

MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY
REGULAR BOARD OF DIRECTORS MEETING

Thursday, February 18, 2021 at 1:00 P.M.
via Zoom, due to COVID-19 Meeting Protocol

DRAFT MINUTES

DIRECTORS IN ATTENDANCE:

Mike Mobley, Chair
Susan Rungren, Vice-Chair/Secretary
Glenn Shephard, Treasurer
Jim Chambers
Conner Everts

STAFF IN ATTENDANCE:

Bryan Bondy, Executive Director
Joseph Hughes, Agency Legal Counsel
Jackie Lozano, Clerk of the Board

PUBLIC IN ATTENDANCE:

Maryam Bral, UWCD
Dan Detmer, UWCD
Burt Handy
Kathleen Kuepper, UWCD
John Lindquist, UWCD
Neal Maguire, MBAWG
Eddie Pech, DWR
Lara Shellenbarger, SCRWC
Steven Slack, CDFW
Dr. Jason Sun, UWCD
Ambry Tibay, UWCD
Jennifer Tribo, City of Ventura

CALL TO ORDER 1:01 PM

Chair Mobley called the meeting to order at 1:01 P.M.

1. PLEDGE OF ALLEGIANCE

Chair Mobley led the participants in reciting the Pledge of Allegiance.

2. ROLL CALL

The Clerk of the Board called the roll. All five Directors were present (Mobley, Chambers, Everts, Rungren, Shephard).

3. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

Chair Mobley asked if there were any public comments. None were offered.

4. APPROVAL OF AGENDA

Motion

Director Shephard informed the Board of his need to depart early. Executive Director Bondy suggested moving Item 8d (Review of Future Groundwater Conditions Modeling Results and Implications for Sustainable Management) up on the Agenda to allow Director Shephard to receive the full update on the GSP and provide comment. All Board members agreed.

Motion to approve the agenda, as amended, Director Everts; Second, Director Chambers. Roll call vote: five ayes (Chambers, Everts, Rungren, Shephard, Mobley), none opposed. Motion carried 5/0.

5. CONSENT CALENDAR

**5a Approval of Minutes
Motion**

The Board will consider approving the Minutes from the January 21, 2021, Regular Mound Basin GSA Board of Directors meeting.

**5b Approval of Warrants
Motion**

The Board will consider approving payment of outstanding vendor invoices.

**5c Monthly Financial Reports
Information Item**

The Board will receive monthly profit and loss statements and balance sheets for the month of January 2021.

No comments or questions were offered by the Directors.

No public comments were offered.

Motion to approve the Consent Calendar, Director Everts; Second, Director Shephard. Roll call vote: fives ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carried 5/0.

6. BOARD MEMBER ANNOUNCEMENTS

6a Since the previous Board meeting, Director Everts participated in a monthly NGO groundwater call where he viewed presentations and listened to updates.

6b Since the previous Board meeting, the Directors reported no time was spent on grant eligible activities.

7. EXECUTIVE DIRECTOR UPDATE

Executive Director Bondy reviewed the staff report with the Board regarding updates on non-GSP items.

Information item. No comments or questions were offered by the Directors.

No public comments were offered.

8. MOTION ITEMS

**8d Review of Future Groundwater Conditions Modeling Results and Implications for Sustainable Management (Grant Category (c), Task 3 and Category (d), Task 4)
Motion**

Executive Director Bondy presented a thorough review of assumptions and scenarios of the modeling results to the Board. The second part of the presentation included recommended approaches for addressing the sustainability indicators in the groundwater sustainability plan. United Water's Hydrogeologist John Lindquist provided additional details concerning the modeling tasks. (Presentation slides are attached to the minutes.)

Director Everts appreciated the presentation and work that went into the modeling. There were also questions regarding if the modeling had addressed an earthquake event due to the outlying faults and/or impact of climate change scenarios with seawater rising, and how that would affect groundwater? Executive Director Bondy responded the faults are a geologic structure and there could already be a connection that exists whether there is an earthquake or not. He added that DWR climate change factors address seawater rise, which was included in the modeling. UWCD staff confirmed the sea level rise values in the Zoom chat during the meeting.

Director Shephard agreed on the recommendations for the sustainable management criteria, but asked how Mound Basin would coordinate with Fox Canyon GMA's GSP? Would DWR want the two linked and/or aligned together? Executive Director Bondy said that coordination with Fox Canyon GMA will be necessary and that the GSP should identify that as an action. He added Mound Basin could seek to enter into a formal coordination agreement, or the coordination could be less formal. Director Rungren thanked staff for the work that went into this report. She had no questions.

Burt Handy asked if seawater intrusion was considered in the vicinity of San Jon Road. Executive Director Bondy replied that there is no groundwater pumping in that area and referred to a presentation figure showing model results indicating offshore groundwater flow in that area.

A question was asked about Ventura's sewer trunkline which runs along Harbor Boulevard. Director Rungren provided clarifications.

Director Everts is interested in hearing more about information factoring in drought and seawater rise. Director Mobley was pleased to see that groundwater levels are projected to be higher than in the past and asked if the results have been reviewed for accuracy. Executive Director Bondy explained that UWCD staff completed several rounds of quality control review of the model results and he feels confident that there are no mistakes.

No further comments or questions were offered by the Directors.

No further comments or questions were offered by the public.

Motion to receive and file the information regarding the modeling results and implications for sustainable management, Director Everts; Second, Director Shephard. Roll call vote: five ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carried 5/0.

Director Shephard exited the meeting at 2:30 p.m.

8a Fiscal Year 2020/2021 2nd Quarter Budget Report and Mid-Year Budget Modifications
Motion

Executive Director Bondy briefly reviewed the staff report and recommendations. There was a question from the public as to the \$55,000 loan from the City of Ventura, asking if the Agency should pay the loan off early? Executive Director Bondy said it would be too early to pay off the loan because the cash balance would fall below the reserve target the Board had adopted.

No comments or questions were offered by the Directors.

No further comments or questions were offered by the public.

Motion to receive and file the report and budget modifications, Director Everts; Second, Director Rungren. Roll call vote: four ayes (Chambers, Everts, Mobley, Rungren), none opposed; one absent (Shephard). Motion carried 4/0/1.

8b Fiscal Year 2019-20 and FY 2020-21 Biennial Audit
Motion

Executive Director Bondy recommended approving the new contract with Rogers, Anderson, Malody & Scott LLP (RAMS) in an amount not to exceed \$9,200 for the Fiscal Year 2019-2020 and 2020-2021 audit and associated State Controller's Reports. He also recommended authorizing the Executive Director to sign the engagement letter with RAMS.

No comments or questions were offered by the Directors.

No comments or questions were offered by the public.

Motion to approve and file the contract with RAMS and authorize the Executive Director to execute an engagement letter with RAMS for auditing purposes as discussed; Director Rungren; Second, Director Chambers. Roll call vote: four ayes (Chambers, Everts, Mobley, Rungren), none opposed; one absent (Shephard). Motion carried 4/0/1.

8c GSP Monthly Update (Grant Category (c), Task 3 and Category (d), Task 4)

Motion

The Board received an update from Executive Director Bondy concerning development of the Agency's Groundwater Sustainability Plan and grant status.

No comments or questions were offered by the Directors.

No comments or questions were offered by the public.

Motion to receive and file the GSP monthly update, Director Rungren; Second, Director Chambers. Roll call vote: four ayes (Chambers, Everts, Mobley, Rungren), none opposed; one absent (Shephard). Motion carried 4/0/1.

9. FUTURE AGENDA ITEMS

- Discuss Sustainable Management Criteria based on feedback received from the GSP online workshop no. 2.

ADJOURNMENT 2:41 P.M.


Chair Mobley adjourned the meeting at 2:41 P.M. to the next **Regular Board Meeting** on **Thursday, March 18, 2021**, or call of the Chair. Chair Mobley thanked Executive Director Bondy on a job well done.

I certify that above is a true and correct copy of the minutes of the Mound Basin Groundwater Sustainability Agency's Board of Directors meeting of February 18, 2021.

ATTEST:


Susan Rungren, Board Secretary

ATTEST:


Jackie Lozano, Clerk of the Board



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY



ITEM 8D
MBGSA
BOARD MEETING
FEBRUARY 18, 2021

2021-02-18

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SGMA REQUIREMENTS

- SGMA requires minimum 50-yr future projections of groundwater conditions, including water budget for the basin
- Must use ≥ 50 yrs. of *historical* hydrology
- Must use most recent conditions for baseline estimate of future water demands
- Must evaluate potential effects on water demand due to:
 - Land Use Change
 - Population Change
 - Climate Change

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FUTURE CONDITIONS KEY ASSUMPTIONS

- Discussed with Board on 9/17/2020
- Hydrology
 - 1943 – 2019 (77 yrs.) is proxy for future conditions
 - Wide range of conditions during this period
- Groundwater Pumping
 - Agricultural – per MBAWG
 - Ranges from 2,873 AFY in wet yrs. to 3,548 AFY in dry yrs.
 - City of Ventura planned pumping = 4,000 AFY
 - Two industrial wells – same as recent historical pumping

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FUTURE CONDITIONS KEY ASSUMPTIONS (CON'T)

- Adjacent Basins
 - Santa Paula – assume future pumping consistent with recent pumping (adjudicated)
 - Oxnard Basin – used FCGMA “Reduction with Projects Scenario from GSP per FCGMA staff recommendation
 - Adjustments made to reduce unrealistically high groundwater levels in Oxnard Basin Forebay (GW levels above land surface)
- Artificial Recharge (UWCD)
 - Existing Freeman Diversion operations + planned expansion project per UWCD staff

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■ Land Use Impact

- ## ■ Population Change

- ## ■ Climate Change

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MODEL SCENARIOS

- Historical: 1985-2019 (calibration/verification model)
- Baseline: This simulation employs the future assumptions described above.
- 2030 Climate Change: Baseline inputs modified using DWR 2030 “climate change factors”
- 2070 Climate Change: Baseline inputs modified using DWR 2070 “climate change factors”
- 2070 Climate Change without Freeman Diversion Expansion Project: Same as “2070 Climate Change” scenario, but w/o expansion project.
- Particle tracking to evaluate seawater intrusion risk

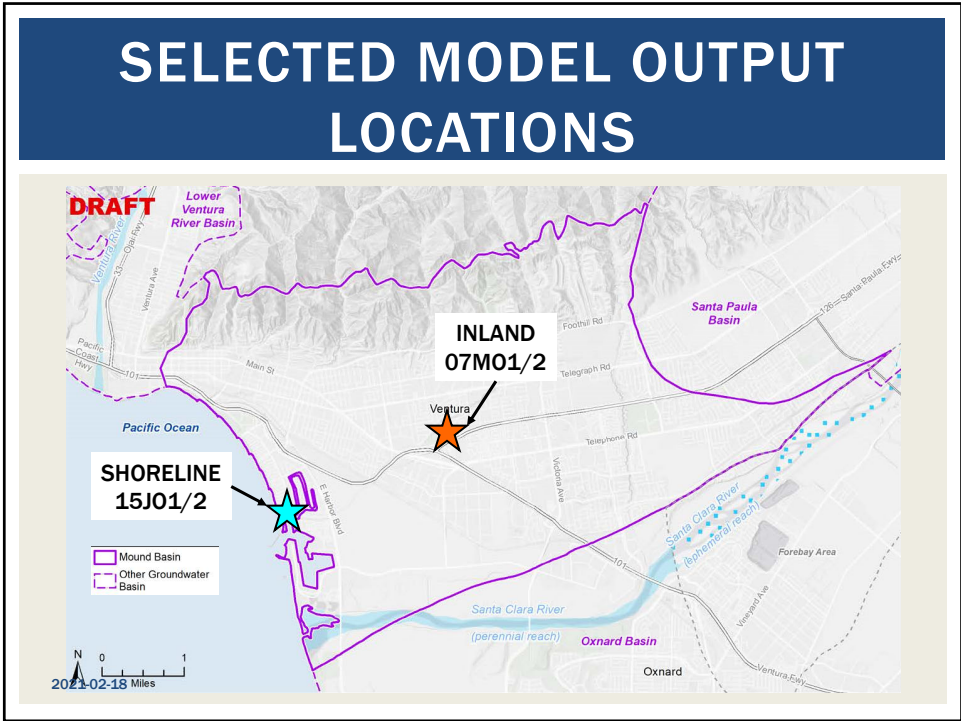
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KEY RESULTS GROUNDWATER LEVELS

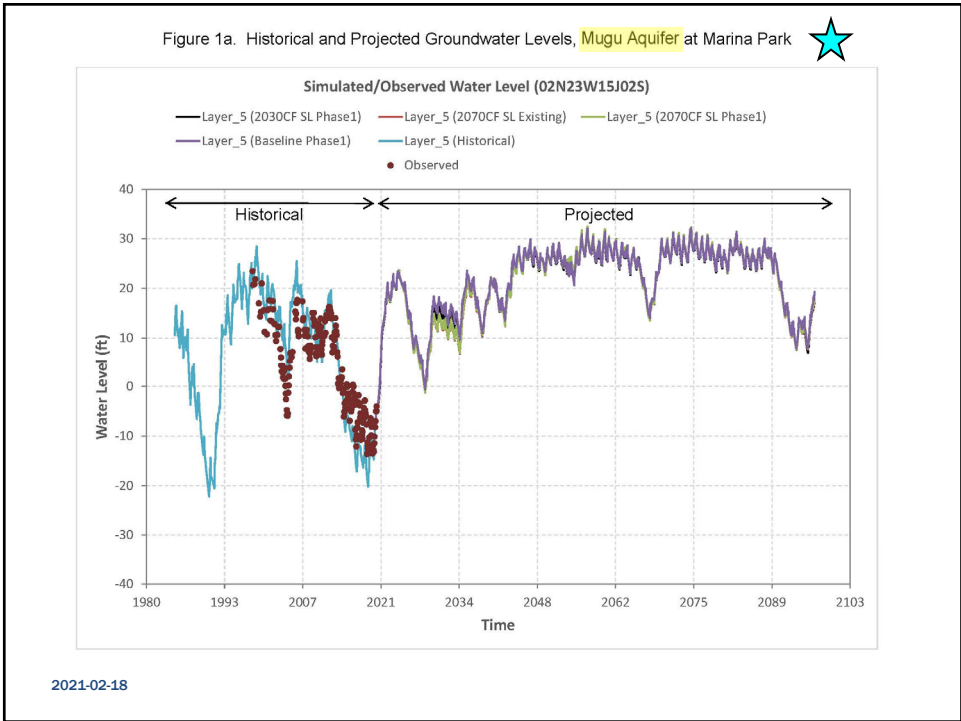
1. Future groundwater levels are predicted to be higher than historical levels due to anticipated increases in Oxnard Basin groundwater levels.
2. The impact of climate change on groundwater levels is typically less than approximately 5 ft.
3. The impact of the Freeman Diversion expansion project is almost undetectable.

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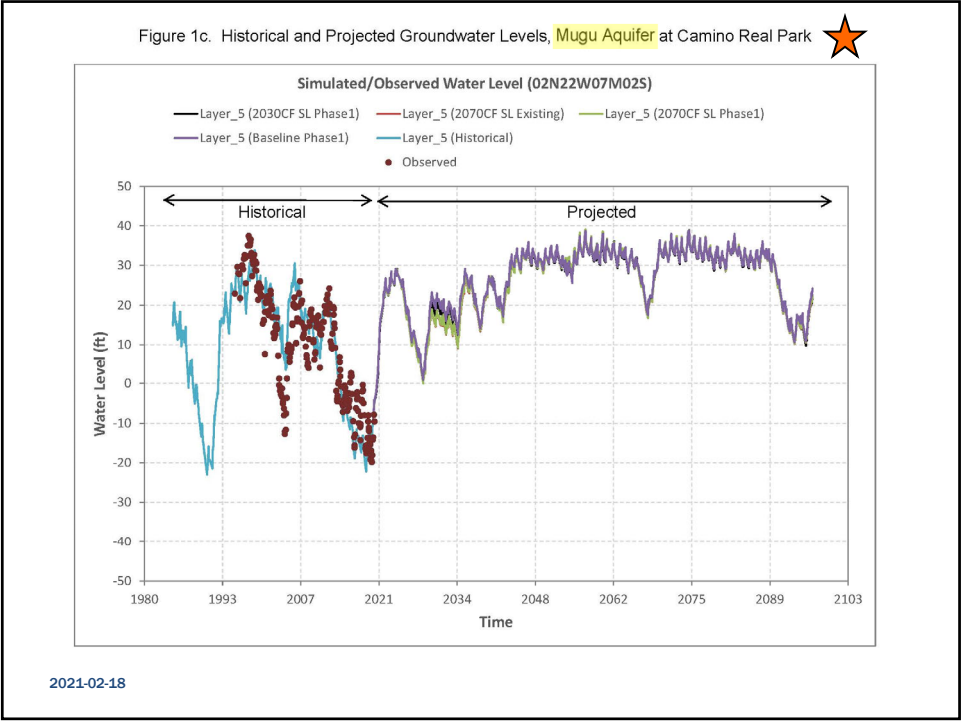
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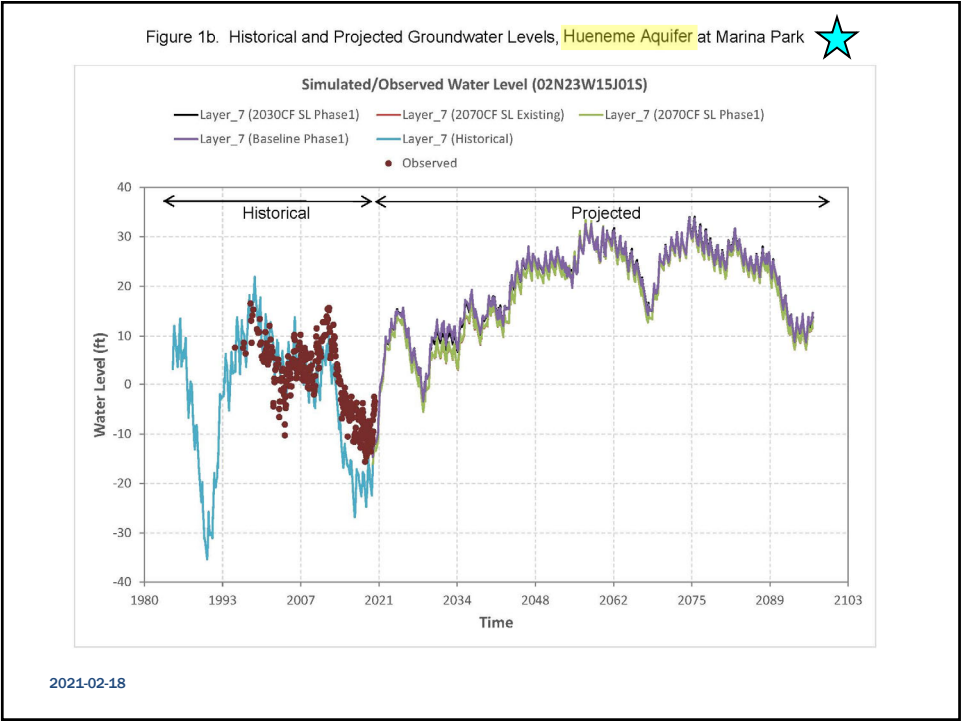
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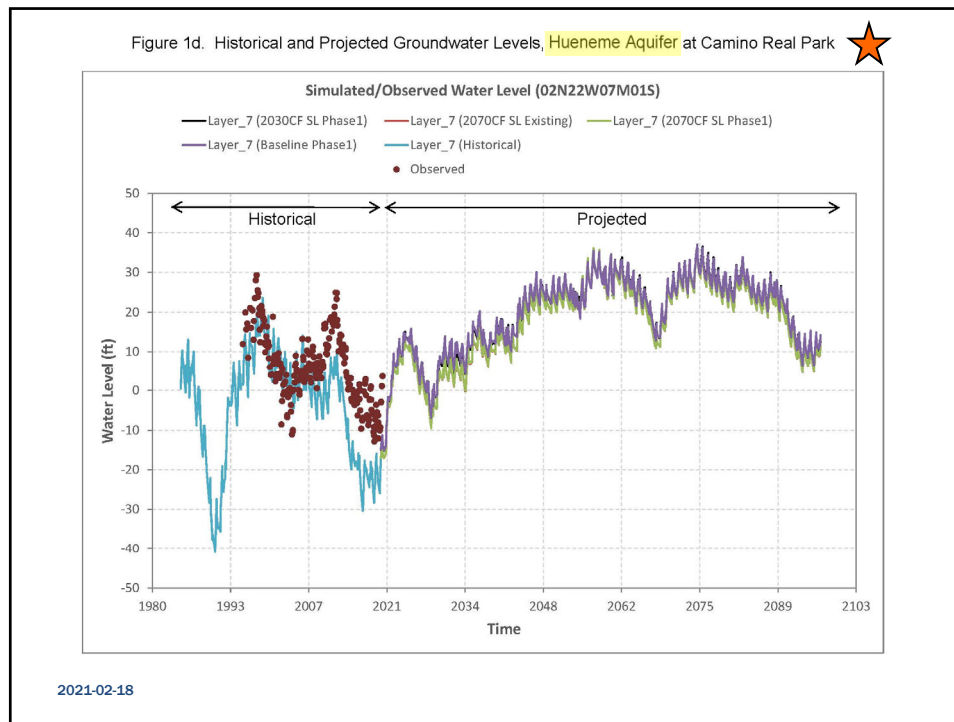
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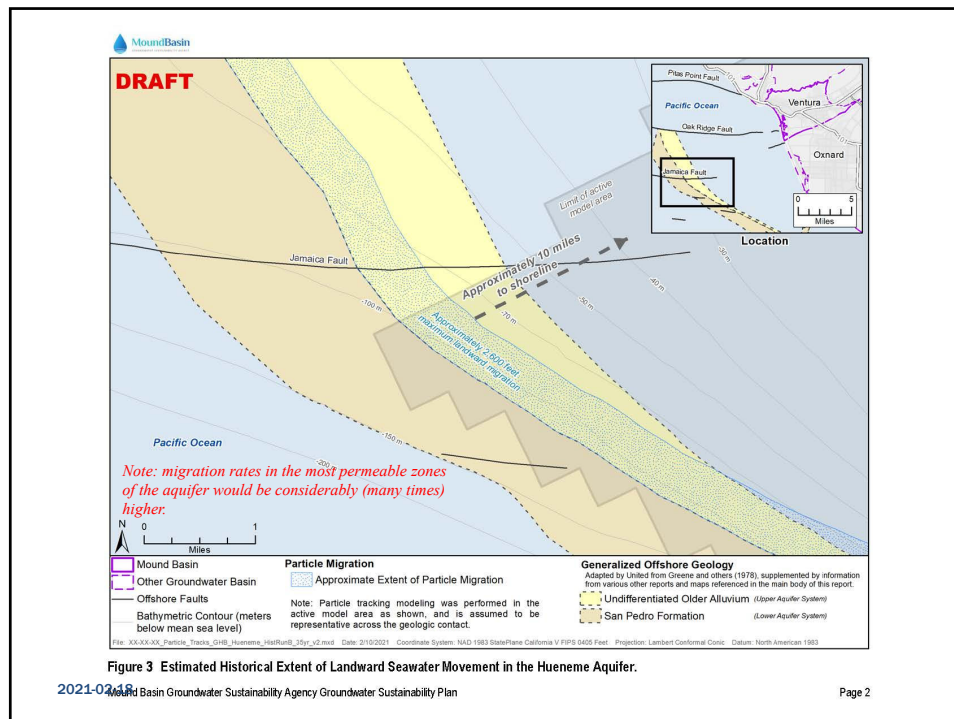
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SEAWATER INTRUSION RISK EVALUATION

- Aquifers are exposed to seawater at subcrop approximately 10.5 miles offshore.
- Between subcrop and shoreline, aquifers are believed to be protected from seawater by thick sequence of fine-grained deposits (aquitard)
- Historical movement of seawater from subcrop toward shoreline was estimated using historical model using particle tracking
 - No landward movement of seawater in Mugu Aquifer
 - Approximately 0.5 miles of average landward movement in Hueneme Aquifer over last century*

* Migration rates in the most permeable zones of the aquifer would be considerably (many times) higher.

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SEAWATER INTRUSION RISK EVALUATION (CON'T)

■ Conclusions:

- Seawater is not migrating landward in Mugu Aquifer
- Timeframe for seawater to migrate from current estimated location in Hueneme Aquifer to shore is longer than SGMA planning horizon
- However, if a short circuit pathway for seawater migration into aquifers exists nearshore (possible along faults or “stratigraphic windows”), onshore flow of seawater could occur much sooner.

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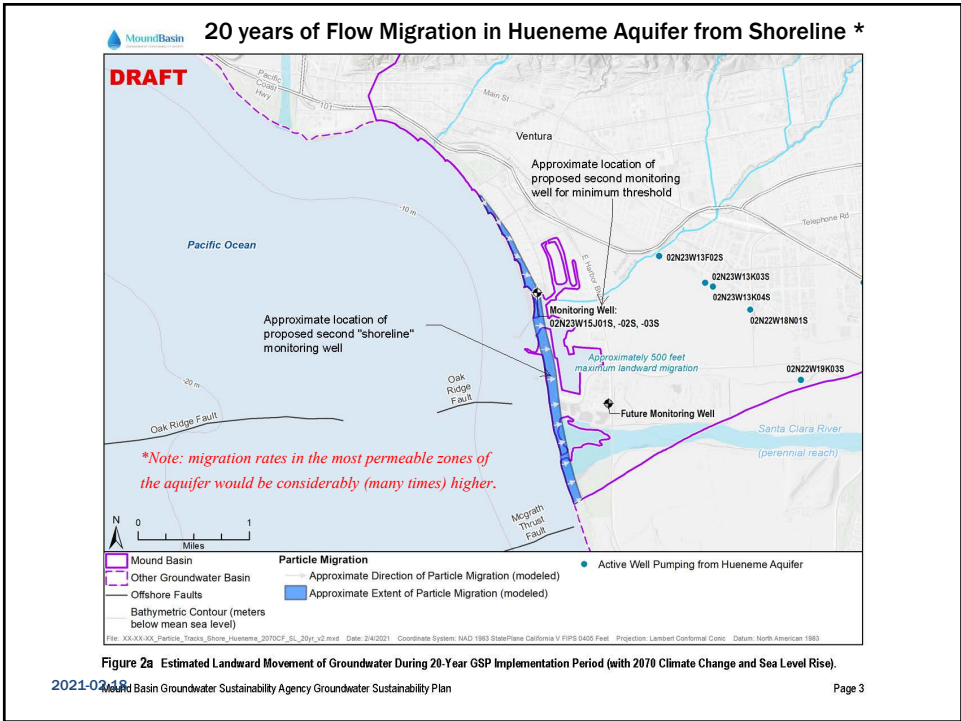
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SEAWATER INTRUSION RISK EVALUATION (CON'T)

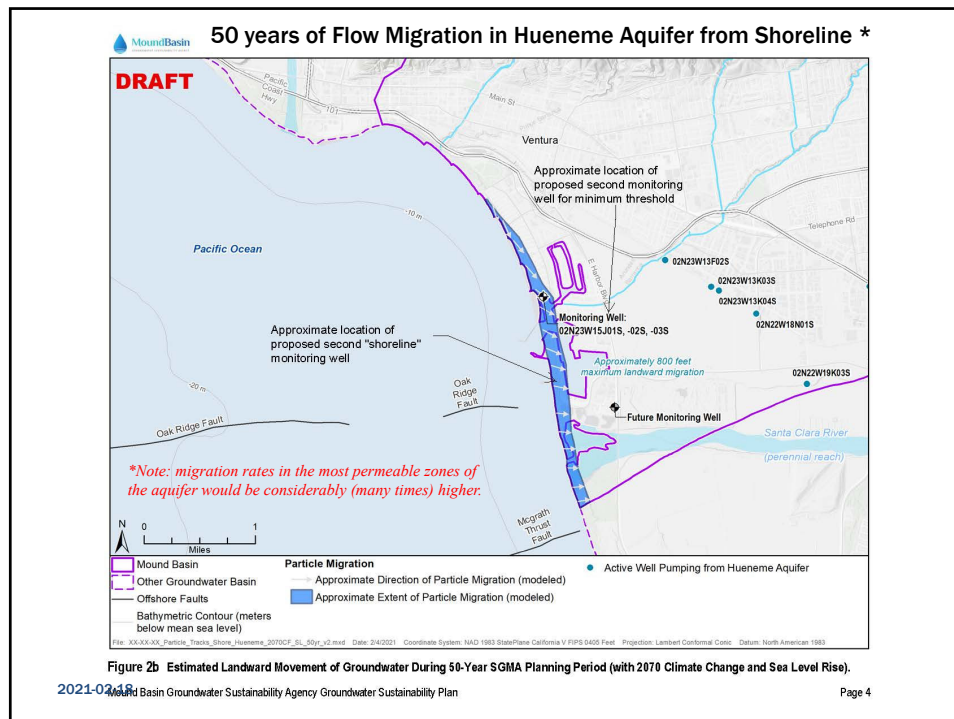
- Particle tracking of groundwater flow directions and flow rates along the shoreline was performed to evaluate risk of onshore migration via a near shore short-circuit pathway.

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KEY RESULTS OF SHORELINE FLOW EVALUATION

1. Particle tracking results suggest that groundwater will flow offshore in the Mugu Aquifer.
2. Particle tracking results suggest that groundwater will flow onshore in the Hueneme Aquifer at an average rate of approximately 1/8 of a mile per 20 years.
 - Note: Migration rates in the most permeable zones of the aquifer could be considerably (many times) higher.

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SUSTAINABLE MANAGEMENT IMPLICATION #1

- Seawater intrusion is not anticipated to be an issue for the Mound Basin during the 50-year SGMA planning horizon; however, a monitoring and contingency plan is warranted to address potential short-circuit pathways for seawater.

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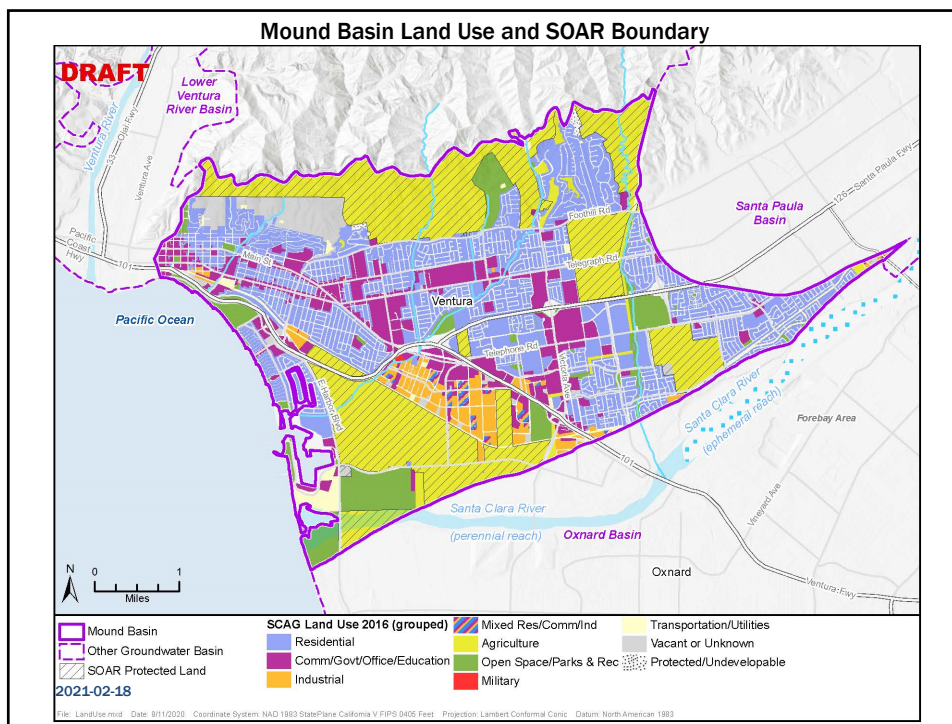
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PROPOSED SEAWATER INTRUSION SMC

- Undesirable Result: Seawater intrusion east of Harbor Blvd.
 - No current or anticipated future beneficial uses of groundwater west of Harbor Blvd.
 - Protect existing beneficial uses east of Harbor Blvd.
- Minimum Threshold:
 - Seawater in monitoring wells near Harbor Blvd.
- Measurable Objective:
 - No indication of seawater in monitoring wells near Harbor Blvd.

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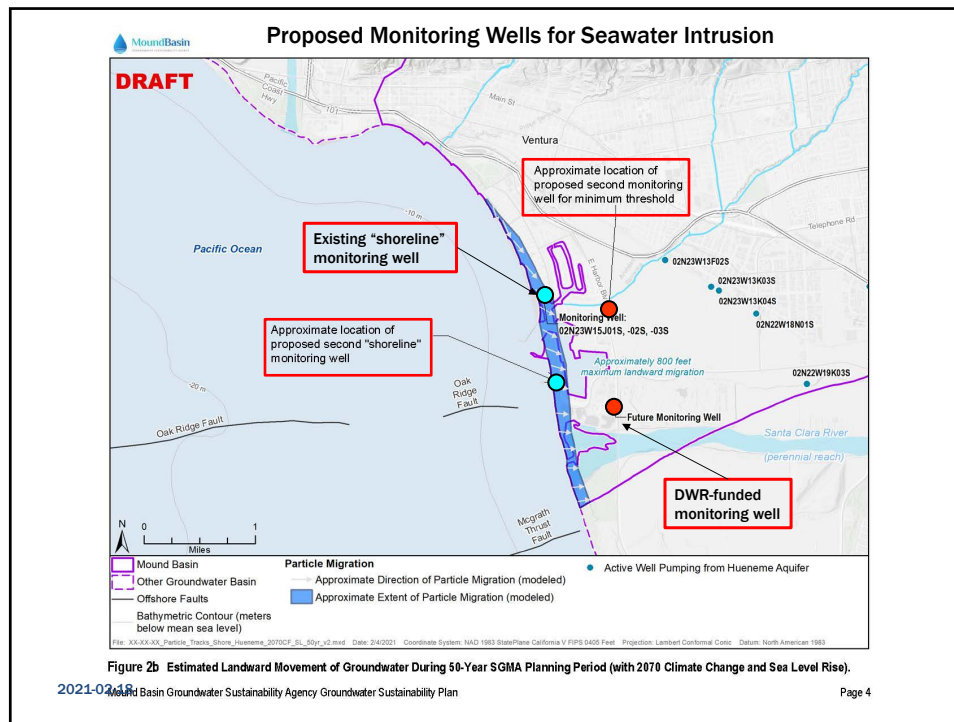
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SEAWATER INTRUSION MONITORING RECOMMENDATIONS

- Construct one additional “shoreline monitoring well”
 - Shoreline monitoring wells provide early detection of seawater and provide time for GSA to implement contingency measures before seawater reaches Harbor Blvd.
- Construct one additional monitoring well along Harbor Blvd. for SMC monitoring
- Estimate cost ~\$500,000 each
 - Pursue SGMA implementation grant

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SUSTAINABLE MANAGEMENT IMPLICATION #2

- Subsidence is not anticipated because modeling results suggest that future groundwater levels will remain above historical low levels.
- Therefore, inelastic land subsidence is not anticipated to be an issue for the Mound Basin during the 50-year SGMA planning horizon.

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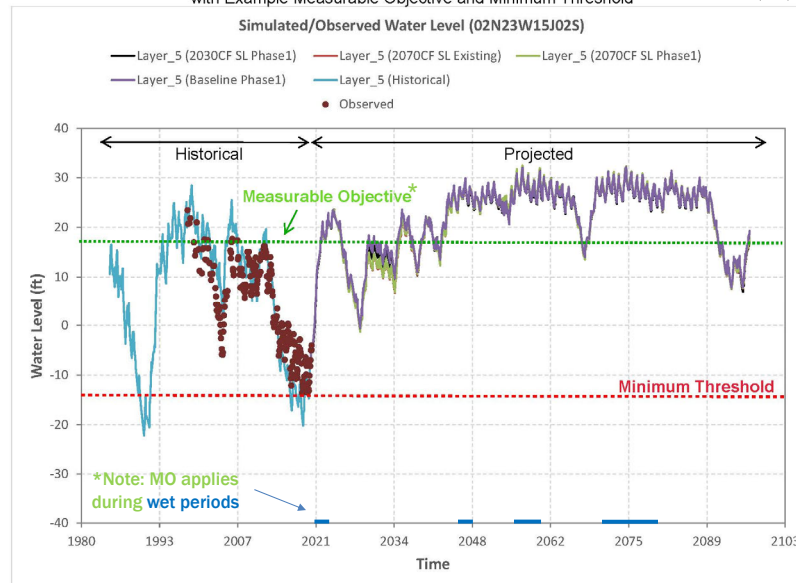
PROPOSED SUBSIDENCE SMC

- **Undesirable Result: Measurable inelastic subsidence due to groundwater pumping west of Harbor Blvd.**
 - “Coastal Area” west of Harbor Blvd. is susceptible to land subsidence
 - City sewer main running along Harbor Blvd has low slope
 - Sea level rise impacts to Coastal Area predicted – subsidence would exacerbate sea level rise impacts
- **Minimum Threshold:**
 - Groundwater levels below historical low levels as a proxy for potential onset of subsidence
 - Note: areas east of Harbor Blvd. are less susceptible to effects of subsidence, but it is unlikely that groundwater levels could be sustained below historical lows east of Harbor Blvd. without causing groundwater levels to drop below historical lows in Coastal Area
- **Measurable Objective:**
 - GW levels during wet periods sufficient to prevent dropping below historical lows during droughts

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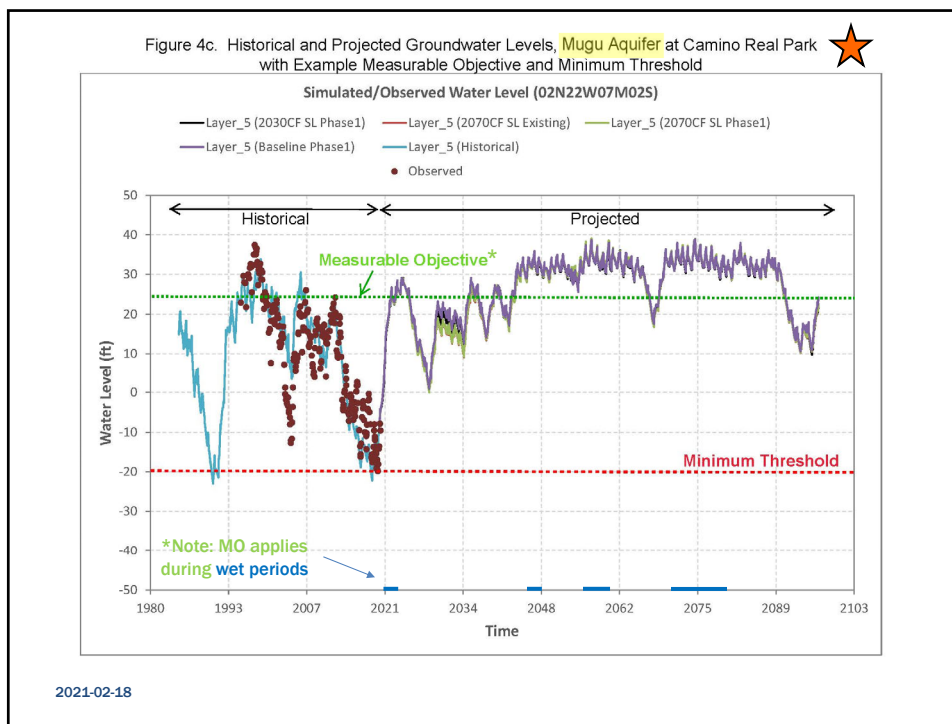
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Figure 4a. Historical and Projected Groundwater Levels, Mugu Aquifer at Marina Park with Example Measurable Objective and Minimum Threshold

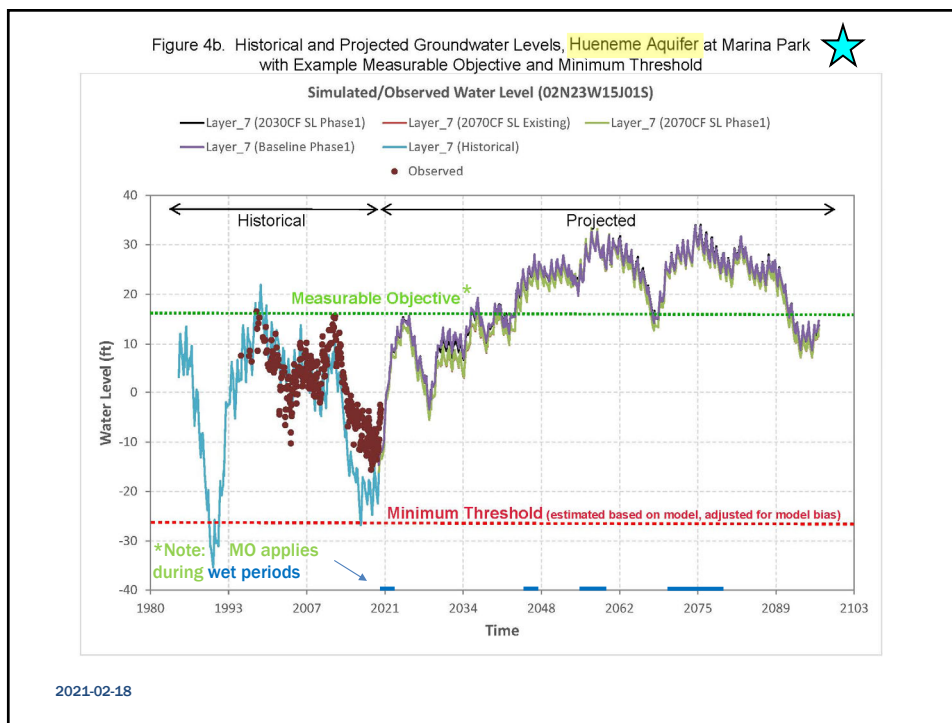


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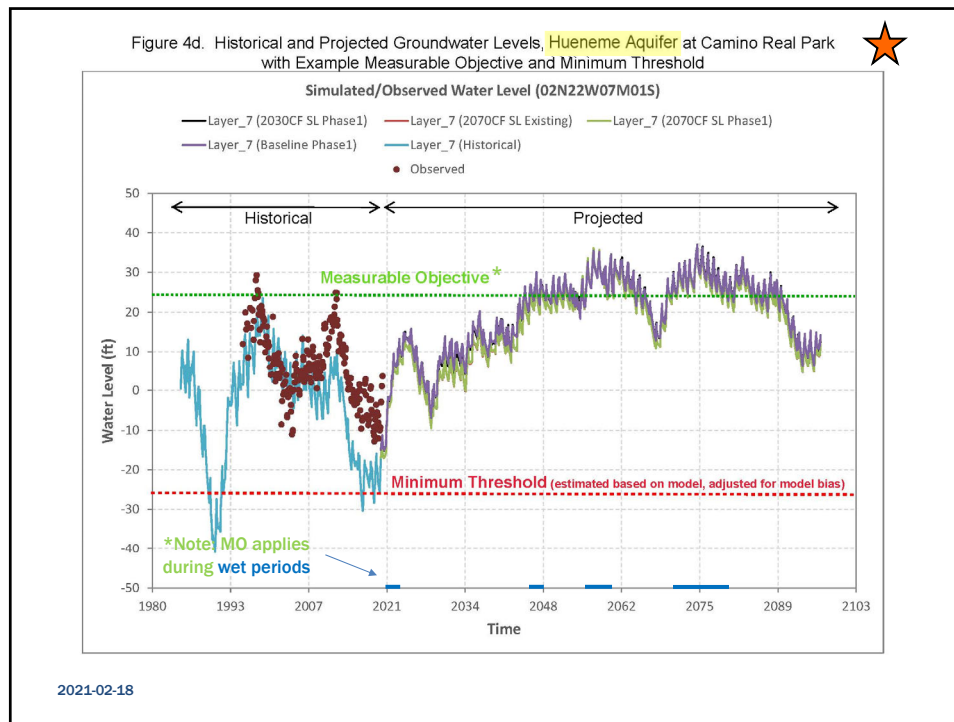
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OTHER SUSTAINABLE MANAGEMENT IMPLICATIONS

- The chronic groundwater level decline and reduction of groundwater storage sustainability indicators will not be controlling factors for sustainable management.
- FCGMA's progress toward achieving its sustainability goal for the Oxnard Basin will be important to track. MBGSA will need to be prepared to adapt its GSP if FCGMA does not meet its sustainability goal or otherwise dramatically deviates from the plans set forth in its initial GSP.

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PROPOSED NEXT STEPS

- Board feedback today
- Present at upcoming GSP workshop on March 4
- Review and approve for draft SMC for inclusion in draft GSP at March 18 regular Board meeting

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QUESTIONS & DISCUSSION

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