MEETING NOTICE AND AGENDA

TECHNICAL ADVISORY COMMITTEE OF THE SEASIDE BASIN WATER MASTER

DATE: Wednesday, November 17, 2021
MEETING TIME: 1:30 p.m.

IN KEEPING WITH GOVERNOR NEWSOMS EXECUTIVE ORDERS N-29-20 AND N-35-20, THE TECHNICAL ADVISORY COMMITTEE MEETING WILL BE CONDUCTED BY TELECONFERENCE AND WILL NOT BE HELD IN THE MONTEREY ONE WATER OFFICES.

YOU MAY ATTEND AND PARTICIPATE IN THE MEETING AS FOLLOWS:
JOIN 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) BY GOING TO THIS WEB ADDRESS:
https://us02web.zoom.us/j/87696095243?pwd=SXBreUtrSWNmOW1EMjVIdS8xdkZNUT09
If joining the meeting by phone, dial this number:
+1 669 900 9128 US (San Jose)

If you encounter problems joining the meeting using the link above, you may join from your Zoom screen using the following information:
Meeting ID: 876 9609 5243
Passcode: 308681

OFFICERS
Chairperson: Jon Lear, MPWMD
Vice-Chairperson: Tamara Voss, MCWRA

MEMBERS

California American Water Company | **City of Del Rey Oaks** | **City of Monterey**
City of Sand City | **City of Seaside** | **Coastal Subarea Landowners**
Laguna Seca Property Owners | **Monterey County Water Resources Agency**
Monterey Peninsula Water Management District

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	2.A
AGENDA TITLE:	Approve Minutes from the August 11 and October 20, 2021 Meetings
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Draft Minutes from these meetings were emailed to all TAC members. Any changes requested by TAC members have been included in the attached versions.

ATTACHMENTS:	Minutes from these meetings
RECOMMENDED ACTION:	Approve the minutes

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
August 11, 2021
(Meeting Held Using Zoom Conferencing)

Attendees: TAC Members

City of Seaside – Scott Ottmar
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 – Laura Paxton

Consultants
None

Others
None

The meeting was convened at 1:33 p.m.
Note: Because Jon Lear had to attend to a bid opening at MPWMD, Tamara Voss chaired this meeting.

1. **Public Comments**

There were no public comments.

2. **Administrative Matters:**

1 Approve Minutes from the June 9, 2021 Meeting

On a motion by Mr. Gaglioti, seconded by Mr. O'Halloran, the minutes were unanimously approved as presented.

2 Sustainable Groundwater Management Act (SGMA) Update

Mr. Jaques briefly presented this item and asked for input on whether TAC members wished to continue receiving the monthly meeting summaries.

Mr. Gaglioti, Ms. Voss, and Mr. O'Halloran all said they would like to continue getting the monthly meeting summaries, and Mr. Jaques said he would continue including them in the TAC meeting agenda packets.

3 Information from MPWMD on the Pure Water Monterey Expansion Project Schedule

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

4 Geologic Reports from MCWRA

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

3. Discuss Recommendation to the Board Regarding Preparing a Sustainable Yield Analysis

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

Mr. Gaglioti commented that the ultimate goal is to protect the basin by replenishing it to achieve protective water levels. He went on to say that the TAC needs to get something to the Board in order to get the Board started on taking action to protect the basin. He said he agreed that preforming a sustainable yield analysis would not result in protecting the basin, because projects such as expansion of the Pure Water Monterey Project, or ASR, will not by themselves be able to replenish the basin.

Mr. O'Halloran said he agreed with Mr. Gaglioti's comments. He went on to say that the Board needs to get started working on plans to replenish the basin, both physical and financial plans. He commented that a continued drought will intensify the problem.

Mr. Lear said he felt the TAC and conclude that the sustainable yield approach was the technically most desirable approach for basin management.

In response to a question from Mr. Gaglioti, Mr. Jaques said his intent was to provide all 3 of the attachments from this agenda item to the Board when he prepares his transmittal to the Board with regard to performing a sustainable yield analysis.

Mr. Ottmar said he was comfortable with Mr. Jaques' recommendation and background information being provided to the Board.

Mr. Lear said that achieving protective water levels could be included within the definition of "sustainability" in the preparation of a sustainable yield analysis.

Ms. Voss commented that once protecting water levels are achieved, the sustainable yield would tell you how much you could pump on an ongoing basis without causing damage to the basin.

Mr. Leith said he agreed with Mr. Jaques, and that the sustainable yield analysis should be revisited at a future time when progress in implementing the proposed water supply projects is better known.

Following further discussion a motion was made by Mr. Gaglioti, seconded by Mr. O'Halloran, that Mr. Jaques' provide to the Board the following TAC recommendation:

Sustainable Yield (SY) is a technically superior Basin management approach compared to the Natural Safe Yield (NSY) approach used in the Decision, and an SY analysis should be performed either now or at some point in the future.

Because of the historical over pumping from the Basin, regardless of the approach that is used for Basin management, be it NSY or SY, even reducing pumping levels to match either the NSY or SY pumping levels will not achieve protective groundwater elevations. This is because these approaches only seek to stabilize groundwater levels and do not take into account that the Basin would still be at risk of seawater intrusion at some time in the future. An additional source(s) of water (replenishment water) that can be injected into the Basin to raise groundwater levels, and to

maintain them at protective water levels, will be necessary regardless of which approach is used for Basin management.

The motion also directed Mr. Jaques to place the agenda item asking the Board to approve having Montgomery & Associates perform the updated replenishment water modeling (covered in Agenda Item 4 of today's meeting) ahead of the SY recommendation in the Board's upcoming meeting agenda packet.

The motion passed on a vote of 7 to 1, with Mr. Leith voting no.

4. Approve Montgomery & Associates RFS No. 2021-01, Amendment No. 2 for Replenishment Water Modeling

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

Mr. Gaglioti and Ms. Voss said they concurred with moving forward with this work. Ms. Voss commented that the work should include the climate change optional task.

On a motion by Mr. O'Halloran, seconded by Mr. Gaglioti, Montgomery and Associates RFS No. 2021-01, Amendment No. 2, including the optional climate change task, was approved on a vote of 7 to 1, with Mr. Leith voting no.

5. Approve Monitoring and Management Program (M&MP) for FY 2022

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

On a motion by Mr. Gaglioti, seconded by Mr. O'Halloran, the 2022 Monitoring and Management Program was approved.

6. Approve the FY 2022 Monitoring and Management Program (M&MP) Operations and Capital Budgets

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

Mr. Ottmar asked if the 2022 assessments to fund the Monitoring and Management Program would be lower, if the replenishment water modeling update work is performed in 2021. Mr. Jaques responded that the assessments would be lower if that work was performed this year rather than in 2022.

On a motion by Mr. Gaglioti, seconded by Mr. Ottmar, the Monitoring and Management Program Operations and Capital Budgets for 2022 were unanimously approved.

Ms. Voss asked Mr. Lear for an update on Monitoring Well FO-9 Shallow. Mr. Lear responded that he had just opened a bid for $25,000 from Maggiora Brothers to destroy the existing well, and that only one bid had been received. With regard to installing a new well to replace the existing one, he said that the Water Supply Planning Committee did not take any action on that item at its recent meeting.

7. Approve Initial RFSs for Montgomery & Associates, MPWMD, Martin Feeney, and Todd Groundwater for 2022

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

On a motion by Mr. O'Halloran, seconded by Mr. Gaglioti, these contracts were approved with Mr. Lear abstaining.

8. Schedule

Mr. Jaques reported that there does not appear to be any need to have a TAC meeting in either September or October, and that the next TAC meeting would likely be held on the third Wednesday, not the second Wednesday, in November, which will be November 17. He went on to say that he would send out an email to confirm this, or to update this, prior to the normal September and October meeting dates.

9. Other Business

There was no other business.

The meeting adjourned at 2:38 PM.

D-R-A-F-T
MINUTES

Seaside Groundwater Basin Watermaster
Technical Advisory Committee Meeting
October 20, 2021
(Meeting Held Using Zoom Conferencing)

Attendees: TAC Members

City of Seaside – Scott Ottmar
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

Consultants
Montgomery & Associates - Pascual Benito

Others
MCWD – Patrick Breen
City of Seaside – Nisha Patel

The meeting was convened at 1:04 p.m.
Note: The Zoom conferencing service crashed during the meeting. The meeting was resumed using a different remote meeting service after a quorum of attendees was re-established.

1. **Public Comments**

There were no public comments.

2. **Administrative Matters:**

A. Approve Minutes from the June 9, 2021 Meeting

This item was skipped in order to shorten this meeting to avoid a conflict with another meeting that some of the participants need to attend. It will be deferred to the next TAC meeting.

B. Sustainable Groundwater Management Act (SGMA) Update

This item was skipped in order to shorten this meeting to avoid a conflict with another meeting that some of the participants need to attend. It will be deferred to the next TAC meeting.

3. **Discuss Assumptions and Answers to Questions for Montgomery & Associates to Use When Performing Replenishment Water Modeling**

Mr. Jaques summarized the agenda packet materials for this item. Mr. Benito then provided a PowerPoint presentation and solicited questions and comments from the TAC members.

Mr. Ottmar had some comments and questions with regard to operation of the ASR project. Mr. Lear responded to them. He noted that 20 acre-feet per day is the assumed ASR injection rate, based on existing infrastructure.

In response to a question, Mr. O'Halloran said he was not sure 700 acre foot per year over pumping repay back program by Cal am will be implemented.

Mr. Gaglioti asked Mr. Benito to describe what the model output will show. Mr. Benito responded that it will show how long it will take, and how much water will be needed, to replenish the Basin to achieve protective groundwater levels.

Mr. Gaglioti asked Mr. Benito if it would be easy to determine how much water will be needed from the desalination project to provide sufficient water to replenish the basin. He noted that more water than can be supplied by the pure water Monterey expansion Project will be needed. Mr. Benito responded that the model will only show how much water will be needed. The model will not analyze how the replacement water can or should be provided.

Mr. Lear reported that the growers have not yet opted-in to there being a drought reserve under the Pure Water Monterey Project, so it is not currently being used. Ms. Voss said she did not know what the growers might decide to do on this in the future. Mr. Gaglioti and Ms. Voss reported it was their understanding that this and related source of water issues are still under discussion.

Mr. Lear reported that an operating reserve which contains approximately three months of needed water supply which approximates 1,500 acre-feet of water is being used in the Pure Water Monterey Project.

Ms. Voss, Mr. Lear, and Mr. Gaglioti felt that the modeling should be based on current CSIP operating conditions. If desired as an additional scenario, the scope of the modeling work could be expanded to reflect the impacts of providing additional water to the CSIP if the growers want to do that. Mr. Jaques pointed out it would be necessary to increase the scope and cost of the current modeling contract, which means it would need to receive TAC and Board approval before an additional scenario such as that could be modeled. The additional CSIP water under that scenario would be for a potential expansion of the CSIP service area so that it could serve more irrigated acres. This is one of the projects being considered in the 180/400-foot Aquifer Subbasin GSP, and could potentially reduce the amount of water that could be delivered to the Seaside Basin by the Pure Water Monterey Project.

Mr. O'Halloran reported that all of the parties have agreed to sign the new Water Purchase Agreement related to the Pure Water Monterey Expansion Project. However it still needs to actually get signed and approved by the respective boards of directors, and then by the Public Utilities Commission, to finalize the approval process.

Mr. Ottmar said he did not anticipate the Seaside Municipal Water System to appreciably decrease or increase its pumping in the near future. Mr. Lear suggested keeping the pumping rate for the Seaside Municipal System at its current pumping rate.

In response to a question with regard to the SNG well, Mr. Lear reported that it was his understanding that the SNG project is currently bogged down in a land dispute.

Mr. Ottmar said that design is in progress to enable the Seaside golf courses to be irrigated with reclaimed water from the Pure Water Monterey Project, rather than from its own wells, but they are not yet being irrigated with reclaimed water.

Mr. Ottmar reported that will probably be necessary to build a new well to supplement Seaside Municipal System Well #4. There was some discussion about recommending what aquifer it should draw from. Mr. Lear suggested that the city proceed with developing a new well in which ever aquifer the city desires, either the Paso Robles or the Santa Margarita. Mr. Ottmar said the city would probably seek to have the well draw from the Santa Margarita aquifer, but that it would be by the end of 2023 before a new well could be installed. He went on to say that the Campus Town Project will be a new demand that will need about 301 acre-feet per year of water, and he anticipated that it would not come online until the 2024/2025 time frame. He felt the city would use the rest of the golf courses' 540 acre-foot-per- year allotment for other future projects.

In response to a request from Mr. Jaques, Mr. Ottmar said he would do some research and prepare a synopsis of this information and send it to him, so it could be included in this meeting to refine Mr. Ottmar's comments.

Mr. Benito described the various risk aversion levels related to modeling the impacts of sea level rise. After some discussion there was consensus to use the 1 in 20 risk aversion level, which is higher than the lowest risk level and more at the medium risk aversion level.

Mr. Lear made a motion to have Mr. Jaques send out to TAC members via email a listing of the assumptions to be used in performing the replenishment water modeling, showing Mr. Jaques' understanding of what the TAC had agreed upon at today's meeting. The purpose of that email would be to get feedback regarding concurrence with that listing via email in order to avoid the need to have another TAC meeting on this issue. Ms. Voss seconded this motion, and it passed unanimously by those TAC members that were still in the meeting and had not had to leave to attend another meeting.

4. **Schedule**
   This item was skipped in order to shorten this meeting to avoid a conflict with another meeting that some of the participants need to attend. It will be deferred to the next TAC meeting.

5. **Other Business**
   This item was skipped in order to shorten this meeting to avoid a conflict with another meeting that some of the participants need to attend. It will be deferred to the next TAC meeting.

The meeting adjourned at 2:40 PM.

SEASIDE BASIN WATER MASTER TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

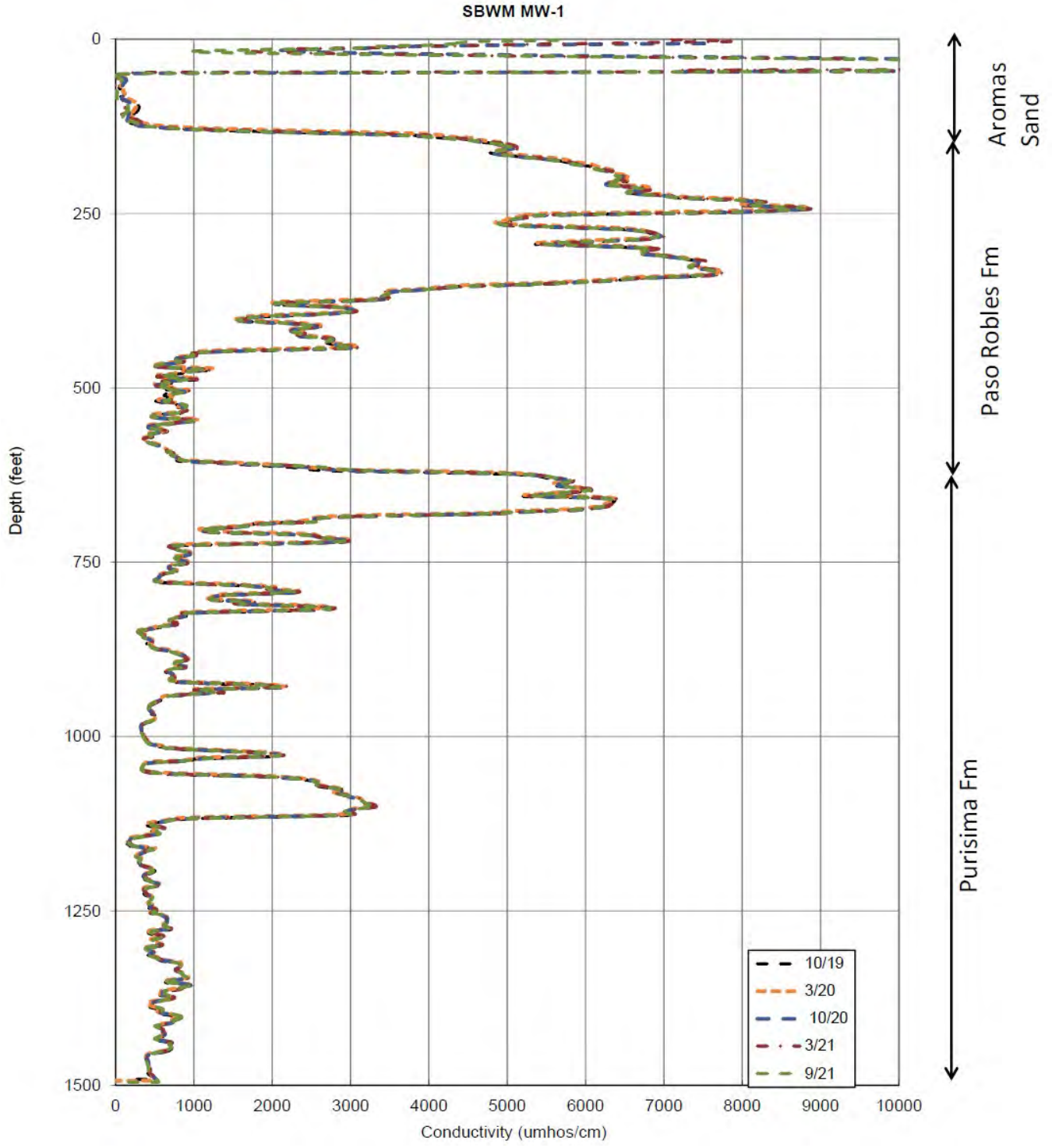
MEETING DATE:	Nonmember 17, 2021
AGENDA ITEM:	2.B
AGENDA TITLE:	Results from Martin Feeney's September 2021 Induction Logging of the Sentinel Wells
PREPARED BY:	Robert Jaques, Technical Program Manager

Attached are plots of the induction logging data from the September 2021 Sentinel Well logging event.

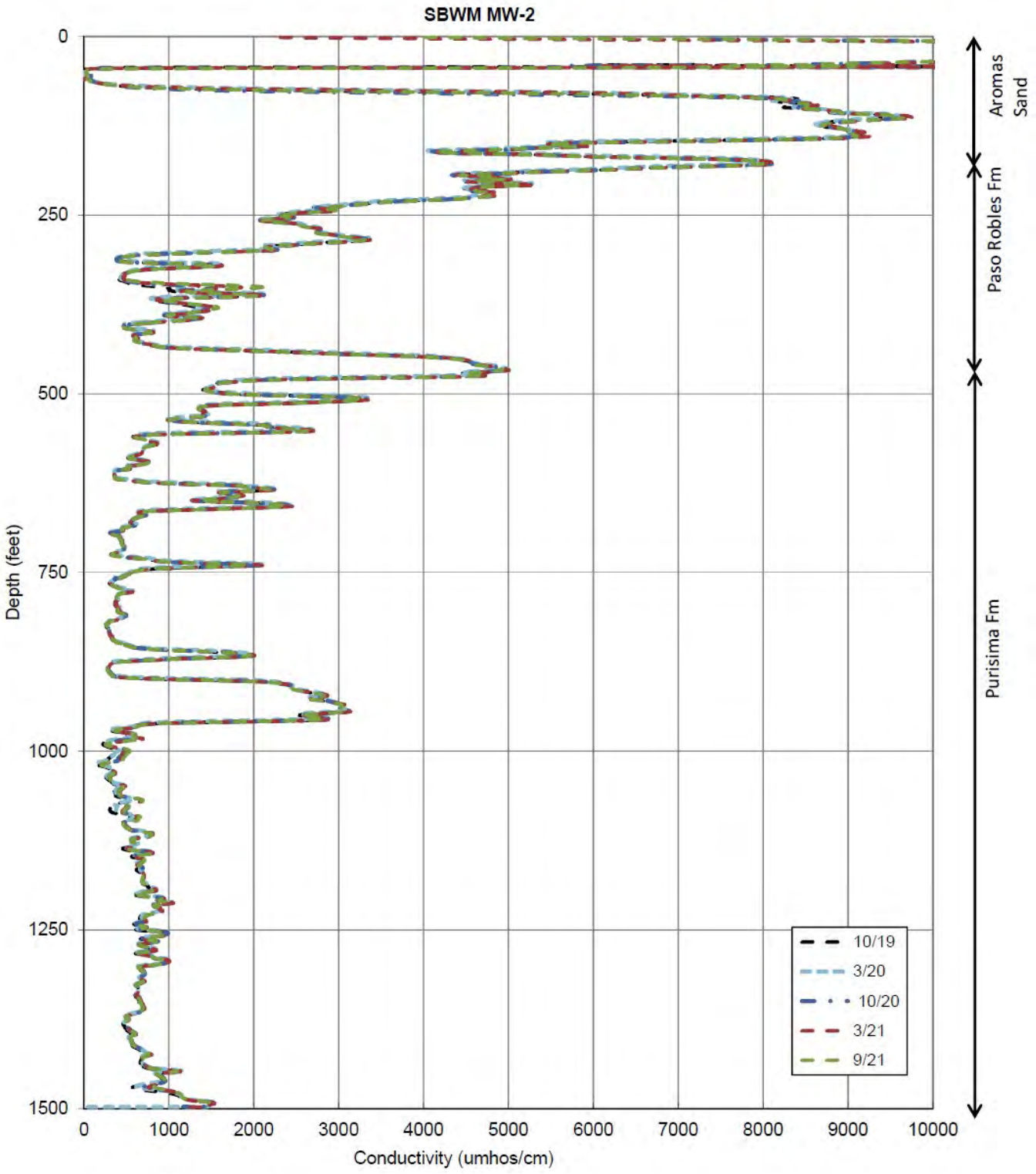
Mr. Feeney reports that the September 2021 data shows no detectable change in formation conductivity – a proxy for seawater intrusion. Thus, the induction logging does not show any indication of the start of seawater intrusion in any of the formations within which production wells are located (primarily the Paso Robles and Santa Margarita formations).

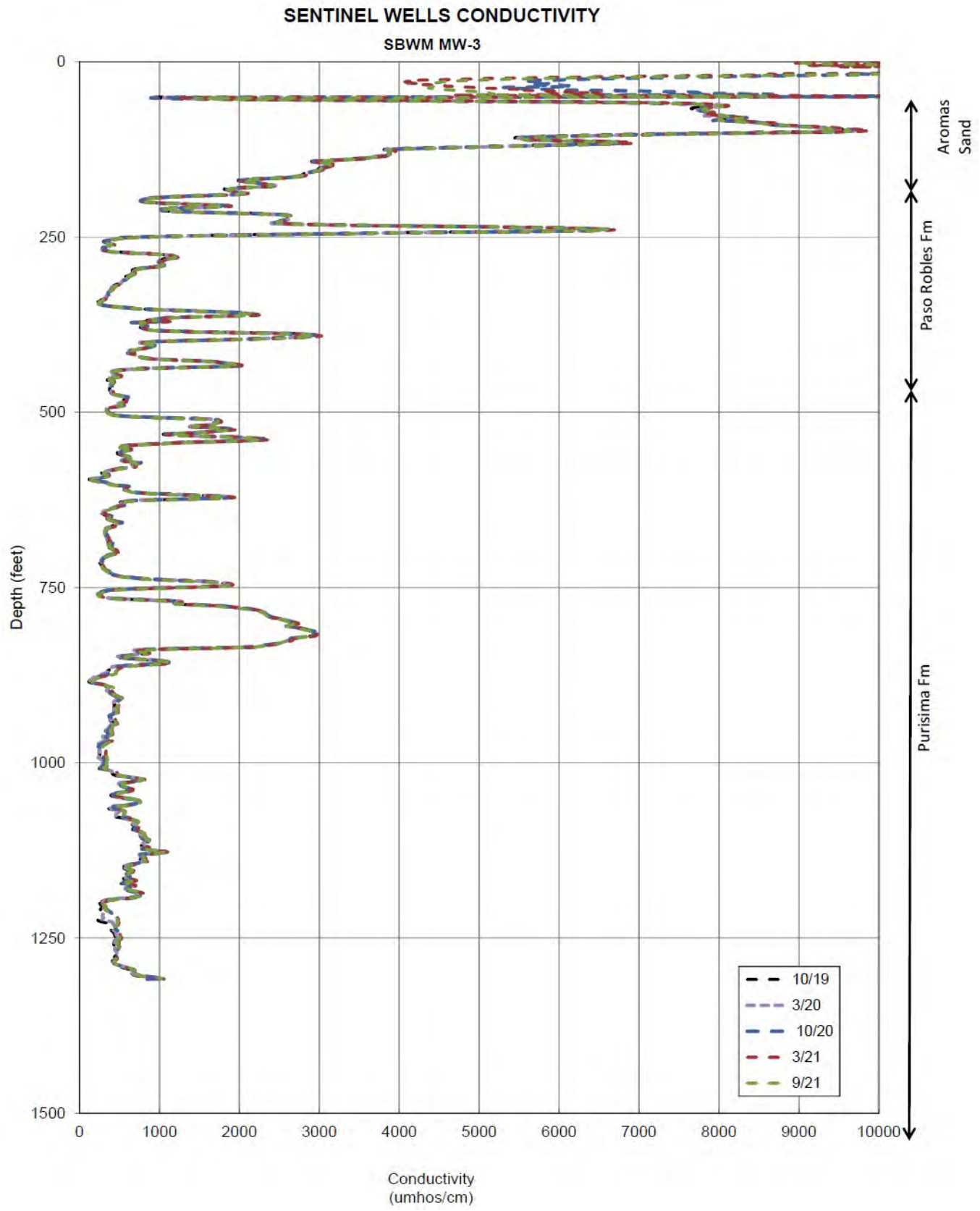
ATTACHMENTS:	Induction Logging Results
RECOMMENDED ACTION:	None required – information only

SENTINEL WELLS CONDUCTIVITY



SENTINEL WELLS CONDUCTIVITY




SENTINEL WELLS CONDUCTIVITY
SBWM MW-3
Depth (feet)
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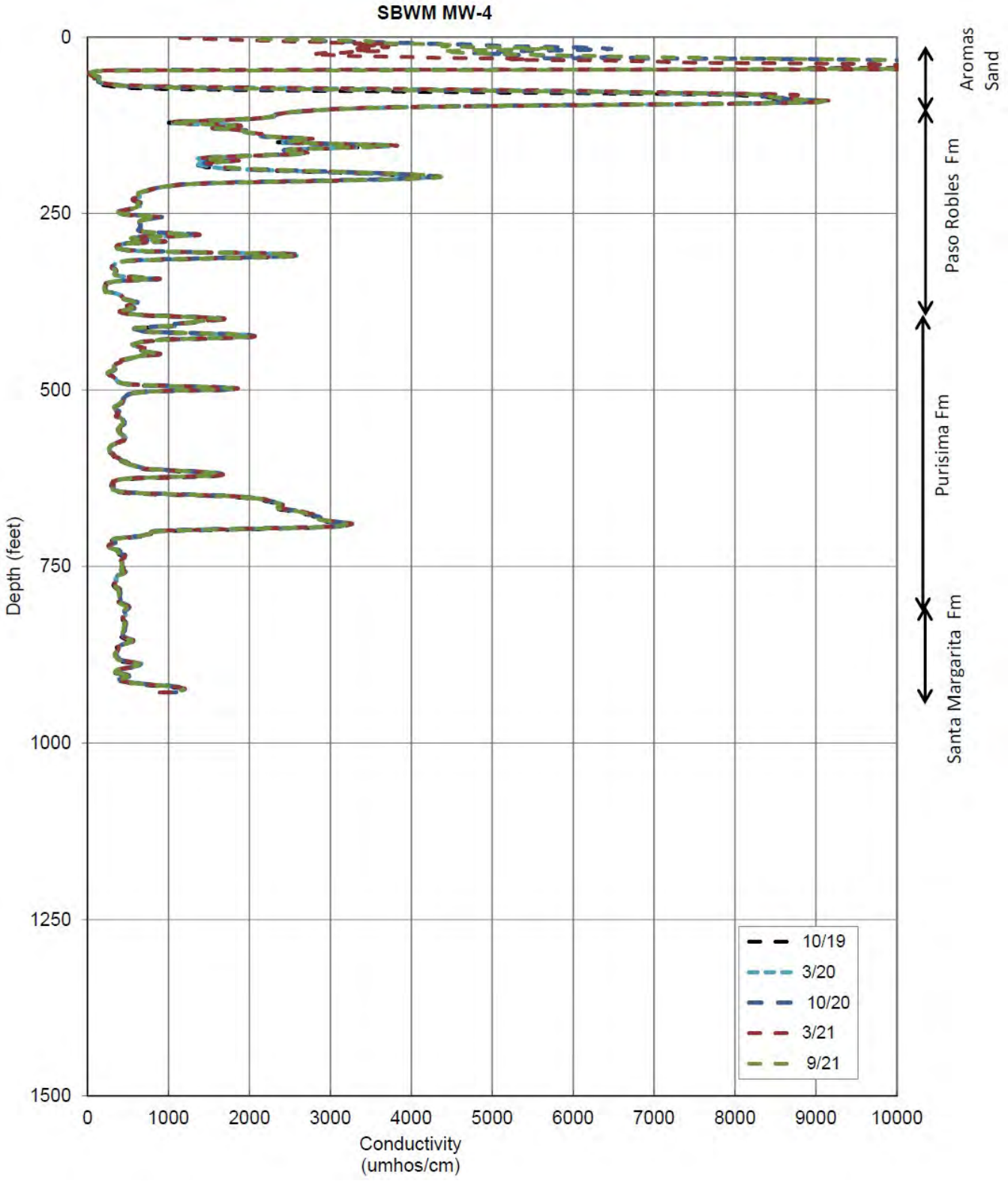
250
500
750
1000
1250
1500
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
Conductivity
(umhos/cm)
10/19
3/20
10/20
3/21
9/21
Aromas
Sand
Paso Robles Fm
Purisima Fm

SENTINEL WELLS CONDUCTIVITY



SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	2.C
AGENDA TITLE:	Sustainable Groundwater Management Act (SGMA) Update
PREPARED BY:	Robert Jaques, Technical Program Manager

At the State level:
Since my last update, I have not received any new materials from the State that would impact the Watermaster.

At the Monterey County level:
Attached are summaries of meetings held in September and October, 2021.

ATTACHMENTS:	Meeting Summaries
RECOMMENDED ACTION:	None required – information only

SUMMARY OF
PURE WATER MONTEREY,
SALINAS VALLEY GROUNDWATER SUSTAINABILITY, AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY
ZOOM MEETINGS
IN OCTOBER 2021

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

SVBGSA Monterey Subbasin GSP Committee Limited Participants Meeting October 5, 2021:

I was not able to attend this meeting, the intent of which was for Cal Am to provide an update on its projects as they affect the Laguna Seca Subarea, and to respond to questions from members of the consultant team that is preparing the GSP for the Corral de Tierra subarea of the Monterey Subbasin, due to a scheduling conflict. However, Emily Gardner of the SVBGSA provided this synopsis:

- There was discussion of what data that would be helpful, and they requested that Abby Ostovar send a request via email that they could consider (system boundaries, wells (if possible), well logs, extraction data). Abby will email Tim O'Halloran the request and they will forward along.

- Chris Cook noted that the Hidden Hills system should not be included in GSP pumping totals because he thinks it is included in the Seaside Basin pumping. He noted that whether or not the Bay Ridge well is in or out of the Seaside Basin has been legally disputed and he contends that it is within the Seaside Basin.

- There was discussion of how stakeholders have advocated for both demand reduction and supply increase projects and management actions. Chris noted that this area has much higher water use than on the Peninsula, so there could be conservation savings, but that won't achieve the needs.

- There was discussion of some of the projects in the draft GSP including the potential extraction barrier and desalination plant.

MCWDGSA Monterey Subbasin GSP Stakeholders Meeting October 13, 2021:

At this meeting MCWD's consultants, EKI, provided an overview and an update on progress on preparing the GSP for the Marina-Ord subarea of the Monterey Subbasin. Much of what was presented duplicated material that had been presented at a recent meeting of the GSP Committee for the Corral de Tierra subarea. However, other topics discussed at this meeting which are of interest to the watermaster included:

- The Climate Change forecasting model that has been prepared by the Department of Water Resources, and which is being used in the development of this GSP, projects that there will be higher temperatures and also higher amounts of rainfall in the future in this vicinity, due to climate change. This means that natural recharge to this subbasin is expected to increase over time into the future.
- The Water Budget for the Marina-Ord subarea shows an increase in the amount of water that will flow out of the Seaside Subbasin and into the Monterey Subbasin, compared to the amount that is currently flowing out of the Seaside Subbasin, under both the Minimum Threshold and Measurable Objective conditions being proposed in the Draft GSP. Under the Seawater Intrusion Protective conditions, the outflow from the Seaside Basin would be slightly reduced from its current level. This is true under both the "No Projects" and "Projects" scenarios, which

respectively reflect no projects being undertaken to achieve sustainability in the Monterey Subbasin, and a series of projects being undertaken to achieve sustainability. This is because groundwater levels in the portion of the Marina-Ord subarea near the northern boundary with the Seaside Subbasin are projected to decline due to pumping in that part of the subarea.

- Sustainability in the Monterey Subbasin can only be achieved if the 180/400-foot Subbasin is able to achieve sustainability. This is because there is considerable outflow from the Monterey Subbasin into the 180/400-foot Subbasin under current conditions, and unless this is remedied by achieving sustainability in the 180/400-foot Subbasin, then it will not be possible for the Monterey Subbasin to achieve sustainability.

SVBGSA Advisory Committee Meeting October 21, 2021:

Most of the agenda for this meeting pertained to administrative matters, but one topic that was discussed which may be of interest to the Watermaster was the definition of "undesirable water quality results" in the Sustainable Management Criteria section of the GSP. Changes to the language in the earlier draft version of that section were proposed and discussed by the consultant team. I questioned a part of the new language being proposed which read *"Undesirable results are not caused by (1) lack of action; (2) past harm; (3) GSA required reductions in pumping; (4) degradation that occurs but is less than if there had been a lack of management."* My question was: How could item (4) be determined, since there would not appear to be any way of knowing how much degradation would have occurred if there had been a lack of management, if the subbasin was in fact being managed via the GSP? The consultant agreed that this would be difficult to determine. My sense of the discussion of this point was that there was a time-crunch to get the GSP completed in time to meet the submittal deadline of January 2022, and that some of the language had not been fully thought out.

SVBGSA Monterey Subbasin GSP Committee Special Meeting October 22, 2021:

This was a meeting at which there was some intense discussion of several topics and a display of differing opinions on some of them. Topics discussed at this meeting which are of interest to the watermaster included:

- The next version of the draft GSP will come out for review in early November.
- A special meeting will be scheduled in the last week of November (November 29 through December 3) to receive comments and discuss the updated draft GSP.
- In addition, because of changes in State requirements for the holding of remote meetings, a special meeting needs to be held within 30 days of today's meeting to comply with the updated Brown Act legislative requirements.
- In response to a question that I raised, Emily Gardner said they are working on preparing a comment response table for the comments that have been submitted on the draft GSP to date. They will publish that once they have completed it.
- A "no-pumping" scenario has been modeled by EKI and it showed that, largely due to losses of groundwater to adjacent subbasins, groundwater levels within the Corral de Tierra subarea would continue to decline even if all pumping within that subarea was discontinued. This highlights how overdrafted the Corral de Tierra subarea is, and that it is affected by adjacent subbasins.
- There are conflicts in the model findings between the Watermaster's modeling and the EKI modeling in terms of directions and quantities of flow between the Laguna Seca subarea and the Corral de Tierra subarea. I coordinated with Georgina King of Montgomery and Associates and submitted suggested GSP wording with regard to getting these conflicts revised early during implementation of the GSP.
- The GSP subcommittee was asked to reconsider setting the minimum threshold and measurable objective for groundwater levels in the Corral de Tierra subarea. This item was brought to the agenda by Sarah Hardgrave. The measurable objective and minimum threshold were changed in August by the committee's action to higher levels than those that were previously proposed. Janet

Brennan said she was inclined to go back to the initial ones because it seems unrealistic to try to achieve the higher groundwater levels. I highlighted the Watermaster's concern that our modeling has shown that low groundwater levels in the Corral de Tierra subarea are making it impossible for the Laguna Seca subarea to be achieve sustainability, even with no pumping at all within the Laguna Seca subarea.

- Janet Brennan commented that a coordinated regional sponsor is needed because so many subbasins will need new water sources in order to become sustainable.
- A Corral de Tierra resident who is on the committee said he agreed with some of the other commenters that residents in the Corral de Tierra subarea are probably not aware of the severity of the groundwater overdraft problem.
- The issue of needing to include the pumping impact of *de minimis* users was again raised, a topic which has been discussed in previous meetings. Emily Gardner said that legal counsel has advised her that the Groundwater Sustainability Agency is limited with regard to what it can do to regulate *de minimis* users, but that MCWRA and the Monterey County health Department do have that authority.
- Sarah Hardgrave reported that the SVBGSA Board of Directors' comments about the Monterey Subbasin GSP have indicated that Corral de Tierra residents need to be more informed and involved in the development of the GSP. She said that a public outreach meeting to be held in the Corral de Tierra area on the evening of November 17 is being planned. I encouraged that the meeting be publicized through the newspapers to make sure that Corral de Tierra residents were aware of the meeting so they could attend.
- Sarah Hardgrave reiterated her belief that a regional solution is needed.
- Sarah Hargrave made a motion to go back to using the earlier minimum threshold and measurable objective groundwater levels, which are lower than those that were approved by the committee at its August 2021 meeting. I voted "no "as did some others, but the motion passed.
- I raised the question of financial viability of implementing projects that will gray raise groundwater levels in the corral de Tierra subarea as it is apparent to me that an additional water source to bring those groundwater levels up will be necessary. This was confirmed by the "no pumping" scenario described above which shows that groundwater levels will continue to fall even if all pumping in the Corral de Tierra subarea is discontinued. In response to my concerns, which were shared by Janet Brennan, Abby Ostovar talked around the issue without addressing it, and said she felt the GSP was adequately meeting DWR's GSP requirements.
- Sarah Hardgrave reported that Supervisor Adams has started to raise the Board of Supervisors' awareness of the magnitude of the financial needs of the various GSP projects within the Salinas Valley Basin.

Seawater Intrusion Work Group (SWIG) Meeting October 25, 2021:

I was not able to attend this meeting due to a scheduling conflict. The topics discussed were an update on progress of the Deep Aquifer Study and a continued discussion (started at the prior meeting) of Projects to control and/or manage Seawater Intrusion.

MCWDGSA Monterey Subbasin GSP Stakeholders Meeting October 27, 2021:

The topics discussed at this meeting were the same as those discussed at the October 13th meeting of this Stakeholders group, so I did not attend this meeting.

SEASIDE BASIN WATER MASTER TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	2.D
AGENDA TITLE:	Update on Security National Guarantee (SNG) Well
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Some months ago water quality sampling indicated that chloride levels were rising in the SNG well. The well owner (Mr. Ghandour) was contacted and he was asked to look into whether the well casing was leaking and allowing salty water from a shallow aquifer to flow downward into the Paso Robles aquifer and cause the higher chloride level. He responded that he would look into this, but that the property was in the midst of litigation and he was prevented by the Court from doing any work on the well until the litigation was concluded. He recently provided an update, as follows:

I am awaiting the Court Ruling on the Project, expected in late January 2022. The physical trial ended, now the briefs etc. As soon as we get the Court Order and finalize title, we can jump on fixing the well.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	2.E
AGENDA TITLE:	Make Findings Required Under AB 361 Regarding Holding Meetings Via Teleconference
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Provision L.3.h of the Adjudication Decision reads as follows:

> *Meeting Procedures. Watermaster shall designate the procedure for conducting meetings within its Rules and Regulations. Rules and regulations for conducting meetings shall conform to the procedures established for meetings of public agencies pursuant to the California Open Meetings Law ("Brown Act"), California Government Code section 54950 et seq., as it may be amended from time to time.*

The Watermaster's Rules and Regulations, originally adopted by the Board some years ago and subsequently from time-to-time amended, includes the following provision:

3.7 Meeting Procedures

3.7.1 Conduct for Meetings

Meetings of the Watermaster Board shall be called to order by the Chairperson or, in his or her absence, the Vice Chairperson. Watermaster Board meetings shall be conducted in conformity with the procedures established for meetings of public agencies pursuant to the California Open Meeting Law (the "Brown Act"), California Government Code section 54950 et seq., as it may be amended from time to time.

Thus, even though the Watermaster is not a "public agency" (which apparently is intended to mean "local agency" as defined in the Brown Act - see attached excerpts from the Brown Act), the Adjudication Decision directs, and the Watermaster Board complied, that the Watermaster's meetings would be held in conformance with the requirements of the Brown Act.

County Counsel Les Girard recently prepared an action item for one of the Salinas Valley Basin Groundwater Sustainability Agency's committees. I have adapted his language to be applicable to the Watermaster TAC in order to comply with recent legislation under AB 361, as follows:

On September 16, 2021, Governor Newsom signed AB 361. This legislation amends the Brown Act to allow meeting bodies subject to the Brown Act to meet via teleconference during a proclaimed state of emergency in accordance with teleconference procedures established by AB 361 rather than under the Brown Act's more narrow standard rules for participation in a meeting by teleconference. AB 361 provides that if a state or local health official recommends social distancing, a legislative body may meet remotely after September 30, 2021, provided that within 30 days of the first meeting after September 30, and every 30 days thereafter, the legislative body finds:

(1) The Governor's proclaimed state of emergency is still in effect,

(2) The legislative body has reconsidered the circumstances of the state of emergency, and

AGENDA ITEM:	2.E (Continued)

(3) Either the Monterey County Health Officer continues to recommend social distancing measures for meetings of legislative bodies, or the state of emergency continues to directly impact the ability of the members to meet in person.

The Monterey County Health Officer has recommended social distancing measures for meetings of legislative bodies. In compliance with AB 361 the TAC was able to meet remotely the first time after September 30, 2021, which was the TAC's October 20, 2021 meeting.

In order to continue meeting, I recommend making these findings which rely on the continuing recommendation by the County Health Officer. Making such findings will be required every 30 days in order to keep meeting remotely, so special meetings may periodically be necessary for that purpose.

It is my understanding from a recent conversation with Mr. Girard that efforts are in progress to have AB 361 amended to streamline the process of complying with AB 361. Such amendments might include revising the 30 day requirement for remaking findings, and/or authorizing the governing body to make findings that will include its committees (such as the TAC). I will provide an update on this when it becomes available to me.

ATTACHMENTS:	None
RECOMMENDED ACTION:	Approve Making the Findings Described Above

Excerpts from the Brown Act

Local Agency: As used in this chapter, "local agency" means a county, city, whether general law or chartered, city and county, town, school district, municipal corporation, district, political subdivision, or any board, commission or agency thereof, or other local public agency.

Legislative Body: As used in this chapter, "legislative body" means:
(a) The governing body of a local agency or any other local body created by state or federal statute.
(b) A commission, committee, board, or other body of a local agency, whether permanent or temporary, decision-making or advisory, created by charter, ordinance, resolution, or formal action of a legislative body. However, advisory committees, composed solely of the members of the legislative body that are less than a quorum of the legislative body are not legislative bodies, except that standing committees of a legislative body, irrespective of their composition, which have a continuing subject matter jurisdiction, or a meeting schedule fixed by charter, ordinance, resolution, or formal action of a legislative body are legislative bodies for purposes of this chapter.

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	4
AGENDA TITLE:	Discuss and Provide Input on the 2021 Seawater Intrusion Analysis Report (SIAR)
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

Montgomery & Associates has completed preparing the Draft Seawater Intrusion Analysis Report (SIAR) for Water Year 2021 and the Executive Summary, which contains conclusions and recommendations, is attached. The complete Draft SIAR is lengthy, so rather than including it in this agenda packet it will be posted on the Watermaster's website so TAC members wishing to review the entire document could 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. Previous SIARs have stated that depressed groundwater levels, continued pumping in excess of recharge and freshwater inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin. In spite of these factors, the previous SIARs stated that neither the Piper nor the Stiff Diagrams nor any of the other parameters indicated the presence of seawater intrusion in the existing monitoring wells. The 2021 SIAR reports that the evaluation of the data from the sampling and monitoring program continues to indicate that seawater intrusion is <u>not</u> occurring.

The 2020 SIAR reported on increases in chloride concentrations at monitoring wells FO-9 Shallow and FO-10 Shallow. The cause of the increase in well FO-9 Shallow was determined to be due to a casing leakage allowing water from the overlying Dunes Sands deposit to leak downward to the location where the Paso Robles aquifer (the Shallow) water quality samples were being collected. That well has since been destroyed by MPWMD and is currently not in service. The reason for the increase in well FO-10 Shallow is not known at this time, but will be investigated by the MCWDGSA as it implements the GSP for the Marina-Ord subarea of the Monterey Subbasin.

A representative from Montgomery & Associates will participate in today's TAC meeting to provide an oral summary of the report and to respond to questions by TAC members.

ATTACHMENTS:	Executive Summary from the Draft 2021 SIAR
RECOMMENDED ACTION:	Discuss and either modify or approve the Draft SIAR and forward the document to the Board with the TAC's recommendation for approval

EXECUTIVE SUMMARY

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

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

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

As noted in the previous two SIAR reports (M&A, 2019; M&A, 2020), 2 monitoring wells in the Watermaster's network have experienced increased chloride concentrations. One of these, monitoring well FO-10 Shallow, is north of and outside of the Seaside Basin, and the other, monitoring well FO-9 Shallow, is just inside the northern boundary of the Northern Coastal Subarea of the Seaside Basin. Induction logging of both wells took place in March 2021 to evaluate if seawater intrusion was evident. A structural failing was identified in monitoring well FO-9 Shallow that most likely acts as a conduit, allowing known shallow intruded groundwater in the dune sands to flow into the well and potentially into underlying aquifers. To prevent further leakage of poorer quality water, Well FO-9 Shallow is scheduled for destruction before the end of 2021. Downhole logging of FO-10 Shallow confirmed chloride concentrations in groundwater, but was inconclusive as to whether this is a result of seawater intrusion. Sentinel Wells' induction logs remain stable over the historical record. No data collected in Water Year (WY) 2021 indicate that seawater intrusion is occurring within the Seaside Groundwater Basin.

The induction logging of FO-9 described above rules out the occurrence of seawater intrusion in the Paso Robles aquifer. However, no structural failing was found in FO-10 Shallow to account

for increasing chloride concentrations which led to inconclusive results regarding seawater intrusion at this location just north of the basin boundary. There continue to be ongoing detrimental groundwater conditions within the Basin that pose a potential threat of seawater intrusion. Groundwater levels below sea level, the cumulative effect of pumping in excess of recharge and freshwater inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion has the potential to occur in the Seaside Groundwater Basin. Based on the findings of this report, ongoing detrimental groundwater conditions that pose a direct threat of seawater intrusion are:

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

- Deep groundwater levels in the Northern Coastal subarea continue to be below sea level. The WY2021 2nd quarter (winter/spring) deep aquifer coastal groundwater levels are more than 40 feet below sea level and the 4th quarter (summer/fall) levels are more than 60 feet below sea level. Pumping depressions expanded both vertically and spatially from the previous year in both the shallow and deep aquifer system.

- Groundwater levels remain below protective elevations in all deep target monitoring wells (MSC deep, PCA-W Deep, and sentinel well SBWM-3). Currently, MSC Shallow one of the three shallow wells with protective elevation has its groundwater levels below its protective elevation. Two years ago, groundwater elevations at PCA-W Shallow were temporarily just above its protective elevation, but since WY2020 has remained below its protective elevation.

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

- Most groundwater samples for WY2021 from depth-discreet monitoring wells generally plot in a single cluster on Piper diagrams, with no water chemistry changes towards seawater. Increased chloride in recent measurements at FO-9 Shallow and FO-10 Shallow has shifted how these wells plot on Piper diagrams. Currently, they appear to be shifting

towards a chlorinated water type, however they still generally plot between sodium-chloride and sodium-bicarbonate type waters. As described above, induction plotting of these wells indicates seawater intrusion in the Paso Robles or Santa Margarita aquifers is not causing this change in water quality. FO-9 Shallow is scheduled for destruction and will not be included in next year's report. Groundwater quality in FO-10 Shallow, outside of the basin, should be monitored closely to identify if further increases occur.

- In some production wells, groundwater quality plot on Piper diagrams is different than the groundwater quality in the monitoring wells. This may be a result of mixed water quality from both shallow and deep aquifers in which these wells are perforated. None of the production wells' groundwater qualities are indicative of seawater intrusion.
- None of the Stiff diagrams for monitoring and production wells show the characteristic chloride spike that typically indicates seawater intrusion in Stiff diagrams. The Stiff diagrams for monitoring wells FO-9 Shallow and FO-10 Shallow show a slightly different shape than other shallow wells because of increased chloride. As described above, FO-09 Shallow is scheduled for destruction, and results suggest intrusion in the Paso Robles or Santa Margarita aquifer is not the source of these water quality changes.
- Chloride concentration trends are stable for most monitoring wells, except FO-9 Shallow and FO-10 Shallow. Chloride increases in FO-09 Shallow result from structural failing in the well introducing intruded dune sand water into the well and and not seawater intrusion of the Paso Robles or Santa Margarita aquifers. Monitoring well FO-10 Shallow experienced a 48 mg/L increase in chloride concentrations last year, and rose by another 3 mg/L this year. The elevated concentrations in themselves do not indicate seawater intrusion, and recent induction logging of the well did not conclusively indicate seawater intrusion as the source of elevated chloride.
- Sodium/chloride molar ratios in most monitoring wells remained constant or increased over the past year. The sodium chloride ratio in 2 of the 3 samples taken at FO-10 Shallow in WY2021 were lower than what has been seen historically at the location and significantly below the ratio of 0.86 that may differentiate between a domestic and seawater chloride source. Accordingly, water quality in FO-10 Shallow should be monitored consistently to determine if increasing chloride concentrations are temporary, and whether they are a result of seawater intrusion.
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing towards the coast. As noted previously well FO-10 Shallow has increased chloride concentrations that started in WY2020 , though induction logging suggests these are not a result of seawater intrusion. Deep aquifer chloride concentration maps show that the highest chloride concentrations are limited to coastal monitoring wells PCA-West Deep

and MSC Deep, but these are not indicative of seawater intrusion since their concentrations are less than 155 mg/L and they do not have increasing trends.

- Induction logging data at the coastal Sentinel Wells do not show historical or recent changes over time that are indicative of seawater intrusion.

Other important findings from the analysis contained in this report are:

- Due to its distance from the coast, seawater intrusion is not an issue of concern in the Laguna Seca subarea. However, groundwater levels in the eastern Laguna Seca subarea have historically declined at rates of 0.6 feet per year in the shallow aquifers, and up to 4 feet per year in the deep aquifers. These declines have occurred since 2001, despite triennial reductions in allowable pumping. The cause of the declines is due in part to the Natural Safe Yield of the subarea being too high and in part due to the influence of wells east of the Seaside Basin. In WY2021, groundwater elevations in the area appeared to experience some stabilization and recovery, potentially correlated with a cessation of pumping at the Ryan Ranch wells.

- Native groundwater production in the Seaside Groundwater Basin for WY2021 was 2,858 acre-feet, which is 465 acre-feet less than WY2020 and 142 acre-feet less than the Decision-ordered Operating Yield for WY2021 of 3,000 acre-feet. Despite WY2021 being an extremely dry year, recovery of over 3,027 acre-feet from the PWM project helped offset pumping.

The following recommendations should be implemented to monitor and track seawater intrusion.

1. Monitoring well FO-9 Shallow be destroyed as soon as possible to prevent leakage of the shallower dune sand high chloride water through the cracked casing to underlying aquifers. A similarly constructed monitoring well should replace the destroyed well so it can provide a continuation of the groundwater level data already collected in the shallow aquifer at this location.
2. Given the increasing chloride concentrations at FO-10 Shallow noted in 2 consecutive SIARs, groundwater quality sampling at this well should continue at the increased frequency of quarterly recommended last year.
3. The assessment of year-to-year trends underpinning each SIAR evaluation relies on consistently collecting groundwater levels and quality in the 2nd and 4th quarters to compare to previous years. When data are not collected according to their specific schedules, or results are not assembled in a timely manner, analysis of whether seawater intrusion is occurring becomes less robust. Additionally, there is a tight schedule of about a month from when data are requested to completion of the draft SIAR that is to be reviewed by the TAC. When well data are delayed, this only leaves a couple of weeks to

prepare the SIAR. It is recommended that all production, groundwater level and groundwater quality data be available by mid-October each year.

4. Seawater intrusion is a threat to the basin, and data must be collected and analyzed regularly to identify incipient intrusion. Maps, graphs, and analyses similar to what are found in this report should continue to be developed every year

It is important to remain vigilant and to closely monitor groundwater quality even though seawater intrusion has not yet been observed in monitoring or production wells in the Seaside Groundwater Basin. As outlined in the most recent Basin Management Action Plan (M&A, 2018a), it is important that the Watermaster continues to identify ways to reduce pumping native groundwater and/or to recover groundwater elevations with water that is left in the basin and is not extracted out as water supply.

Based off last year's SIAR recommendation, groundwater elevation data from the Carmel River water Aquifer Storage and Recovery project (ASR) and PWM monitoring wells are now incorporated into the analysis of groundwater elevations. As these and any future projects are implemented, groundwater levels, groundwater flow directions, and potentially groundwater quality will change. It is important that data from monitoring wells associated with these projects be evaluated in future SIARs.

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	5
AGENDA TITLE:	Discuss and Provide Input on the Preliminary Draft Watermaster 2021 Annual Report
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

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.

A Preliminary Draft Annual Report for 2021 is being presented to the TAC for its review and input, in as complete a form as it can be as of today's TAC meeting. Due to its large file size, a complete copy of the Preliminary Draft 2021 Annual Report cannot be included with the agenda packet. However, a copy of the body of the Preliminary Draft is attached. A copy of the complete Preliminary Draft Annual Report was posted on the Watermaster's website for anyone that would like to examine the entire document.

At today's meeting I will review with the TAC the principal components of the Preliminary Draft and provide an opportunity for the TAC to raise questions, provide input, and provide suggested edits to the document.

ATTACHMENTS:	Preliminary Draft 2021 Annual Report (Body only)
RECOMMENDED ACTION:	Provide input to the Technical Program Manager regarding any edits to the Preliminary Draft Annual Report that the TAC wishes to propose

SEASIDE BASIN WATERMASTER PRELIMINARY DRAFT ANNUAL REPORT – 2021

November 17, 2021

Note: This is a Preliminary Draft of the Annual Report. It will be reviewed by the Watermaster's Technical Advisory Committee at its November 17, 2021 meeting.

Items highlighted in yellow were still being prepared at the time of preparation of this document, and will be included in the next Draft.

Any revisions that result from that meeting will be incorporated into a Draft version of the Annual Report which will be presented to the Board of Directors for its review and approval at a subsequent meeting.

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SEASIDE BASIN WATERMASTER

ANNUAL REPORT – 2021

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

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

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

A. Groundwater Extractions

The schedule summarizing the Water Year 2021 (WY 2021) groundwater production from all the producers allocated a Production Allocation in the Seaside Groundwater Basin is provided in Attachment 1, "Seaside Groundwater Basin Watermaster, Reported Quarterly and Annual Water Production from the Seaside Groundwater Basin for all Producers Included in the Seaside Basin Adjudication During Water Year 2021." Water Year 2021 is defined as beginning October 1, 2020 and ending on September 30, 2021.

B. Groundwater Storage

Monterey Peninsula Water Management District (MPWMD), in cooperation with California American Water (CAWC), operates the Seaside Basin Aquifer Storage and Recovery (ASR) program. Under the ASR program, CAWC diverts water from its Carmel River sources during periods of flow in excess of NOAA-Fisheries' bypass flow requirements, and transports the water through the existing CAWC distribution system for injection and storage in the Seaside Basin at the MPWMD's Santa Margarita ASR site and CAWC's Seaside Middle School ASR site. During WY 2021, 66 acre-feet was diverted and stored in the Seaside Basin under the ASR program. Rainfall in the area was about 51% of normal, and Carmel River flow was about 24% of normal.

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

Producer	Free Carryover Credit (Acre-feet)	Not-Free Carryover Credit (Acre-feet)

Granite Rock	202.02	19.98
DBO Development	375.62	28.35 (-2.31 transfer)
Calabrese (Cypress)	13.47	2.61 (-3.17 transfer)
CAWC	00.00	00.00 (+5.48 transfer)
City of Seaside Muni	00.00	00.00

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

During Water Year 2021 the Watermaster did not indirectly engage in In-lieu Replenishment of the Basin. No non-native water was made available to the Basin during Water Year 2021 under the April 7, 2010 Memorandum of Understanding and Agreement entered into by Watermaster with the City of Seaside for its golf course irrigation program creating in-lieu replenishment water.

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

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

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

During WY 2021 the Watermaster Board did not make any revisions to its *Rules and Regulations*.

During WY 2021 the Watermaster Board was comprised of the following Members and Alternates:

MEMBER	ALTERNATE	REPRESENTING
Director Paul Bruno	N/A	Coastal Subarea Landowner
Christopher Cook	Tim O'Halloran	California American Water
Wesley Leith	N/A	Laguna Seca Subarea Landowner
Director George Riley	Director Alvin Edwards	MPWMD
Mayor Mary Ann Carbone	City Manager Aaron Blair	City of Sand City
Supervisor Mary Adams	Supervisor Wendy Askew	Monterey County (MCWRA)
Councilmember John Gaglioti	Council Member Scott Donaldson	City of Del Rey Oaks
Councilmember Dan Albert	Mayor Clyde Roberson	City of Monterey
Mayor Ian Oglesby	Council Member Jon Wizard	City of Seaside

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

The CAWC/MPWMD ASR Program operated in WY 2021 and 66.06 acre-feet of water was injected into the Basin as Stored Water Credits and 0 acre-feet was extracted.

As reported in the 2019 Annual Report, the Watermaster issued a Storage and Recovery Agreement to CAWC and MPWMD governing the injection and recovery of water from PWM. A copy of the agreement was included in Attachment 13 of the 2019 Annual Report. The quantities of water that were stored and recovered in accordance with that Agreement during WY 2021 are reported in the lower portion of the spreadsheet in Attachment 1.

F. Violations of the Decision and Any Corrective Actions Taken

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

In WY 2021 the Watermaster implemented a final ramp-down in production to achieve the Basin's Decision-established Natural Safe Yield of 3,000 AFY. The Watermaster made its declaration regarding the availability of Artificial Replenishment Water, and the Total Usable Storage Space of the Basin, for WY 2021 at its Board meeting of December 2, 2020. Copies of these declarations are contained in Attachment 2.

Total pumping for WY 2021 did not exceed the Operating Yield (OY) of the Basin, and did not

exceed the Natural Safe Yield (NSY) of the Basin.

G. Watermaster Administrative Costs
The total estimated Administrative costs through the end of Fiscal Year 2021 amounted to $75,000 including a $25,000 dedicated reserve. Costs include the Administrative Officer salary and legal counsel fees. The "Fiscal Year 2021 Administrative Fund Report" and "Fiscal Year 2021 Operations Fund Report" are provided in Attachment 3.

H. Replenishment Assessments
At its meeting of September 1, 2021 the Watermaster Board determined that beginning with WY 2022 the Natural Safe Yield Replenishment Assessment unit cost should be updated to $3,260 per acre-foot, and the Operating Yield Replenishment Assessment unit cost should be updated to $815 per acre-foot. The Agenda transmittal which explains the basis of calculation for these new unit costs is contained in Attachment 4.

[NOTE: After the Replenishment Assessment calculations have been completed, they will be included in Attachment 5 and one or more paragraphs will be inserted here describing any assessments that will be imposed.]

I. All Components of the Watermaster Budget
The Watermaster budget has four separate funds: Administrative Fund; Monitoring & Management–Operations; Monitoring and Management–Capital Fund and; Replenishment Fund. Copies of the budgets for Fiscal Year 2022 are contained in Attachment 6.

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

J. Water Quality Monitoring and Basin Management
Water Quality Analytical Results
Groundwater quality data continued to be collected and analyzed on a quarterly basis during WY 2021 from the enhanced network of monitoring wells. The low-flow sampling method implemented in 2009 continued to be used in 2021 and is expected to continue to be used in the future to improve the efficiency of sample collection. Except as discussed below regarding Monitoring Well FO-9 Shallow, no modifications to the quarterly data collection frequency from the enhanced network of monitoring wells were made during WY 2021.

Monitoring and Management Program for the Upcoming Year
The 2022 Monitoring and Management Program (M&MP) contained in Attachment 8 includes the types of basin management activities conducted in prior years.

Other than cost changes due to changes in hourly rates for some of the consultants, the following are the principal differences between the 2021 M&MP and the 2022 M&MP, and their respective budgets:

Technical Program Manager: Due to the large number of meetings being held by the Salinas Valley Basin's and Marina Coast Water District's Groundwater Sustainability Agency's committees that I serve on representing the Watermaster, and the increasing work associated with working toward obtaining replenishment water to protect the Seaside Basin against the

threat of seawater intrusion, the budget amount for the Technical Program Manager had to be increased in 2021 through a mid-year budget amendment from an initial $60,000 to $95,000. I anticipate that this increased workload will begin to reduce in 2022 after the Monterey Subbasin GSP has been completed. Therefore, the proposed line-item budget amount has been reduced to $75,000 in 2022.

Tasks M.1.c, M.1.d, and M.1.e (On-call/as-needed Consulting Services): In 2020 and again in 2021 we have needed a greater amount of assistance from Montgomery and Associates in evaluating a number of different issues that have come before the TAC, than has been the case in prior years. In 2022 there will be some hourly rate increases for the Montgomery and Associates staff that will likely be the ones to provide on-call/as-needed hydrogeological consulting services under Tasks M.1.c, M.1.d, and M.1.e (Derrik Williams, Pascual Benito, and Georgina King). I also anticipate that there may be an ongoing need for a greater level of services in 2022, and have accordingly increased the on-call consulting services allowance for this budget line-item.

Task M.1.g (SGMA Documentation Preparation): Although the scope of work for this Task is unchanged from 2021, in 2022 there will be some hourly rate increases for the Montgomery and Associates staff that perform this work. Therefore, the amount proposed for 2022 is slightly increased from 2021 amount.

Tasks I.2.a.1 (Conduct Ongoing Data Entry/ Database Maintenance/Enhancement), I.2.b.2 (Collect Water Levels), and I.2.b.3 (Collect Quarterly Water Quality Samples and Perform Sentinel Well Induction Logging): Although the scope of work for these Tasks is essentially unchanged from 2021, in 2022 there will be significant hourly rate increases for the MPWMD staff that perform this work, and additional charges for direct and indirect MPWMD costs associated with performing this work. Also, under the new Scope of Work being used with MPWMD under the new Master Agreement starting in 2022, some of the cost allocations between their work on these Tasks is slightly different than in 2021.

The proposed cost for the induction logging work that is performed by Mr. Feeney and his subcontractor in Task I.2.b.3 is slightly higher than it was in 2021. This is because more maintenance work on the Sentinel wells is anticipated in 2022, and the induction logging contractor's costs have gone up.

Therefore, the amounts proposed for these Tasks in 2022 differ significantly from the 2021 amounts, and are generally higher than they were in 2021.

Task I.2.b.6 (Reports): Although the scope of work for this Task is unchanged from 2021, in 2022 there will be hourly rate increases for the MPWMD staff that perform this work. Therefore, the amount proposed for 2022 is slightly increased from 2021 amount.

Task I.2.b.7 (CASGEM Data Submittal for Watermaster's Voluntary Wells): MPWMD expects to be able to reduce the amount of time needed to format and submit this data to DWR in 2022 to comply with the SGMA requirements for adjudicated basins. Even with MPWMD's hourly rate increases, it has been possible to reduce the budget for this Task in 2022 from the amount budgeted in 2021.

Task I.3.a.3 (Evaluate Replenishment Scenarios and Develop Answers to Basin Management Questions): Included in Task I.3.a.3 is $40,000 to perform work to update modeling performed in 2013 pertaining to injection of water to raise groundwater levels. This additional work was initially proposed for 2020, but was removed based on input from Todd Groundwater and Montgomery & Associates that pointed out that if all the water injected by the PWM and desalination plant projects is subsequently extracted, there would be little if any net increase in groundwater levels. Reinstating that work was proposed for 2021 in order to work on getting additional water above and beyond that which would be injected by the desalination plant or the PWM Expansion Project (depending on which of these moves forward to construction) and not extracted, in order to raise groundwater levels to protective elevations Basinwide. However, in the event the Board decides to defer this work until 2022, funds to perform that work have been included in the 2022 budget for this Task. If the Board proceeds with that work in 2021, the scope and budget for it will be deleted from the 2022 M&MP and its budget.

Task I.4.c (Annual Report- Seawater Intrusion Analysis): Although the scope of work for this Task is essentially unchanged from 2021, Montgomery & Associates has been able to slightly reduce its costs to prepare the 2022 Seawater Intrusion Analysis Report, and no costs for MPWMD to perform work under this Task are anticipated. Therefore, the amount proposed for 2022 is lower than the 2021 amount.

A Capital Project to replace monitoring well FO-9 Shallow is anticipated in 2022.

Basin Management Database

Pertinent groundwater resource data obtained from a number of sources has been consolidated into the Watermaster's database to allow more efficient organization and data retrieval. No modifications or enhancements to the database are planned in FY 2022.

Enhanced Monitoring Well Network

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

In 2021 it was discovered that one of the monitoring wells in this Network, monitoring well FO-9 Shallow, had developed a leak in its casing. This was allowing salty water from the shallow Dunes Sand aquifer to flow down the casing and into the Paso Robles aquifer. Because this was causing the water quality samples taken from this well to no longer be representative of water quality in the Paso Robles aquifer, water quality sampling from this well was discontinued in early 2021. The Monterey County Environmental Health Department directed that this well be destroyed to prevent cross-aquifer contamination, and this was accomplished by the well owner, MPWMD, in late 2021. The potential to have this monitoring well replaced through a three-party cost-sharing agreement (between MPWMD, the Watermaster, and MCWD) was being pursued in late 2021, and a Capital Project for the estimated Watermaster share of the replacement cost is included in the 2022 M&MP Capital Budget.

Basin Management Action Plan (BMAP)

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

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

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

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

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

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

The Memo contains a set of ramp-down calculations for a basin-wide NSY of 3,000 AFY, because 3,000 AFY had been the ramp-down figure that was developed when CAWC was

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

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

In conjunction with updating the BMAP, Montgomery & Associates and Todd Groundwater (a hydrogeologic consultant the Watermaster used to perform a peer review of a draft version of the Updated BMAP) recommended that at some point in the future the Watermaster change to a different approach (Sustainable Yield) rather than continuing to use the Natural Safe Yield approach that was used in the Adjudication Decision, for basin management purposes.

Attachment 11 in the 2019 Annual Report contains a discussion of the pros and cons of using the Sustainable Yield approach vs. the Natural Safe Yield approach. The Watermaster Board considered the information contained in that attachment at its June 5, 2019 meeting and made the following determinations:

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

The Watermaster Board revisited this topic at its September 1, 2021 meeting, and concluded the following:

- Sustainable Yield (SY) is a technically superior Basin management approach compared to the Natural Safe Yield (NSY) approach used in the Decision, and an SY analysis should be performed at some point in time.
- Because of the historical over pumping from the Basin, regardless of the approach that is used for Basin management, be it NSY or SY, even reducing pumping levels to match either the NSY or SY pumping levels will not achieve protective groundwater elevations. This is because these approaches only seek to stabilize groundwater levels and do not take into account that the Basin would still be at risk of seawater intrusion at some time in the future. An additional source(s) of water (replenishment water) that can

be injected into the Basin to raise groundwater levels, and to maintain them at protective water levels, will be necessary regardless of which approach is used for Basin management.

- In view of the expense and complexity of changing to the SY approach, the Board concluded that making this change would not be justified until a source for this replenishment water has been secured.

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

Seawater Intrusion Response Plan

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

The Final SIRP was approved by the Watermaster Board in 2009 and a summary of the Seawater Intrusion Contingency Actions from the SIRP were contained in Attachment 10 of the 2009 Annual Report. The complete document may be viewed and downloaded from the Watermaster's website at: http://www.seasidebasinwatermaster.org/.

When water quality sampling from monitoring well FO-9 Shallow in late 2020 and again in early 2021 appeared to indicate that seawater intrusion might have been detected in the Paso Robles aquifer in the vicinity of that well, the SIRP was immediately reviewed to determine what steps should be taken in response to that finding. However, subsequent investigation of that well led to the determination that the increased chloride levels in the water quality sampling of that well were due to a casing leakage, and not from seawater intrusion in the Paso Robles aquifer as initially feared. Consequently, no actions to implement the SIRP were taken and no modifications to the SIRP were made in 2021.

Seawater Intrusion Analysis Report

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

The Watermaster retained Montgomery & Associates to prepare the WY 2021 SIAR required by the M&MP. The WY 2021 SIAR provided an analysis of data collected during that Water Year.

Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. However, as noted in the previous two SIAR reports (2019 and 2020), two monitoring wells in the Watermaster's network have experienced increased chloride concentrations. One of these, monitoring well FO-10 Shallow, is north of and outside of the Seaside Basin, and the other, monitoring well FO-9 Shallow, is just inside the northern boundary of the Northern Coastal

Subarea of the Seaside Basin. Induction logging of both wells took place in March 2021 to evaluate if seawater intrusion was evident. A structural failure was identified in monitoring well FO-9 Shallow that most likely acts as a conduit, allowing known shallow intruded groundwater in the dune sands to flow into the well and potentially into underlying aquifers. To prevent further leakage of poorer quality water, Well FO-9 Shallow is scheduled for destruction before the end of 2021. Downhole induction logging of Well FO-10 Shallow confirmed chloride concentrations in groundwater, but was inconclusive as to whether this is a result of seawater intrusion. Induction logs of the Sentinel Wells remain stable over the historical record.

There continue to be ongoing detrimental groundwater conditions within the Basin that pose a potential threat of seawater intrusion. Groundwater levels below sea level, the cumulative effect of pumping in excess of recharge and freshwater inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion has the potential to occur in the Seaside Groundwater Basin. However, No data collected in Water Year (WY) 2021 indicate that seawater intrusion is occurring within the Seaside Groundwater Basin.

The SIAR is lengthy, but the full *Executive Summary Section* from it is provided in Attachment 7. A complete copy of the document is posted for viewing and downloading from the Watermaster's website at: http://www.seasidebasinwatermaster.org/. All recommendations contained in the SIAR are being or will be carried out and are included in the budgeted activities contained in Attachment 6 and described in Attachment 8.

Geochemical Impact Assessments

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

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

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

In 2021 no additional geochemical impact assessments needed to be performed, since the Monterey Peninsula Water Supply Project was still in the process of obtaining the permits necessary to move forward with that project.

Sustainable Groundwater Management Act (SGMA)

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

At the State Level:

During 2021 DWR did not issue any new regulations, or revisions to prior regulations, that impacted the Seaside Groundwater Basin or the Watermaster. In March of 2021 the Watermaster submitted to DWR the reporting information required of it, as an adjudicated basin, under SGMA.

At the Monterey County level:

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

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

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

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

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

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

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

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

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

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

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

Summary of Basin Conditions and Important Developments Concerning the Management of the Basin

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

In summary, the *2021 Seawater Intrusion Analysis Report*, which analyzes the water quality data collected under the Watermaster's sampling program, reported that while conditions exist within the Basin that pose a risk of seawater intrusion, none of the data collected in WY 2021 indicate that seawater intrusion has actually occurred.

The 2019 updated *Basin Management Action Plan* found that in spite of recent pumping at levels less than the Decision-established Natural Safe Yield of 3,000 AFY, water levels in some portions of the Basin are continuing to drop. It is expected that once the MPWSP becomes operational, or if that project is not constructed but an expansion of the PWM project

is constructed, and CAWC is able to further reduce its pumping from the Basin by 700 AFY through its 25-year overpumping repayment program, the rate of drop in groundwater levels will be at least partially mitigated.

Planned Near and Long-term Actions of the Watermaster

Near-term actions are described in the 2022 Monitoring and Management Program discussed in Section J and Attachment 8 of this Annual Report.

Long-term actions will include:

- Continuing to carry out the duties and responsibilities assigned to the Watermaster by the Decision
- Continuing to coordinate with the Monterey County Water Resources Agency in their development of an updated hydrogeologic model of the Salinas Valley Basin, as discussed under the *Coordination of Watermaster's Seaside Groundwater Model with Salinas River Basin Model* subheading in Section J of the 2018 Annual Report (Note: In 2020 completion of this model was delayed and was still being completed as of the date of preparation of this 2021 Annual Report. The Watermaster will continue to coordinate with the Monterey County Water Resources Agency on this, once the model is completed and promulgated. However, it was found that the Salinas River Basin model did not adequately address groundwater conditions in the Monterey Subbasin, and for this reason MCWD retained a hydrogeologic consultant (EKI Environment and Water) to develop a new model for the Monterey Subbasin. This new model is being used in the preparation of the GSP for that subbasin, including the Marina-Ord and Corral de Tierra subareas. As discussed above under the *Sustainable Groundwater Management Act (SGMA)* subheading in Section J, the Watermaster is participating in the development of that GSP, and is having its hydrogeologic consultant (Montgomery & Associates) actively interface with EKI Environment and Water to ensure that there is hydrogeologic agreement between the new Monterey Subbasin model and the Watermaster' Seaside Basin model.
- Continuing to coordinate with the Salinas Valley Basin Groundwater Sustainability Agency to develop measures to aid in groundwater management of the Laguna Seca Subarea, as discussed under the *Sustainable Groundwater Management Act* subheading in Section J of this Annual Report.

Information Concerning the Status of Regional Water Supply Issues

MPWSP

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

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

objections. On November 5, 2020 CAWC formally resubmitted its application for a Coastal Development Permit with the Coastal Commission. The Coastal Commission requested that CAWC submit additional information in order for the Commission to deem the application to be complete.

On December 3, the Coastal Commission sent a Notice of Incomplete application, identifying certain additional information needed to consider the application complete. On March 5, 2021 CAWC submitted a partial response to the Coastal Commission's Notice of Incomplete, noting that additional information on the few remaining requested items would be submitted shortly. CAWC supplemented that response on May 19, 2021.

On March 26, 2021, the City of Marina and MCWD each submitted a letter to the Coastal Commission urging rejection of CAWC's response as incomplete. On April 2, 2021, the Coastal Commission responded to CAWC's response, noting the receipt of additional information the Coastal Commission had requested and the few still outstanding items. CAWC supplemented its response to the Coastal Commission on May 19, 2021. On June 18, 2021, the Coastal Commission responded, acknowledging the responses and requesting certain additional information before the application could be considered complete. CAWC is currently working on preparing the additional information the Coastal Commission has requested.

Detailed update reports on the MPWSP are posted on the MPWSP website at https://www.watersupplyproject.org. The most recent update (as of the date of preparation of this Annual Report) provided this information:

- CAWC resubmitted its application for the Monterey Peninsula Water Supply Project to the California Coastal Commission. The resubmission came roughly a month after the company withdrew its application, prior to the Commission hearing that had been scheduled on the project in September 2020. CAWC reported that its withdrawal was made as it attempted to address some of the issues raised by Commissioners, staff and stakeholders, and that CAWC had taken the intervening time to reach out to the City of Marina to see if it would be possible to resolve their concerns as well as to further examine options for low income customers who will be served by the project.

- A week after withdrawing its application, CAWC sent a letter to the City of Marina offering several major options to modify the project in response to objections raised by stakeholders in the Marina community. These included options to purchase water from the project, own infrastructure, enter into a franchise agreement and perform mitigation and restoration work at the proposed project well site, above and beyond what is required to comply with the California Environmental Quality Act. The City responded with a letter indicating these options were insufficient but stating they would nevertheless be willing to talk. CAWC said it remained open to working with the City and maintaining its project to help to address regional inequities in housing and economic opportunities that effect the entire region.

- Once the Commission deems CAWC's renewed application complete, the Commission will have 180 days to make a decision on the project. CAWC said that it was hoping for a hearing as soon as possible, because time is of the essence given the pending restrictions on pumping from the Carmel River.

- CAWC informed the State Water Resources Control Board (SWRCB) it would not meet the 2020 desal project construction milestone required by the Board's Cease and Desist Order after the Coastal Commission postponed a vote on the project in November 2019. Recently, CAWC sent another letter to the SWRCB acknowledging the missed milestone and the accompanying diversion reduction imposed by the CDO, as well as CAWC's understanding that a discretionary waiver of that reduction from the SWRCB was unlikely. Nevertheless, CAWC expressed the need for continuing discussions regarding the 2021 milestone and final cutback scheduled for December 31, 2021, noting the need to ensure the SWRCB understood that CAWC was still working diligently to develop a permanent replacement supply for the community and to protect the river. CAWC went on to say that the desalination project remains the only viable option that can solve the issues long term, which is what the Cease and Desist Order requires.

Approval by the Coastal Commission is the last major permit needed to allow construction of the project to begin. The schedule on the MPWSP website has not been updated since CAWC anticipated getting its Coastal Development Permit approved in December 2018. If the Coastal Commission approves CAWC's resubmitted Coastal Development Permit in the first quarter of 2022, and if the same time periods for implementation of the project which are shown on the last posted schedule are accurate, the MPWSP desalination plant could become operational in the fall of 2024.

PWM

Construction work on Monterey One Water's (M1W) Pure Water Monterey (PWM) recycled water project in Marina was completed in late 2019, and the Advanced Water Treatment plant began producing water in early 2020. Water began being injected into the Seaside Groundwater Basin in February 2020. During the time period of September 2020 through July of 2021 a total of 2,781 acre-feet of water had been injected.

M1W experienced some problems with the shallow injection wells (called vadose zone injection wells) shortly after it began injecting water into the Basin. It was found that some subsidence was occurring at these shallow wells, and also that it was not possible to inject the amounts of water in these shallow wells that was expected. As a result, in early 2021 M1W rehabilitated the wells where subsidence was occurring, and was constructing two additional deep injection wells in order to bring the PWM injection capacity up to the intended levels. Those new deep injection wells are planned to be completed in late 2021, at which time the PWM project is expected to be able to inject approximately 3,500 AFY of advanced treated recycled water into the Seaside Basin for subsequent recovery and service to CAWC customers.

The Title 22 Indirect Potable Reuse (IPR) Groundwater Replenishment regulations require that the water from the PWM project be retained underground no less than two months before it reaches the closest downgradient drinking water well. This is referred to as the Response Retention Time, and is intended to provide sufficient response time to identify a treatment failure and a quick response.

Underground retention time can be determined in three ways: (1) numerical modeling, (2) an intrinsic tracer study, or (3) an added (extrinsic) tracer study. A different credit factor for removal of pathogens is applied to each of these estimation methods to reflect the accuracy of the method. For numerical modeling, the factor is 0.5, for an intrinsic tracer study, the factor is 0.67, and for an extrinsic tracer study, the factor is 1.0.

Before the intrinsic tracer study was done, the numerical modeling predicted that the underground detention time would be 10.8 months before the water would reach ASR Wells 1 and 2. Once the intrinsic tracer study was completed, and the model was calibrated with data from this tracer study, the model showed that the shortest travel time from Deep Injection Well No.1 to ASR Monitoring Well No. 1 (adjacent to ASR Wells 1 and 2) was only 2.5 months. ASR-1 had been offline since February 2021, for independent reasons, and M1W began collaborating with MPWMD and CAWC as soon as the model results were learned regarding future use of ASR-1 .

PWM began injection in March of 2020 and injected water was detected at ASR Well 1 and PWM Monitoring Well No. 1 in mid-September 2020, six months after injection began. There was no time when water extracted from ASR Well 1 had a travel time shorter than 2 months.

At the time of preparation of this Annual Report, M1W was in the process of seeking State Division of Drinking Water approval to conduct an extrinsic tracer study involving the addition of dyes, in order to get the most accurate understanding of underground travel time and to be able to get full credit for underground retention time (factor of 1.0).

In late 2021 M1W was also applying to the Division of Drinking Water to obtain additional pathogen reduction credits for certain of the treatment processes the PWM AWT provides, but which had not been previously used in determining the AWT's reduction credits.

Public Buyout of CAWC Water System

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

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

The preliminary valuation assessment and cost of service evaluation concluded that acquisition of the Monterey Water System by MPWMD appeared to be economically feasible. Economic feasibility was assessed by comparing the estimated revenue requirements of the water system

under MPWMD ownership versus CAW ownership, which indicated significant revenue requirement savings could be achieved under the MPWMD ownership scenarios. MPWMD's assessment was prepared by consultants hired by MPWMD, and did not take into account an appraisal prepared by CAWC consultants which indicated that higher costs to customers would be expected under MPWMD ownership.

MPWMD does not presently have the legal authority to provide retail water service in Monterey County, and would need Monterey County Local Agency Formation Commission (LAFCO) authorization to do that. In order for the MPWMD Board to consider in the future a Resolution of Public Necessity for the potential acquisition of CAWC's Monterey Water System, LAFCO must allow MPWMD to activate certain latent powers authorized by its legislation, as well as consider annexation of approximately 56 parcels to MPWMD. LAFCO will require CEQA findings, action by MPWMD, and a filing of a Notice of Determination with the State. At its August 17, 2020 meeting MPWMD's Board of Directors adopted Resolution 2020-12, seeking authorization to activate latent District powers and to adopt a sphere of influence amendment and annexation. As a step toward fulfilling CEQA requirements, at its October 29, 2020 meeting the MPWMD Board certified a Final Environmental Impact Report (FEIR) for the Potential Acquisition of Monterey Water System and District Boundary Adjustment.

In February 2021 MPWMD submitted an application to LAFCO that included the following components:

1) Activation of MPWMD's latent powers to provide potable water production and distribution services for retail customers, and
2) Authorization for MPWMD to amend its sphere of influence and annex affected parcels.

In response to MPWMD's application, LAFCO issued a completeness review letter on March 28, 2021, stating that the application was incomplete. The letter listed items needed from MPWMD to complete the application before scheduling a public hearing. The letter also called attention to other matters that were relevant to LAFCO's evaluation of the proposal. With respect to those matters, LAFCO held an informal study session agenda item on April 26, 2021 where it received presentations from staff, MPWMD, and CAWC, received public comment, asked questions regarding MPWMD's incomplete application, and continued the discussion to its next meeting on June 28.

On May 3, 2021, the District submitted an amended application to LAFCO. Subsequently, LAFCO issued a completeness review letter on June 2, 2021, listing the remaining completeness items of: 1) a property tax transfer agreement and 2) analysis and mitigation regarding reduction in annual property tax revenue to local taxing agencies.

The Monterey County Board of Supervisors approved the property tax transfer agreement item on June 22, and MPWMD transmitted a consultant analysis of the property tax revenue reduction issue on July 12. On July 30 LAFCO issued a Certificate of Filing determining the amended application to be complete.

On June 28, 2021 LAFCO provided direction to staff to obtain an independent financial review of MPWMD's proposal and complete the review before a public hearing on MPWMD's proposal. LAFCO determined that it would be MPWMD's responsibility to pay for the

independent financial review. LAFCO staff was also preparing a municipal service review and sphere of influence study for MPWMD.

At its September 20, 2021 meeting MPWMD's Board of Directors approved expenditure of and additional $428,000 in funds to prepare the independent financial review and for other services related to acquisition of CAWC's Monterey Water System. The independent financial review was provided to LAFCO on October 11, 2021, and LAFCO set the public hearing to consider MPWMD's application for October 25, 2021.

No decision was reached by LAFCO at its October 25, 2021 hearing. The matter is scheduled for a further hearing on December 6, 2021, at which it is expected that a LAFCO decision will be issued.

Management Activities that May Bear on the Basin's Wellbeing

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

2. *Storm Water and Recycled Water.* Storm water and recycled water are both components of the Pure Water Monterey (PWM) project that is being implemented by Monterey One Water (M1W). CAWC has already contracted to receive 3,500 AFY of PWM recycled water for injection into, and recovery from, the Seaside Basin. M1W, in coordination with others, has been looking at the potential to expand the delivery capacity of the PWM project by using additional sources of recycled water and storm water, and in late 2019 completed preparation of a Supplemental Environmental Impact Report (SEIR) to fulfill the CEQA requirements for such an expansion.

At its April 2020 meeting the M1W Board voted not to certify the SEIR. However, at its April 26, 2021 meeting the M1W Board did vote to certify the SEIR.

In September 2021 the Boards of Directors of both MPWMD and M1W approved an Amended and Restated Water Purchase Agreement with CAWC for purchase of water produced by the Pure Water Monterey and Pure Water Monterey Expansion Projects.

Work to begin design and then construction of the Pure Water Monterey Expansion Project is set to begin in late 2021, with the potential for the expansion project to become operational as early as late 2023 or early 2024.

3. *Sustainable Groundwater Management Act.* Coordination between the Watermaster and the SVBGSA and the MCWD GSA is ongoing and is discussed in more detail above under Section J of this Annual Report. That coordination will aid in groundwater management of the Laguna Seca and Corral de Tierra subareas.

4. Climate Change. Higher seawater levels could exacerbate seawater intrusion concerns, which punctuates the importance of monitoring and long-term management to avoid seawater intrusion. From a water supply perspective, reliance on groundwater with sustainable management is ideal because the resource is a reservoir and therefore not subject to sharp fluctuations in availability resulting from year-to-year precipitation amounts as is the case with

surface water supplies. Updating of the Watermaster's *Groundwater Model* in 2018 (discussed in Section J of the 2018 Annual Report) and *Basin Management Action Plan* in 2019 (discussed in Section J of the 2019 Annual Report) incorporated projected impacts from climate change and sea level rise.

5. *New Technical Issues or Activities.*
   - Stormwater Projects Being Evaluated in the Monterey Peninsula Stormwater Resource Plan (SWRP).

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

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

Of the seven priority projects that were identified in the SWRP, several projects have been able to receive funding and proceeding as described below.

City of Seaside: The Del Monte Manor project in the City of Seaside received grant in the amount of approximately $560,000 to complete the project, and the City filed notice of exemption for the project. The City retained Whitson Engineers to complete the design and has thus far received 60% design drawings. The City anticipates design to be completed by the end of November, 2021. Assuming that milestone is achieved, the following is the tentative schedule to complete construction of the project:

- Construction project put out to bid by end of 2021
- Construction contract awarded in January of 2022
- Construction started in March of 2022
- Construction completed in August of 2022

City of Sand City: The City of Sand City has two green street retrofit projects. They are the West End Stormwater Improvement Projects on Contra Costa Street and Catalina Street. The Contra Costa Street project is funded by an SWRCB Proposition 1 Stormwater Grant (technical assistance and implementation) and the Catalina Street project is funded by a DWR Proposition 1 IRWMP Grant. Although these projects were not top priority projects in the SWRP, they were projects identified in the plan and were eligible for State funding. These projects are described in more detail below:

West End Stormwater Improvement Project – Contra Costa Street
Project Description

The West End Stormwater Improvement Project is a retrofit of an existing major collector street, Contra Costa Street between Olympia Avenue and Redwood Avenue. The Project will integrate Low Impact Development (LID) strategies to address flood control, water quality, and meet several community objectives. The Project proposes to install bioretention facilities (i.e. urban rain gardens), trash capture, permeable pavement, landscaping, and subsurface

infiltration chambers and will improve pedestrian and Americans with Disability Act (ADA) access throughout the corridor. The Project will improve urban storm water runoff quality, augment groundwater quantity, provide climate change adaptation, reduce flooding, and create urban green space. The City developed the Project with a grant from the State Water Resources Control Board Proposition 1 Technical Assistance Funding Program for disadvantaged communities.

West End Stormwater Improvement Project – Catalina Street
Project Description

The West End Stormwater Improvement Project is a retrofit of an existing minor collector street, Catalina Street, between Olympia Ave. and Ortiz Avenue. The Project will integrate Low Impact Development (LID) strategies to address flood control, water quality, and meet several community objectives. The Project proposes to install bioretention facilities (i.e. urban rain gardens), trash capture, permeable pavement, landscaping, and subsurface infiltration chambers and will improve pedestrian and Americans with Disability Act (ADA) access throughout the corridor. The Project will improve urban storm water runoff quality, augment groundwater quantity, provide climate change adaptation, reduce flooding, and create urban green space. The conceptual design of the Project was funded through a Proposition 1 Stormwater Technical Assistance grant which the City was previously awarded. Construction of the Project will be funded through a Proposition 1 Round 1 Integrated Regional Water Management (IRWM) Grant.

Note: Both Projects are designed to capture, treat, and infiltrate urban storm water runoff to reduce the amount of pollutants such as metals, bacteria, nutrients, and trash that are currently being discharged into the Monterey Bay. Both Projects will increase the reliability of the Seaside Groundwater Basin through infiltration of treated storm water and will incorporate City and regional objectives for economic vitality, community livability, and environmental equity. In addition, the Project will improve regional water self-reliance and strengthen collaborative efforts between local agencies to provide sustainable water resources. The City obtained community input regarding storm water management priorities which influenced the design of the Projects.

City of Monterey: The City of Monterey is working to identify potential funding opportunities to proceed with priority urban stormwater diversion opportunities within the City."

- Reduction in Pumping in the Laguna Seca Subarea

In late 2020 CAWC completed construction of an intertie pipeline that enables it to serve the customers in its Bishop and Ryan Ranch Units in the Laguna Seca Subarea with water from its Main System. With the completion of this pipeline, CAWC has been able to discontinue pumping from the Laguna Seca Subarea to serve those customers. This is expected to reduce total pumping from the Laguna Seca Subarea by about 28%.

L. Conclusions and Recommendations

The Seaside Basin Watermaster Board has worked diligently to meet all of the Court's established deadline dates. All of the Phase 1 Scope of Work activities, which are described in the "Implementation Plan for the Seaside Basin Monitoring and Management Program" dated March 7, 2007, have been completed. At the Watermaster Board meeting held on September 1, 2021 the Board adopted the FY 2022 budgets contained in Attachment 6, which support carrying out all elements of the 2022 Seaside Groundwater Basin Monitoring and Management

Program (M&MP). The M&MP is contained in Attachment 8 and describes the activities that the Watermaster plans to conduct during Fiscal Year 2022.

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

As of the date of preparation of this 2021 Annual Report, no future status conferences with the Court have been scheduled.

LISTING OF ACRONYMS USED IN THIS ANNUAL REPORT

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

SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	6
AGENDA TITLE:	Schedule
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:

As a regular part of each monthly TAC meeting, I will provide the TAC with an updated Schedule of the activities being performed by the Watermaster, its consultants, and the public entity (MPWMD) which are performing certain portions of the work.

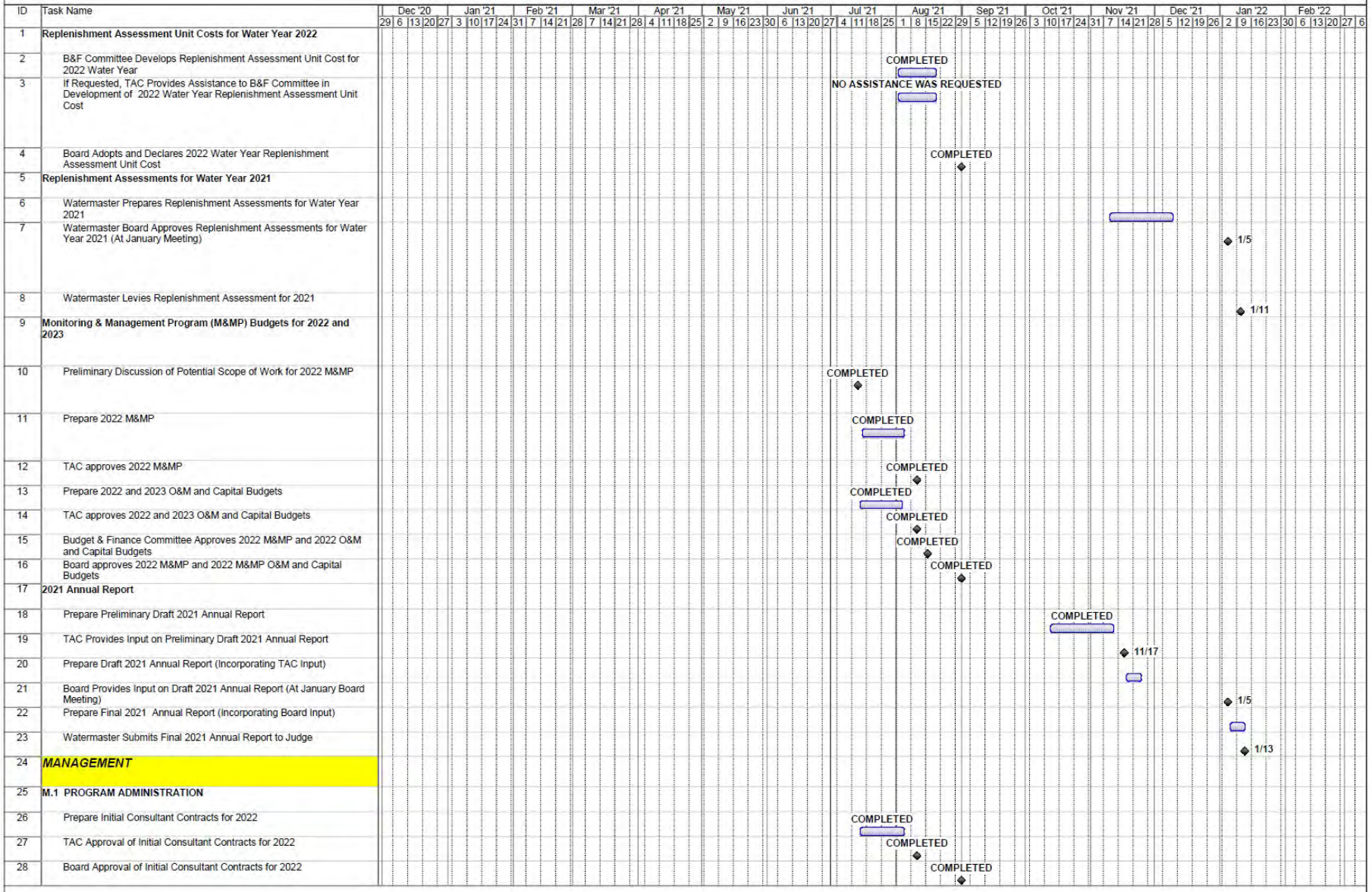
Attached are the updated schedule for 2021 activities, and the proposed schedule for 2022 activities.

Some activities which may be needed in 2022, such as further geochemical modeling if the MPWSP desalination plant begins construction or if groundwater modeling is necessary to interface with the Salinas Valley Basin GSA in its development of a Groundwater Sustainability Plan for the Corral de Tierra subarea, will be added during the year if necessary.

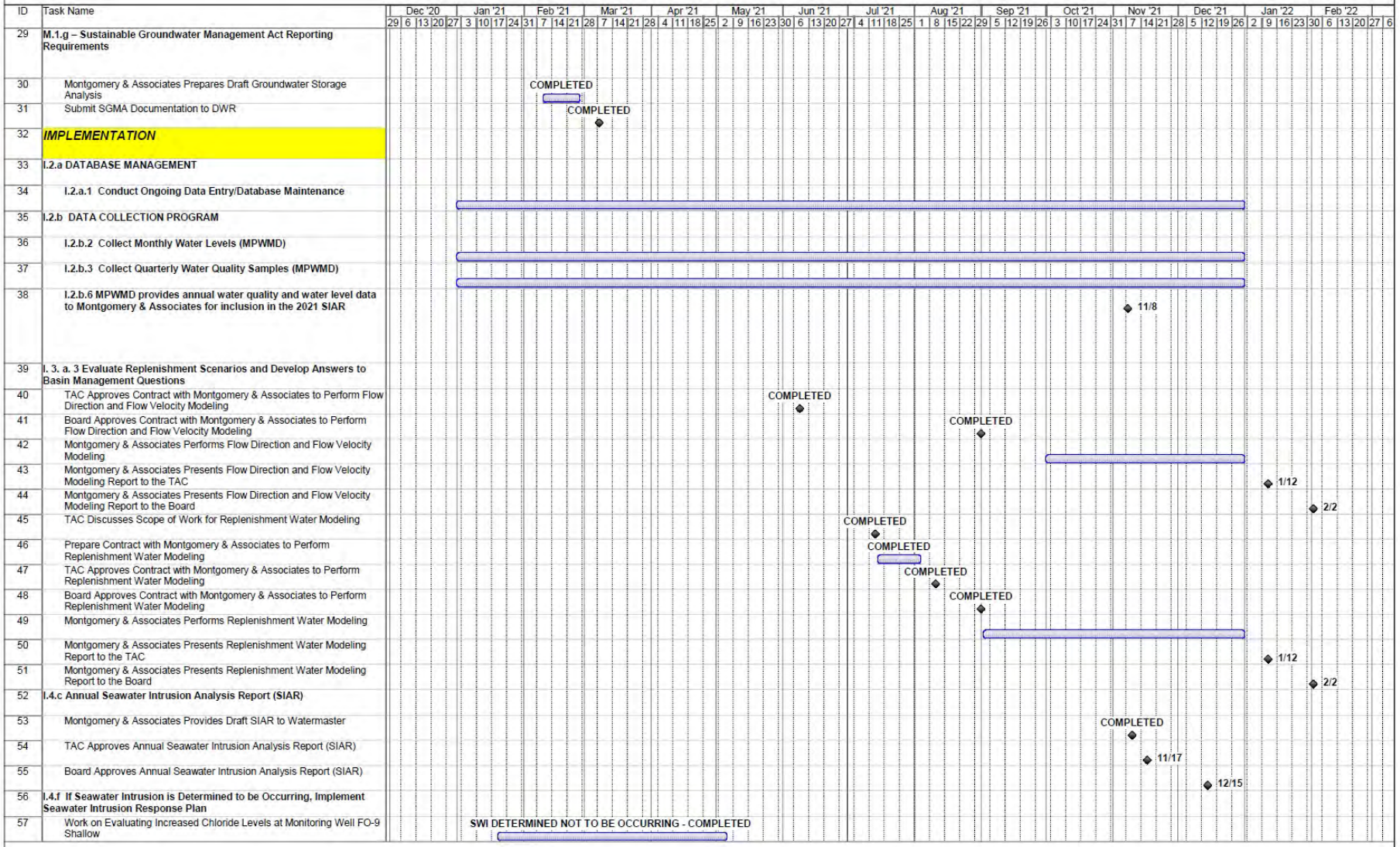
There is no pressing business that the TAC needs to conduct in December, so the next TAC meeting will be on Wednesday January 12, 2022.

ATTACHMENTS:	1. Schedule of Work Activities for FY 2021 2. Proposed Schedule of Work Activities for FY 2022
RECOMMENDED ACTION:	Provide Input to Technical Program Manager Regarding Any Corrections or Additions to the Schedules

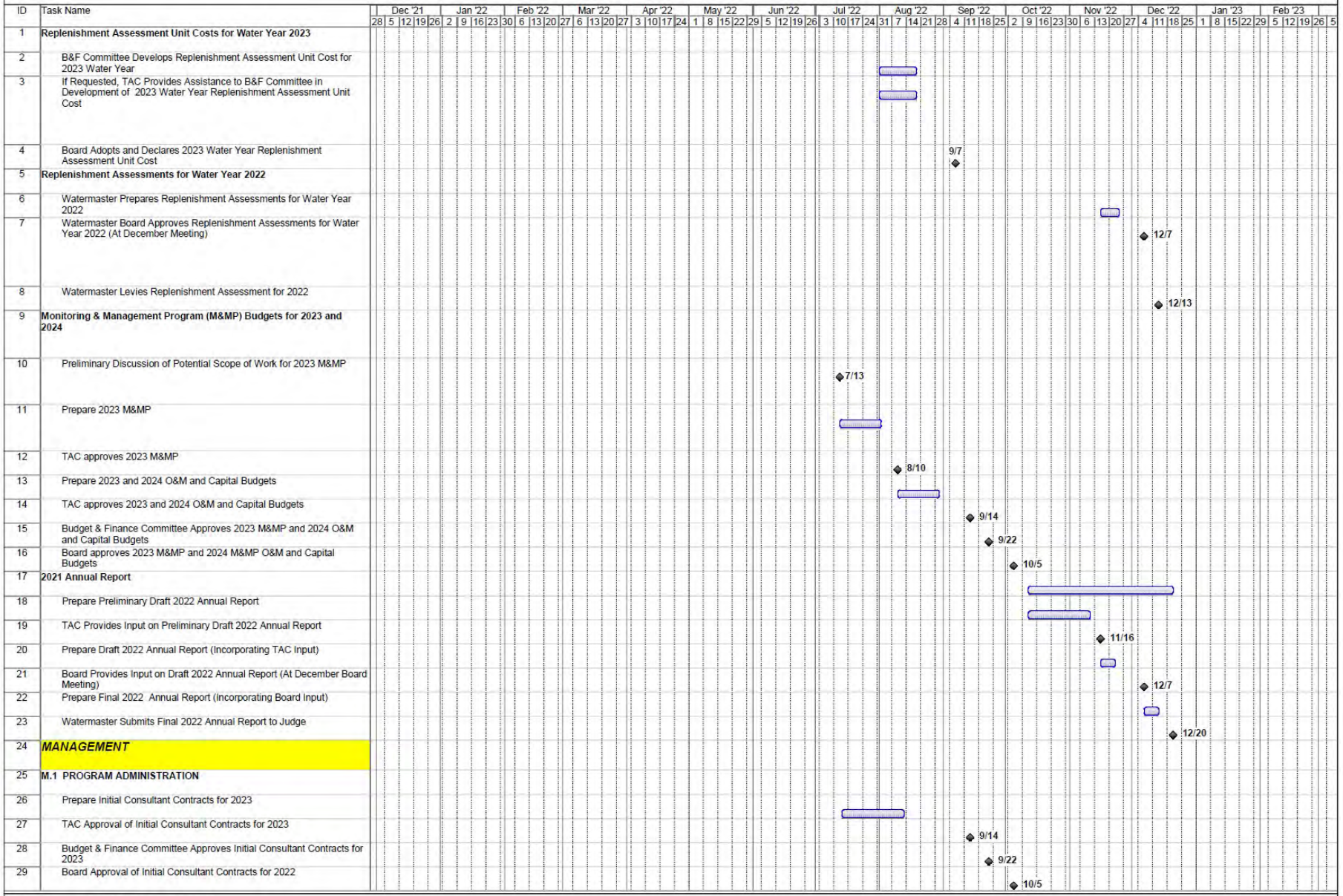
Seaside Basin Watermaster
2021 Monitoring and Management Program
Work Schedule



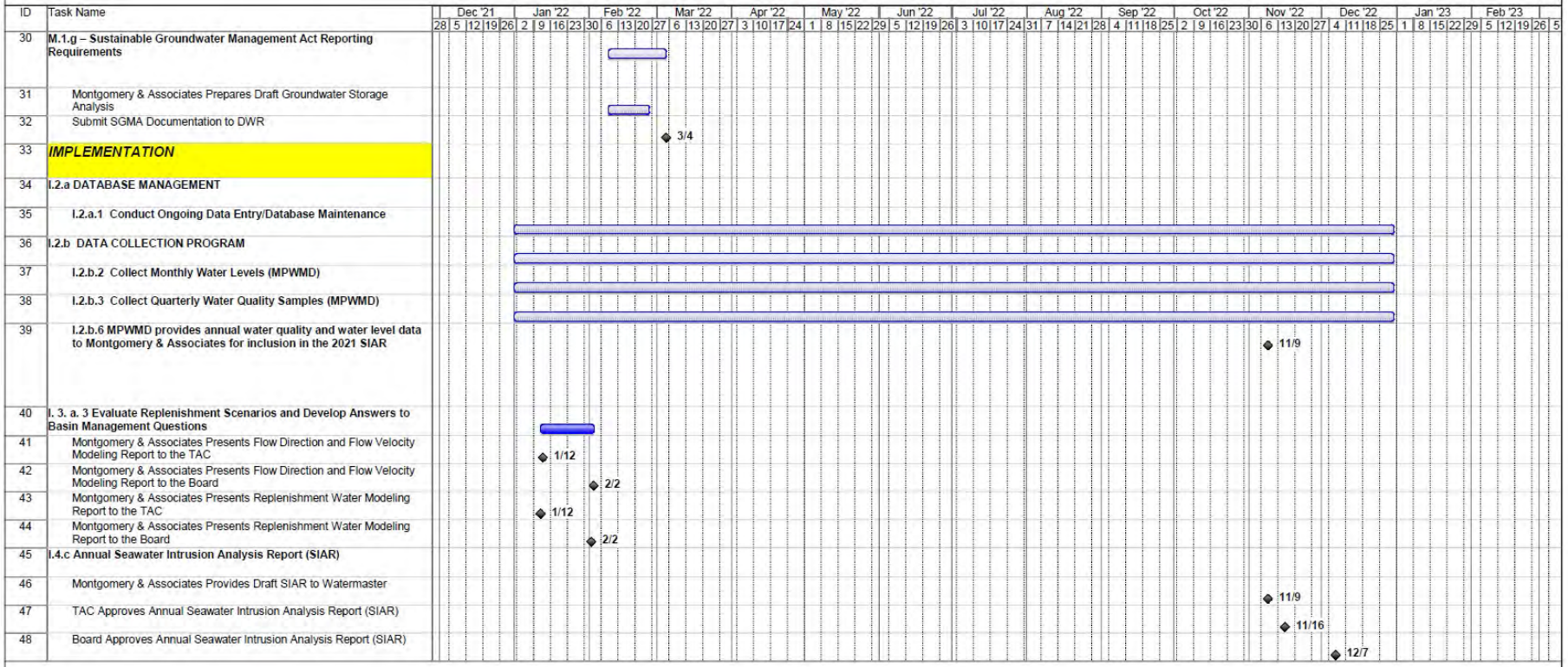
Seaside Basin Watermaster
2021 Monitoring and Management Program
Work Schedule



Seaside Basin Watermaster
2022 Monitoring and Management Program
Work Schedule



Seaside Basin Watermaster
2022 Monitoring and Management Program
Work Schedule



SEASIDE BASIN WATER MASTER
TECHNICAL ADVISORY COMMITTEE

** * * AGENDA TRANSMITTAL FORM * * **

MEETING DATE:	November 17, 2021
AGENDA ITEM:	7
AGENDA TITLE:	Other Business
PREPARED BY:	Robert Jaques, Technical Program Manager

SUMMARY:
The "Other Business" agenda item is intended to provide an opportunity for TAC members or others present at the meeting to discuss items not on the agenda that may be of interest to the TAC.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only