experts possessing unique skills, the utilization of which will, in the opinion of PROFESSIONAL, enhance the quality of its service to WATERMASTER under this Agreement provided, however, that any such additional assistants, part-time or otherwise, shall be considered employees of PROFESSIONAL or of PROFESSIONAL's subcontractor(s), and the responsibility for same shall rest with PROFESSIONAL.

SECTION XIII: INDEPENDENT PROFESSIONAL

PROFESSIONAL shall perform the services hereunder as an independent contractor, and nothing herein contained shall be construed to be inconsistent with this relationship or status. The employees of PROFESSIONAL shall not be deemed to be the employees of WATERMASTER, and WATERMASTER shall have no right to

control the physical conduct of PROFESSIONAL's employees.

SECTION XIV: USE OF DOCUMENTS

For all work performed under this Agreement and all RFSs thereto, PROFESSIONAL shall provide to WATERMASTER copies of all plans, drawings, specifications, studies, reports, analyses, calculations, and all other work products and supporting documentation developed in the course of performing the work authorized by these agreements. The costs for reproducing, assembling, and delivering said copies of these documents to WATERMASTER shall be considered to have been included in the price for performing each RFS, whether or not specifically stated therein. Unless stated otherwise in the RFS, one paper copy, and the electronic file on disc or on CD (e.g. in MS Word, MS Excel, etc.), of each document shall be provided by PROFESSIONAL to WATERMASTER. WATERMASTER shall have the right, and permission of PROFESSIONAL, to use any such document for any purpose which WATERMASTER deems appropriate. Use of documents for other than their intended purpose shall be at WATERMASTER's risk. WATERMASTER shall hold PROFESSIONAL harmless from all claims and damages arising out of improper use of said documents.

SECTION XV: AMENDMENTS AND SCOPE OF AGREEMENT

WATERMASTER hereby reserves the right to amend the provisions of this Agreement from time to time as may be in the best interest of WATERMASTER. Such amendments, upon acceptance by PROFESSIONAL and by WATERMASTER, shall become and be considered as part of this Agreement, and all provisions herein shall apply to such amendments.

This Agreement constitutes the entire agreement between the parties relative to the subject matters hereof, and no modifications thereof shall be effective unless and until such modifications are evidenced by written amendments, signed by both parties, to this Agreement. There are no understandings, agreements, conditions, representations, warranties, or promises with respect to the subject matter of this Agreement which are not actually contained in the Agreement, except those expressly contained in such written amendments.

SECTION XVI: SUCCESSORS AND ASSIGNS

This Agreement and all amendments thereto shall be binding upon and inure

to the benefit of any successors and assigns of the respective parties hereto.

SECTION XVII: ATTORNEYS' FEES

If any legal action is necessary to enforce or interpret the terms or provisions of this Agreement and all amendments thereto, and the respective rights and duties of the parties hereunder, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which he may be entitled.

SECTION XVIII: JURISDICTION

This Agreement shall be administered and interpreted under the laws of the State of California. Jurisdiction of litigation arising from this Agreement shall be in this state. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said laws, but the remainder of the Agreement shall be in full force and effect.

SECTION XIX: INSURANCE

PROFESSIONAL shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by PROFESSIONAL, his agents, representatives, employees or subcontractors.

A. Minimum Scope and Limits of Insurance

PROFESSIONAL shall maintain the types of insurance with limits no less than those set forth below, and having no deductibles, except as noted.

The coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001).
2. Insurance Services Office Form No. CA 0001 covering Automobile Liability, Code 1 (any auto).
3. Workers Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Errors and Omissions Liability insurance appropriate to the consultant's profession. For architects and engineers this coverage shall be endorsed to include contractual liability.

Required coverage:

1. General Liability Insurance: Combined single limit of $1,000,000 per occurrence and $2,000,000 annual aggregate for bodily injury, personal injury, and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location, or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability Insurance: $1,000,000 per accident for bodily injury and property damage.

3. Employer's Liability Insurance: $1,000,000 per accident for bodily injury or disease. If PROFESSIONAL has no employees, this coverage is not required.

4. Workers' Compensation Insurance: As required by the State of California.

5. Errors and Omissions Insurance: PROFESSIONAL shall procure and maintain errors and omissions liability insurance appropriate to the type of professional services that PROFESSIONAL will be providing under this Agreement. The minimum coverage shall be $1,000,000 per claim and in the aggregate.

B. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by WATERMASTER before any work under this Agreement is performed.

C. Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. WATERMASTER, its officers, officials, employees, and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of PROFESSIONAL; products and completed operations of PROFESSIONAL; premises owned, occupied or used by

PROFESSIONAL; or, automobiles owned, leased, hired or borrowed by PROFESSIONAL. The coverage shall contain no special limitations on the scope of protection afforded to WATERMASTER, its officers, officials and employees.

2. For any claims related to this project, PROFESSIONAL's insurance coverage shall be primary insurance as respects WATERMASTER, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by WATERMASTER, its officers, officials, employees, or volunteers shall be excess of PROFESSIONAL's insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to WATERMASTER, its officers, officials and employees.

4. PROFESSIONAL's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to WATERMASTER.

6. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.

E. Acceptability of Insurers

Insurance is to be placed with insurers with a current A. M. Best's rating of no less than A:VII, unless otherwise acceptable to WATERMASTER.

F. Verification of Coverage

PROFESSIONAL shall furnish WATERMASTER with original certificates and

amendatory endorsements effecting coverage required by this section. The endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements are to be received and approved by WATERMASTER before work commences. If this is not possible due to time constraints prior to commencement of work, PROFESSIONAL may initially furnish Certificates of Insurance in lieu of endorsements, as long as the endorsements are provided within forty-five (45) days from the date of execution of this Agreement.

G. Subcontractors

PROFESSIONAL shall include all subcontractors as insureds under its policies or shall furnish separate evidence of coverage and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

SECTION XX: INDEMNIFICATION

PROFESSIONAL shall indemnify and hold harmless WATERMASTER and its officers, officials, employees and agents from and against all losses, claims, demands, payments, suits, actions, recoveries, and judgements of every nature and description brought or recoverable against it or them by reason of any negligent act, negligent error, or negligent omission of PROFESSIONAL, his agents, or employees for work performed under this Master Agreement. The only exception in this regard will be for errors, omissions or other deficiencies to the extent attributable to WATERMASTER, WATERMASTER-furnished data or any third party not under the control of PROFESSIONAL.

SECTION XXI: WRITTEN NOTICE

Written notice shall be deemed to have been duly served if delivered in person or by mail to the individuals and at the addresses listed below:

A. WATERMASTER: Administrative Officer
Seaside Basin Watermaster
PO Box 51502
Pacific Grove, CA 93950

B. PROFESSIONAL: Christopher Campbell
Baker Manock & Jensen PC
5260 North Palm Avenue, Suite 421
Fresno, CA 93704

IN WITNESS WHEREOF, the parties hereto have executed this Agreement consisting of fifteen (15) pages and one (1) Attachment in duplicate on the date hereinabove written.

WATERMASTER	PROFESSIONAL
SEASIDE BASIN WATERMASTER	BAKER MANOCK & JENSEN PC
By _____	By _____
Paul Bruno	Christopher Campbell
WATERMASTER Chairman of the Board	

SEASIDE BASIN WATERMASTER
REQUEST FOR SERVICE

DATE: December 2, 2020 **RFS NO.** 2021-01

TO: Christopher Campbell
Baker Manock & Jensen PC
PROFESSIONAL

FROM: Laura Paxton
WATERMASTER

Services Needed and Purpose: Provide legal services to assist as may be requested by Watermaster.

Completion Date: All work under this RFS will be completed no later than December 31, 2021.

Method of Compensation: Time and Expense Payment Method. Hourly rates are described in Attachment 1.

Total Price Authorized by this RFS: $25,000.00 (Cost is authorized only when evidenced by signature below.)
(See Attachment 1 for derivation of Estimated Costs).

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

Requested by: _____ Date: _____
Laura Paxton

Authorized by: _____ Date: _____
Paul Bruno
WATERMASTER Chairman of the Board

Agreed to by: _____ Date: _____
Christopher Campbell
PROFESSIONAL

ATTACHMENT 1

SCOPE OF WORK AND ESTIMATED COSTS

BACKGROUND

Under RFS No. 2021-01, PROFESSIONAL will render opinions on adjudicated basin related legal matters, interact with the judge presiding in the matter, attend meetings, review documents, determine appropriate response by Watermaster to Public Records Act requests, and other work as necessary to assist WATERMASTER. Requests for assistance will normally be made by email or by telephone by WATERMASTER staff.

ESTIMATED COSTS

All Partners $300 per hour
All Associates $200 per hour
Work examples: time spent preparing documents, legal research, negotiations, conferences, telephone calls, travel time and any time in court or before any government agency.

Paralegals $150-$160 per hour

In general, costs are not advanced. Costs can include, by way of example, transportation costs, photocopying, facsimiles, telephone calls and similar costs, administrative filing fees, court filing fees, subpoena costs, deposition costs, investigator's fees, fees for preparing transcripts, expert witness fees, accounting fees, consulting fees, appraisal fees and actuarial costs.

Since there is no detailed scope of work for this RFS, it is not possible to provide a detailed breakdown of estimated costs. Based on experience with previous legal counsel, it is estimated that PROFESSIONAL may provide up to 83 hours of time assisting WATERMASTER with the work to be performed under this RFS. At PROFESSIONAL's hourly rate of $300, this would amount to $24,000. This serves as the basis for the Total Price set forth on page 1 of this RFS No. 2021-01.

Christopher L. Campbell
Attorney at Law
ccampbell@bakermanock.com

November 25, 2020

Seaside Groundwater Basin Watermaster

_____

Re: Confirmation of Our Engagement

Dear Laura:

You have asked this office to represent Seaside Groundwater Basin Watermaster as General Counsel.

Because it is essential to a successful attorney-client relationship that fee arrangements and other agreements are clearly understood at the very beginning of an engagement, and pursuant to the requirements of Business and Professions Code Section 6148, we ask that you read and sign this letter as confirmation of this understanding. This letter will be our agreement in connection with this engagement.

Fees

Our firm's fees will be based upon time spent on behalf of Seaside Groundwater Basin Watermaster at our agreed hourly rates of $300 for partner and $200 for associates including, for example, time spent preparing documents, legal research, negotiations, conferences, telephone calls, travel time and any time in court or before any government agency. Our current other hourly rates vary from $150.00 to $160.00 for paralegals. We charge for our time in minimum units of one-tenth of an hour or six minutes. While our rates are subject to change, we normally change them only annually. We will notify you in advance of any increase in rates.

The total fees for our professional services will be based on the time we believe in our professional judgment is required to perform the services rendered and will be computed on the basis of the usual hourly charges of the attorneys rendering service. In general, we do not advance costs. Costs can include, by way of example, transportation costs, photocopying, facsimiles, telephone calls and similar costs, administrative filing fees, court filing fees, subpoena costs, deposition costs, investigator's fees, fees for preparing transcripts, expert witness fees, accounting fees, consulting fees, appraisal fees and actuarial costs. Under some circumstances, we may be required to, or we may in our discretion agree to, advance costs. Should we do that, costs which are advanced by our office will be additional charges to Seaside Groundwater Basin Watermaster. These costs advanced will be reflected separately in our

regular billing to Seaside Groundwater Basin Watermaster. Telephone and postage costs are computed at the rate of 1% of gross fees incurred in performing services.

Any discussion or cursory estimate given by us regarding fees and costs is only an estimate. The fees and costs may be greater than any certain amount mentioned. The number of hours expended, and resulting fees and costs, vary greatly depending upon working relationships and the conduct of the opposing party and opposing counsel. In addition, over the course of the action, attitudes can greatly change, and legal and factual issues can become more complex. These factors, among others, make it impossible to estimate an ultimate fee and cost amount with any reasonable accuracy.

Scope of Services

We will provide services with respect to the matter described above. Should Seaside Groundwater Basin Watermaster engage us to perform any other services, and in the absence of a separate written fee agreement for any such other engagement, those other engagements will also be subject to the terms of this agreement.

Billing

We will render monthly statements to Seaside Groundwater Basin Watermaster. The account shall be payable when billed. A late payment charge of 1-1/2% per month from the billing date will be assessed on all amounts thirty days or more past due.

Document Preservation

Whenever you are contemplating litigation or are aware that litigation is threatened or has been actually filed against you, you must institute a "litigation freeze" to prevent the destruction (even destruction in the ordinary course of business pursuant to your typical document retention policy) of any potentially relevant paper or electronic document. Make sure that all potentially relevant documents, including all documents pertaining to the adverse party or parties (even if you do not believe them to be relevant to the litigated matter), are saved and preserved. "Documents" includes not only paper, but also electronic records such as email, computer files, phone notes, social media posts, photographs, videos, and the like. If there is any doubt as to whether a document should be preserved, resolve the doubt by preserving the document. Make sure you disable any automatic overwrite feature that might ordinarily erase computer files without action on your part. Failure to preserve potentially relevant documents at the outset of a controversy can lead to sanctions which may be costly or result in the dismissal of claims or defenses, and could, even absent sanctions, impair our ability to effectively represent you in current or future litigation.

Withdrawal of Attorney

This firm may withdraw from the representation with regard to the matter covered by this Agreement within a reasonable time after giving notice of such withdrawal to Seaside Groundwater Basin Watermaster. There is no reason to assume this would happen, but we do reserve the right to withdraw in situations where attorneys' fees are not timely paid or where there exist other grounds for withdrawal recognized by our state's Rules of Professional Conduct. Notwithstanding our withdrawal, Seaside Groundwater Basin Watermaster will remain obligated to pay us at the agreed rates for all services previously provided, and to reimburse us for all costs advanced before the withdrawal.

Discharge of Attorney

Seaside Groundwater Basin Watermaster may discharge us at any time by written notice effective when received by us. Unless specifically agreed between Seaside Groundwater Basin Watermaster and this firm, we will provide no further services and advance no further costs on behalf of Seaside Groundwater Basin Watermaster after receipt of the notice. If we are Seaside Groundwater Basin Watermaster's attorneys of record in any proceeding, Seaside Groundwater Basin Watermaster agrees to execute and return a substitution-of-attorney form immediately on its receipt from us.

Notwithstanding the discharge, Seaside Groundwater Basin Watermaster will remain obligated to pay us at the agreed rates for all services provided and to reimburse us for all costs advanced.

Fee Disputes

Seaside Groundwater Basin Watermaster has the right to arbitrate the dispute through the local Bar's Fees Arbitration Procedures (Business & Professions Code Section 6200, et seq.).

Document Retention Policy

We will keep the information pertinent to your case in a file maintained by our office. The primary file will consist of electronic documents although we often keep many of the documents in hard copy form. Once we conclude your case we will, unless otherwise instructed in writing, return to you any original documents you provided us and deliver to you any original documents you signed such as contracts, settlement agreements and the like. We will, unless otherwise agreed in writing, preserve the electronic file for six years at which time it will be destroyed. We may destroy any subsidiary hard copy paper file immediately upon completion of our services but, should it not be destroyed before, it will be destroyed at the same time as the electronic file.

No Warranty or Prediction of Results

Our firm cannot warrant or predict the results in your case. Any expressions regarding the potential results of your case are only that attorney's opinion, intention, or hope. We will, however, attempt at all times to render to Seaside Groundwater Basin Watermaster faithful and diligent service to the best of our abilities.

Electronic Signature Same as Original

This agreement may be executed in several counterparts and all such executed counterparts shall constitute one agreement, binding on the parties hereto as if the parties were all signatories to the same counterpart. In addition, any party may evidence execution of this agreement by facsimile transmission or electronic signature (as on pdf attached to an email) to the other party, and receipt of said facsimile or electronic signature shall be deemed receipt of an original. Notwithstanding any provision of law to the contrary, including section 255 and section 260 of the California Evidence Code, a signature evidenced by facsimile transmission or electronic signature shall be considered an original executed counterpart agreement. Upon demand, the original signed document which was evidenced by said facsimile transmission or electronic signature shall be delivered to the receiving party

If Seaside Groundwater Basin Watermaster agrees to the terms of this letter, please date and sign this letter in blue ink. Return the original by mail to this office with the retainer. Please also e-mail me a pdf of the signed document. The enclosed copy is for your records.

We look forward to working with the Watermaster Staff and Board to protect the Basin.

Very truly yours,

Christopher L. Campbell
BAKER MANOCK & JENSEN, PC

CLC:tlw

I have read, understand, and hereby agree to the terms and conditions of this letter agreement concerning engagement of professional services to be performed by Baker Manock & Jensen, PC.

Date: _____

Seaside Groundwater Basin Watermaster

_____

If you would prefer to receive your monthly statements via electronic mail rather than U.S. Mail, please include your e-mail address and sign below:

_____
E-mail Address

_____
Seaside Groundwater Basin Watermaster

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: December 2, 2020

SUBJECT: Obtaining additional water to recharge the Basin in order to raise groundwater levels

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RECOMMENDATIONS:
It is recommended that the Board discuss, and provide direction to staff on, how additional water could be obtained to recharge the Basin in order to raise groundwater levels so that the Basin does not continue to be at risk of seawater intrusion.

BACKGROUND:
At its September 2, 2020 meeting the Board discussed the groundwater level impacts of two potential scenarios, one involving the Cal Am proposed desalination plant and one involving an expanded Pure Water Monterey (PWM) project. The already-in-operation initial PWM project includes both an Operating Reserve of 1,000 AF, and a Drought Reserve of 1,000 AF. These volumes of PWM water are intended to be left in the Basin, and only used when necessary to meet demands and subsequently replenished to these levels whenever they are used. However, it was concluded that neither the desalination plant nor the expanded PWM project, in conjunction with the already-in-operation initial PWM project including these reserves, will enable groundwater levels to reach protective elevations. It is clear that in order to protect the Basin against the threat of seawater intrusion it will be necessary to obtain additional recharge water that can be left in the Basin and not pumped out, in order to achieve protective groundwater elevations. Previous groundwater modeling indicated that on the order of 1,000 AFY of recharge water, injected into and left in the Basin over a 25-year period, might be necessary to achieve protective elevations.

DISCUSSION
If the Board wishes to discuss this topic, here are some issues to consider:

- Does the Adjudication Decision have any specific requirements directing the Watermaster to obtain additional recharge water to protect the Basin, or is the Watermaster only required to see that pumping is reduced to the Natural Safe Yield, even if that does not protect the Basin against the threat of seawater intrusion? Note that Exhibit A to the Decision, titled *"Principles and Procedures for the Seaside Basin Monitoring and Management Plan,"* includes this wording in the section titled "Plan Criteria":
  "Within one year after entry of the Judgment by the Court, the Watermaster will: …(d) develop a plan of action to be implemented to avoid various adverse effects in the Basin, including seawater intrusion; and (e) develop a plan of action to contain seawater intrusion should it occur. The plan of action to avoid adverse effects in the Basin shall include a timeline for the importation of Non-Native water for spreading or injection into the Basin, and for acquisition of recycled water in lieu of Native Water production, and shall outline concrete steps to be taken to secure both Non-Native water and recycled water."

This language appears to impose the expectation that the Watermaster will take steps to secure water to replenish the Basin to protect it against seawater intrusion.

- If the desalination plant is constructed, there will initially be surplus production capacity that won't be needed until sometime in the future, as demand increases to reach the plant's full capacity. This is a potential source of additional water. The quantity of additional water that the plant could potentially provide for groundwater recharge would need to be determined in order to see if that quantity would be sufficient to achieve protective elevations.
- If the desalination plant is constructed, and were to provide only a portion of the amount of recharge water that is needed, could the initial Pure Water Monterey project be expanded somewhat to augment the Cal Am desalination plant water in order to achieve protective elevations?
- If the desalination plant is not constructed and the Pure Water Monterey Expansion Project is constructed, could it be further expanded to provide the full amount of recharge water that is needed to achieve protective elevations?
- There would be an operational cost of operating the Cal Am desalination plant at greater production capacity than is needed to supply Cal Am's customer demands. Similarly, there would be an operational cost of operating further-expanded Pure Water Monterey Projects. Who would pay for those additional costs? Would the costs be charged on an incremental basis, i.e. just the additional cost to produce the additional water, or would they be charged at the unit cost of water from these initial projects, which includes all of the capital and operational costs of these respective projects?
- More modeling would need to be done to refine the amount of recharge water needed to achieve protective groundwater elevations by injecting it at the PWM wells. Would it be beneficial to perform that modeling work now in order to better determine the most cost-effective approach to getting the necessary recharge water?

FISCAL IMPACT:

Other than Watermaster staff costs to investigate the bulleted items above and report findings to the Board, the only apparent fiscal impact would be if modeling were to be performed. This would involve having Montgomery & Associates use the Seaside Basin Groundwater Model to refine the amount of recharge water that would be needed. If the Board wished to have this work performed, staff would request from Montgomery & Associates a scope of work and cost proposal and present that to the Board for its consideration and approval before any such work would be undertaken. There is money in the approved 2021 Monitoring and Management Program Operations Budget to cover the expected costs of such modeling.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
August 12, 2020
(Meeting Held Using Zoom Conferencing)

Attendees: TAC Members

City of Seaside – Scott Ottmar
California American Water – Tim O'Halloran
City of Monterey – Max Reiser
Laguna Seca Property Owners – Wes Leith
MPWMD – Jon Lear
MCWRA – Tamara Voss
City of Del Rey Oaks – No Representative
City of Sand City – Leon Gomez
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques
Administrative Officer – Laura Paxton

Consultants
None

Others
City of Seaside – Sheri Damon and Nisha Patel

The meeting was convened at 1:30 p.m.

Scott Ottmar introduced Nisha Patel, the new City of Seaside Director of Public Works, who was attending her first Watermaster TAC meeting. She reported that she will be attending future TAC meetings to represent the City of Seaside.

1. **Public Comments**
There were no public comments.

2. **Administrative Matters:**
A.Approve Minutes from the July 8, 2020 Meeting
On a motion by Mr. Ottmar, seconded by Ms. Voss, the minutes were unanimously approved by those voting. Mr. Gomez and Mr. Leith were having audio problems and were unable to respond when asked for their votes. Mr. Leith subsequently said that he intended to vote to approve the minutes and asked that his vote be counted as such.

B.Sustainable Groundwater Management Act (SGMA) Update
Mr. Jaques summarized the agenda packet materials for this item. There was no other discussion.

3. Approve Monitoring and Management Program (M&MP) for FY 2021

Mr. Jaques summarized the agenda packet materials for this item. In his remarks, Mr. Jaques noted that a correction needed to be made in the dollar amount shown for Task I.2.b.7. The correct dollar amount is $5,960, not $5,940 as shown in the agenda packet. He also reported that he had not revised the Monitoring and Management Program to reflect reducing the frequency of water quality sampling of the Camp Huffman well, because he wanted to await direction from the TAC before making any change. He went on to report that there would be a slight cost savings if the frequency of sampling was reduced, because Monterey Peninsula Water Management District would not have to do that work in 2021.

Mr. Ottmar asked if the modeling scenario runs described in Task I.3.a.3 were required by the Monitoring and Management Program or by the Decision. Mr. Jaques responded that when the Monitoring and Management Program was developed, the Watermaster committed to developing a groundwater model and using it for Basin management purposes. He also reported that a number of previous model runs had been made to evaluate various groundwater management issues. Mr. Jaques said that making these specific scenario modeling runs was not required by the Monitoring and Management Program, but that at its July meeting the TAC concurred with including them in the Monitoring and Management Program for FY 2021.

Ms. Voss asked Mr. Lear about water quality sampling at the Camp Huffman well and asked if the water quality looked okay. Mr. Lear responded that the water quality looked fine. He went on to explain that this well had been installed in order to get data from this part of the Northern Inland Subarea where there were no other wells from which to gather information. He went on to say that this well is not induction logged, whereas the coastal Sentinel Wells are.

Mr. Lear if asked if any of the TAC members were opposed to reducing the sampling frequency for water quality at the Camp Huffman wells, and none of the members were opposed.

On a motion by Ms. Voss, seconded by Mr. O'Halloran, the Monitoring and Management Program was unanimously approved by those voting. Mr. Gomez and Mr. Leith were having audio problems and were unable to respond when asked for their votes. Mr. Leith subsequently said that he intended to vote to approve the Monitoring and Management Program and asked that his vote be counted as such.

4. Approve the FY 2021 Monitoring and Management Program (M&MP) Operations and Capital Budgets

Mr. Jaques summarized the agenda packet materials for this item. In his remarks Mr. Jaques noted that a correction needed to be made in the dollar amount shown for Task I.2.b.7. The correct dollar amount is $5,960, not $5,940 as shown in the agenda packet. He went on to say that with this correction made, the 2021 Monitoring and Management Program would be $68,102 higher than the 2020 budget, not the $68,080 shown in the agenda packet

Mr. Ottmar asked if the geochemical modeling work related to the Cal Am desalination plant was included in the budget. Mr. Jaques responded that it was included in task I.3.e, and that the work would only be done if it was found to be necessary. Mr. Lear went on to describe the previous work that had been done on the Pure Water Monterey Project, which led to the conclusion that no groundwater modeling needed to be done for that project.

On a motion by Mr. Ottmar, seconded by Mr. Lear, the budgets were unanimously approved as presented by those voting, with the correction in cost to Task I.2.b.7 mentioned above. Mr. Gomez and Mr. Leith were having audio problems and were unable to respond when asked for their votes. Mr. Leith subsequently said that he intended to vote to approve the Monitoring and Management Program budgets and asked that his vote be counted as such.

5. Approve Initial RFSs for Montgomery & Associates, MPWMD, Martin Feeney, and Todd Groundwater for 2021

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

On a motion by Mr. O'Halloran, seconded by Ms. Voss, the consultant contracts were unanimously approved as presented by those voting. Mr. Gomez and Mr. Leith were having audio problems and were unable to respond when asked for their votes. Mr. Leith subsequently said that he intended to vote to approve the consultant contracts, and asked that his vote be counted as such.

Note: Subsequent to the TAC meeting Mr. Jaques discovered that the correct amount for RFS No. 2021-01 to Martin Feeney is $18,000.56 (which corresponds to the dollar amount in the cost proposal that is an attachment to that RFS) rather than the $19,000.56 shown on page 47 in the agenda packet. The M&MP Operations Budget has the correct amount in it.

6. Schedule

Mr. Jaques summarized the agenda packet materials for this item. There was no other discussion.

7. Other Business

There was no other business.

The meeting adjourned at 2:00 PM.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
November 18, 2020
(Meeting Held Using Zoom Conferencing)

Attendees: **TAC Members**
City of Seaside – Scott Ottmar
California American Water – Tim O'Halloran
City of Monterey – Max Reiser
Laguna Seca Property Owners – Wes Leith
MPWMD – Jon Lear
MCWRA – Tamara Voss
City of Del Rey Oaks – John Gaglioti
City of Sand City – Leon Gomez
Coastal Subarea Landowners – No Representative

Watermaster
Technical Program Manager - Robert Jaques

Consultants
Montgomery & Associates – Georgina King

Others
None

The meeting was convened at 1:30 p.m.

1. **Public Comments**

There were no public comments.

2. **Administrative Matters:**

A. Approve Minutes from the August 12, 2020 Meeting

On a motion by Ms. Voss, seconded by Mr. O'Halloran, and with Mr. Gaglioti abstaining because he had not attended the meeting, the minutes were unanimously approved as presented.

B. Results from Martin Feeney's October 2020 Induction Logging of the Sentinel Wells

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

Mr. Gaglioti commented that while we are not seeing seawater intrusion indications in the Sentinel Wells, we know it's a matter of "when", not "if" seawater intrusion will eventually occur. Further discussion under this topic is covered below under Agenda item 3.

C. Sustainable Groundwater Management Act (SGMA) Update

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

Mr. Lear added that conditioning of the first deep injection well had been completed and it had been restored to its original injection capacity. Conditioning of deep injection well No. 2 will be performed in the near future. New deep injection wells No. 3 and No. 4 will be constructed and should become operational in 2022. Those wells are covered by the Storage and Recovery Agreement with the Watermaster.

Mr. Gaglioti added that a total of over 300 acre-feet above the Operational Reserve quantity has now been stored in the Basin.

D. Discuss Monitoring to be Performed at Security National Guarantee (SNG) Well
Mr. Jaques summarized the agenda packet materials for this item.

Mr. Lear added that on the former sand mining site where this well is located, the landowner is planning to build an ecoresort. The owner has a wheeling agreement with Cal Am for Cal Am to use his allocation and have the water to the resort supplied by Cal Am.

Ms. Voss said she agreed that data from this site would be valuable, and that water quality as well as water level data should be provided for that purpose, as well as to comply with the requirements of the Monitoring and Management Program.

Ms. King said that the SNG well is screened in a different part of the aquifer, and therefore water quality data from this well would provide additional information.

Mr. Gaglioti asked if the land owner was pushing back against having to do water quality sampling. Mr. Jaques responded no; he was just asking to see if he could be relieved of that obligation. Mr. Gaglioti went on to say that he concurred with the need and requirement for the well to be monitored for both water level and water quality.

A motion was made by Mr. Gaglioti, seconded by Ms. Voss, to require the SNG well to provide both water level and water quality data. With Mr. Gomez abstaining because he represents Sand City and was involved in project development approval for this project, the motion passed unanimously.

3. Discuss and Provide Input on the Draft 2020 Seawater Intrusion Analysis Report (SIAR)
Mr. Jaques introduced this item and then Ms. King provided a PowerPoint presentation on the SIAR. Copies of the presentation slides are attached.

Comments included in Ms. King's presentation are summarized below:

- She highlighted that two monitoring wells (FO-9 and FO-10 shallow) again showed rising chloride levels, as was also seen last year. The FO-9 shallow chloride level and sodium/chloride ratio plot suggests that the source of the chloride increases may be seawater. The same is true for FO-10 shallow. FO-10 shallow has been resampled and results are expected to be received in December. The field electrical conductivity reading taken during the resampling is similar to what it was when the prior sample was taken, so the chloride result will probably be confirmed as correct. FO-10 shallow Piper diagram shows trending toward seawater, but the Stiff diagram does not show this.

- In recent years there has been some decline in groundwater levels at the PCA-E well in the Paso Robles aquifer, but in the Santa Margarita aquifer at this well no increasing or decreasing trend is apparent.

- The Sentinel wells have groundwater levels that are fairly stable.

- The Southern Coastal Subarea Paso Robles groundwater level is also fairly stable, based on measurements made at the K-Mart well. Mr. Lear recommended putting in a data logger at that well, and this was supported by Ms. King and Ms. Voss. Ms. Voss added that the data logger could be placed in a lockable vault to prevent vandalism at that site. There was TAC consensus to put in a data logger there.

  Further on the subject of data loggers, it was suggested that a recommendation from Montgomery and Associates be requested to identify the most beneficial wells where data loggers could be installed. This will be added to the agenda of an upcoming TAC meeting, and cost information from Mr. Lear to purchase and install additional data loggers will also be solicited.

- The Laguna Seca Subarea continues to show declining groundwater levels, as it has for some years.

- The Northern Coastal Subarea groundwater pumping depression is actually slightly smaller this year in both the shallow and deep aquifers than it was in 2019. However, groundwater levels in the Northern Coastal Subarea declined by from 2 feet to 7 feet in the shallow aquifer, and by 1 foot to 7 feet in the deep aquifer.

- In the Laguna Seca Subarea the pumping depression was slightly larger than it was in 2019. That pumping depression is the result of pumping for the golf courses.

- All Northern Coastal Subarea groundwater levels were below Protective Water Levels. Only the Southern Coastal Subarea shallow well had a groundwater level above Protective Water Level.

- The SIAR recommends increasing sampling of the FO-9 and FO-10 shallow wells to a quarterly basis. Mr. Lear reported that he will need to buy another pump for the FO-10 well, but can use the line-item already in the 2020 contract with the Watermaster to cover this cost. Mr. Lear will look into whether additional costs will be incurred to perform the additional sampling and will advise Mr. Jaques if any amendment to the contract will be necessary.

Ms. Voss recommended trying to get data in the area to the north of the Seaside groundwater basin boundary to better understand what is happening there. She noted that little data currently is available for that area. Also, if data from the SNG well raises any questions, sampling of that well could also be increased in frequency.

Mr. Jaques reported that the stakeholder meetings with the Marina Coast Water District GSA for the development of the Groundwater Sustainability Plan for the Monterey Subbasin are now getting into more complex hydrogeologic issues. It appears that the Marina Coast Water District may have less interest in the central and southern portions of their part of the Monterey Subbasin, than they do in the northern part where their production wells are located. Because of the Watermaster's concern about the potential for seawater intrusion to come into the Seaside Basin from the southerly part of the Monterey Subbasin, Mr. Jaques said he would like to have Ms. King become more involved in reviewing documents and potentially attending some of the stakeholder meetings to ensure that the Watermaster's concerns are being adequately addressed.

Mr. O'Halloran reported that the Laguna Seca Subarea Cal Am pipeline to provide service to that area from its Main System had been constructed, and the Main System will begin serving the Laguna Seca Subarea shortly. Cal Am will retain its existing wells there for the time being, but ultimately will probably abandon and decommission them.

Mr. Gaglioti recommended that the SIAR state in its conclusions that we are beginning to see the start of seawater intrusion in the FO-9 and FO-10 wells. He went on to urge quarterly sampling at the SNG well, and that the additional sampling be done at the Watermaster's expense, rather than expecting the landowner to cover the additional sampling. He also recommended that Ms. Voss see if the Resource Management Agency of the County had data available on wells to the north of the boundary between the Seaside Subbasin and the Monterey Subbasin. He also stated he concurred with Mr. Jaques' proposal to have Ms. King become more involved in matters associated with development of the Monterey Subbasin Groundwater Sustainability Plan by the Marina Coast Water District GSA.

Mr. Lear noted that he also attends the Marina Coast Water District stakeholder meetings and would be able to provide additional input on these matters at those meetings.

Ms. King noted that even though the FO-9 shallow well appears to be showing the start of seawater intrusion, Sentinel Well No. 3 induction logging is not showing this.

Mr. Cook said he concurred with highlighting the seawater intrusion findings of Wells FO-9 and FO-10. He also said that Cal Am has some flexibility in the use of the ASR wells as to when and how much each of them pumps. He asked if some recommendation could be provided as to how pumping from the ASR wells could be managed to best benefit the Basin. Ms. King recommended pumping as much as possible from the wells that are furthest from the coast as being the best way to manage this. Mr. Cook said that Cal Am would try to do this. Mr. Lear added that he concurred with using well ASR No. 1 (the easternmost one) as much as possible.

Mr. Ottmar and Mr. Gomez complimented Ms. King on preparing an excellent report.

A motion was made by Ms. Voss, seconded by Mr. Gaglioti, to approve the SIAR with the revision to the conclusions was that had been recommended by Mr. Gaglioti. The motion passed unanimously.

Note: At this point in the meeting at 3:00 Mr. Gaglioti had to depart.

4. Discuss and Provide Input on the Preliminary Draft Watermaster 2020 Annual Report

Mr. Jaques summarized the agenda packet materials for this item. There were no questions or comments by TAC members with regard to the Preliminary Draft Annual Report.

On a motion by Mr. O'Halloran, seconded by Mr. Leith, the TAC unanimously approved forwarding the Preliminary Draft Annual Report to the Board of Directors for their consideration of approval.

Note: At this point in the meeting at 3:06 Mr. Lear had to depart.

5. Schedule

Mr. Jaques summarized the agenda packet materials for this item. He reported that there would be no need for a TAC meeting in December, and that if there was no pressing business for the TAC, the January 2021 meeting would be canceled. A meeting notice regarding the January 2021 meeting will be sent out in early January. There was no other discussion.

6. Other Business

There was no other business.

The meeting adjourned at 3:10 PM.

SEASIDE GROUNDWATER BASIN

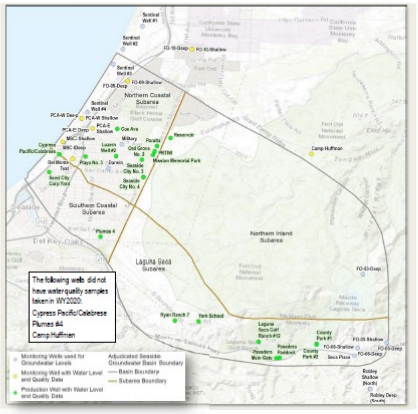
2020 SEAWATER INTRUSION ANALYSIS REPORT

MONTGOMERY & ASSOCIATES

Presented to the Seaside Basin Technical Advisory Committee November 18, 2020

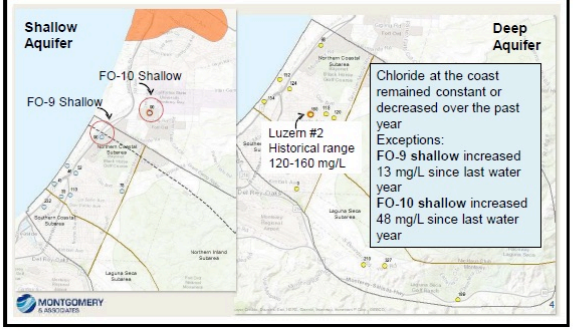
SIAR ANALYSIS

- Chloride Distribution and Na/Cl Molar Ratio
- Cation/Anions – Piper and Stiff Diagrams
- Electric Induction Logs
- Groundwater Elevations
- Protective Groundwater Elevations
- Groundwater Production



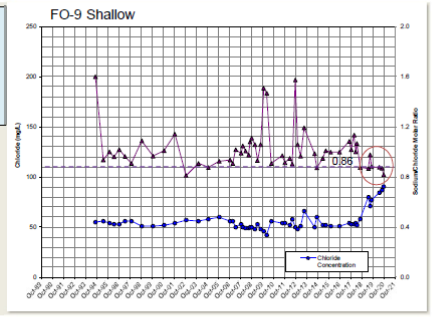
WELL DATA INCLUDED IN SIAR

CHLORIDE DISTRIBUTION



SODIUM/CHLORIDE MOLAR RATIO

Na/Cl ratios remained constant or increased over the past year
Exception: FO-9 Shallow



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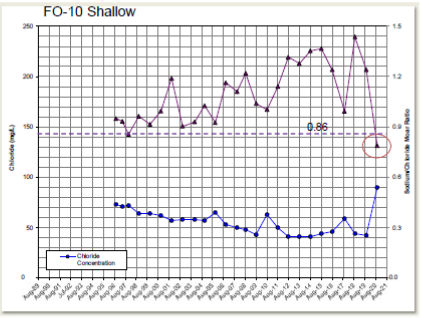
SODIUM/CHLORIDE MOLAR RATIO

Exception: FO-10 Shallow



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PIPER DIAGRAMS

No trends towards seawater

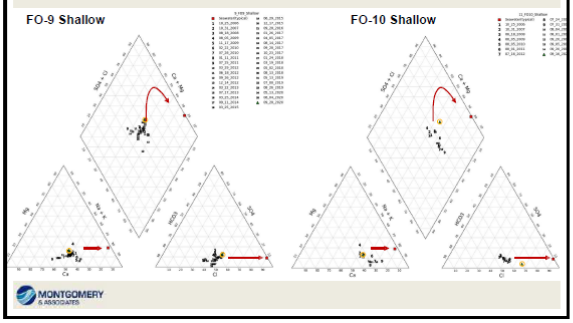
4th Quarter Monitoring Wells

Indicates path taken if intruded

FO-9 and FO-10 Shallow

4th Quarter Production Wells

PIPER DIAGRAMS



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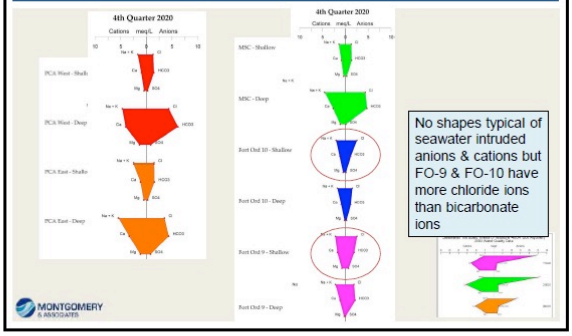
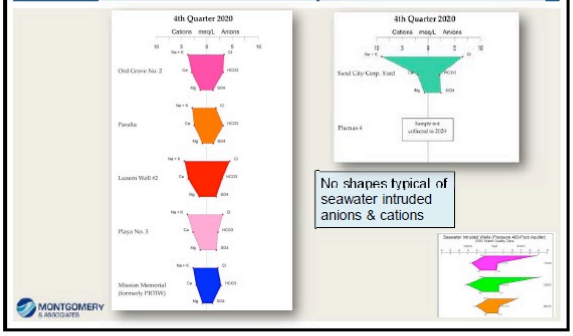
MONITORING WELL STIFF DIAGRAMS



No shapes typical of seawater intruded anions & cations but FO-9 & FO-10 have more chloride ions than bicarbonate ions

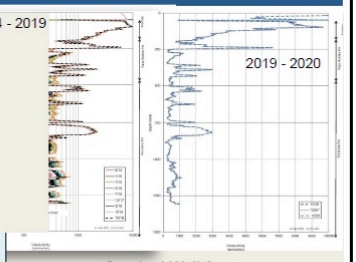
PRODUCTION WELL STIFF DIAGRAMS



No shapes typical of seawater intruded anions & cations

ELECTRIC INDUCTION LOGS

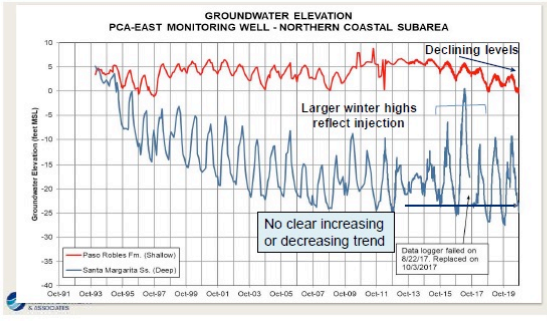
- Tool used during the past 10 logging events failed at the end of 2019 and replaced with a new tool
- Logs run in March & October 2020



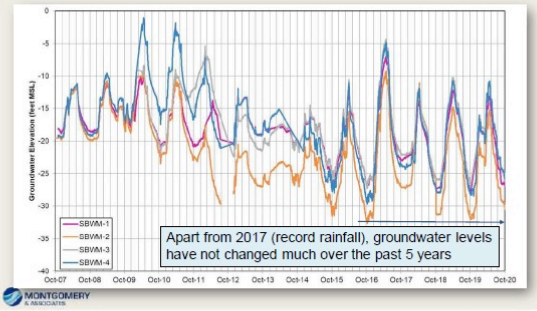
Sentinel Well 3

None of the Sentinel wells show detectable changes in conductivity in the deeper aquifers where production wells extract groundwater

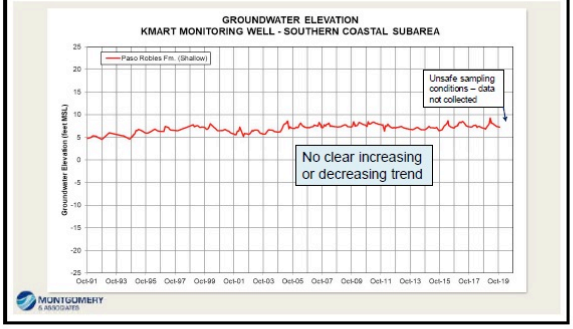
NORTHERN COASTAL GROUNDWATER ELEVATIONS



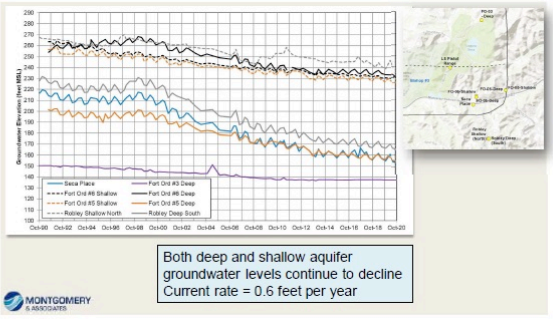
NORTHERN COASTAL GROUNDWATER ELEVATIONS



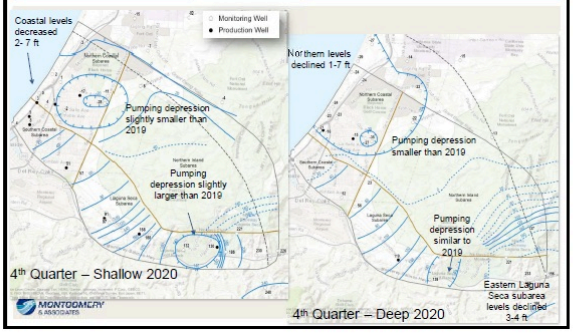
SOUTHERN COASTAL GROUNDWATER ELEVATIONS



EASTERN LAGUNA SECA GROUNDWATER ELEVATIONS



GROUNDWATER ELEVATION CONTOURS

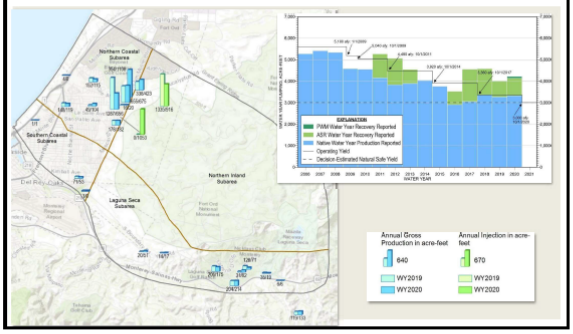


PROTECTIVE GROUNDWATER ELEVATIONS

Subarea	Well	Depth	Protective Elevation, feet amsl	Above or Below
Northern	MSC	Deep	17	Below
		Shallow	11	Below
Coastal	PCA-W	Deep	17	Below
		Shallow	2	Below
	Sentinel 3	Deep	4	Below
Southern Coastal	CDM-MW4	Shallow	2	Above

MONTGOMERY & ASSOCIATES

GROUNDWATER PRODUCTION WY 2019 VS 2020



CONCLUSIONS

Conditions in the basin that continue to provide a potential for seawater intrusion:

- All deep groundwater in the Northern Coastal subarea is below sea level
  - 2nd quarter (winter/spring) > 20 feet below sea level
  - 4th quarter (summer/fall) > 30 feet below sea level
- Groundwater levels remain below protective elevations in all deep target monitoring wells
- Two of the three shallow wells' groundwater levels are below protective elevations

MONTGOMERY & ASSOCIATES

CONCLUSIONS

Analyses indicating seawater intrusion is currently NOT occurring:

- No groundwater chemistry changes towards seawater in either shallow or deep groundwater
- Overall, chloride concentration trends were stable for most monitoring wells. Two wells had an increase greater than 10 mg/L
  - FO-9 shallow has a sustained increase leading to a 13 mg/L chloride increase over last years concentrations
  - FO-10 shallow has an increase of 48 mg/L over last years concentrations.
- Sodium/chloride molar ratios at most monitoring wells remained constant or increased over the past year. Two wells had molar ratios below 0.86:
  - FO-9 shallow now has a molar ratio of 0.81
  - Fo-10 shallow now has a molar ratio 0.76
- Induction logging data at the coastal Sentinel Wells do not show large changes over time that are indicative of seawater intrusion

MONTGOMERY & ASSOCIATES

CONCLUSIONS

- There are still ongoing groundwater level declines in the Laguna Seca subarea of around 0.6 feet per year
- Native groundwater production in the Seaside Groundwater Basin for Water Year 2020 was 3,323.1 acre-feet:
  - 53.9 acre-feet more than Water Year 2019
  - 36.9 acre-feet less than the Decision-ordered Operating Yield of 3,360 acre-feet per year that is required between October 1, 2017 and September 30, 2020
  - Operating yield starting this water year will be 3,000 acre-feet per year – this is the last Court-Ordered triennial reduction

MONTGOMERY & ASSOCIATES

RECOMMENDATIONS

1. Immediately resample FO-10 shallow to confirm 48 mg/L chloride concentration increase. Sample was collected on November 10 and results are expected in three weeks
2. Increase sampling frequency at FO-9 Shallow and FO-10 Shallow to quarterly, and review concentrations after each sampling event
3. Continue to analyze and report on groundwater quality and levels annually
4. For the 2021 SIAR, include groundwater level data from selected monitoring wells installed as part of Pure Water Monterey's monitoring program

MONTGOMERY & ASSOCIATES

QUESTIONS?

MONTGOMERY & ASSOCIATES

D-R-A-F-T MINUTES
Seaside Groundwater Basin Watermaster
Budget and Finance Committee Meeting
Via Zoom Teleconference
November 5, 2020

Attendees: BFC Members
City of Seaside – Victor Damiani, Chair
California American Water – Chris Cook
City of Sand City – Mayor Mary Ann Carbone
Coastal Subarea Landowners – Paul Bruno

Watermaster
Administrative Officer – Laura Paxton
Technical Program Manager – Robert Jaques

Others:
Director George Riley, Monterey Peninsula Water Management District

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Chair Damiani called the meeting to order at 11:00 a.m.

1. **Consider recommendation to the Watermaster Board of Directors whether to proceed with recruitment process with one of the two legal firms that responded to the Request for Proposal for Watermaster Legal Services.**

   Director Bruno called out that although a range of fees was proposed by Baker Manock & Jensen PC (BMJ) with the high end of $450 the rate for lead attorney Christopher Campbell, a fee schedule of $300 for partners and $200 for associates assigned to Watermaster was also given. In comparing the two proposals received, the cost advantage of lead attorney attendance at two in-person meetings per year at no charge offered by BMJ, and being the larger of the two firms with more extensive insurance coverage, Director Bruno favored BMJ over O'Laughlin & Paris LLP (OP). Mayor Carbone also favored the apparent cost advantage of BMJ. The merits of a larger firm (BMJ having 36 attorneys versus OP having 6) with a greater knowledge base to draw from was discussed. Chair Damiani considered that a smaller firm might offer more personal service. Director Cook was impressed with Christopher Campbell's background and education. In response to Chair Damiani inquiring of the applicable experience of each firm for Watermaster needs, Technical Program Manager Jaques felt BMJ had more experience with established adjudicated groundwater basins as compared with OP with more experience in developing groundwater sustainability agencies and plans per the Sustainable Groundwater Management Act.

   Director Cook requested Christopher Campbell be interviewed by staff to determine if he speaks eloquently and precisely to the needs of Watermaster. Chair Damiani suggested interviewing OP as well and Director Bruno concurred, *if* the interview with BMJ did not meet expectations.

   Staff responded to Director Riley's inquiry of possible legal issues forthcoming, with nothing currently pressing. In the interest of cost, Director Bruno recommended using expert legal counsel to render opinion, and continue to use Watermaster party attorneys for routine administrative processes such as filing the annual report to court by December 15th.

   Moved by Director Cook and seconded by Mayor Carbone to have staff interview Chris Campbell of Baker Manock & Jensen PC and, if found suitable to deliver services, recommend to the board to contract with Baker Manock & Jensen PC for Watermaster legal services. Carbone – Aye; Cook – Aye; Bruno – Aye; Damiani – Aye

The meeting ended at 11:20 a.m.

SEASIDE GROUNDWATER BASIN WATERMASTER

Reported Quarterly and Annual Water Production From the Seaside Groundwater Basin

For All Producers Included in the Seaside Basin Adjudication -- Water Year 2020

(All Values in Acre-Feet [AF])

	Type	Oct	Nov	Dec	Oct-Dec 19	Jan	Feb	Mar	Jan-Mar 20	Apr	May	Jun	Apr-Jun 20	Jul	Aug	Sep	Jul-Sep 20	Reported Total	Yield Allocation	from WY 2019	for WY 2020
Coastal Subareas																					
CAW - Coastal Subareas	SPA	376.33	272.21	148.59	**797.13**	89.04	0.00	131.05	**220.09**	204.23	116.76	161.01	**482.00**	322.26	0.38	-1.15	**321.49**	**1,820.71**	1,791.62	130.75	1,922.36
Luzern		0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	34.84	15.22	54.90	**104.96**	**104.96**			
Ord Grove		90.22	73.80	75.89	**239.91**	35.40	0.00	54.56	**89.95**	75.61	15.28	0.00	**90.89**	0.00	116.80	118.88	**235.69**	**656.45**			
Paralta		139.56	51.43	53.31	**244.30**	34.15	0.00	76.50	**110.64**	127.01	101.42	153.41	**381.84**	151.79	129.29	89.83	**370.92**	**1,107.70**			
Playa		26.68	14.82	14.08	**55.59**	0.00	0.00	0.00	**0.00**	0.00	0.00	1.95	**1.95**	28.65	9.67	22.80	**61.12**	**118.66**			
Plumas		18.39	0.00	0.00	**18.39**	19.50	0.00	0.00	**19.50**	1.61	0.00	5.65	**7.26**	7.59	0.00	0.00	**7.59**	**52.74**			
Santa Margarita		101.48	132.16	5.31	**238.94**	0.00	0.00	0.00	**0.00**	0.00	0.05	0.00	**0.05**	152.55	159.71	123.42	**435.68**	**674.67**			
ASR Recovery														(53.15)	(430.32)	(322.58)	**(806.05)**	**(806.05)**			
PWM Recovery														0.00	0.00	(88.41)	**(88.41)**	**(88.41)**			
City of Seaside (Municipal)	SPA	17.69	14.60	13.85	**46.13**	12.34	13.68	13.18	**39.21**	13.34	16.73	16.39	**46.46**	16.97	17.28	15.59	**49.84**	**181.65**	146.99	0.00	146.99
Granite Rock Company	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	**0.00**	13.87	222.00	235.87
DBO Development No. 30	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	**0.00**	25.16	403.96	429.12
Calabrese (Cypress Pacific In	SPA	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	- -	- -	- -	**0.00**	**0.00**	3.37	16.29	19.66
City of Seaside (Golf Courses	APA	53.68	21.08	0.00	**74.77**	0.32	27.56	17.62	**45.50**	29.81	81.15	93.15	**204.11**	100.37	68.15	44.10	**212.62**	**537.00**	540.00		540.00
Sand City	APA	0.16	0.12	0.02	**0.31**	0.00	0.08	0.08	**0.17**	0.17	0.13	0.14	**0.44**	0.15	0.14	0.14	**0.44**	**1.35**	9.00		9.00
SNG (Security National Guar	APA	0.05	0.06	0.04	**0.15**	0.00	0.03	0.03	**0.06**	0.00	0.01	0.00	**0.01**	0.00	0.03	0.00	**0.03**	**0.26**	149.00		149.00
Calabrese (Cypress Pacific In	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	0.00	**0.00**	**0.00**	6.00		6.00
Mission Memorial (Alderwoo	APA	2.22	1.42	0.00	**3.64**	0.00	0.13	0.12	**0.25**	0.37	2.19	3.22	**5.78**	3.42	3.59	3.32	**10.33**	**20.00**	31.00		31.00
Coastal Subareas Totals					**922.13**				**305.28**				**738.80**				**594.75**	**2,560.97**	**2,716.00**	**773.00**	**3,489.00**
Laguna Seca Subarea																					
CAW - Laguna Seca Subares	SPA	34.90	28.14	19.44	**82.48**	18.79	21.69	22.59	**63.07**	21.18	27.94	34.65	**83.76**	36.58	36.88	33.99	**107.45**	**336.76**	0.00		0.00
Ryan Ranch Unit		6.35	4.52	3.88	14.75	3.62	4.03	3.84	11.49	2.96	1.30	4.57	**8.83**	5.76	5.40	5.04	16.20	51.27			
Hidden Hills Unit		13.35	10.82	7.60	31.77	7.47	8.27	8.90	24.64	9.02	12.45	13.73	**35.20**	13.65	13.86	13.42	40.93	132.54			
Bishop Unit 3		7.58	5.77	3.50	16.86	3.28	4.10	3.61	11.00	4.20	6.05	8.79	**19.04**	9.02	7.53	7.45	23.99	70.89			
Bishop Unit 1		7.62	7.03	4.45	19.10	4.42	5.28	6.24	15.94	5.01	8.13	7.56	**20.70**	8.15	10.09	8.09	26.33	82.07			
The Club at Pasadera	APA	19.00	9.00	0.00	**28.00**	1.00	4.00	6.00	**11.00**	7.00	31.00	38.00	**76.00**	42.00	28.00	29.00	**99.00**	**214.00**	251.00		251.00
Laguna Seca Golf Resort (Bis	APA	24.14	12.06	0.00	**36.20**	0.00	2.24	2.51	**4.75**	1.70	24.87	28.85	**55.43**	32.55	26.47	19.56	**78.58**	**174.96**	320.00		320.00
York School	APA	1.69	1.02	0.00	**2.71**	0.00	0.93	0.62	**1.55**	0.29	2.00	4.06	**6.34**	2.54	2.52	1.73	**6.79**	**17.39**	32.00		32.00
Laguna Seca County Park	APA	1.54	1.77	0.65	**3.97**	0.79	0.87	0.75	**2.41**	0.40	1.52	1.34	**3.26**	1.78	5.31	2.32	**9.42**	**19.06**	41.00		41.00
Laguna Seca Subarea Totals					**153.35**				**82.78**				**224.80**				**301.24**	**762.17**	**644.00**	**0.00**	**644.00**
Total Production by WM Producers					**1,075.48**				**388.06**				**963.60**				**896.00**	**3,323.14**	**3,360.00**	**773.00**	**4,133.00**
									Annual Production from APA Producers									984.01	1,379.00		
									Annual Production from SPA Producers									2,339.12	2,754.00		

																			Previous Balance	***Total***
CAW / MPWMD ASR (Carmel River Basin source water)																				
Injection	256.69	0.00	0.00	**256.69**	160.76	0.00	166.28	**327.04**	312.80	19.96	0.00	**332.76**	0.00	0.00	0.00	0.00	**916.49**		
(Recovery)	0.00			**0.00**	0.00			**0.00**				**0.00**	(53.15)	(430.32)	(322.58)	**(806.05)**	**(806.05)**		
Net ASR	256.69			**256.69**				**0.00**				**0.00**				**0.00**	**110.44**	**735.49**	**845.93**
Pure Water Monterey (PWM) Injection and Cal-Am Recovery																			
Injection Operating Reserve	0.00	0.00	0.00	**0.00**	0.00	59.43	172.51	**231.93**	179.15	176.59	150.92	**506.65**	155.12	159.56	0.00	**314.68**	**1053.27**	**0.0**	**1053.27**
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**	**0.0**	**0.00**
Storage	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	88.41	**88.41**	**88.41**	**0.0**	**88.41**
(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	(88.41)	**(88.41)**	**(88.41)**	**0.0**	**(88.41)**

Notes:

1. The Water Year (WY) begins October 1 and ends September 30 of the following calendar year. For example, WY 2020 begins on October 1, 2019, and ends on September 30, 2020.

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 October 15, 2020.

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 2020* (see Item VIII.B. in 12/4/2019 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. It should be noted that CAW/MPWMD ASR "Injection" and "Recovery" amounts are not expected to "balance" within each Water Year. This is due to the injection recovery "rules" that are part of SWRCB water rights permits and/or separate agreements with state and federal resources agencies that are associated with the water rights permits.

WATERMASTER PRODUCER ALLOCATIONS WATER YEAR 2020 IN ACRE-FEET (AF)

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

Initial Basin-Wide Operating Yield[1]	**3360.00**	**Coastal Operating Yield[1]**	**2716.00**
Natural Safe Yield (NSY)[2]	**3000.00**	**Laguna Seca Operating Yield[1]**	**644.00**

ALTERNATIVE PRODUCER ALLOCATIONS

Coastal Subarea[3]	AF	Laguna Seca Subarea[3]	AF
Seaside (Golf)	540.00	Nicklaus Club Monterey	251.00
SNG	149.00	Bishop	320.00
Calabrese	6.00	York School	32.00
Mission Memorial (Alderwood)	31.00	Laguna Seca County Park	41.00
Sand City	9.00		
Total[1]	**735.00**	**Total[1]**	**644.00**

ALTERNATIVE PRODUCER AMOUNT PUMPED WY 2020

Coastal Subarea[3]	AF	Laguna Seca Subarea[3]	AF	Total Alternative Producer WY 2020 Production
Seaside (Golf)	537.00	The Club at Pasadera	214.00	
SNG	0.26	Bishop	174.96	
Calabrese	0.00	York School	17.39	
Mission Memorial (Alderwood)	20.00	Laguna Seca County Park	19.06	
Sand City	1.35			
Total[1]	**558.61**	**Total[1]**	**425.41**	**984.02**

STANDARD PRODUCER ALLOCATIONS

Coastal Operating Yield Available to Standard Producers (AF)	1981.00	Laguna Seca Operating Yield Available to Standard Producers (AF)	0.00

Coastal Subarea	Standard Producer Allocations: Base Water Right %[4]	Standard Producer Allocations: Weighted %[5]	AF Available to This Producer	Laguna Seca Subarea	Standard Producer Allocations: Base Water Right %[4]	Standard Producer Allocations: Weighted %[5]	AF Available to This Producer
California American Water (CAW)	77.55%	90.44%	1791.62	CAW	45.13%	100.00%	0.00
Seaside (Municipal)	6.36%	7.42%	146.99				
Granite Rock	0.60%	0.70%	13.87				
D.B.O. Development No. 30	1.09%	1.27%	25.16				
Calabrese (Cypress Pacific Investors LLC)	0.15%	0.17%	3.37				
Total	**85.75%**	**100.0%**	**1981.00**	**Total**	**45.13%**	**100.0%**	**0.00**

Allocation of Available Operating Yield Among Standard Producers	Base Water Right Available to this Producer (AF)	% NSY to SPA (Base Water Right ./. Total Water Right)	NSY Available to Producers (AF) Current Water Year	Free Carryover Credits from Prior Water Year	Not-Free Carryover Credits from Prior Water Year	Water Rights Transferred / Sold DBO to CAW 710 Amador (0.16) DBO to CAW 2 Upper Ragsdale (2.15)	Water Rights Transferred / Sold Calabrese to CAW Ryan Ranch CHOMP	Total Producer NSY (AF) (NSY Available + Free Carryover Credits)	Total Authorized Production Current WY (Base Water Right Plus All Carryover)[6]	Actual AF Pumped by Producer in WY 2020	Free Carry over Credits to WY 2021	Not-Free Carry over Credits to WY 2021	Stored Water Credits to WY 2021
		NSY 3000 - 984.01 AF =	WY 2020 APA Pumped 984.01 AF: **2015.99**										
California American Water	1791.62	90.44%	1823.26	0.00	130.75	2.31	3.17	1828.74	1927.84	2157.47	0.00	0.00	845.93
Seaside (Municipal)	146.99	7.42%	149.59	0.00	0.00	0.00	0.00	149.59	146.99	181.65	0.00	0.00	0.00
Granite Rock	13.87	0.70%	14.11	194.88	27.12	0.00	0.00	208.99	235.87	0.00	208.99	13.01	0.00
D.B.O. Development No. 30	25.16	1.27%	25.60	364.98	38.98	(2.31)	0.00	388.27	426.81	0.00	388.27	15.69	0.00
Calabrese (Cypress Pacific Investors LLC)	3.37	0.17%	3.43	14.65	1.64	0.00	(3.17)	14.91	16.49	0.00	14.91	1.58	0.00
Total	**1981.00**	**100.00%**	**2015.99**	**574.50**	**198.49**	**0.00**	**0.00**	**2590.49**	**2754.00**	**2339.12**	**612.17**	**30.28**	**845.93**

Footnotes:

(1) From page 17 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(2) From page 14 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(3) From page 21 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(4) From Table 1 on page 19 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.

(5) Calculated from the Base Water Right percentages in the adjacent column. Any discrepancy in totals is due to rounding.

(6) Base Water Right plus Free and Not Free Carryover Credit = 2018 Production Allocation capped at storage allocation (see 2018 Declaration from 12/6/2017 Watermaster board meeting)

Note: Calabrese (Cypress Pacific Investors LLC) opted to convert 8AF of its 14AF Alternative Production Allocation to Standard Production Allocation on January 22, 2015 (notice filed by Cypress with Superior Court).

Producers carryover is capped at their storage capacity.

CALCULATION OF REPLENISHMENT ASSESSMENTS WATER YEAR 2020

Using the Basin-wide methodology approved by the Court on January 12, 2007, and as shown in detail on the spreadsheet contained in this attachement, Watermaster calculated the Water Year (WY) (October 1st through September 30th) 2020 Replenisment Assessments as follows:

	2020 Replenishment Assessment NSYO Unit Charge =					$2,872.00			
	2020 Replenishment Assessment OSYO Unit Charge =					$718.00			
2020 Natural Safe Yield (NSY) Available to Standard Producers =						2,015.99	AF (3,000 AF NSY - 984.01 Alternative Producers 2020 Production)		

Standard Producers	WY 2020 Production (AF)	% of NSY Available	Volume of NSY Available (AF)	NSY Overproduction (AF)	NSY Overproduction Assessment	Operating Yield Available (AF)	Operating Yield Overproduction (AF)	Operating Yield Overproduction Assessment	Total Assessment
California American Water	2,157.47	90.44%	1,823.26	334.21	$ 959,859.26	1,927.84	229.63	$ 164,871.96	$ 1,124,731.22
Seaside (Municipal)	181.65	7.42%	149.59	32.06	92,088.74	146.99	34.66	24,886.10	116,974.84
Granite Rock	-	0.70%	14.11	-	-	235.87	-	-	-
D.B.O. Development No. 30	-	1.27%	25.60	-	-	426.81	-	-	-
Calabrese (Cypress Pacific Inv.)	-	0.17%	3.43	-	-	16.49	-	-	-
Total Production	**2,339.12**	**100.00%**	2,015.99	**366.28**	**$ 1,051,947.99**	**2,754.00**	**264.29**	**$ 189,758.06**	**$ 1,241,706.05**

Alternative Producers	WY 2020 Production (AF)	% of NSY Available	Volume of NSY Available (AF)	NSY Overproduction (AF)	NSY Overproduction Assessment	Operating Yield Available (AF)	Operating Yield Overproduction (AF)	Operating Yield Overproduction Assessment	Total Assessment
City of Seaside (Golf Courses)	537.00	N/A	540.00	0.00	$ -	540.00	0.00	$ -	$0
Security National Guaranty	0.26	N/A	149.00	0.00	-	149.00	0.00	-	-
Calabrese (Cypress Pacific Inv.)	-	N/A	6.00	0.00	-	6.00	0.00	-	-
Mission Memorial (Alderwoods)	20.00	N/A	31.00	0.00	-	31.00	0.00	-	-
City of Sand City	1.35	N/A	9.00	0.00	-	9.00	0.00	-	-
Nicklaus Club Monterey	214.00	N/A	251.00	0.00	-	251.00	0.00	-	-
Laguna Seca Golf Resort (Bisho	174.96	N/A	320.00	0.00	-	320.00	0.00	-	-
York School	17.39	N/A	32.00	0.00	-	32.00	0.00	-	-
Laguna Seca County Park	19.06	N/A	41.00	0.00	-	41.00	0.00	-	-
Total Production	**984.02**	**N/A**	**1,379.00**	**0.00**	**$ -**	**1,379.00**	**0.00**	**$ -**	**$0**