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) 23

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 25

D. Consider Approving the Professional Service Contract with Baker Manock & Jensen PC Attorneys at Law to provide legal services to Watermaster 27

IX. OLD BUSINESS

A. Direct Staff regarding obtaining additional water to recharge the Basin in order to raise groundwater levels 29

X. INFORMATIONAL REPORTS (No Action Required)

A. Technical Advisory Committee (TAC) minutes from August 12, 2020 meeting..... 32
and November 18, 2020 meeting (draft version) 35

B. Budget and Finance Committee draft minutes from November 5, 2020 meeting 39

C. Watermaster report of production of the Seaside Basin through Water Year 2020 (October 1, 2019 – September 30, 2020) 41

D. Replenishment Fund Assessment calculations and 2020 Standard Producer Assessments 43

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.)

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

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.

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

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.

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**