## MEETING NOTICE AND AGENDA TECHNICAL ADVISORY COMMITTEE OF THE SEASIDE BASIN WATER MASTER

DATE: Wednesday, August 9, 2023 MEETING TIME: 1:30 p.m.

Monterey One Water Offices 5 Harris Court, Building D (Ryan Ranch) Monterey, CA 93940

## THIS MEETING WILL BE IN PERSON

If you wish to participate in the meeting from a remote location, please call in on the Watermaster Conference Line by dialing (267) 807-9495. Use the Meeting ID 355890617. Please note that if no telephone attendees have joined the meeting by 10 minutes after its start, the conference call will be ended. **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 Agenda Item** Page 1. Public Comments No. 2. Administrative Matters: A. Approve Minutes from the July 12, 2023 Meeting 2 B. Sustainable Groundwater Management Act (SGMA) Update 5 3. Progress Report on FO-9 Replacement Well 7 8 4. Progress Report on Damage to Sentinel Well No. 4 9 5. Presentation on Development of the Seawater Intrusion Model for the Salinas Valley Basin **Groundwater Sustainability Agency** 10 6. Approve Monitoring and Management Program (M&MP) for FY 2024 19 7. Approve the FY 2024 Monitoring and Management Program (M&MP) Operations and **Capital Budgets** 25 8. Schedule 26 9. Other Business The next regular meeting is tentatively planned for Wednesday September 13, 2023 at 1:30 p.m. However, that meeting will be cancelled if there is no business that the TAC needs to conduct at that time.

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	2.A
AGENDA TITLE:	Approve Minutes from the July 12, 2023 Meeting
PREPARED BY:	Robert Jaques, Technical Program Manager
SUMMARY	

#### **SUMMARY:**

Draft Minutes from this meeting were emailed to all TAC members. Any changes requested by TAC members have been included in the attached version.

ATTACHMENTS:	Minutes from this meeting
RECOMMENDED ACTION:	Approve the minutes

## D-R-A-F-T MINUTES

#### Seaside Groundwater Basin Watermaster Technical Advisory Committee Meeting July 12, 2023

#### **Attendees: TAC Members**

City of Seaside – Carolyn Burke California American Water – Tim O'Halloran City of Monterey – Cody Hennings Laguna Seca Property Owners – No Representative MPWMD – Jon Lear MCWRA – Nicole Koerth City of Del Rey Oaks – Kim Shirley City of Sand City –Leon Gomez (via telephone) Coastal Subarea Landowners – No Representative

#### Watermaster

Technical Program Manager – Robert Jaques

## Consultants

None

#### Others

Schaaf & Wheeler – Andy Sterbenz (on behalf of City of Seaside)

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

#### 1. Public Comments

Mr. Lear asked each person to briefly identify themselves, as there were some new attendees. Carolyn Burke introduced herself as the new Assistant Public Works Director for the City of Seaside, and Nicole Koerth introduced herself as and MCWRA hydrologist filling in for Tamara Voss who could not attend today's meeting. There were no public comments.

#### 2. Administrative Matters:

## A. Approve Minutes from the March 8, 2023 Meeting

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

#### B. Sustainable Groundwater Management Act (SGMA) Update

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

## 3. Progress Report on FO-9 Replacement Well

Mr. Jaques summarized the agenda material for this item. Mr. Lear provided background information on the history of Well FO-9.

## 4. Report on Damage to Sentinel Well No. 4

Mr. Jaques summarized the agenda material for this item. There was some discussion regarding how the plug in the well could be fished-out. Mr. Sterbenz reported that retention money on the

demolition contract with Monterey Peninsula Engineers was being held back until this problem was resolved.

#### 5. Initial Discussion Regarding Monitoring and Management Program (M&MP) for FY 2024

Ms. Shirley requested wording revisions to Task I.3.a.3 to reflect that the PWMX project was out to bid for construction and was expected to become operational in 2025, and that the desalination project was still in the design and permitting stage with no completion date currently projected. Mr. Jaques said he would draft revisions to reflect this, and have Ms. Shirley review them before preparing the final version of the 2024 M&MP. No other revisions to the Preliminary Draft 2024 M&MP were proposed.

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

He noted that Georgina King of Montgomery & Associates had recommended that scope and budget be included to update the groundwater model. Mr. Jaques said that because he did not anticipate needing the model for any currently-identified work in 2024, it would not be an appropriate expense to update the model in 2024. There was some discussion between Ms. Shirley and Mr. Lear regarding the possibility of updating the model in conjunction with information gained from MPWMD's use of the model for the PWM Project, if MPWMD and/or M1W felt that would be beneficial. Mr. Lear noted that in the past the cost of updating the model had been shared equally between the Watermaster, MPWMD, and M1W. Mr. Jaques reported that monies proposed for the budget of Task I.3.a.3 could be used for this purpose, if there was a desire to update the model in 2024.

#### 6. Schedule

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

#### 7. Other Business

Mr. Jaques asked if there was a preference among TAC members to be able to meet via Zoom rather than in-person, if the Board was willing to approve that. Each member said they would prefer to have the option to meet via Zoom, and only hold meetings in-person if in-depth discussion of complex issues was going to be involved, or if there was some other reason to meet in-person. Mr. Jaques said he would pursue this with the Board and report back.

The meeting adjourned at 2:02 PM.

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	2.B
AGENDA TITLE:	Sustainable Groundwater Management Act (SGMA) Update
PREPARED BY:	Robert Jaques, Technical Program Manager

#### At the State level:

Since the last TAC meeting I have not received anything from the State that impacts the Watermaster.

At the Monterey County level: Attached are summaries of meetings held in July 2023.

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

## <u>SUMMARY OF</u> <u>PURE WATER MONTEREY, AND</u> <u>SALINAS VALLEY AND</u> <u>MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY</u> <u>AGENCY ZOOM MEETINGS</u>

<u>IN JULY 2023</u>

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

#### **SVBGSA Groundwater TAC July 27, 2023:**

This meeting was held for Montgomery & Associates to provide an update on the Deep Aquifers study. Principal items discussed of interest to the Watermaster included:

- Field studies are in progress to gather more data.
- The water budget and draft management guidance will be developed later this year.
- Today's meeting was not to be a political discussion, but only to focus on technical issues.
- There was a review of the definition of Deep Aquifers
  - They used several sources of "existing lines of evidence" i. e. various reference sources including data from MCWRA, data from DWR AEM, data from Thorup papers, and WCR
  - They a lateral extent map to show where the deep offer is believed to exist.
  - They re-ran the AEM survey with more sensitive equipment and got better results
  - They ground-truthed the AEM data to the extent possible.
- They then went through a discussion of each of the seven areas that were evaluated
- The Coastal Southwest Extent is the area within which the Seaside Groundwater Basin is located.
  - The geology in this area is complex.
  - They tried to correlate geologic layers within each of the adjacent subbasins including Pajaro, 180/400 foot, Monterey, and Seaside.
  - AEM data is not very good at detecting chloride levels below 3,000 mg/L. The interpretation can be confused with some other strata that is not seawater.
  - Low resistivity readings can also be indicative of clay layers, not necessarily seawater intrusion.
- There are lots of data gaps making it difficult to interpret some of the results of the AEM data.
- They used the best reasonable Deep Aquifers extent interpretation to develop the lateral extent map.
- They are exploring remaining questions with the best available data.
- They cannot determine whether or not aquifers extend out into the bay. The conclusion is the greatest threat of seawater intrusion is downward migration from the shallow aquifers that do extend into the bay and which overlie the deeper aquifers.

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	3
AGENDA TITLE:	Progress Report on FO-9 Replacement Well
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

Montgomery & Associates is working with Maggiora Brothers to get the well drilling work on their schedule. As of July 28<sup>th</sup> Maggiora estimated they would be able to drill the well in September, but no specific date was set.

If there is more information to report, I will provide an oral update on this at today's meeting.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	4
AGENDA TITLE:	Progress Report on Damage to Sentinel Well No. 4
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

As of July 26<sup>th</sup> MPE was still trying to get on Maggiora Brothers' schedule to have the plug removed from the well.

If there is more information to report, I will provide an oral update on this at today's meeting.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	5
AGENDA TITLE:	Presentation on Development of the Seawater Intrusion Model for the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA)
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

As mentioned at the July 12, 2023 TAC meeting, in my meeting summary from the April 18 meeting of the SVBGSA Groundwater Technical Advisory Committee a seawater intrusion model has been developed by Montgomery & Associates. That model has now been presented to the SVBGSA Board of Directors.

Sarah Hardgrave of the SVBGSA will provide a short presentation on the Seawater Intrusion Model and respond to questions from the TAC.

ATTACHMENTS:	None
RECOMMENDED ACTION:	None required – information only

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	6
AGENDA TITLE:	Approve 2024 Monitoring and Management Program (M&MP)
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

At its July 12, 2023 meeting the TAC reviewed and discussed a Draft version of the proposed FY 2024 Management and Monitoring Program (M&MP). One revision was requested by Ms. Shirley to Task I.3.a.3 and that was made.

The costs for the various tasks have been updated based on input received from MPWMD, Montgomery & Associates, and Martin Feeney.

No other changes to the Draft version of the M&MP have been made from the draft version presented to the TAC at its July 12, 2023 meeting, and the version that is attached to this Agenda Item is the proposed Final 2024 M&MP.

ATTACHMENTS:	Proposed Final FY 2024 Seaside Groundwater Basin M&MP
	Provide Input to the Technical Program Manager Regarding Any Further Corrections or Additions to the proposed Final FY 2024 M&MP, and recommend its approval to the Board

## Seaside Groundwater Basin 2024 Monitoring and Management Program

The tasks outlined below are those that are anticipated to be performed during 2024. Some Tasks listed below are specific to 2024, while other Tasks are recurring such as data collection, database entry, and Program Administration Tasks.

Within the context of this document the term "Consultant" refers either to a firm providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.

## M.1 Program Administration

M. 1. a Project Budget and Controls (\$0)	Consultants will provide monthly or bimonthly invoices to the Watermaster for work performed under their contracts with the Watermaster. Consultants will perform maintenance of their internal budgets and schedules, and management of their subconsultants. The Watermaster will perform management of its Consultants.
M. 1. b Assist with Board and TAC Agendas (\$0)	Watermaster staff will prepare Board and TAC meeting agenda materials. No assistance from Consultants is expected to be necessary to accomplish this Task.
M. 1. c., M. 1. d, & M.1.e Preparation for and Attendance at Meetings, and Peer Review of Documents and Reports (\$19,530)	<ul> <li>The Consultants' work will require internal meetings and possibly meetings with outside governmental agencies and the public. For meetings with outside agencies, other Consultants, or any other parties which are necessary for the conduct of the work of their contracts, the Consultants will set up the meetings and prepare agendas and meeting minutes to facilitate the meetings. These may include planning and review meetings with Watermaster staff. The costs for these meetings will be included in their contracts, under the specific Tasks and/or subtasks to which the meetings relate. The only meeting costs that will be incurred under Tasks M.1.c, M.1.d, and M.1.e will be:</li> <li>Those associated with attendance at TAC meetings (either in person or by videoconference connection), including providing periodic progress reports to the Watermaster for inclusion in the agenda packets for the TAC meetings, when requested by the</li> </ul>

Watermaster to do so. These progress reports will typically include project progress that has been made, problem identification and resolution, and planned upcoming work.
From time-to-time when Watermaster staff asks Consultants to make special presentations to the Watermaster Board and/or the TAC, and which are not included in the Consultant's contracts for

Appropriate Consultant representatives will attend TAC meetings (either in person or by videoconference connection) when requested to do so by Watermaster Staff, but will not be asked to prepare agendas or meeting minutes. As necessary, Consultants may provide oral updates to their progress reports (prepared under Task M.1.d) at the TAC meetings.

When requested by the Watermaster staff, Consultants may be asked to

other tasks.

	assist the TAC and the Watermaster staff with peer reviews of documents and reports prepared by various other Watermaster Consultants and/or entities.			
M. 1. f	A Consultant (MPWMD) will provide general QA/QC support over the			
QA/QC	Seaside Basin Monitoring and Management Program. These costs are			
(\$0)	included in the other tasks.			
M.1.g	Section 10720.8 of the Sustainable Groundwater Management Act			
<b>Prepare Documents for</b>	(SGMA) requires adjudicated basins to submit annual reports. Most of the			
SGMA Reporting documentation that needs to be reported is already generated by the				
(\$2,540)	Watermaster in conjunction with preparing its own Annual Reports.			
	However, some information such as changes in basin storage is not			
	currently generated and will require consultant assistance to do so. This			
	task will be used to obtain this consultant assistance, as needed.			

## I. 2 Comprehensive Basin Production, Water Level and Water Quality Monitoring Program

I. 2. a. Database Managen	nont
I. 2. a. 1 Conduct Ongoing Data Entry and Database Maintenance/ Enhancement (\$22,700)	The database will be maintained by a Consultant (MPWMD) performing this work for the Watermaster. MPWMD will enter new data into the consolidated database, including water production volumes, water quality and water level data, and such other data as may be appropriate. Other than an annual reporting of data to another Watermaster Consultant at the end of the Water Year, as mentioned in Task I.4.c below, no reporting of water level or water quality data during the Water Year is required. However, MPWMD will promptly notify the Watermaster of any missing data or data collection irregularities that were encountered.
	Under this Task, when requested MPWMD will also respond to requests from consultants and others for data from the database.
	At the end of the Water Year MPWMD will prepare an annual water production, water level, and water quality tabulation in Access format and will provide the tabulation to another Watermaster Consultant who will use that data in the preparation of the SIAR under Task No. I.4.c of the Monitoring and Management Program.
	No enhancements to the database are anticipated during 2024.
	A separate consultant will maintain the Watermaster's website.
I. 2. a. 2 Verify Accuracy of Production Well Meters (\$0)	To ensure that water production data is accurate, the well meters of the major producers were verified for accuracy during 2009 and again during 2015. No additional work of this type is anticipated during 2024.
I. 2. b. Data Collection Pro	ogram
I. 2. b. 1	The monitoring well network review that was started in 2008 has been
Site Representation and Selection (\$0)	completed, and sites have been identified where future monitoring well(s) could be installed, if it is deemed necessary to do so in order to fill in data gaps. No further work of this type is anticipated in 2024.
	Saper 110 Lander work of the type is anderpated in 2021.

I. 2 b. 2 Collect Water Levels (\$21,128)	Each of the monitoring wells will be visited on a regular basis. Water levels will be determined by either taking manual water levels using an electric sounder, or by dataloggers. The wells where the use of dataloggers is feasible or appropriate have been equipped with dataloggers All of the other wells will be manually measured.
	This Task includes the purchase of one datalogger and parts for the datalogger to keep in inventory as a spare if needed.
I. 2. b. 3 Collect Water Quality Samples. (\$38,446)	As discussed in the 2018 Annual Report, water quality data will be collected quarterly from certain of the monitoring wells, but is no longer being collected from the four coastal Sentinel Wells. Because many years of data have shown essentially no change in aquifer water quality, beginning in WY2023 the frequency of induction logging of the Sentinel Wells was reduced to once per year.
	As discussed in the 2012 Annual Report, water quality analyses were expanded to include barium and iodide ions. Since these analyses have created more than 10 years of data, as discussed in the 2022 Annual Repo the analyses were no longer being performed starting in WY 2023. They will only be resumed if the other water quality parameters are indicative of seawater intrusion.
	As discussed in the 2021 Annual Report, the frequency of sampling of SBWM-5 (the Camp Huffman well) has been reduced over the years. It i being sampled once every five years beginning in WY 2022.
	Water quality data may come from water quality samples that are taken from these wells and submitted to a State Certified analytic laboratory for general mineral and physical suite of analyses, or the data may come from induction logging of these wells and/or other data gathering techniques. The Consultant or Contractor selected to perform this work will make this judgment based on consideration of costs and other factors.
	Sampling equipment sits in the water column and may periodically need to be replaced or repaired. Accordingly, an allowance to perform maintenance on previously installed equipment has been included in this Task. Also, in the event a sampling pump fails or is found to be no longe adequate due to declining groundwater levels, an allowance of \$945 to purchase a replacement sampling pump has been included in this Task.
I. 2. b. 4 Update Program Schedule and Standard Operating Procedures. (\$0)	All recommendations from prior reviews of the data collection program have been implemented. No additional work of this type is anticipated in 2024.
I. 2. b. 5 Monitor Well Construction (\$0)	A well to replace Monitoring Well FO-9 Shallow, which in 2021 was found to have a leaking casing, was installed in 2023. No other monitoring wells are expected to be constructed in 2024.

I. 2. b. 6				
Reports (\$3,680)	This task was essentially eliminated starting in 2020 by having the data collected by MPWMD under tasks I.2.b.1, I.2.b.2, and I.2.b.3 reported in the SIAR under Task I.4.c. The work remaining under this task is for MPWMD to prepare and provide the data appendix to the Consultant that prepares the SIAR.			
	No formalized reporting on a quarterly basis is required. However, MPWMD will promptly notify the Watermaster and the Consultant that prepares the SIAR of any missing data or data collection irregularities in the water quality and water level data collected under Tasks I.2.b.2 and I.2.b.3.			
I.2.b.7 CASGEM Data Submittal (\$4,200)	On the Watermaster's behalf MPWMD will compile and submit data on the Watermaster's "Voluntary Wells" into the State's CASGEM groundwater management database. The term "Voluntary Well" refers to a well that is not currently having its data reported into the CASGEM system, but for which the Watermaster obtains data. This will be done in the format and on the schedule required by the Department of Water Resources under the Sustainable Groundwater Management Act.			
	I. 3 Basin Management			
l. 3. a. Enhanced Seaside Basin Groundwater Model (Costs listed in subtasks below)	The Watermaster and its consultants use a Groundwater Model for basin management purposes.			
I.3.a.1 Update the Existing Model (\$0)	The Model, described in the report titled "Groundwater Flow and Transport Model" dated October 1, 2007, was updated in 2009 in order to develop protective water levels, and to evaluate replenishment scenarios and develop answers to Basin management questions. The Model was again updated in 2014.			
	In 2018 the Model was recalibrated and updated. No further work of this			
	type is anticipated in 2024.			

Modeling performed to date indicates that the solution to the problem of water levels in the Seaside Basin being below Protective Water Levels will be to inject replenishment water.				
Two projects are planned that have the potential to provide additional water for Basin replenishment. The first is the Pure Water Monterey Expansion (PWMX) Project for which construction bids were solicited in 2023 and is projected to become operational in 2025. The PWMX Project will increase the capacity of the existing 3,500 AFY PWM Project by 2,250 AFY. The second is the Monterey Peninsula Water Supply Project's (MPWSP) desalination plant which is still in the design and permitting stage with no currently projected implementation date. Growth is built into each of these projects' plant capacity, and the full capacity of these plants will likely not all be needed for some years into the future. During the time period that these projects would have excess capacity, they could potentially provide water for Basin replenishment.				
Montgomery & Associates agrees that injection is the quickest way to bring groundwater levels up in the Seaside Basin. Modeling performed in 2022 and 2023 found that between 1,000 and 4,600 AFY of replenishment water will need to be needed, depending on future water demands and rainfall.				
Modeling performed in 2014, 2015, and 2016 led to the conclusion that groundwater levels in parts of the Laguna Seca Subarea will continue to fall, even if all pumping within that subarea is discontinued, because of the influence of pumping from areas near to, but outside of, the Basin boundary. The Groundwater Sustainability Plan for Corral de Tierra area of the Monterey Subbasin includes projects to help to alleviate this problem, but they are unlikely to completely alleviate it.				
This Task includes a \$40,000 allowance to perform further modeling or analyses pertaining to Basin management issues if so directed by the Watermaster Board.				
The Watermaster's Consultant completed preparation of the Basin Management Action Plan (BMAP) in February 2009. The BMAP serves as the Watermaster's long-term seawater intrusion prevention plan. The Sections that are included in the BMAP are: Executive Summary Section 1 – Background and Purpose Section 2 – State of the Seaside Groundwater Basin Section 3 – Supplemental Water Supplies Section 4 –Groundwater Management Actions				

I. 3. c. Refine and/or Update the Basin Management Action	In 2019 the BMAP was updated based on new data and knowledge that has been gained since it was prepared in 2009.
Plan (\$0)	No further work of this type is anticipated in 2024. However, although no funds are budgeted for this Task in 2024, since the Groundwater Sustainability Plan (GSP) for the adjacent Monterey Subbasin of the Salinas Valley Groundwater Basin was completed in early 2022, at some point it may be appropriate to further update the BMAP to reflect the impacts of implementing that GSP.
I. 3. d. Evaluate Coastal Wells for Cross-Aquifer Contamination Potential (\$0)	If seawater intrusion were to reach any of the coastal wells in any aquifer, and if a well was constructed without proper seals to prevent cross-aquifer communication, or if deterioration of the well led to casing leakage, it would be possible for the intrusion to flow from one aquifer to another.
	An evaluation of this was performed in 2012 and is described in Attachment 10 of the 2012 Annual Report.
	In 2021 the Watermaster TAC examined the feasibility of performing conductivity profiling of certain of the near-coastal wells that were evaluated in the 2012 Memorandum, as a method of determining if any of those wells was allowing downward migration of intruded water from the shallow dunes aquifer to enter the Paso Robles aquifer. However, it was concluded that conditions in those wells would make it infeasible to perform such work.
	No further work of this type is anticipated in 2024.
I.3. e. Seaside Basin Geochemical Model (\$10,000)	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 which have previously been attached to soil particles, such as arsenic or mercury, into solution and thus into the water itself. This has been experienced in some other locations where changes occurred in the quality of the water being injected into an aquifer. MPWMD's consultants used geochemical modeling to predict the effects of injecting Carmel River water into the Seaside Groundwater Basin under the ASR program.
	In order to predict whether there will be groundwater quality changes that will result from the introduction of desalinated water and additional ASR water (under the Monterey Peninsula Water Supply Project) and advance- treated water (under the Pure Water Monterey Project) geochemical evaluations, and potentially modeling, will be performed in the areas of the Basin where injection of these new water sources will occur.
	In 2019 a geochemical evaluation of introducing advance-treated water from the Pure Water Monterey Project was performed. That evaluation concluded that there would be no adverse geochemical impacts as a result of introducing that water into the Basin. A similar evaluation of the impact

I.3. e. of introducing ASR water also concluded that there would be no adverse Seaside Basin Geochemical geochemical impacts. An evaluation of introducing desalinated water will Model be performed, if the Monterey Peninsula Water Supply Project's (Continued) desalination plant proceeds into the construction phase. If the geochemical evaluation of injecting desalinated water indicates the potential for problems to occur, then Montgomery and Associates may use the Watermaster's updated groundwater model, and information about injection locations and quantities, injection scheduling, etc. provided by MPWMD and/or California American Water for this project, to develop model scenarios to see if the problem(s) can be averted by changing delivery schedules and delivery quantities. This Task includes an allowance of \$10,000 to have Montgomery and Associates perform such modeling, if necessary. If the modeling predicts that there may be adverse impacts from introducing desalinated water, measures to mitigate those impacts will be developed under a separate task that will be created for that purpose when and if necessary.

## I. 4 Seawater Intrusion Response Plan (formerly referred to as the Seawater Intrusion Contingency Plan)

I. 4. a. Oversight of Seawater Intrusion Detection and Tracking (\$0)	Consultants will provide general oversight over the Seawater Intrusion detection program under the other Tasks in this Work Plan.
I. 4. c. Annual Report- Seawater Intrusion Analysis (\$28,020)	At the end of each water year, a Consultant will reanalyze all water quality data. Water level and water quality data will be provided to the Consultant by another Consultant (MPWMD) in MS Access format. The Consultant will put this data into a report format and will include it as an attachment to the Seawater Intrusion Analysis Report. If possible, semi-annual chloride concentration maps will be produced for each aquifer in the basin. Time series graphs, trilinear graphs, and stiff diagram comparisons will be updated with new data. The induction logs will be analyzed to identify changes in seawater wedge locations. All analyses will be incorporated into an annual report that follows the format of the initial historical data report. Potential seawater intrusion will be highlighted in the report, and if necessary, recommendations will be included. The annual report will be submitted for review by the TAC and the Board. Modifications to the report will be incorporated based on input from these bodies, as well as Watermaster staff.
I. 4. e. Refine and/or Update the Seawater Intrusion Response Plan (\$0)	At the beginning of 2009, and again in 2021, it was thought that it might be beneficial or necessary to perform work to refine the SIRP and/or to update it based on new data or knowledge that was gained subsequent to the preparation of the SIRP. However, this did not prove to be necessary, and no further work of this type is anticipated in 2024.

I. 4. f.	The SIRP will be implemented if seawater intrusion, as defined in the
If Seawater Intrusion is	SIRP, is determined by the Watermaster to be occurring.
Determined to be Occurring,	
Implement Contingency	
Response Plan	
(\$0)	

## SEASIDE BASIN WATER MASTER TECHNICAL ADVISORY COMMITTEE \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	7
AGENDA TITLE:	Approve the FY 2024 Monitoring and Management Program (M&MP) Operations and Capital Budgets
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

Attached are the proposed M&MP Operations and Capital Budgets for 2024 and 2025. The Board has asked that two-year budgets be developed to alert the Board to potential changes in scope and/or cost in near future years. Only the 2024 budgets are before the TAC for approval. The 2025 budgets are for information only. The following are comments and/or principal revisions from the 2023 M&MP Budget:

**Technical Program Manager:** Although the Groundwater Sustainability Plan for the adjacent Monterey Subbasin has been completed and was submitted in early 2022 by the Salinas Valley Basin and the Marina Coast Water District Groundwater Sustainability Agencies, there will continue to be regular meetings of their GSP-related committees that I serve on representing the Watermaster. Also, there will likely be further work related to obtaining replenishment water for the Basin. Therefore, I anticipate that the 2024 workload will be similar to that of 2023, so the proposed line-item budget amount has been maintained at \$75,000 in 2024.

**Tasks Involving MPWMD and Montgomery & Associates:** The scopes-of-work for both MPWMD and Montgomery & Associates are essentially unchanged from 2022. However, both will have hourly-rate increases in 2024, so the costs of the Tasks in which they are involved reflect somewhat higher dollar amounts in 2024 compared to 2023.

For several of the Tasks involving MPWMD (I.2.a.1, I.2.b.2, I.2.b.3) I have re-allocated certain of their costs to more closely match the Tasks to which they pertain. This accounts for some of the changes in costs of these Tasks in 2024 compared to their costs in 2023.

Task I.2.b.3 includes induction logging of the Sentinel Wells. Access to Sentinel Well #4 may be reduced if the access road leading to it is removed and re-vegetated in conjunction with the demolition of the Ord Village Pump Station. If that is the case, the induction logging vehicle will have to be located some distance away from this well, and the cable that connects the logging tool to the vehicle will have to be supported by a series of braces with pulleys on them. Mr. Feeney included a contingency amount of \$5,000 in his cost estimate for this work in case this additional work is needed. This, along with increases in the charges from the induction logging subcontractor, led to the increase in the cost of this Task.

As a result of the changes described above, as indicated by the right-hand column titled "Comparative Costs from 2023 Budget" in <u>Attachment 1</u>, the proposed 2024 Budget is \$31,149 lower (\$324,930 -\$293,781) than the 2023 Budget. Following TAC approval of the 2024 M&MP and Budgets, they will be forwarded to the Budget and Finance Committee and then to the Board for approval.

ATTACHMENTS:	<ol> <li>2024 and 2025 M&amp;MP Operations Budgets</li> <li>2024 and 2025 M&amp;MP Capital Budgets</li> </ol>
RECOMMENDED	Approve, or make changes to, the attached Budgets and then recommend
ACTION:	these for approval by the Board

Task			For Tasks to be Unde		1024			Comparative	
	Subtask	sk Sub- Subtask	Cost Description		NTS & CONTRA	CTOPS <sup>(3)</sup>	Total	Costs from 2023 Budget	
				MPWMD		Contractors			
							Consultants		
			Labor						
			Technical Project Manager	\$0	\$75,000	\$0	\$75,000	\$75,00	
1.1 P	rogram Ad	minis trati	on						
	M.1.a		Project Budget and Controls	\$0	\$0	\$0	\$0		
	M.1.b		Assist with Board and TAC Agendas	\$0	\$0	\$0	\$0		
	M.1.c, M.1.d, &		Preparation for and Attendance at Meetings and Peer Review of Documents and	\$0	\$19,530	\$0	\$19,530	\$28,2	
	M.1.a, & M.1.e		Reports <sup>(8)</sup>						
	M.1.c M.1.f		QA/QC	\$0	\$0	\$0	\$0		
	_			30 \$0	\$2,540	30 \$0	\$2,540		
1 Ini	M.1.g	l Monitor	SGMA Documentation Preparation ing Well Construction (Task Completed	\$0	\$2,540	\$0	\$2,540	\$2,4	
1 Phas		INTOINTOI	ing wen Construction (Task Completed						
	,	Vater Lev	el and Quality Monitoring	Í		1			
	I. 2. a.		Database Management						
		I. 2. a. 1.	Conduct Ongoing Data Entry/ Database	\$19,100	\$3,600	\$0	\$22,700	\$32,2	
			Maintenance <sup>(15)</sup>					. ,	
	1	I. 2. a. 2.	Verify Accuracy of Production Well Meters	\$0	\$0	\$0	\$0		
				* -					
	I. 2. b.		Data Collection Program						
		I. 2. b. 1.	Site Representation and Selection <sup>(7)</sup>	\$0	\$0	\$0	\$0		
		I. 2. b. 2.	Collect Water Levels <sup>(5)(6)</sup>	\$21,128	\$0	\$0	\$21,128	\$20,0	
		I. 2. b. 3.	Collect Water Quality Samples and Perform	\$20,694	\$0	\$17,752	\$38,446	\$28,2	
			Sentinel Well Induction Logging <sup>(1)(5)</sup>						
		I. 2. b. 4.	Update Program Schedule and Standard	\$0	\$0	\$0	\$0		
			Operating Procedures.				÷-		
		I. 2. b. 5.	Monitor Well Construction	\$0	\$0	\$0	\$0		
		I. 2. b. 6.		\$3,680	\$0	\$0	\$3,680	\$3,5	
		I. 2. b. 7.	CASGEM Data Submittal for	\$4,200	\$0	\$0	\$4,200	\$5,3	
			Watermaster's Voluntary Wells						
.3 Ba	sin Manag	ement							
	I. 3. a.		Enhanced Seaside Basin Groundwater Model		(Costs Shown in	Subtasks Below	)		
		I. 3. a. 1	Update the Existing Model <sup>(11)</sup>	\$0	\$0	\$0	\$0		
		I. 3. a. 2	Develop Protective Water Levels <sup>(12)</sup>	\$0	\$0	\$0	\$0		
			Evaluate Replenishment Scenarios and	\$0	\$40,000	\$0	\$40,000	\$60,0	
			Develop Answers to Basin Management						
			Ouestions <sup>(10)</sup>						
	I. 3. b.		Complete Preparation of Basin	\$0	\$0	\$0	\$0		
			Management Action Plan						
	T . C				\$0	\$0	\$0		
	I. 3. c.		Refine and/or Update the Basin	\$0					
			Management Action Plan <sup>(7)</sup>						
	I. 3. c. I. 3. d		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer	\$0	\$0	\$0	\$0		
	I. 3. d		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential	\$0	\$0			\$10.0	
4.6-	I. 3. d I. 3. e		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup>			\$0 \$0	\$0 \$10,000	\$10,0	
.4 Se:	I. 3. d I. 3. e awater Intr	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tingency Plan</b>	\$0 \$0	\$0 \$10,000	\$0	\$10,000	\$10,0	
.4 Sea	I. 3. d I. 3. e	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tinge ncy Plan Oversight of Seawater Intrusion Detection	\$0	\$0			\$10,0	
.4 Sez	I. 3. d I. 3. e awater Intr I. 4. a.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup>	\$0 \$0	\$0 \$10,000 \$0	\$0 \$0	\$10,000	\$10,0	
.4 Se:	I. 3. d I. 3. e awater Intr	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from	\$0 \$0	\$0 \$10,000 \$0	\$0	\$10,000		
.4 Se:	I. 3. d I. 3. e awater Intr I. 4. a.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup>	\$0 \$0	\$0 \$10,000 \$0	\$0 \$0	\$10,000	\$10,0	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells	\$0 \$0 \$0	\$0 \$10,000 \$0 (Costs Include	\$0 \$0 •d Under I.4.a)	\$10,000	\$10,0	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tingency Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion	\$0 \$0 \$0	\$0 \$10,000 \$0 (Costs Include	\$0 \$0 •d Under I.4.a)	\$10,000	\$10,0	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tingency Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup>	\$0 \$0 \$0 \$0 \$0	\$0 \$10,000 \$0 (Costs Include \$28,020	\$0 \$0 cd Under I.4.a) \$0	\$10,000	\$10,0	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$10,000 \$0 (Costs Include \$28,020	\$0 \$0 \$0 \$0 \$0 \$0	\$10,000 \$0 \$28,020 \$0		
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2)(9)</sup> If Seawater Intrusion is Determined to be Occurring, Implement Contingency	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021.	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 \$1 \$1 \$1 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary,	\$10,0	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.	usion Cor	Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> tingency Plan Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2),(9)</sup> If Seawater Intrusion is Determined to be	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021. gency Funds or a	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 \$1 it Does Becc Budget Modifica	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary,		
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tinge ncy Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2) (9)</sup> If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup>	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess Use of Conting	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021. gency Funds or a be Nec	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary,		
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tinge ncy Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2) (9)</sup> If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup>	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess Use of Conting <b>\$68,802</b>	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021. gency Funds or a be Nec <b>\$178,690</b>	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 fit Does Becc Budget Modifica sessary) \$17,752	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary, ation Will Likely	\$27,1	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tingency Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2) (9)</sup> If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup> <b>S CONSULTANTS &amp; CONTRACTORS</b> SUBTOTA	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess Use of Conting \$68,802 L not including T	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021. gency Funds or a be Nec <b>\$178,690</b> Fechnical Program	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 fit Does Becc Budget Modifica eessary) \$17,752 n Manager =	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary, ation Will Likely \$190,244	\$27,1	
4 Se:	I. 3. d I. 3. e awater Intr I. 4. a. I. 4. b. I. 4. c. I. 4. e.		Management Action Plan <sup>(7)</sup> Evaluate Coastal Wells for Cross-Aquifer Contamination Potential Seaside Basin Geochemical Model <sup>(13)</sup> <b>tinge ncy Plan</b> Oversight of Seawater Intrusion Detection and Tracking <sup>(17)</sup> Analyze and Map Water Quality from Coastal Monitoring Wells Annual Report- Seawater Intrusion Analysis <sup>(16)</sup> Refine and/or Update the Seawater Intrusion Response Plan <sup>(2) (9)</sup> If Seawater Intrusion is Determined to be Occurring, Implement Contingency Response Plan <sup>(2)</sup>	\$0 \$0 \$0 \$0 \$0 \$0 (No Costs are Not be Necess Use of Conting \$68,802 L not including T ding Technical P	\$0 \$10,000 \$0 (Costs Include \$28,020 \$0 Included for This sary During 2021. gency Funds or a be Nec <b>\$178,690</b> Fechnical Program	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$10,000 \$0 \$28,020 \$0 Fask Will Likely ome Necessary, ation Will Likely		

#### Footnotes:

(1) Under this Subtask the Watermaster will directly contract with an outside contractor to perform the Sentinel Well induction logging work, and to also collect water level data in conjunction with doing the induction logging. MPWMD will perform the other portions of the work of this Subtask. The Sentinel Wells will be induction logged once per year (in September).

(2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.

(3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.

(4) Due to the uncertainties of the exact scopes of some of the larger Tasks listed above at the time of preparation of this Budget it is recommended that a Contingency of 15% be included in the Budget.

(5) The MPWMD portion of these Tasks includes:

For Task I.2.b.2: (1) \$527 for vehicle mileage costs for both this Task and Task I.2.b.3 and (2) \$893 to purchase a replacement datalogger (if

For Task I.2.b.3: (1) \$5,670 for laboratory analytical costs, (2) \$158 for air compressor rental to sample the Camp Huffman well, (3) \$263 for CO2 bottles to run the sample pumps, (4) \$945 to purchase a replacement low flow sampling pump (if necessary) and (5) \$736 of administrative support costs for preparing billings and processing invoices from the water quality laboratory.

(6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks.

(7) The BMAP was updated in 2018, and no further work on this Task is anticiapted in 2024.

(8) This cost is for Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager. This work may include, but not be limited to, participation in conference calls and reviewing documents prepared by others.

(9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.

(10) This Task is included to provide funds for the Watermaster to perform modeling and other investigative work to aid in making Basin management decisions that the Board may wish to perform in 2024.

(11) The Model was updated and recalibrated in 2018, so no costs for this Task are anticipated in 2024.

(12) The protective water levels developed in 2009 were examined in 2013 to see if they needed to be updated. It was concluded that the 2009 protective levels were still satisfactory for Basin management purposes, and that no revisions were needed. No work under this Task is anticipated in 2024.

(13) This was a new Task that was started in 2018, and was completed for the PWM AWT water in 2019. Funds allocated for this Task in 2024 would only be used if geochemical modeling is performed in 2024 for the MPWSP desalination plant water, and if that modeling indicates the need to have Montgomery and Associates use the Seaside Basin groundwater model to provide additional information needed by the geochemical model to develop miltgation measures for any adverse water quality impacts the geochemical model predicts could occur from introducing desalinated water into the Basin.

(14) Not used.

(15) Includes \$300/month for an outside consultant to maintain the Watermaster's website and post documents on it and \$2,300 for MPWMD to respond to requests from consultants and others for data from the database.

(16) MPWMD's costs to assist in this Task are included in its costs under Task I.2.b.6.

(17) MPWMD's and Montgomery & Associates' costs to provide oversight in this Task are included under their other Tasks.

## Monitoring and Management Program Operations Budget For Tasks to be Undertaken in 2025<sup>(12)</sup>

Task	Subtas k	Sub-	Cost Description	CONSU	CONSULTANTS & CONTRACTORS <sup>(3)</sup>					
		Subtask		MPWMD	Private Consultants	Contractors				
	I	ļ	Labo	r	Consultants	I				
			Technical Project Manager	\$0	\$75,000	\$0	\$75,			
.1 P	rogram Ad	ministrati								
	M.1.a		Project Budget and Controls	\$0	\$0	\$0				
	M.1.b		Assist with Board and TAC Agendas	\$0	\$0	\$0				
	M.1.c,		Preparation for and Attendance at Meetings	\$0	\$20,116	\$0	\$20			
	M.1.d, &		and Peer Review of Documents and							
	M.1.e		Reports <sup>(8)</sup>							
	M.1.f		QA/QC	\$0	\$0	\$0				
	M.1.g		SGMA Documentation Preparation	\$0	\$2,616	\$0	\$2			
		l Monitor	ing Well Construction (Task Completed							
Phas	,									
Pro	1	Vater Lev	el and Quality Monitoring							
	I. 2. a.		Database Management							
		I. 2. a. 1.	Conduct Ongoing Data Entry/ Database	\$19,673	\$3,708	\$0	\$23			
		12.22	Maintenance/Enhancement	¢0	¢0	\$0				
		1. <i>2</i> . a. <i>2</i> .	Verify Accuracy of Production Well Meters	\$0	\$0	\$0				
	I. 2. b.		Data Collection Program							
	1. 2. 0.	I. 2. b. 1.	Site Representation and Selection <sup>(7)</sup>	\$0	\$0	\$0				
		I. 2. b. 2.	Collect Monthly Water Levels <sup>(6)</sup>	\$21,762	\$0	\$0	\$21			
		I. 2. b. 2. I. 2. b. 3.			\$0 \$0					
		1. 2. 0. 3.	Collect Quarterly Water Quality Samples <sup>(1)(5)(6)</sup>	\$21,315	50	\$18,285	\$39			
		I 2 h 4	Update Program Schedule and Standard	\$0	\$0	\$0				
		1. 2. 0. 4.	Operating Procedures.	40	\$0	\$0				
		I. 2. b. 5.	Monitor Well Construction <sup>(7)</sup>	\$0	\$0	\$0				
					\$0 \$0	\$0	\$2			
	1	I. 2. b. 6. I. 2. b. 7.	Reports CASGEM Data Submittal for	\$3,790 \$4,326	\$0 \$0	\$0 \$0	\$3.			
		1. 2. 0. 7.	Watermaster's Voluntary Wells	\$4,520	<b>Ф</b> О	50	φ <del>4</del> .			
	I. 3. a.		Enhanced Seaside Basin Groundwater Model		(Costs Shown	in Subtasks Below)				
		I. 3. a. 1	Update the Existing Model <sup>(10)</sup>	\$0	\$30,000	\$0	\$30,			
		I. 3. a. 2	Develop Protective Water Levels	\$0	\$0	\$0				
		I. 3. a. 3	Evaluate Replenishment Scenarios and	\$0	\$30,000	\$0	\$30.			
			Develop Answers to Basin Management							
			Questions <sup>(15)</sup>							
	I. 3. b.		Complete Preparation of Basin	\$0	\$0	\$0				
			Management Action Plan							
	I. 3. c.		Refine and/or Update the Basin	\$0	\$0	\$0				
			Management Action Plan <sup>(11)</sup>							
	I. 3. d		Evaluate Coastal Wells for Cross-Aquifer	\$0	\$0	\$0				
			Contamination Potential <sup>(13)</sup>							
	I. 3. e		Seaside Basin Geochemical Model <sup>(14)</sup>	\$0	\$10,000	\$0	\$10			
Sea	water Intr	usion Cor	tingency Plan							
	I. 4. a.		Oversight of Seawater Intrusion Detection	\$0	\$0	\$0				
			and Tracking							
	I. 4. b.		Analyze and Map Water Quality from		(Costs Inclu	ided Under I.4.a)				
	I. 4. c.		Coastal Monitoring Wells	\$0	\$29.961	\$0	\$28			
	1. 4. C.		Annual Report- Seawater Intrusion Analysis	\$0	\$28,861	50	\$20			
	I. 4. e.		Refine and/or Update the Seawater	\$0	\$0	\$0				
			Intrusion Response Plan <sup>(2) (9)</sup>							
	I. 4. f.		If Seawater Intrusion is Determined to be	(No Costa an-	Included for This	Task, as This Task W	All Libob N-			
	1. 4. 1.		Occurring, Implement Contingency			Does Become Nece	•			
			Response Plan <sup>(2)</sup>	-	-	idget Modification Wi	-			
				8*	-	cessary)	-y			
		TOTAL	S CONSULTANTS & CONTRACTORS	\$70,866	\$125,301	\$18,285				
	-	-		TOTAL not incl	luding Technical P	rogram Manager =	\$214			
			~	at in a hadin a Ta al	huisal Dusseum M	(anager) @ 15% <sup>(4)</sup> =	\$32			
			Contingency (ne	st including reci	linical Program M	(u) 15% –	40-			
			Contingency (no		Technica	l Program Manager	\$75			

#### Footnotes:

(1) Under this Subtask the Watermaster will directly contract with an outside contractor to perform the Sentinel Well induction logging work, and to also collect water level data in conjunction with doing the induction logging. MPWMD will perform the other portions of the work of this Subtask.

(2) The response plan would only be implemented in the event sea water intrusion is determined to be occurring.

(3) Within the context of this document the term "Consultant" refers either to a Private Consultant providing professional engineering or other types of technical services, or to the Monterey Peninsula Water Management District (MPWMD). The term "Contractor" refers to a firm providing construction or field services such as well drilling, induction logging, or meter calibration.

(4) Due to the uncertainties of the exact scopes of some of the Tasks listed above at the time of preparation of this Budget, it is recommended that a 15% Contingency be included in the Budget.

(5) A portion of this cost is for maintaining sampling equipment that was installed in prior years.

(6) Does not include costs for MPWMD to collect water level data or water quality samples from wells other than those that are part of the basic monitoring well network, i.e. for private well owners who have requested that the Watermaster obtain this data for them. Costs to obtain that data are to be reimbursed to the Watermaster by those well owners, so there should be no net cost to the Watermaster for that portion of the work under these Tasks.

(7) No additional monitoring well is expected to be constructed in 2025.

(8) For Montgomery and Associates, Todd Groundwater, and Martin Feeney to provide hydrogeologic consulting assistance to the

Watermaster, beyond that associated with performing other specified Tasks, when requested to do so by the Technical Program Manager. (9) If work under this Task is found to be necessary, it will be funded through the Contingency line item in this Budget.

(10) The model was last updated in 2018. Information subsequently gained through implementation of the Pure Water Monterey Project may warrant updating the model again in 2025. Updating the model in 2018 cost \$54,370 and that cost was shared 50% by the Watermaster and 50% by MPWMD/M1W. The amount budgeted for this work assumes the 2025 update would cost approximately \$60,000 and that this same cost-share would be used, so the estimated cost to the Watermaster would be \$30,000.

(11) The BMAP was updated in 2018, and no further work on this Task is anticiapted in 2025.

(12) Includes a 3% inflation factor on most annually recurring costs in the 2024 Budget, except the Technical Program Manager cost which has no inflation factor applied to it.

(13) No further work on this Task is anticipated in 2025.

(14) Work on this Task may not be performed in 2024, so work on this Task may need to be rebudgeted in 2025.

(15) This Task is included to provide funds for the Watermaster to perform modeling and other investigative work to aid in making Basin management decisions that the Board may wish to perform in 2025.

# Monitoring and Management Program Capital Budget For Tasks to be Undertaken in 2024

No Capital projects are anticipated to be undertaken in 2024, so this budget is \$0.

# Monitoring and Management Program Capital Budget For Tasks to be Undertaken in 2025

No Capital projects are anticipated to be undertaken in 2025, so this budget is \$0.

## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

MEETING DATE:	August 9, 2023
AGENDA ITEM:	8
AGENDA TITLE:	Schedule
PREPARED BY:	Robert Jaques, Technical Program Manager

#### **SUMMARY:**

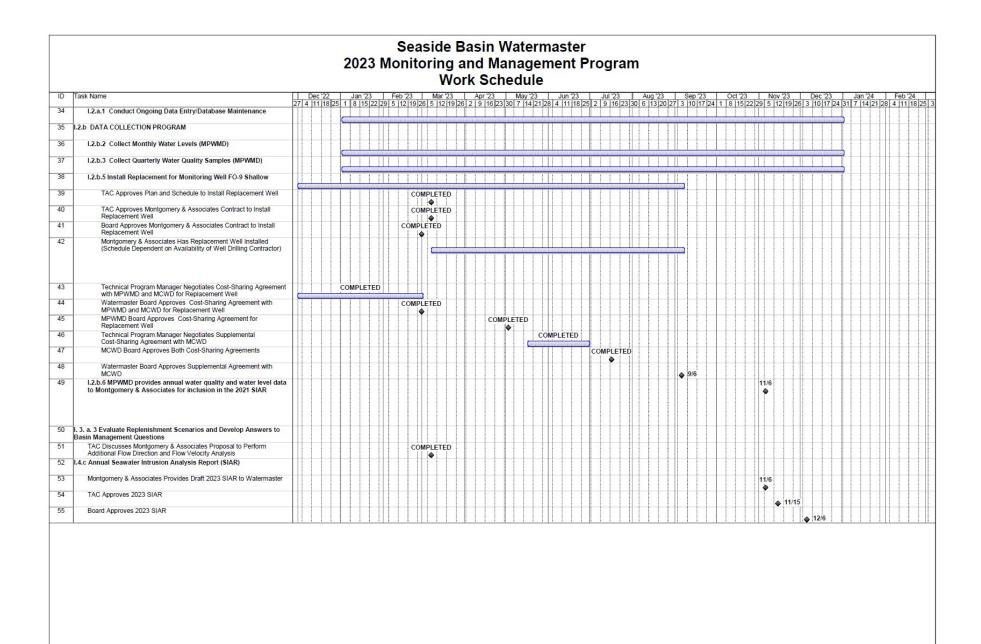
As a regular part of each monthly TAC meeting, I will provide the TAC with an updated Schedule of the activities being performed by the Watermaster, its consultants, and the public entity (MPWMD) which are performing certain portions of the work.

Attached is the updated schedule for 2023.

At this point in time it appears it may not be necessary to have a TAC meeting in September. If that is the case, a meeting cancellation notice will be sent out prior to the September meeting date.

ATTACHMENTS:	Schedule of Work Activities for FY 2023
	Provide Input to Technical Program Manager Regarding Any Corrections or Additions to the Schedules

)	Task Name	Dec '22 Ja 27 4 11 18 25 1 8	an '23 Fe'	b 23 Ma	ar '23 Ar	pr '23	May '23	Jun '23	Jul '23	Aug '23	3 Sep '2	3 Oct '23	Nov '23	Dec '23	Jan '24 24 31 7 14 21 2	Feb '2
_	MANAGEMENT & ADMINISTRATION	27 4 11 18 25 1 8	3 15 22 29 5	12 19 26 5 1	12 19 26 2 9	16 23 30 7	7 14 21 28	4 11 18 25	2 9 16 23	30 6 13 2	20 27 3 10 17	24 1 8 15 2	2 29 5 12 19	26 3 10 17 2	4 31 7 14 21 2	28 4 11
	Replenishment Assessment Unit Costs for Water Year 2023															
_	B&F Committee Develops Replenishment Assessment Unit Cost for															
	2023 Water Year If Requested, Technical Program Manager Provides Assistance to B&F Committee in Development of 2023 Water Year Replenishment Assessment Unit Cost															
_	Board Adopts and Declares 2023 Water Year Replenishment Assessment Unit Cost											10/4 •				
	Replenishment Assessments for Water Year 2023															
	Watermaster Prepares Replenishment Assessments for Water Year 2023															
	Watermaster Board Approves Replenishment Assessments for Water Year 2023 (At December Meeting)													12/6		
	Watermaster Levies Replenishment Assessment for 2023													12/12		
	2023 Annual Report															
	Prepare Preliminary Draft 2023 Annual Report															
	TAC Provides Input on Preliminary Draft 2023 Annual Report												11/15			
	Prepare Draft 2023 Annual Report (Incorporating TAC Input)															
	Board Provides Input on Draft 2023 Annual Report (At December Board Meeting)													12/6 ◆		
	Prepare Final 2023 Annual Report (Incorporating Board Input)															
	Watermaster Submits Final 2023 Annual Report to Judge													12/19		
	MONITORING AND MANAGEMENT PROGRAM															
	Monitoring & Management Program (M&MP) Plan and Budgets for 2024															
	Discussion of Draft Scope of Work for 2024 M&MP							С	OMPLETED							
	Prepare Final 2024 M&MP								COMPLE	IED I						
	TAC approves Final 2024 M&MP									8/9						
	Prepare 2024 O&M and Capital Budgets								COMPLE	TED						
	TAC approves 2024 O&M and Capital Budgets			+ + + + + + + + + + + + + + + + + + +						8/9						
	Budget & Finance Committee Approves 2024 M&MP and 2024 O&M									♦ 8/17						
	and Capital Budgets Board approves 2024 M&MP AND 2024 O&M and Capital Budgets									•	9/6					
	M.1 PROGRAM ADMINISTRATION			++++							•					
	Prepare Initial Consultant Contracts for 2024															
	TAC Approval of Initial Consultant Contracts for 2024			++++									11/15			
	Board Approval of Initial Consultant Contracts for 2024			++++									•	12/6		
	M.1.g – Sustainable Groundwater Management Act Reporting Requireme	6												•		
	Montgomery & Associates Prepares Draft Groundwater Storage		COMPLE	ETED												
	Analysis Submit SGMA Documentation to DWR			COMPLETED												
_	I.2.a DATABASE MANAGEMENT			¢	-											



2023 Consultants Work Schedule 8-9-23.mpp

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## \* \* \* AGENDA TRANSMITTAL FORM \* \* \*

August 9, 2023
9
Other Business
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