SEASIDE GROUNDWATER BASIN WATERMASTER REGULAR MEETING OF THE BOARD OF DIRECTORS

VIRTUAL

Wednesday, September 7, 2022 – 2:00pm Draft Agenda

IN KEEPING WITH GOVERNOR NEWSOM'S EXECUTIVE ORDERS N-29-20 AND N-35-20, THE WATERMASTER REGULAR BOARD MEETING WILL NOT BE HELD IN PERSON. YOU MAY ATTEND AND PARTICIPATE IN THE MEETING BY JOINING FROM A PC, MAC, IPAD, IPHONE OR ANDROID DEVICE (NOTE: ZOOM APP MAY NEED TO BE DOWNLOADED FOR SAFARI OR OTHER BROWSERS PRIOR TO LINKING) AT THIS WEB ADDRESS: https://us02web.zoom.us/j/81494488430?pwd=c1ZSdkNRK2F1TkRnZms0U0kvMFJGQT09 If joining the meeting by phone, dial either: +1 408 638 0968 (San Jose) or +1 669 900 6833 (San Jose) If problems are encountered joining the meeting via the link above, try the following in your Zoom screen: Meeting ID: 814 9448 8430 Passcode: 183291

Watermaster Board

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

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC COMMUNICATIONS

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

IV. REVIEW OF AGENDA

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

V. CONSENT CALENDAR

VI. ORAL PRESENTATION – None

VII. OLD BUSINESS

A. TECHNICAL ADVISORY COMMITTEE (TAC)

i.	Results of Additional Analyses of the Replenishment Water Modeling Work
ii.	Flow Velocity/Flow Direction Modeling Work Performed and Recommendation to Perform
	Additional Analyses
iii.	Consider Approval of Montgomery & Associates (M&A) Request for Service (RFS) No. 2022-

VIII. NEW BUSINESS

IX. INFORMATIONAL REPORTS (No Action Required)

- **B.** Watermaster Report of Production third quarter Water Year 2022 (April 1, 2022 June 30, 2022) 23

X. DIRECTOR'S REPORTS

XI. STAFF COMMENTS

XII. NEXT REGULAR MEETING DATE

A. Consider setting the next regular meeting date for October 5, 2022 - 2:00 P.M.

XIII. ADJOURNMENT

This agenda was forwarded via e-mail to the City Clerks of Seaside, Monterey, Sand City and Del Rey Oaks; the Clerk of the Monterey Board of Supervisors, the Clerk to the Monterey Peninsula Water Management District; the Clerk at the Monterey County Water Resources Agency, Monterey One Water and the California American Water Company for posting on September 1, 2022 per the Ralph M. Brown Act, Government Code Section 54954.2(a).

SEASIDE GROUNDWATER BASIN WATERMASTER

ATTACHMENT A

DRAFT RESOLUTION NO. 2022-03

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SEASIDE GROUNDWATER BASIN WATERMASTER PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE STATE OF EMERGENCY PROCLAIMED ON MARCH 4, 2020, AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF ALL WATERMASTER LEGISLATIVE BODIES FOR THE FOLLOWING 30 DAYS IN ACCORD WITH THE RALPH M. BROWN ACT AND AB 361 (RIVAS)

FACTS

- 1. The Seaside Groundwater Basin Watermaster (Watermaster) is public entity established under the laws of the State of California.
- 2. The Watermaster is committed to preserving and nurturing public access and participation in meetings of the Watermaster Board and Committees; and
- 3. All meetings of Watermaster legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code sections 54950 54963), so that any member of the public may attend, observe, and participate when Watermaster legislative bodies conduct business; and
- The Brown Act, Government Code section 54953(e), enables remote teleconferencing participation in meetings by members of a legislative body, without strict compliance with requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and
- 5. One required condition is that a state of emergency has been declared by the Governor of the State of California pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and
- 6. A proclamation is made that there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the Watermaster's jurisdiction, caused by natural, technological, or human-caused disasters; and
- 7. State or local officials have imposed or recommended measures to promote social distancing, or having the legislative body meet in person would present imminent risks to the health and safety of attendees; and
- 8. The Watermaster Board affirms these conditions now exist. Specifically, on March 4, 2020, the Governor proclaimed a State of Emergency to exist as a result of the threat of COVID-19. That Proclamation has not been terminated by either the Governor or the Legislature pursuant to Government Code section 8629; and
- 9. Despite sustained efforts to remedy this circumstance, the Watermaster Board determines that meeting in person poses an imminent risk to health and safety of attendees due to the COVID-19 virus and its variants; and
- 10. The Watermaster Board finds the emergency created by the COVID-19 virus and its variants has caused, and will continue to cause, conditions of peril to the safety of persons that are likely to be beyond the control of services, personnel, equipment, and facilities of an agency hosting the Watermaster board meetings and desires to proclaim a local emergency and ratify the proclamation of state of emergency by the Governor and similar local health orders that require social distancing; and
- As a consequence of the local emergency, the Watermaster Board determines that all legislative bodies of the Watermaster are required to conduct their meetings without full compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section

54953, and that those Watermaster legislative bodies shall comply with the requirements to provide public access to the meetings remotely as prescribed in paragraph (2) of subdivision (e) of section 54953; and

- 12. Each Watermaster legislative body shall continue to conduct meetings with public access available via call-in or internet-based service options and the public shall be allowed to address the legislative body directly in real time; and
- 13. This Resolution shall authorize the Administrative Officer to establish and maintain platforms necessary for each Watermaster legislative body to hold teleconference meetings and provide an avenue for real-time public comments for such meetings; and
- 14. The Watermaster Board finds the introduction and adoption of this resolution is not subject to the California Environmental Quality Act (CEQA) as the activity is not a project as defined in Section 15378) of the CEQA Guidelines.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS THE SEASIDE GROUNDWATER BASIN WATERMASTER:

SECTION 1. <u>RECITALS</u>. The foregoing findings are true and correct and are adopted by the Watermaster Board as though set forth in full.

SECTION 2. <u>PROCLAMATION OF LOCAL EMERGENCY</u>. The Board hereby proclaims that a local emergency now exists and meeting in person would present imminent risk as a result of the COVID-19 virus and its variants.

SECTION 3. <u>RATIFICATION OF PROCLAMATION OF A STATE OF EMERGENCY</u>. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

SECTION 4. <u>REMOTE TELECONFERENCE MEETINGS</u>. The Administrative Officer and legislative bodies of the Seaside Groundwater Basin Watermaster are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

SECTION 5. <u>EFFECTIVE DATE OF RESOLUTION</u>. This Resolution shall take effect immediately upon its adoption and shall be remain in effect for a period of 30 days, or until such time the Watermaster Board adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which Watermaster legislative bodies may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED on this 7th day of September, 2022 on a motion by Director ______ and second by Director ______ by the following vote, to wit:

AYES: NOES: ABSENT:

I, Laura J. Paxton, Secretary to the Board of Directors of the Seaside Groundwater Basin Watermaster, hereby certify the foregoing is a resolution adopted on 7th day of September, 2022.

Laura J. Paxton, Secretary to the Board

SEASIDE GROUNDWATER BASIN WATERMASTER REGULAR MEETING MINUTES Wednesday, June 1, 2022 Via Zoom Teleconference

I. CALL TO ORDER – Director Bruno called the meeting to order at 2:00pm

II. ROLL CALL

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 Monterey Peninsula Water Management District (MPWMD) – Director George Riley City of Del Rey Oaks – Council Member John Gaglioti

Absent: City of Monterey – Council Member Dan Albert – Vice Chair Monterey County/Monterey County Water Resources Agency – Supervisor Wendy Root-Askew City of Seaside – Mayor Ian Oglesby

Others Present:

Robert Jaques, Watermaster Technical Program Manager (TPM) Laura Paxton, Watermaster Administrative Officer (AO) Michael Paxton, Assistant AO Alvin Edwards, Chair, MPWMD Board of Directors David Stoldt, MPWMD Jonathan Lear, MPWMD Maureen Hamilton, MPWMD Tim O'Halloran, Engineering Manager, CAW Aiko Yamakawa, Attorney, CAW Josh Stratton, External Affairs, CAW Susan Schiavone, Seaside resident Melodie Chrislock, Public Water Now Yuri Anderson, Chief of Staff, District 4

III. PUBLIC COMMUNICATIONS – None

IV. REVIEW OF AGENDA

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

V. CONSENT CALENDAR

- A. Consider Approving Minutes of Regular Board meeting held May 4, 2022
- B. Consider Approving Summary of Payments made April 2022 in the amount of \$13,813.10
- C. Consider Approving Fiscal Year 2022 Financial Reports through April 30, 2022
- D. TAC Recommendation to the Board Regarding Preparing a Sustainable Yield Analysis
- **E.** Results from March 2022 Induction Logging of the Sentinel Wells and Recommendation to Reduce Frequency of Induction Logging

Director Riley requested Item D be pulled.

It was moved by Director Riley and seconded by Councilmember Gaglioti to approve consent calendar Items A, B, C, and E as presented. Director Bruno – Aye; Director Cook – Aye; Councilmember Gaglioti – Aye; Mayor Carbone – Aye; Director Riley – Aye; Director Leith – Aye. Motion carried.

Director Riley was satisfied with clarification on Item D that a Sustainable Yield Analysis was not being recommended at this time.

It was moved by Director Riley and seconded by Councilmember Gaglioti to approve consent calendar Item D as presented. Director Bruno – Aye; Director Cook – Aye; Councilmember Gaglioti – Aye; Mayor Carbone – Aye; Director Riley – Aye; Director Leith – Aye. Motion carried.

VI. ORAL PRESENTATION – None

VII. OLD BUSINESS

A. TECHNICAL ADVISORY COMMITTEE (TAC)

i. Initial Findings from Replenishment Water Modeling Work and Recommendation to Perform Additional Replenishment Water Analyses

TPM Jaques gave highlights from his transmittal, and referenced the recently received correspondence dated May 25, 2022, from Mr. Stoldt of MPWMD challenging the revised modeling assumption that proposes a reduction of Pure Water Monterey's (PWM) delivery amount to 4,600 acre-feet per year (AFY). According to Mr. Jaques, the revised assumption transpired as follows: at the January 2022 TAC meeting, Mr. Lear reported that the latest Water Purchase Agreement contained water supply guarantees from Monterey One Water (M1W) including terms for delivery of a minimum allotment of 4,600AFY to CAW; there was no mention made at the TAC meeting that failure to deliver 5,750AFY would constitute an event of default of that Agreement. Mr. Stoldt also sent correspondence by email on May 27, 2022, that Mr. Jaques felt contained a misstatement regarding CAW's Urban Water Management Plan (UWMP), that such a plan is merely a regulatory filing with no review or comment by the State, and seldom does the public or MPWMD have sufficient time to review and comment on it before it is filed. Mr. Jaques' research on the Department of Water Resources website contradicts Mr. Stoldt's statement. He found that the plans are required by the State's Water Code to be prepared by large urban water suppliers to support their resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The Water Code requires that development of UWMPs be coordinated with water management agencies prior to and during preparation, and requires a 60-day minimum public review period during development of the UWMP to solicit input on the plan. Cal Am fulfilled this requirement and adopted its plan in June of 2021.

Director Bruno inquired of TPM Jaques if the assumptions were agreed upon by the TAC members and whether any TAC members expressed concern that numbers in the assumptions might not be accurate. Jaques recalled that members felt the information that would be provided by performing the additional analysis would serve to "book end" the likely range of the Basin's replenishment water needs, i.e., the amounts needed under both optimistic (MPWMD supply/demand) and potentially more realistic (CAW) sets of future conditions. The proposed additional work was discussed over several TAC meetings and was passed unanimously by the TAC at its May meeting. Jaques noted that Jon Lear, the TAC chair, was not present at that meeting and gave no advanced notification he would not be attending. Councilmember Gaglioti, who is on the TAC, stated that MPWMD was intimately involved in the crafting of the

additional work over the course of TAC meeting discussions. He felt the revised assumptions better indicated likely conditions.

Director Riley questioned the feasibility of the coastal desalination plant being operational by 2030. Councilmember Gaglioti felt the urgent need for an additional source of replenishment water at the current rate of pumping could quickly force feasibility. Director Riley felt Watermaster had ample information on the issue without conducting further analyses. Staff responded to Director Riley's inquiry on Seaside Basin outflow or "leakage" stating the amount is influenced by conditions in adjacent basins and is estimated to be \sim 1,300AFY. Director Cook expressed his support for updating and defining replenishment water needs, and felt the assumptions that considered potential drier years ahead were realistic.

Susan Schiavone of Seaside questioned why additional replenishment water needs analyses would be performed based on what she felt were false assumptions with inaccuracies that would result in false data. She disputed CAW supply and demand figures and 2030 desalination plant startup, and felt the money to perform the proposed analyses would be better spent in purchasing an increased amount of PWM water injected into the Basin derived from what she claimed to be yet unused wastewater in the area, or by implementing CAW's 700AFY in-lieu replenishment now and not waiting for desalination plant startup.

Melodie Chrislock, Public Water Now, felt Watermaster already knows the Basin is over drafted and questioned the expenditure for further analyses instead of pursuing a solution. She was not convinced that the CAW desalination plant would be producing by 2030, and encouraged buying more PWM water injected into the Basin.

David Stoldt, MPWMD General Manager, stated the failure of the PWM project to deliver 5,750AFY would be an event of default under the proposed water purchase agreement and felt it nonsensical in the proposed analyses to reduce the yield to 4,600AFY. His recalling of the timeline of public review of the CAW Urban Water Management Plan was there were 7 days in June 2021 from public notice to approval of the plan with no public comment brought into the approved plan. He disagreed with some of the assumptions in the CAW UWMP.

Director Riley inquired as to the demand figure that would be used in the analyses – Director Cook recalled in its UWMP the amount of 14,000AFY in 2045 but would need to confirm. Mayor Carbone, who sits on the M1W Board and is involved with the Association of Monterey Bay Area Governments (AMBAG), has realized that recycled water will be part of the overdraft solution but not all of it. The State is mandating area cities to add 33,000 housing units that equates to an additional 6,000AFY of water—solutions need to be found very soon, irrespective of from where or whom. Director Riley felt the Watermaster is not in any position to solve the problem on its own. The study may give bounds of replenishment need however it will not provide a solution. Watermaster could join in efforts beyond its boundaries such as with the Salinas Valley Basin and Marina Coast Water District GSAs that have proposed projects, or the MPWMD effort to modify the Section 2 rule that forbids allocation for affordable housing. He felt these are ways to support solutions instead of performing more analyses. Director Leith stated as a member of the TAC he had reservations on supporting the analyses due to modeling skepticism—the need, assumptions made, and lack of contribution to the solution—and felt he would abstain or vote no due to wanting to discuss it further at the board level.

It was moved by Councilmember Gaglioti and seconded by Mayor Carbone to approve the TAC recommendation to 1. Approve Montgomery & Associates RFS No. 2022-04 to perform additional replenishment water analyses; and 2. Fund the costs of this work from Task I.3.a.3, Task I.3.e, and the Contingency line-item in the Watermaster's 2022 Monitoring and Management Program Operations Budget. Director Bruno – Aye; Director Cook – Aye; Councilmember Gaglioti – Aye; Mayor Carbone – Aye; Director Riley – Nay; Director Leith – Nay. Motion carried.

VIII. NEW BUSINESS

IX. INFORMATIONAL REPORTS (No Action Required)

- A. Technical Advisory Committee (TAC) meeting minutes April 27 (review on website at <u>https://www.seasidebasinwatermaster.org/sbwmARC.html</u>) and Draft May 11, 2022
- **B.** Watermaster Report of Production second quarter Water Year 2022 (Jan 1, 2022 Mar 31, 2022)
- C. Correspondence from Watermaster to Department of Water Resources re: Final Draft Groundwater Sustainability Plan for the Monterey Subbasin of the Salinas Valley Groundwater Basin
- D. Correspondence Between CAW, Pure Water Monterey and MPWMD regarding ASR-01
- E. Mission Memorial Park Replenishment Assessment Update
- X. DIRECTOR'S REPORTS Director Bruno reported on the meeting he attended May 27th with discussion between CAW, M1W, and MPWMD of the ASR-01 well. Watermaster has a Storage and Recovery Agreement with the parties. No action or resolution resulted from the meeting and talks are ongoing. Director Riley thanked Director Bruno and TPM Jaques for the well-done letter sent to the Department of Water Resources.
- XI. STAFF COMMENTS Ms. Paxton gave an update on the status of Mission Memorial Park's replenishment assessment, reporting that they opted to pay the \$25,000 fee in one lump sum.
- **XII. NEXT REGULAR MEETING DATE -** July 6, 2022 2:00 P.M.
- XIII. ADJOURNMENT There being no further business, the meeting was adjourned at 3:07pm

SEASIDE GROUNDWATER BASIN WATERMASTERITEM VII.A.i.9/7/22

TO: Board of Directors FROM: Robert S. Jaques, Technical Program Manager DATE: September 7, 2022 SUBJECT: Results of Additional Analyses of the Replenishment Water Modeling Work

RECOMMENDATIONS:

Accept the Consolidated Technical Memorandum for information and for use in management of the Seaside Basin.

BACKGROUND:

At its June 1, 2022 meeting the Board approved a contract with Montgomery & Associates to perform additional replenishment water evaluations using different assumptions than those that had been used in the January 2022 replenishment water modeling work. The revised assumptions principally consisted of:

- Using the water supply and demand figures, and the schedule for implementation of the desalination plant, as contained in Cal Am's Urban Water Management Plan
- Using reduced ASR injection quantities
- Using updated golf course irrigation information from the City of Seaside,

The Technical Memorandum describing the January 2022 work is posted on the Watermaster's website at this link:

http://www.seasidebasinwatermaster.org/Other/Updated%20Modeling%20of%20Seaside%20Basin %20Replenishment%20Options.pdf

DISCUSSION:

The additional work authorized in June was completed in early August and is described in the Technical Memorandum posted on the Watermaster's website at this link: <u>http://www.seasidebasinwatermaster.org/Other/Montgomery%20&%20Associates%20Tech%20Me</u> <u>mo_Replenishment_WaterBudget_and_AlternateScenario_Analysis_DRAFT_A%20%208-5-22.pdf</u>

The document posted at this link is marked as a Draft, because it was felt that a better way of presenting the January and August work would be in the form of a single Technical Memorandum that consolidates that work.

The Consolidated Technical Memorandum is too large for inclusion in this agenda packet, so it will be posted on the Watermaster's website at this link:

https://www.seasidebasinwatermaster.org/Other/ExcecSummary_and%20TMs_Replenishment_Modeling_WaterBudget_and_AlternateScenario_Analysis%20_BOARD_DRAFT_20220901pdf.pdf

Attached is the Executive Summary from the Consolidated Technical Memorandum.

At today's meeting Montgomery & Associates will make a comprehensive PowerPoint presentation describing this work and will respond to questions and comments from the Board.

ATTACHMENTS: The Executive Summary from the Consolidated Replenishment Water Technical Memorandum

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: September 7, 2022

SUBJECT: Results from Flow Direction/Flow Velocity Modeling and Recommendation to Perform Additional Analysis

RECOMMENDATIONS:

- 1. Accept the flow direction/flow velocity Technical Memorandum of February 25, 2022 as a preliminary evaluation of how potential seawater intrusion would move in the Seaside Basin
- 2. Perform additional analyses of this topic in the 2023 Monitoring and Management Program using somewhat different assumptions than those used in the February 2022 work

BACKGROUND:

At its September 1, 2021 meeting the Board approved a contract with Montgomery & Associates to perform flow direction/flow velocity modeling. The objective of this work was to estimate the velocities, travel times, and directions of the potential movement of seawater intrusion inland from the coast into the Northern Coastal Subarea of the Seaside basin, where the majority of the production wells are located. The analysis considered both current conditions and projected potential future conditions.

This work has been completed and consisted of these Tasks:

- Developing Groundwater Elevation Surface Map Snapshots of the Shallow Aquifer
- Performing Particle Tracking and a Travel Time Analysis on the Developed Water Elevation Maps
- Preparing a Technical Memorandum
- Making a presentation to the TAC

Attached is information and graphics excerpted from the Flow Direction/Flow Velocity Modeling Technical Memorandum that describe its findings and conclusions. The full document is 30 pages in length, and is posted on the Watermaster's website at this link

> <u>http://www.seasidebasinwatermaster.org/Other/Flow%20Direction-</u> Flow%20Velocity%20Tech%20Memo%20Final%20Version%202-25-22.pdf

DISCUSSION:

The TAC received a full presentation on this work at its March 9, 2022 meeting.

Key assumptions that were used in the groundwater model to perform this work included:

- Hydrology (rainfall, recharge, and streamflow) for Water Years (WY) 2018-2021 based on actual records, and hydrology for WY 2022-2050 based on repeating the recorded hydrology from WY 1988 through 2016
- Pure Water Monterey (PWM) Base Project (3,500 AFY) beginning in 2020

- California American Water discontinuing its pumping in the Laguna Seca Subarea in 2021
- PWM Base Project ramping up to 4,100 AFY in 2022
- Seaside Golf Courses shifting to use of recycled water for irrigation and discontinuing pumping groundwater in 2023
- PWM Expansion Project (5,750 AFY) beginning in 2024
- Cal Am begins its 700 AFY overpumping repayment program in 2024

The Technical Memorandum points out that the sequence of projected hydrologic conditions that were used is based on the repetition of historical hydrologic data, and that a different sequence of wet and dry years, for example a greater number of dry years early on, would change the picture and could show much more rapid inland penetration of seawater intrusion. This highlights the fact that velocities and travel distances are sensitive to changes in hydrologic conditions that impact the amount of water available for both PWM and ASR injection into the basin. Periods of prolonged drought will increase potential inland travel velocities and increase the seawater intrusion risk. The sequence of projected hydrologic conditions in the baseline simulation represents only a single realization of many possible future hydrology scenarios. Other future climatic conditions could also be evaluated if desired.

Some of the key issues raised by the TAC at its March 9 meeting were:

- The hydrologic conditions that are assumed in the modeling have a significant impact on travel times.
- The modeling is based on repeating historical hydrology patterns which may be overly optimistic. Future years may be drier than the historical patterns. The Mid-Coast Basin in Santa Cruz County is using more conservative (drier) future hydrology projections for purposes of managing its basin.
- The amount of water injected via ASR has a strong impact on the projected rates of movement of seawater intrusion. If ASR amounts are less than those that were used in this modeling, the rates of movement would be greater than projected.
- The assumptions used in the modeling work may be reflective of a best-case scenario. Concern was expressed that there may be a delay in when Cal Am can begin its projected 700 AFY overpumping payback program.
- The time-series graphics in the Technical Memorandum should be recognized as being very climate dependent. These graphics could give the reader a misleading impression, because they are based on assuming that the climate pattern will repeat itself and that everything will be fine with the Pure Water Monterey Expansion and Cal Am's payback program taking place starting in 2024.

At the March 9 meeting there was discussion about potentially performing additional analyses to determine what the impacts would be of using different assumptions. Specifically, the issues pertaining to assumptions that were discussed included:

- Whether using a repeat of historical hydrology might underestimate the effects of climate change, and that in future years there might be less than the historical pattern of rainfall. This could result in:
 - o Less water available for ASR injection into the Basin
 - An increase in water demands for irrigation within the Castroville Seawater Intrusion Project and Cal Am service areas and other urban water suppliers
 - A reduction in the amount of Pure Water Monterey water that could be supplied to the Basin due to that project having to provide more water to the Castroville Seawater Intrusion Project because of increased irrigation demands there

- The timing of the start of using recycled water on the Seaside golf courses
- The timing of the start of Cal Am's overpumping payback program of 700 AFY

At its July 13, 2022 meeting the TAC revisited this topic and passed a motion recommending that in the 2023 Monitoring and Management Program Operations Budget (which will come to the Board for consideration at its October 2022 meeting) money be included for performing additional flow direction/flow velocity analytical work.

ATTACHMENT: Information and Graphics Excerpted from the Technical Memorandum

SEASIDE GROUNDWATER BASIN WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: September 7, 2022

SUBJECT: Consider Approval of Montgomery & Associates (M&A) Request for Service (RFS) No. 2022-05 to Provide Consulting Services for Replacement of Well FO-9 Shallow

RECOMMENDATIONS:

Approve Montgomery & Associates RFS No. 2022-05 to Provide Consulting Services for Replacement of Monitoring Well FO-9 Shallow.

BACKGROUND:

In 2021 Monitoring Well FO-9 Shallow, which is perforated in the Paso Robles aquifer, was found to have a casing leak that allowed water from the shallower Aromas Sands to flow downward and into the Paso Robles aquifer. For this reason the well was destroyed. As <u>Attachment A</u> shows, while there are numerous monitoring and production wells in and near the Seaside Basin, with the loss of FO-9 Shallow there are no monitoring wells in the Paso Robles aquifer in that part of the Northern Coastal Subarea of the Basin.

At its September 1, 2021 meeting the Board approved the 2022 Monitoring and Management Program (M&MP) Capital Budget which included \$66,667 for work to replace Monitoring Well FO-9 Shallow. That was the Watermaster's estimated cost-share based on a preliminary rough cost estimate for the work, and an assumed equal 3-way sharing of costs between the Watermaster, MPWMD, and the Marina Coast Water District (MCWD).

DISCUSSION:

Because there will be a considerable cost (approximately \$250,000 as detailed in <u>Attachment C</u>) involved with installing a well to replace FO-9 Shallow, I polled our hydrogeologists and others for their opinions on whether the benefit of doing that would justify the costs. It was the unanimous opinion of those parties that a replacement well should be installed. The TAC reviewed the consultants' input at its August 10, 2022 meeting and also unanimously agreed that a replacement well should be installed.

At the August 10th TAC meeting there was a brief discussion as to whether the existing FO-9 Well is still on U.S. Army property, or whether that land had been transferred to the City of Seaside. Nisha Patel, the City's Public Works Director, researched this and found that it is still on U.S. Army property. If a well to replace FO-9 Shallow is to be installed, it may be easier (and less costly) to put the replacement well in the northerly part of the City of Seaside's Bayonet and Black Horse Golf Courses property. This would be reasonably close to the location of FO-9 Shallow. The current location of FO-9 Shallow is near a housing area and has some access and other limitations which would be avoided if the replacement well were installed in a more open area without nearby housing. It would also avoid having to get permission and associated terms and conditions from the U.S. Army for installing the replacement well, which would likely add time and cost to the process. <u>Attachment B</u> shows the location of the existing FO-9 well, and a possible location where a replacement well could be installed on the City of Seaside's golf course property. Nisha Patel, the City's Public Works Director, is looking into whether or not the City would authorize this.

Martin Feeney, who managed construction of the Watermaster's Sentinel Wells and more recently the Watermaster's monitoring well at the Camp Huffman location on Bureau of Land Management property, was able to subcontract with well drillers to have those wells installed. However, he reports that his Errors and Omissions Insurance no longer enables him to do that. Consequently, I contacted Montgomery & Associates who has a field group that does well installations, and they are able to directly subcontract with drillers. I requested a Scope and Cost Proposal from them to install a replacement for well FO-9 Shallow, and used it to prepare RFS No. 2022-05 for Montgomery & Associates which is contained in <u>Attachment C</u>. The Montgomery Proposal includes a price quote from Maggiora Brothers Drilling Inc. which updates the prior rough estimate of the well drilling cost.

In order to continue moving ahead with replacing FO-9 Shallow, the TAC recommended that the Board approve RFS No. 2022-05. That RFS only authorizes performing the first two Tasks of the M&A Proposal. This will allow the planning (including site selection, permitting, and approvals) and design work to be done and paid for out of the 2022 M&MP Capital Budget. The actual well installation work (under Tasks 3 and 4 of the Proposal) could then be authorized under a subsequent RFS in calendar year 2023 and paid for out of the 2023 M&MP Capital Budget.

I contacted both MPWMD and MCWD to inquire about their willingness to share in the cost of replacing Well FO-9 Shallow. Both entities indicated a willingness to share the cost. In his September 1, 2021 letter to the Watermaster, Mr. Stoldt of MPWMD stated that MPWMD would be willing to share in the cost at approximately the 15% level. The percentage of the cost MCWD would be willing to share is yet to be determined. Since it is unlikely that either of those entities would be willing to pay 1/3 of the cost, the Watermaster will likely have to pay the largest share of the cost. I will be drafting up a cost-sharing agreement to begin that negotiation with them. I hope to complete that later this year so it can be brought to the Board for approval before Tasks 3 and 4 are authorized.

ATTACHMENTS:

- A. Map Showing Locations of Wells in the Seaside Basin
- **B.** Map Showing Location of Existing Monitoring Well FO-9 Shallow and Possible Location Where a Replacement Well Could be Installed
- C. Montgomery & Associates RFS No. 2022-05

August 23, 2022

Bob Jacques, Technical Program Manager Seaside Groundwater Basin Watermaster PO Box 51502 Pacific Grove CA 93950

Re: Invitation to Speak at Regional Water Forum, September 20, 2022, 1:30pm

Dear Mr. Jacques:

On September 20, 2022 at 1:30pm, the Board of Supervisors will hold its second Regional Water Forum to address water supply issues facing Monterey County.

The purpose of the regional water forum is to provide an overview of current efforts regarding water management and sustainability, and to initiate a comprehensive discussion on regional water supplies and solutions. The goal is to look broadly at what is needed to ensure water security in Monterey County. An understanding of the larger regional water picture is important to forge a consensus approach for water agencies and County leaders.

The first regional water forum, held in March, provided an overview of how the regional water picture is now influenced by the Sustainable Groundwater Management Act's required outcomes, particularly in over drafted subbasins. The second forum will provide an overview of the portfolio of potential regional management actions and projects to address our water supply needs, followed by input from key stakeholders, including our federal and state elected representatives, special district water agency and regulated utility representatives and the public.

As part of the forum agenda, I would like to invite you, or your designated representative to make brief remarks (up to five minutes) on these issues. In particular, the Board of Supervisors would benefit from hearing your perspective on the following questions:

- What are the water supply needs and conditions facing your agency?
- What role do you see for your agency in implementing regional projects or management actions?
- Where do you foresee progress towards regional solutions in the next five years?
- What are the biggest challenges to getting there?
- What do you recommend as next steps?

This invitation to speak is being sent to the following water agencies and the regulated utilities in Monterey County:

- Monterey County Water Resources Agency
- Salinas Valley Groundwater Sustainability Agency
- Monterey One Water
- Monterey Peninsula Water Management District
- Marina Coast Water District/MCWD Groundwater Sustainability Agency
- Castroville Community Services District
- Seaside Groundwater Basin Watermaster
- Arroyo Seco Groundwater Sustainability Agency
- California Water Service
- California American Water
- Alco Water Service

We are planning for the water agencies' portion of the agenda to occur shortly after 2:30pm, following a presentation by the General Managers from the Monterey County Water Resources Agency and the Salinas Valley Basin Groundwater Sustainability Agency and remarks from our Federal and State representatives.

If you, or your designated representative, are able to participate on September 20th, please have your staff confirm with my office by email to my Chief of Staff, Sarah Hardgrave at hardgraves@co.monterey.ca.us or by phone at 831-647-7755. Sarah will be following up with you in early September to answer any questions you may have about this invitation.

I look forward to working with you and other stakeholders to identify a path forward to ensure water security for Monterey County in the 21st century and beyond.

Sincerely,

Tony L. Geour.

Mary L. Adams, Chair Monterey County Board of Supervisor Fifth District

cc: Seaside Groundwater Basin Watermaster Board of Directors

D-R-A-F-T MINUTES

Seaside Groundwater Basin Watermaster Technical Advisory Committee Meeting August 10, 2022 (Meeting Held Using Zoom Conferencing)

Attendees: TAC Members

City of Seaside – Nisha Patel California American Water – Tim O'Halloran City of Monterey – Cody Hennings 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 Administrative Officer Assistant – Michael Paxton

Consultants

Montgomery & Associates – Pascual Benito, Bill DeBoer Wallace Group – Rick Riedl

Others

Cal Am – Josh Stranton MPWMD – Maureen Hamilton

The meeting was convened at 1:34 p.m.

1. Public Comments and Roll Call

There were no public comments. Ms. Voss conducted the roll call with the members listed above being in attendance.

2. Administrative Matters:

A. Make Findings Required Under AB 361 Regarding Holding Meetings Via Teleconference

Mr. Jaques briefly summarized the agenda packet materials for this item. A motion was made by Mr. O'Halloran, seconded by Mr. Gaglioti, to adopt the findings contained in the agenda packet. The motion passed with Mr. Leith voting no.

B. Approve Minutes from the July13, 2022 Meeting

On a motion by Mr. O'Halloran, seconded by Mr. Gomez, the minutes were unanimously approved as presented, with Mr. Lear abstaining.

C. Sustainable Groundwater Management Act (SGMA) Update

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

D. Update on Issues Concerning Well ASR-1

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

3. Presentation on Additional Replenishment Water Evaluations Using Different Assumptions

Mr. Jaques introduced this item.

Mr. Gaglioti had joined the meeting by phone and was concerned that he might lose the connection due to the location he was in. He said that if there is a vote on this issue he would vote in favor of sending the material to the Board for their information at the September Board meeting.

Using the attached PowerPoint slides Mr. Benito presented the work done on the additional replenishment water evaluations using different assumptions. He noted that the new work compares the Baseline and 1,000 AFY replenishment water scenarios that were evaluated in the January 2022 work, to the amount of replenishment water needed under the revised assumptions that are described in the August Technical Memorandum.

Mr. Benito reported that water levels rise or fall depending on whether the inflow is greater than or less than the outflow. This work focused on the water budget for the Northern Coastal Subarea, plus the Pure Water Monterey Expansion area to the east. In this subarea, inflows include injected water, and outflows include pumping, both of which are controllable activities. Flows to or from adjacent areas are head -dependent and not directly controllable.

As deep aquifer water levels rise, more water is lost to the Monterey Subbasin and to the offshore area. During prolonged drought periods, larger amounts of net outflow occur because the amounts of water that are injected are reduced and the amount of water pumped generally increases. This lowers groundwater levels, but it also reduces outflows to adjacent areas that are down gradient, and increases inflows from those that are up-gradient.

In this Technical Memorandum the shallow aquifer includes all the unconfined aquifers including the Aromas, Dunes Sands, and Paso Robles.

Some of the principal conclusions from this work include:

- On average about 3,200 acre-feet per year of <u>additional</u> recharge water above the amount in the 1,000 AFY scenario would be needed under the revised assumptions to achieve protective water levels.
- Shallow Aquifer:
 - Factors having significant impact include rainfall and reduction in shallow aquifer pumping.

- Pure Water Monterey vadose zone wells provide the biggest increase in groundwater levels. Outflows to the Monterey Subbasin and the offshore area increase as groundwater levels rise.
- Deep Aquifer:
 - Outflows to the Monterey Subbasin increase as groundwater levels rise in the deep aquifer.

Mr. O'Halloran and Mr. Gaglioti thanked Mr. Benito for an excellent presentation on a very complex set of conditions. Mr. Gaglioti said he would be submitting some questions of his own in writing to Mr. Benito at a later date.

A motion was made by Mr. Gaglioti, seconded by Mr. O'Halloran to send the information contained in this Technical Memorandum forward to the Board along with the January 2022 work. Mr. Lear reported that MPWMD feels that assumptions 2, 3, and 6 on page 25 of the agenda packet are not accurate.

The motion passed on the following vote:

Yes-Mr. O'Halloran, Ms. Patel, Mr. Hennings, Ms. Voss, Mr. Gaglioti, and Mr. Gomez No - Mr. Lear, and Mr. Leith

4. Approve the Monitoring and Management Program (M&MP) for FY 2023

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

Mr. Lear and Ms. Voss recommended that if other parameters start to indicate possible seawater intrusion, sampling and analysis for barium and iodide be resumed.

A motion was made by Ms. Voss, seconded by Mr. O'Halloran, to approve the Monitoring and Management Program for FY 2023. The motion passed unanimously.

5. Approve the FY 2023 Monitoring and Management Program (M&MP) Operations and Capital Budgets

A motion was made by Mr. Lear, seconded by Ms. Voss, to approve the Monitoring and Management Program Operations and Capital Budgets for FY 2023. The motion passed unanimously.

6. Update on Monitoring Wells FO-9 and FO-10 and Approval of RFS No. 2022-05 with Montgomery & Associate Regarding Replacement of Well FO-9 Shallow

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

Mr. O'Halloran questioned whether or not well FO-9 Shallow was located on Army property. He said he thought the property had been transferred to the City of Seaside. Mr. Lear responded that as far as he knew it was still on Army property. In order to perform the destruction work at well FO-9 Shallow he had to get an easement and permission to access the site from the Army to do the work. Ms. Patel said that she would research the ownership of the property at this location.

With regard to potentially locating the replacement well on the City of Seaside golf course property, Ms. Patel said that she will talk with her upper management next week to see if this

will be acceptable to the City. She will also see if the existing well FO-9 Shallow is still on Army property or whether it is now on City of Seaside property.

With regard to the replacement well for well FO-9 Shallow, Ms. Voss said she felt that locating the replacement well on the City of Seaside golf course property would be satisfactory, as it is reasonably close to the location of the former FO-9 Shallow well and this would make it easier to get the necessary permissions to do that work.

Mr. Lear said he was not sure how reliable the FO-9 Shallow well monitoring data has been in recent years, because we do not know how long the casing leakage has been occurring which would compromise the analytical data.

On a motion by Ms. Voss, seconded by Mr. O'Halloran, RFS 2022 - 05 with Montgomery and Associates was unanimously approved, with Tasks 1 and 2 to be authorized at this time. There was brief discussion about determining whether or not the existing well FO-9 Shallow is on Army property. If it is no longer on Army property, and it is now on City of Seaside property, the replacement well could potentially be located closer to the existing well. If the property is still owned by the Army, the well could more readily be located on the City of Seaside golf course property.

7. Schedule

Mr. Jaques highlighted his expectation that there would not be a need for TAC meetings in either September or October. Therefore, unless there is a change, the next TAC meeting would be on the 3rd Wednesday of November, i.e. November 16, 2022.

8. Other Business

There was no other business.

The meeting adjourned at 3:23 PM.

ITEM IX.B

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 2022

(All Values in Acre-Feet [AF])

																		Description of Table	V2.14 All	from WY	for WY
	Туре	Oct	Nov	Dec	Oct-Dec	Jan	Feb	Mar	Jan-Mar	Apr	May	Jun	Apr-Jun	Jul	Aug	Sep	Jul-Sep	Reported Total	Yield Allocation	2021	2022
Coastal Subareas																					
CAW - Coastal Subareas	SPA	373.37	267.89	196.91	838.17	336.11	456.67	483.60	1,276.38	474.44	527.94	526.22	1,528.60	0.00	0.00	0.00	0.00	3,643.15	1,466.02	165.15	1,631
Luzern		26.16	0.33	0.00	26.49	0.00	50.18	53.88	104.06	51.27	52.25	50.06	153.58				0.00	284.13			
Ord Grove		109.59	48.86	38.68	197.13	72.51	95.23	106.91	274.65	102.12	104.55	96.53	303.20				0.00	774.97			
Paralta		75.83	92.49	107.42	275.73	113.66	111.53	96.00	321.19	103.07	132.66	131.90	367.64				0.00	964.57			
Playa		0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14	0.00	13.98	32.33	46.32				0.00	46.46			
Plumas		18.98	0.00	0.00	18.98	0.00	14.47	29.35	43.82	28.04	28.88	27.46	84.39				0.00	147.19			
Santa Margarita		142.81	126.22	50.81	319.84	149.94	185.27	197.33	532.53	189.93	195.61	187.93	573.47				0.00	1,425.84			
ASR Recovery		0.00							10.51												
City of Seaside (Municipal)	SPA	14.61	13.21	12.59	40.41	11.66	13.07	15.87	40.61	14.19	16.66	14.78	45.63	0.15			0.15	126.79	120.28	0.00	120
Granite Rock Company	SPA				0.00				0.00				0.00				0.00	0.00	11.35	236.07	247
DBO Development No. 30	SPA				0.00				0.00				0.00				0.00	0.00	20.59	424.88	445
Calabrese (Cypress Pacific Inv.)	SPA				0.00				0.00				0.00				0.00	0.00	2.76	13.57	16
City of Seaside (Golf Courses) Sand City	APA APA	27.41 0.12	7.17 0.03	5.14 0.11	39.72 0.26	5.45 0.09	30.92 0.10	43.83 0.20	80.20	44.89	74.47 0.19	88.67 0.17	208.04	57.13			57.13	385.08 1.16	540.00 9.00		540
									0.39	0.14		0.17	0.50				0.00				9
SNG (Security National Guaranty)	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	149.00		149
Calabrese (Cypress Pacific Inv.)	APA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	6.00		6
Mission Memorial (Alderwoods)	APA	4.45	3.94	1.78	10.16	1.58	1.43	3.52	6.53	3.16	2.98	2.47	8.61				0.00	25.30	31.00	I	31
Coastal Subareas Totals					928.72				1,404.11				1,791.38				57.28	4,181.49	2,356.00	839.68	3,195
aguna Seca Subarea																					
CAW - Laguna Seca Subarea	SPA	10.58	9.56	9.11	29.24	8.85	9.67	9.94	28.46	10.82	12.90	15.38	39.10	0.00	0.00	0.00	0.00	96.81	0.00		(
Ryan Ranch Unit		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00			
Hidden Hills Unit		10.58	9.56	9.11	29.24	8.85	9.67	9.94	28.46	10.82	12.90	15.38	39.10				0.00	96.81			
Bishop Unit 3		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			
Bishop Unit 1 The Club at Pasadera	APA	0.00 32.00	0.00 7.00	0.00	0.00 47.00	0.00	0.00 26.00	0.00	0.00 38.00	0.00 27.00	0.00 41.00	0.00 36.00	0.00	28.00			0.00 28.00	0.00 217.00	251.00		25
	APA	32.00	5.83	8.00 0.00		0.00	26.00	9.69	38.00	14.87	32.55		104.00	28.00			28.00	123.76	320.00		
Laguna Seca Golf Resort (Bishop) Vork School	APA	17.51	0.29	0.00	23.34	0.00	0.62	9.69	2.32		2.88	36.24	83.66				0.00	123.76	320.00		320
York School	APA	1.13	1.73	1.41	1.46 4.68	1.04	1.28	1.52	3.34	2.14 2.40	2.88	1.81 1.99	6.83					14.28	41.00		32
Laguna Seca County Park	APA	1.55	1.75	1.41		1.04	1.28	1.02		2.40	1.87	1.99	6.26				0.00		41.00		41
Laguna Seca Subarea Totals					105.72				88.89				239.85				28.00	462.46	644.00	0.00	644
otal Production by WM Prod	ucers				1,034.45				1,492.99				2,031.23				85.28	4,643.95	3,000.00	839.68	3,839
									Annual Produc									777.19	1,379.00		
									Annual Produc	tion from	SPA Produ	cers						3,866.76	2,460.67		
CAW / MPWMD ASR (Carmel River Basin source water)													Previous Balance	Total							
Injection		0.00	0.00	61.69	61.69	8.86	0.00	0.00	8.86	0.00	0.00	0.00	0.00				0.00	70.55			
(Recovery)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00			
Net ASR		0.00	0.00	61.69	61.69	8.86	0.00	0.00	8.86	0.00	0.00	0.00	0.00				0.00	70.55	801.55	872.10	
					1											l					
Pure Water Monterey (PWM) In	jection	and Cal-A	m Recove	ery																	
Injection Operating Reserve 0.00 0.00 0.00 0.00 0.00								0.00				0.00	0.00	1,200.48	1200.48						
Injection Drought Reserve		0.00	0.00	0.00	0.00				0.00				0.00				0.00	0.00	0.0	0.00	
		200.22	200.0-	212.25	000 11	200.51		241.02	A 1 1 / F	2 (2 00			000	272.04			252.07	20.41.25		20.41.27	

944.65 362.09 295.58

(1120.03) (400.00) (350.00) (249.07)

264.55

922.22 273.96

(999.07) (273.96)

273.96

(273.96)

3041.27

(3132.43)

3041.27

(3132.43)

0.0

0.0

CAW

Delivery to Basin

Notes:
1. The Water Year (WY) begins October 1 and ends September 30 of the following calendar year. For example, WY 2022 begins on October 1, 2021, and ends on September 30, 2022.

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).

900.44

3. Values shown in the table are based on reports to the Watermaster received by April 15, 2022.

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.

(739.37) (301.21) (418.82) (400.00)

320.51 282.22 341.92

5. "Base Operating Yield Allocation" values are based on Seaside Basin Adjudication decision. These values are consistent with the <u>Watermaster Producer Allocations Water Year 2022</u> (see Item VIII.B. in 1/5/2022 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.

298.20 289.97 312.27

(343.61) (233.66) (162.10)

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.

Seaside Basin Watermaster P.O. Box 51502, Pacific Grove, CA 93950 (831) 595-0996

June 9, 2022

Mr. David Stoldt General Manager Monterey Peninsula Water Management District 5 Harris Court, Building G Monterey, CA 93940

Mr. Paul Scuito General Manager Monterey One Water 5 Harris Court, Building D Monterey, CA 93940

Mr. Chris Cook Operations Manager, Monterey District California American Water 511 Forest Lodge Road, No. 100 Pacific Grove, CA 93950

Subject: Well ASR-1 Issues

Gentlemen:

In the May 27, 2022 video conference, and in related email correspondence, discussion regarding the RWQCB's redesignation of Well ASR-1 as no longer being authorized as a drinking water source was focused on the Water Purchase Agreement between Cal Am, MPWMD, and M1W, and the Agreement for Storage and Recovery of Non-Native Water from the Seaside Groundwater Basin ("Storage and Recovery Agreement"), between the Watermaster, Cal Am, and MPWMD. This letter is intended to provide additional information that is pertinent to this issue.

We note that there was discussion of well ownership and the MPWMD's right to modify its historic use. The District's position does not change the fact that, but for the injection of stored water, this well could be used as production well for the benefit of the public. From the perspective of the Watermaster, the injection of stored water was not supposed to jeopardize the use of any well, active or inactive. Determining whether or not limiting the potential use of an existing well is a material injury is within the purview of the Watermaster.

In the paragraphs below, emphasis added is shown in boldface

The SWRCB's Division of Drinking Water September 14, 2021 letter to Cal Am states in part: On July 9, 2021, Monterey One Water submitted a letter to the Division of Drinking Water (Division) providing written notice that the results of the intrinsic tracer study conducted for the Pure Water Monterey (PWM) groundwater recharge project showed the estimated underground retention time of the injected recycled water to the Santa Margarita ASR Wells 01 and 02 (ASR Wells 01 and 02) was much shorter than predicted by a 2019 model used to estimate the Seaside Basin Watermaster Well ASR-1 Issues June 8, 2022 Page 2 of 4

> underground retention time to the nearest drinking water well. The intrinsic tracer study confirmed that the estimated underground retention time to the ASR Wells 01 and 02 was insufficient and would not meet the minimum underground retention time required by California Code of Regulations (CCR), Tittle 22, Article 5.2, Sections 60320.224(a) and (b). In addition, the recycled water that reached the Santa Margarita ASR Well 01 during the 2020 extraction period **potentially did not meet the 12-log virus reduction required** by CCR, Tittle 22, Article 5.2, Section 60320.208(a).

The Pure Water Monterey letter to Cal Am dated April 18, 2022 states in part:

On September 14, 2021 the State Division of Drinking Water (DDW) issued a letter to Cal-Am informing you that "the drinking water source designation of ASR Well 01 (ASR-1) has been changed from active to inactive." The inactive status remains in effect today and can only be removed if available data clearly demonstrates that the recycled water reaching ASR-1 when the well is in extraction mode meets at least 12-log virus reduction, the minimum underground retention time required by the recycled water regulations of 2 months, and all other applicable recycled water regulations.

Based on recent conversations with DDW, we do not believe that DDW will review and accept the data and analysis by the M1W team to demonstrate minimum underground retention time without significant reduction of Pure Water Monterey (PWM) injection capacity.

As the public agency sponsors of the Pure Water Monterey wholesale water project, including ownership of ASR-1 by MPWMD, we find no substantial rationale for changing the source designation of ASR-1 to active at this time or the foreseeable future.

The application for the Storage and Recovery Agreement, which was approved by the Watermaster Board at its October 3, 2018 meeting, states in part:

The AWT water that MPWMD will inject into the Seaside Basin will not exceed the water quality limits contained in the Waste Discharge Requirements and Water Recycling Requirements issued for the Pure Water Monterey Project issued by the Central Coast RWQCB in Order No. R3-2017-0003. These limits are summarized in Attachment B, which is excerpted from the document titled Final Engineering Report, Volume I: Engineering Report Pure Water Monterey Groundwater Replenishment Project, Revised November 2017.

The RWQCB's Waste Discharge Requirements and Water Recycling Requirements (RWQCB Order No. R3-2017-0003) for the PWM Project that were included in Attachment B, states in part: Recycled Water Retention Time - The SWRCB Division of Drinking Water (DDW - formerly the California Department of Public Health) has adopted groundwater replenishment regulations (June 2014) for the recharge of recycled water. Recycled water must be retained underground for a sufficient period of time to identify and respond to any treatment failure so that inadequately treated recycled water does not enter a potable water system (referred to as the response retention time). The response retention time must be at least two months. The 1,000-ft distance between proposed project wells and the closest downgradient production wells is expected to Seaside Basin Watermaster Well ASR-1 Issues June 8, 2022 Page 3 of 4

result in a travel time of approximately one year. MRWPCA will propose a tracer study to DDW and the Central Coast Water Board and when approved, will conduct the study to confirm the underground retention time.

The RWQCB's Monitoring and Reporting Program (MRP NO. R3-2017-0003) for the PWM Project, which was also included in Attachment B, contains this reporting requirement:

Revised estimates, if applicable, on hydrogeologic conditions including the retention time and the amount of the recycled water in the aquifers and at the production well field at the end of that calendar year. The revised estimates shall be based upon actual data collected during that year on recharge rates (including recycled water and native water), hydrostatic head values, groundwater production rates, basin storage changes, and any other data needed to revise the estimates of the retention time and the amount of the recycled water in the aquifers and at the production well field.

The Watermaster's approval of the Storage and Recovery Agreement was based on the information provided in the application, which included assurance that the minimum response retention time of at least two months would be met.

The paragraphs below refer to the Amended Decision, issued by the Superior Court of the County of Monterey, which established the Watermaster.

<u>Section III.A.15</u> defines "Material Injury" as a substantial adverse physical impact to the Seaside Basin or any particular Producer(s), including but not limited to: seawater intrusion, land subsidence, excessive pump lifts, and water quality degradation. Pursuant to a request by any Producer, or on its own initiative, Watermaster shall determine whether a Material Injury has occurred, subject to review by the Court as provided for in Section M.N.

<u>Section III.H.6</u> states that each Producer operating under the Standard Production Allocation, and the Watermaster, and certain public agencies, shall have the right to Store Water by Direct Injection, Spreading, or other artificial means so long as such Storage does not cause Material Injury to any other Party.

<u>Section III.j</u> provides the Watermaster with duties, powers, and responsibilities pertaining to the administration and enforcement of the provisions of the Decision.

<u>Section III.j.xx</u> states that applications for Storage in the Seaside Basin shall be approved absent the issuance of findings that a Material Injury to the Seaside Basin or Producers will or is likely to occur as a result of the proposed Storage program and no reasonable conditions could be imposed to eliminate such risk. It also states that the Storage and Recovery Agreement may include conditions to avoid Material Injury, including water quality characteristics of the water that is to be stored pursuant to the Storage and Recovery Agreement.

Several important things are clear from the citations above:

Seaside Basin Watermaster Well ASR-1 Issues June 8, 2022 Page 4 of 4

- 1. The assurance in the application for Storage and Recovery that the Pure Water Monterey Project's water will meet the retention requirements established by the Division of Drinking Water is not being fulfilled.
- The water being injected into the Basin for storage does not comply with the requirement in the Storage and Recovery Agreement that the quality of that water meets the water quality limits contained in the Waste Discharge Requirements and Water Recycling Requirements issued for the Pure Water Monterey Project.
- 3. Material injury is being caused by the injection of PWM Project water into the Basin because it is rendering ASR-1, historically used by a Producer (Cal Am) for production, no longer available as a source of domestic water supply.
- 4. One of the responsibilities of the Watermaster is to take actions to prevent material injury from occurring. Such an action could include retracting the Storage and Recovery Agreement for the Pure Water Monterey Project until the material injury being caused to Well ASR-1 has been remedied.

Sincerely,

Paul Bruno Chair, Seaside Basin Watermaster



BUDGET & FINANCE COMMITTEE STAFF REPORT

MEETING DATE:	September 7, 2022
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AGENDA ITEM: IX.D

SUBJECT: Supplemental Appropriation for SGMA \$7.6 Million Round 1 Implementation Grant

RECOMMENDATION:

Staff recommends that the Budget & Finance Committee review the \$7.6 million supplemental appropriation for the SGMA Round 1 Implementation Grant and recommend approval to the Board of Directors.

BACKGROUND:

DWR has approved the \$7.6 million Round 1 Implementation Grant for implementation of the 180/400-foot Aquifer GSP. The purpose of the grant is to assist in the financing of the 180/400-Foot Aquifer Subbasin Groundwater Sustainability Plan Phase 1 Implementation (2022-2024) Project. Seven Components will be completed with the Grant funds. The Board of Directors approved submittal of the SGMA Round 1 Implementation Grant on February 10, 2022.

DISCUSSION:

The proposed appropriations for the \$7.6 million Round 1 Implementation Grant budget will cover expenses through June 30, 2025. Any unspent appropriations of a fiscal year will carryover to the next fiscal year until the project is completed. This grant has no cost share requirements. Therefore, all costs associated with the grant are fully covered by the grant. The grant includes \$400,000 for grant administration.

Attached is a copy of the grant agreement. Exhibit A - Work Plan describes the work to be accomplished with the grant and the amount provided for each component. Exhibit B – Budget itemizes the grant amount by component. Exhibit C – Schedule shows the start and end dates for every component.

Attached also is the budget appropriations as they will appear in the accounting system.

Below is a summary of the entire grant:

			\$ 7,600,000
Categories	Start Date	End Date	Budget
Component 1: Grant Agreement Administration	December 17, 2021	March 31, 2025	\$ 400,000
(a) Grant Agreement Administration	17-Dec-21	31-Mar-25	\$ 400,000
Component 2: Dry Chlorine Scrubber Upgrade at Monterey One Water Recycled Water Plant	July 1, 2022	November 30, 2023	\$ 1,185,000
(c) Implementation / Construction	1-Jul-22	30-Nov-23	\$ 1,185,000
Component 3: Castroville Seawater Intrusion Project Distribution System Upgrades	17-Dec-21	31-Dec-24	\$ 2,150,000
(a) Component Administration	17-Dec-21	December 31.2023	\$ 5,000
(b) Environmental / Engineering / Design	17-Dec-21	31-May-23	\$ 520,000
(c) Implementation / Construction	1-Jul-22	30-Nov-23	\$ 1,622,000
(d) Monitoring / Assessment	1-Sep-23	31-Dec-24	\$ 3,000
Component 4: Interested Party Outreach and Engagement	17-Dec-21	30-Jan-25	\$ 279,500
(a) Component Administration	17-Dec-21	30-Jan-25	\$ 2,500
(e) Engagement / Outreach	17-Dec-21	30-Jan-25	\$ 277,000
Component 5: Conduct Feasibility Study on Aquifer Storage and Recovery	Earliest Start Date	Latest End Date	\$ 300,000
(a) Component Administration	17-Dec-21	30-Jun-24	\$ 20,000
(b) Feasibility Study	17-Dec-21	30-Jun-24	\$ 280,000
Component 6: Demand Management Feasibility	Earliest Start Date	Latest End Date	\$ 200,000
(a) Component Administration	17-Dec-21	December 31,2023	\$ 10,000
(b) Feasibility Study	17-Dec-21	December 31,2023	\$ 190,000
Component 7: Compliance Reporting and Data Expansion	Earliest Start Date	Latest End Date	\$ 1,850,500
(a) Component Administration	17-Dec-21	31-Dec-24	\$ 5,000
(b) Reporting and Data Expansion	17-Dec-21	30-Jun-24	\$ 1,845,500
Component 8: Implement Deep Aquifer Study Recommendations	Earliest Start Date	Latest End Date	\$ 40,000
(a) Component Administration	17-Dec-21	30-Jun-24	\$ 5,000
(b) Study and Data Collection	17-Dec-21	30-Jun-24	\$ 35,000
Component 9: Seawater Intrusion Feasibility Study	Earliest Start Date	Latest End Date	\$ 1,195,000
(a) Component Administration	17-Dec-21	30-Jan-25	\$ 10,000
(b) Feasibility Study	17-Dec-21	30-Jan-25	\$ 1,185,000

FISCAL IMPACT:

This appropriation will have no fiscal impact since all the expenditures will be fully reimbursed by the grant. The only impact is that the Agency has to pay the expenses for the quarter while waiting for reimbursement.

ATTACHMENT(S):

SGMA Round 1 Implementation Grant Agreement SGMA Fund Statement of Revenues and Expenditures.

PREPARED BY:

Roberto Moreno, RGS Senior Advisor Donna Meyers, General Manager