This meeting is not subject to
Brown Act noticing requirements.
The agenda is subject to change.

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

AGENDA
Water Supply Planning Committee
of the Monterey Peninsula Water Management District
******
Tuesday, March 5, 2024 at 3:00 p.m. [PST] | *Virtual Meeting*

Join the meeting at:
https://mpwmd-net.zoom.us/j/86751216464?pwd=ICLz6IhIojU0C2d170nigbOnQVlWKj.1

Or access the meeting at: www.zoom.us
Webinar ID Number: 867 5121 6464
Meeting password: 030524
Participate by phone: (669) 900 - 9128

For detailed instructions on connecting to the Zoom meeting see page 3 of this agenda.

Water Supply Planning Committee Members:
Karen Paull, Chair
Marc Eisenhart
Ian Oglesby

Alternate:
Amy Anderson

Staff Contact
David J. Stoldt, General Manager

Jon Lear, Water Resources Manager

Maureen Hamilton, District Engineer

David C. Laredo, District Counsel

Mission Statement
Sustainably manage and augment the water resources of the Monterey Peninsula to meet the needs of its residents and businesses while protecting, restoring, and enhancing its natural and human environments.

Vision Statement
Model ethical, responsible, and responsive governance in pursuit of our mission.

Board's Goals and Objectives (Online)
https://www.mpwmd.net/who-we-are/mission-vision-goals/bod-goals/

Call to Order / Roll Call

Comments from Public - *The public may comment on any item within the District's jurisdiction. Please limit your comments to three minutes in length.*

Action Items - *Public comment will be received. Please limit your comments to three (3) minutes per item.*

1. Consider Adoption of the January 8, 2024 Committee Meeting Minutes

2. Adopt 2024 Water Supply Planning Committee Meeting Schedule

Discussion Items – *Public comment will be received. Please limit your comments to three (3) minutes per item.*

3. Update on Fort Ord Wells Nos. 10 and 11 *(Verbal Report)*

4. Seaside Groundwater Basin Watermaster Seawater Intrusion Analysis Report Findings

5. Discuss Federal WRDA Projects *(Verbal Report)*

Closed Session – *As permitted by Government code Section 54956.9 et seq., the Board may recess to closed session to consider specific matters dealing with pending or threatened litigation, certain personnel matters or certain property acquisition matters.*

CS 1. Conference with Real Property Negotiators (Government Code Sections 54954.5(b), 54956.8/ District Representative: David Stoldt / Negotiation Regarding Properties Affected by California American Water Company and Monterey Peninsula Unified School District

Suggest Items to be Placed on Future Agendas

Adjournment

Accessibility

In accordance with Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), MPWMD will make a reasonable effort to provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. MPWMD will also make a reasonable effort to provide translation services upon request. Submit requests at least 48 hours prior to the scheduled meeting date/time: Sara Reyes, Executive Assistant/Board Clerk by e-mail at sara@mpwmd.net or at (831) 658-5610.

Provide Public Comment at the Meeting

Attend via Zoom: See below "Instructions for Connecting to the Zoom Meeting"

Submission of Public Comment via E-mail
Send comments to comments@mpwmd.net with one of the following subject lines "PUBLIC COMMENT ITEM #" (insert the item number relevant to your comment) or "PUBLIC COMMENT – ORAL COMMUNICATIONS." Staff will forward correspondence received to the Committee. Correspondence is not read during public comment portion of the meeting. However, all written public comment received becomes part of the official record of the meeting and placed on the District's website as part of the agenda packet for the meeting.

Submission of Written Public Comment
All documents submitted by the public must have no less than one copy to be received and distributed by the **Clerk** prior to the Meeting.

Document Distribution
In accordance with Government Code §54957.5, any materials of public record relating to an agenda item for a meeting of the Board of Directors that are provided to a majority of the members less than 72 hours before the meeting will be made available at the **District Office, 5 Harris Court, Building G, Monterey, CA,** during normal business hours. Materials of public record that are distributed during the meeting shall be made available for public inspection at the meeting if prepared by the Board or a member of its legislative/advisory body, or the next business day after the meeting if prepared by some other person.

Instructions for Connecting to the Zoom Meeting

The public may remotely view and participate in the meeting to make public comment by computer, by phone or smart device.

Please log on or call in as early as possible to address any technical issues that may occur and ensure you do not miss the time to speak on the desired item. Follow these instructions to log into Zoom from your computer, smart device or telephone. (Your device must have audio capability to participate).

To Join via Zoom- Teleconferencing means, please click the link below:

Join the meeting at:
https://mpwmd-net.zoom.us/j/86751216464?pwd=ICLz6IhIojU0C2d170nigbOnQVlWKj.1

Or join at: https://zoom.us/
Webinar ID No.: 867 5121 6464
Webinar Password: 030524
Participate by phone: (669) 900 - 9128

1. **Use the "raise hand" function to join the queue to speak on the current agenda item** when the Chair calls the item for Public Comment.

   COMPUTER / SMART DEVICE USERS: You can find the raise hand option under your participant's name.

   TELEPHONE USERS: The following commands can be entered using your phone's dial pad:
   - *6 – Toggle Mute / Unmute
   - *9 – Raise Hand

2. Staff will call your name or the last four digits of your phone number when it is your time to speak.

3. You may state your name at the beginning of your remarks for the meeting minutes.

4. Speakers will have up to three (3) minutes to make their remarks. *The Chair may announce and limit time on public comment.*

5. You may log off or hang up after making your comments.

Refer to the Meeting Rules to review the complete Rules of Procedure for MPWMD Board and Committee Meetings: https://www.mpwmd.net/who-we-are/board-of-directors/meeting-rules-of-the-mpwmd/

WATER SUPPLY PLANNING COMMITTEE

ITEM: ACTION ITEM

1. CONSIDER ADOPTION OF THE JANUARY 8, 2024 COMMITTEE MEETING MINUTES

Meeting Date: March 5, 2024

From: David J. Stoldt,
General Manager

Prepared By: Sara Reyes

CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

SUMMARY: Attached as **Exhibit 1-A** are draft committee meeting minutes for January 8, 2024.

RECOMMENDATION: The Committee should adopt the minutes by motion.

EXHIBIT
1-A Draft Minutes of the January 8, 2024 Committee Meeting

U:\staff\Board_Committees\WSP\2024\03052024\01\Item-1.docx

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

EXHIBIT 1-A

Draft Minutes
Water Supply Planning Committee of the
Monterey Peninsula Water Management District
Monday, January 8, 2024

Call to Order: Chair Edwards called the meeting to order at 3:07 p.m.

Committee Members Present: Alvin Edwards, Chair
Karen Paull
George T. Riley

Committee Members Absent: None

Staff Members Present: David J. Stoldt, General Manager
Sara Reyes, Executive Assistant/Board Clerk

District Counsel Present: David Laredo with De Lay & Laredo
Fran Farina with De Lay & Laredo

Comments from the Public: Chair Edwards opened public comment; no comments were directed to the Committee.

Corrections / Additions to the Agenda None

Action Items

1. Consider Adoption of the November 7, 2023 Committee Meeting Minutes

Chair Edwards introduced Item No. 1 and opened public comment; no comments were directed to the Committee.

A motion was offered by Director Riley with a second by Director Paull to approve the November 7, 2023 Committee Meeting minutes. The motion passed on a roll-call vote of 3-Ayes (Paull, Riley, and Edwards), 0-Noes and 0-Abstain.

Discussion Items

2. Preliminary Results of Water Supply and Demand Assessment for CPUC Phase 2 Proceeding in A.21-11-024

David J. Stoldt, General Manager provided a brief overview of the item and discussed various scenarios with the Committee. Committee discussion followed.

Chair Edwards opened public comment; no comments were directed to the Committee.

3. ASR Third Injection Well Concept

General Manager David J. Stoldt briefly discussed this and stated that the ASR Third Injection Well is an idea from District staff for discussion by the Committee. Committee discussion followed.

Chair Edwards opened public comment; no comments were directed to the Committee.

4. Overview of December 6 Coordination Meeting with Cal-Am

Mr. Stoldt briefly shared information from the meeting held with Cal-Am on December 6, 2023, attended by himself, Jonathan Lear, Water Resources Manager, Maureen Hamilton, District Engineer, and five individuals from Cal-Am. Mr. Stoldt reported the areas discussed included:

- Well program
- Pure Water Monterey Expansion Extraction Wells
- Status of the mercury and well conditions
- Readiness for ASR for the winter
- Supply source dispatching during the year
- Update on the interconnection with Marina Coast Water District
- Letter sent to the Presidio of Monterey regarding Fitch Park Wells

Committee discussion followed.

Chair Edwards opened public comment; no comments were directed to the Committee.

5. Pure Water Monterey Expansion Update

General Manager David J. Stoldt stated there was no new information to present and information was presented under Item 4. Committee discussion followed.

Chair Edwards opened public comment; no comments were directed to the Committee.

Suggest Items to be Placed on Future Agendas

None.

Adjournment

There being no further business, Chair Edwards adjourned the meeting at 4:47 p.m.

/s/ Sara Reyes

_____
Sara Reyes, Committee Clerk
to the Water Supply Planning Committee

Reviewed and Approved by the MPWMD Water Supply Planning Committee on March 5, 2024.
Received by the MPWMD Board of Directors on _____, 2024.

U:\staff\Board_Committees\WSP\2024\03052024\01\Item-1-Exh-1-A.docx

WATER SUPPLY PLANNING COMMITEE

ITEM: ACTION ITEM

2. ADOPT 2024 WATER SUPPLY PLANNING COMMITTEE MEETING SCHEDULE

Meeting Date: March 5, 2024

From: David J. Stoldt,
General Manager

Prepared By: Sara Reyes

SUMMARY: Shown below is a proposed committee meeting schedule for Calendar Year 2024. Please review and advise Sara Reyes if you cannot participate on any of the proposed dates. Any meeting may be cancelled if there is no business for committee consideration.

RECOMMENDATION: The Committee should review and adopt the meeting schedule.

Day of Week	Date	Time
Monday	May 6, 2024	3:00 p.m.
Monday	July 1, 2024	3:00 p.m.
Tuesday	September 3, 2024	3:00 p.m.
Monday	November 4, 2024	3:00 p.m.
Monday	January 6, 2025	3:00 p.m.

WATER SUPPLY PLANNING COMMITTEE

ITEM: DISCUSSION ITEM

4. SEASIDE GROUNDWATER BASIN WATERMASTER SEAWATER INTRUSION ANALYSIS REPORT FINDINGS

Meeting Date:	**March 5, 2024**	**Budgeted:**	**N/A**
From:	**David J. Stoldt** **General Manager**	**Program/** **Line Item No.:**	**N/A**
Prepared By:	**David J. Stoldt**	**Cost Estimate:**	**N/A**

General Counsel Approval: N/A
Committee Recommendation: N/A
CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15378.

SUMMARY: Attached as **Exhibit 4-A** is the Executive Summary of the December 14, 2023 Seaside Groundwater Basin 2023 Seawater Intrusion Analysis Report. The Committee is encouraged to read the summary and the findings will be discussed at the March 5th meeting.

EXHIBIT
4-A 2023 Seawater Intrusion Analysis Report – Executive Summary

EXHIBIT 4-A

MONTGOMERY & ASSOCIATES
Water Resource Consultants

December 14, 2023

Seaside Groundwater Basin
2023 Seawater Intrusion Analysis Report

Prepared for:

Seaside Groundwater Basin Watermaster

Monterey County, California

Prepared by:

Montgomery & Associates

1970 Broadway, Suite 225

Oakland, CA 94602

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 (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 freshwater 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 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 examining various analyses it is possible to determine 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 freshwater 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.

Data collected in Water Year (WY) 2023 from monitoring and production wells do not indicate that seawater intrusion is occurring within the Basin. However, induction logging has revealed small incremental increases in conductivity over time in Sentinel wells SBWM-1, 2, and 4 within the Paso Robles Formation that may be a precursor to seawater intrusion. With SBWM-1 and SBWM-2 located north of the Basin, the focus is on SBWM-4 which has the greater conductivity changes of the 3 wells and is in the Northern Coastal subarea where most of the Basin's groundwater extraction occurs. A zone of increasing conductivity in SBWM-4 is found between 140 to 200 feet below ground surface (bgs) within a coarser-grained unit of the Paso Robles Formation. Because the conductivity changes are relatively small, roughly equating to a total dissolved solids concentration of 100-200 mg/L, and the zone of increasing conductivity is confined to a specific zone in the Paso Robles Formation, no immediate action is warranted.

Since WY 2020, chloride concentrations in FO-10 Shallow, located outside and to the north of the Basin, have been elevated above historical concentrations. Five of the last 7 samples have a sodium/chloride molar ratio below 0.86, which may suggest a seawater chloride source. Of the 4 samples collected from the Shallow well in WY 2023, the first 2 were above 90 mg/L, while

the May and August 2023 samples were just below 90 mg/L. Induction logging of FO-10 Deep in 2021 was inconclusive regarding the presence of seawater intrusion in the well. It was complicated by the presence of a 1,300-foot steel pipe that has been left in the borehole since the well's construction and which is believed to be acting as a conduit across the borehole. Evidence of hydraulic connection between FO-10 Shallow and Deep wells is that the 2 wells have shown extremely similar groundwater elevations over the past 4 years. However, in WY 2023, FO-10 Deep had a 68.4 mg/L chloride decrease bringing concentrations down to those last seen 3 years ago. Regardless, the presence of this steel pipe clouds interpretation of groundwater quality results and may act as a conduit for groundwater in overlying sediments to enter underlying aquifers.

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, the following ongoing detrimental groundwater conditions pose a direct threat of seawater intrusion:

- 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 as seawater in the Paso Robles aquifer would need to move downward through the clay rich deposits overlying the Santa Margarita aquifer before entering the aquifer itself and making 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.
- Over a number of years conductivity data from induction logging of Sentinel Wells 1, 2, and 4 have shown small but steady increases in conductivity within defined coarser-grained zones within the Paso Robles Formation. The estimated total dissolved solids (TDS) increase associated with the change in conductivity since 2019 is approximately 100 mg/L – 200 mg/L. The Secondary Drinking Water limit is 500 mg/L.
- Groundwater levels in some portions of both the Paso Robles and Santa Margarita aquifers in the Northern Coastal subarea continue to be below sea level year-round. WY 2023 fourth quarter (summer/fall) groundwater levels in the Santa Margarita aquifer are approximately 40 feet below sea level. However, pumping depressions in both the Paso Robles and Santa Margarita aquifers are slightly smaller than the previous year.

- Groundwater levels remain below protective elevations in all 3 Santa Margarita aquifer protective elevation monitoring wells (MSC deep, PCA-W Deep, and sentinel well SBWM-3), and 1 of the 3 Paso Robles protective elevation monitoring wells (MSC Shallow). All 3 Santa Margarita monitoring well groundwater elevations recovered slightly in WY 2023 since being the lowest in their historical record the previous year. Other than PCA-W Shallow, the shallow aquifer protective elevation monitoring wells have all consistently been below protective elevations over the period of record shown on Figure 44 through Figure 47. Elevations at PCA-W Shallow were above protective elevations from the late 1990s through 2020 but have since dropped below, though they recovered close to the protective elevation briefly in WY 2023.

The following evidence from this report demonstrates that seawater intrusion has not been detected in monitoring and production wells from which water quality samples are collected:

- Most groundwater samples for WY 2023 from depth-discreet monitoring wells generally plot in a single cluster on Piper diagrams, with no water chemistry changes toward seawater.
- In some production wells, groundwater quality plots on Piper diagrams are different than groundwater quality in monitoring wells. This may be a result of mixed water quality because these wells are perforated in both the Paso Robles and Santa Margarita aquifers. 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 well FO-10 Shallow show a slightly different shape than other shallow wells because of increased chloride. The stiff diagram for FO-10 Deep, which showed a spike of increased chloride in WY 2022, returned to a shape consistent with its historical shape.
- Chloride concentration trends are stable for most monitoring wells, except FO-10 Shallow and FO-10 Deep. FO-10 Shallow experienced a 13.8 mg/L decrease in chloride concentrations in WY 2023. FO-10 Deep experienced a 68.4 mg/L chloride decrease in WY 2023. The reason for this is not apparent.
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing toward the coast. Santa Margarita 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.

Other important findings from the analysis contained in this report include the following:

- 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 and CAWC ceasing pumping its Ryan Ranch and Bishop wells. The cause of the declines is due to the subarea's limited groundwater inflows and natural recharge compounded by the influence of wells pumping east of the Basin. Since WY 2021, groundwater elevations in the area have appeared to experience some stabilization and recovery, potentially correlated with a cessation of pumping at California American Water Company's (CAWC) Ryan Ranch and Bishop wells.
- Native groundwater production in the Basin for WY 2023 was 2,173 acre-feet, which is 698 acre-feet less than WY 2022 and 827 acre-feet less than the Decision-ordered Operating Yield for WY 2023 of 3,000 acre-feet. In addition to WY 2023 being an above average year for rainfall, recovery of 3,458 acre-feet of recycled water from Pure Water Monterey project (PWM) and use of recycled water at the Bayonet/Blackhorse Golf Courses helped offset pumping of native groundwater. Native groundwater production was below the Decision-estimated Natural Safe Yield of 3,000 acre-feet for the fourth year in a row.

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

- Induction logging in the very bottom of SBWM-3 was hampered by the lost transducer and steel cable in the bottom of the well. Given increased conductivity occurring within the Paso Robles aquifer in SBWM-1, 2, and 4, the transducer and cable should be fished out prior to conducting the fall 2024 induction logging so a complete log of conductivity can be obtained.
- EKI and MCWD GSA (Marina Coast Water District Groundwater Sustainability Agency) should be informed that Sentinel wells SBWM-1 and SBWM-2 are starting to show an increase in conductivity in defined coarser-grained zones in the Paso Robles Aquifer. These wells are located outside of the Basin and are within the Marina Subarea of the Monterey Subbasin.
- It is recommended that options for verifying seawater intrusion occurring in the Paso Robles Formation at or near SBWM-4 be evaluated in WY 2024. This may involve finding a site for a new monitoring well, adapting an existing well, induction logging a nearby monitoring well, or some other solution. If the fall 2024 induction logging results

confirm increasing conductivity, the Watermaster should see if it would be feasible to monitor groundwater quality in the affected zone.

- It is recommended that FO-10 Shallow and FO-10 Deep be destroyed and replaced to maintain continuous water quality monitoring and to prevent cross contamination between the Paso Robles and Santa Margarita aquifers, and the overlying Dune Sands. These wells are located outside of the Basin, so destruction would need to be performed by the well owner, MPWMD, and replacement wells would need to be installed by the MCWD GSA.
- 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 Basin. As outlined in the most recent Basin Management Action Plan (M&A, 2018a), it is important that the Watermaster continue to promote projects to obtain replenishment water for the Basin that is not extracted out as water supply.
- Based on the WY 2020's SIAR recommendation, groundwater elevation data from the Carmel River water Aquifer Storage and Recovery (ASR) project and PWM monitoring wells are now incorporated into the analysis of groundwater elevations if available. Groundwater level data from PWM monitoring wells are typically available for the second quarter of the water year, but fourth quarter data from are less likely to be posted online at GeoTracker at the time of reporting. Inclusion of groundwater level data from ASR monitoring wells is reliant on direct transmittal from applicable monitoring entity and is not always provided in time for reporting. As these and any future projects are implemented, groundwater levels, groundwater flow directions, and potentially groundwater quality will change in response. It is important data from monitoring wells associated with these projects continue to be evaluated in future SIARs.
- Seawater intrusion is a threat to the Basin, and data must be collected and analyzed regularly to identify incipient intrusion. Maps, graphs, and analyses like those found in this report should continue to be developed every year.