



MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY
REGULAR BOARD OF DIRECTORS MEETING AND GROUNDWATER
SUSTAINABILITY PLAN WORKSHOP

was held on Thursday, December 18, 2025, at 1:00 p.m. via Zoom and at the County of Ventura, Hall of Administration, Atlantic Conference Room, 800 S. Victoria Avenue, Ventura, CA 93009-1260.

MINUTES

DIRECTORS IN ATTENDANCE

Catherine Keeling, Chair
Jennifer Tribo, Vice Chair/Secretary
Dr. Earthea Nance, Treasurer
James Chambers (per Brown Act, participated online citing “just cause” contagious illness and joined at 1:25 p.m.)
Conner Everts (arrived at 1:23 p.m.)

DIRECTORS ABSENT

None.

STAFF IN ATTENDANCE

Bryan Bondy, Executive Director
Alex Dominguez, Legal Counsel (online)
Jacquelyn (Jackie) Lozano, Clerk of the Board

PUBLIC IN ATTENDANCE

Burt Handy
Mohammad Hasan, UWCD
Sara Guzman, UWCD
Trevor Jones, INTERA
Kathleen Kuepper, UWCD
Raya Nour, County of Ventura

OPEN SESSION

Chair Catherine Keeling called the meeting to order at 1:16 p.m.

1. PLEDGE OF ALLEGIANCE

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

2. ROLL CALL

Clerk of the Board Jackie Lozano called roll.

Present: Directors Nance, Tribo, and Keeling.

Absent: Directors Chambers and Everts (both arrived at 1:23 p.m., as noted above).

3. PUBLIC COMMENTS

None were offered.

4. APPROVAL OF AGENDA

Motion

Action: M/S/C (Nance, Tribo) to approve December 18, 2025, Agenda.

Vote: Ayes: Nance, Tribo, and Keeling; Noes: None; Absent: Chambers and Everts.

5. CONSENT CALENDAR

Action: M/S/C (Nance, Tribo) to approve the Consent Calendar items.

Vote: Ayes: Nance, Tribo, and Keeling; Noes: None; Absent: Chambers and Everts.

5a. Approval of Minutes

Motion

Approved the Minutes of November 20, 2025, regular meeting.

5b. Approval of Warrants

Motion

Received and filed a summary report of the December 2025 warrants, and approved payment of outstanding vendor invoices.

5c. Monthly Financial Report

Information Item

Received and filed the monthly profit and loss statement and balance sheet for the month of December 2025.

5d. Approve Bondy Groundwater Consulting Rate Increase Per Existing Contract

Motion

Approved the updated contract agreement between Mound Basin GSA and Bondy Groundwater Consulting; received and filed.

6. BOARD MEMBER ANNOUNCEMENTS

None were offered.

7. EXECUTIVE DIRECTOR ANNOUNCEMENTS

Executive Director Bondy said the monitoring well encroachment permit and coastal development permit applications were submitted to the City of Ventura.

8. GSP PERIODIC EVALUATION WORKSHOP

Executive Director Bondy presented an overview of the GSP periodic evaluation process which included a brief background of SGMA, periodic evaluation overview, GSP highlights and periodic evaluation focus areas, recommended corrective actions. Executive Director Bondy responded to questions during the presentation.

Senior Hydrogeologist Trevor Jones of INTERA presented an updated evaluation of interconnected surface water for Mound's subbasin which a description of GSP findings, data collected since the GSP, and updated conclusions, which support the original GSP conclusions that groundwater extraction from the basin's principal aquifers does not materially influence surface water in the Santa Clara River or its estuary.

The presentations will be posted on the Agency's website.

Presentations are attached and available for review at www.moundbasingsa.org/gsp.

9. FUTURE AGENDA ITEMS

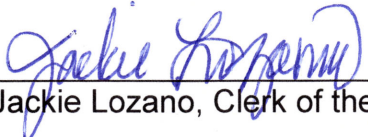
None were offered.

10. ADJOURNMENT

Chair Keeling adjourned the meeting at 2:20 p.m.

I certify that the above is true and correct copy of the minutes of the Mound Basin Groundwater Sustainability Agency's Board of Directors Regular Meeting and Groundwater Sustainability Plan Workshop of December 18, 2025.

ATTEST:  Dr. Eartha Nance acting on behalf of
Jennifer Tribo, Vice Chair/Secretary

ATTEST:  Jackie Lozano, Clerk of the Board



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY

c/o United Water Conservation District
1701 N. Lombard Street, Suite 200
Oxnard, California 93030
(805) 525-4431
<https://moundbasingsa.org>

**MOUND BASIN GSA REGULAR BOARD OF DIRECTORS MEETING AND
GSP WORKSHOP
ATTENDANCE SHEET**

Thursday, December 18, 2025, at 1:00 p.m.

Name: Kat Kuepper
Organization: UWCD
Phone: _____
E-mail: Katukenk@unitedwater.org

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: Trevor Jones
Organization: Intera
Phone: 949-637-0447
E-mail: tajones@intera.com

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: Bret Haney
Organization: _____
Phone: _____
E-mail: BretHaney@macl.com

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: _____
Organization: _____
Phone: _____
E-mail: _____

Name: _____
Organization: _____
Phone: _____
E-mail: _____



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

GROUNDWATER SUSTAINABILITY PLAN PERIODIC EVALUATION WORKSHOP NO. 1

DECEMBER 18, 2025



WORKSHOP COMPONENTS

- 1. Brief SGMA Background**
- 2. GSP Periodic Evaluation (PE) Overview**
- 3. GSP Highlights & PE Focus Areas**
- 4. GSP Recommended Corrective Actions (RCAs)**
- 5. Shallow Groundwater Monitoring Results**
- 6. Questions and Feedback**



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

BRIEF SGMA BACKGROUND

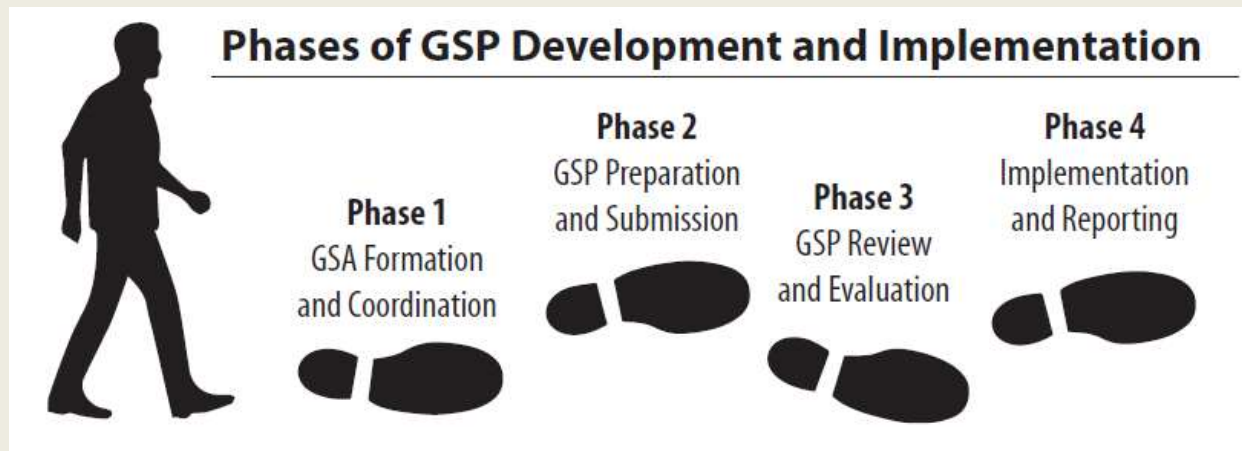


WHAT IS SGMA?

- Sustainable Groundwater Management Act
 - Three bill package signed into CA law in late 2014
 - Provides a statewide framework for long-term sustainable groundwater management in CA
 - Requires basins subject to the act to be managed sustainably 20 years after adopting a Groundwater Sustainability Plan (GSP) by a local Groundwater Sustainability Agency (GSA)

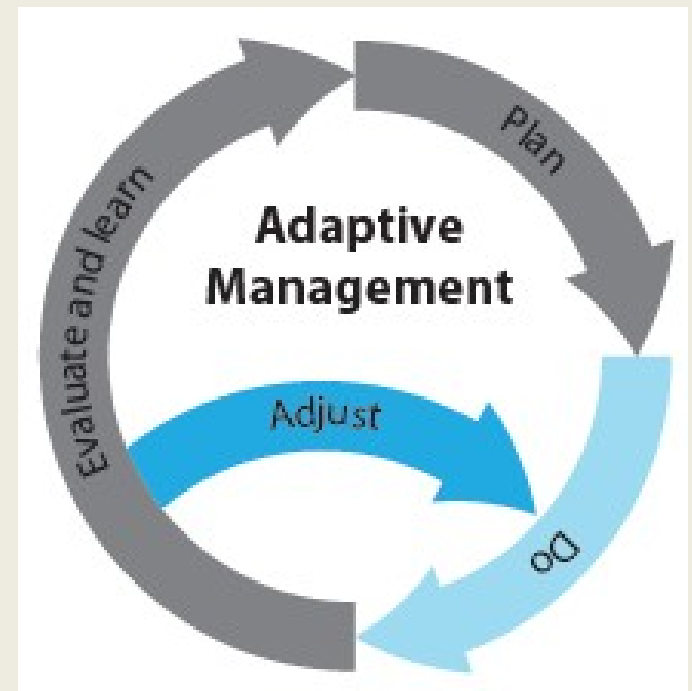
SGMA REQUIREMENTS

1. Form a Groundwater Sustainability Agency (GSA)
 - Completed 2017
2. Adopt a Groundwater Sustainability Plan (GSP)
 - Completed November 2021
3. Achieve Sustainable Groundwater Management
 - 20 years following GSP adoption



WHAT IS A GSP?

The GSP is a flexible road map for how a groundwater basin will achieve long term sustainability by avoiding undesirable results through data-driven adaptive management



PURPOSE OF THE GSP IS TO AVOID “UNDESIRABLE RESULTS”

- Overarching goal of SGMA is to avoid Undesirable Results for each of the six SGMA sustainability indicators:



- Minimum Thresholds for Undesirable Results
- Measurable Objectives goals to provide flexibility
- Monitoring networks track progress



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

GSP PERIODIC EVALUATION OVERVIEW



GSP PERIODIC EVALUATION

■ What?

- Written periodic evaluation report
- Communicate progress on GSP implementation

■ Why?

- It's required...GSP Emergency Regulations
- Prudent for ensuring the basin is managed sustainably

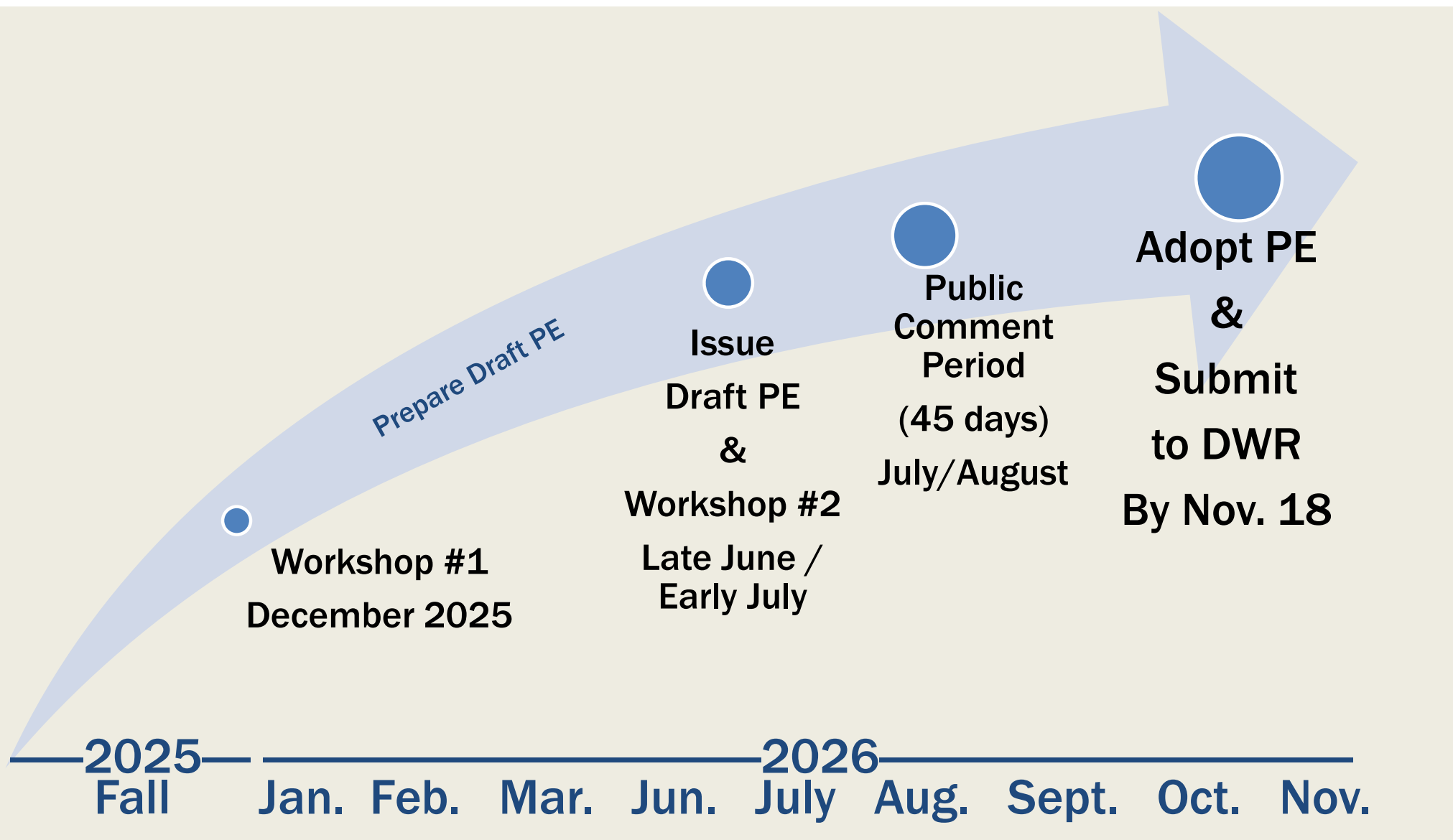
■ When?

- At least once every five years

GSP PERIODIC EVALUATION SCOPE

- Describe new information collected.
- Describe current groundwater conditions for each sustainability indicator.
- Describe status & changes to any GSP sections.
- Explain how have actions taken by GSA have informed changes in basin management.
- Describe whether there is a need to change any GSP section that would lead to a GSP Amendment.
- Address DWR recommended corrective actions

GSP PE SCHEDULE





MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

GSP RECAP &

PE FOCUS AREAS



GSP CONTENTS

GSP Contents are per GSP Emergency Regulations:

➤ **Executive Summary**

- 1. Introduction to Plan Contents**
- 2. Administrative Information**
- 3. Basin Setting**
- 4. Sustainable Management Criteria**
- 5. Monitoring Networks**
- 6. Projects and Management Actions**
- 7. GSP Implementation**



SECTION 1

INTRO TO PLAN CONTENTS

GSP

- **Contents**
 - SGMA Background
 - GSP Overview

- **Key Conclusions**
 - N/A

- **Actions**
 - N/A

Periodic Evaluation

- No new information
- No new information

SECTION 2

ADMINISTRATIVE INFORMATION

GSP

- **Contents**
 - GSA Description
 - Plan Area Description
 - Water Resource Programs
 - Land Use Info
 - Communications Plan

- **Key Conclusions**
 - N/A

- **Actions**
 - N/A

Periodic Evaluation

- No new information
- No new information
- Update City water supplies
- City 2050 General Plan
- Stakeholder Engagement plan updates

SECTION 3

BASIN SETTING

GSP

- **Contents**
 - Hydrogeologic Conceptual Model
 - Historical Basin Conditions
 - Water Budgets

- **Key Conclusions**
 - Pumping from principal aquifers does not materially impact surface water
 - No historical land subsidence
 - No seawater intrusion
 - Basin has been and is projected to remain in balance

- **Actions**
 - Drill MW-A and B

Periodic Evaluation

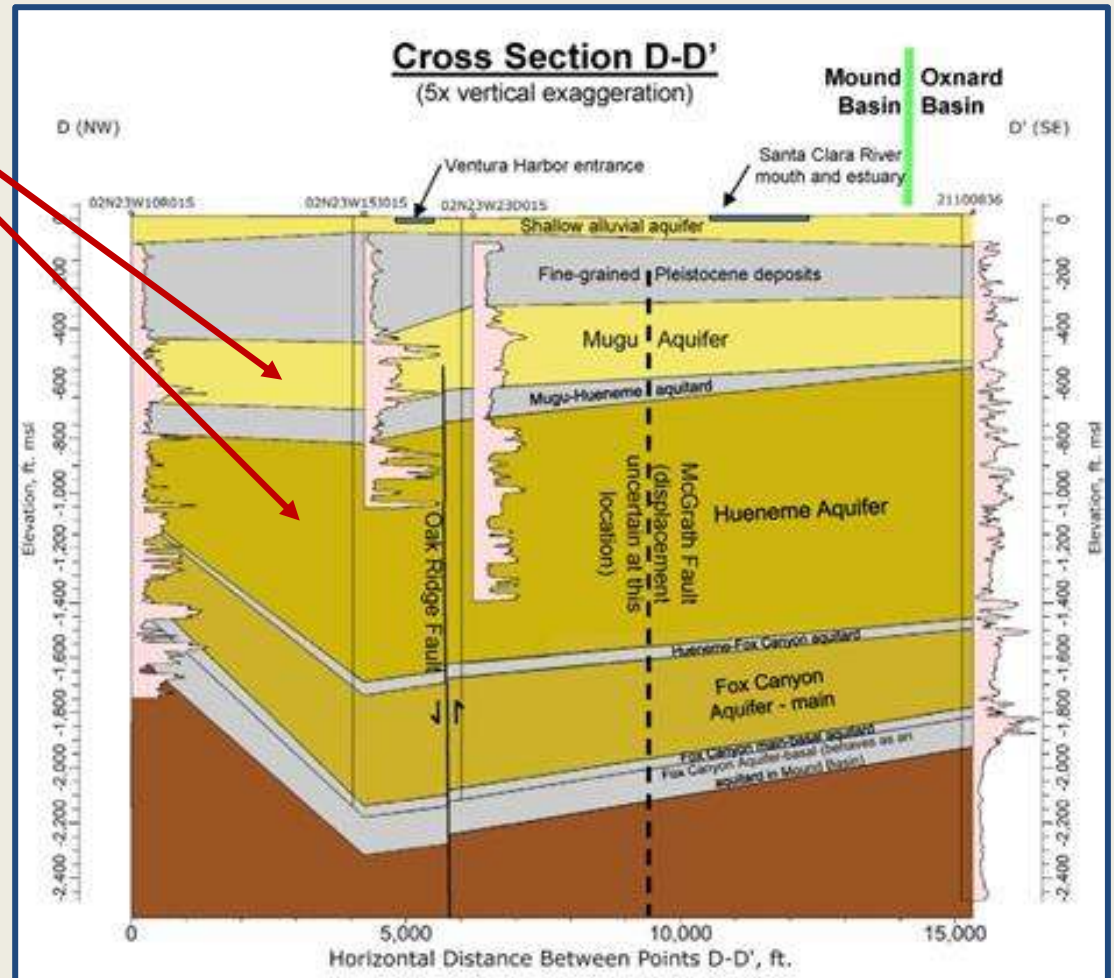
- New data from MW-A
- More recent monitoring data
- Updated water use projections

- Lack of surface water impact further confirmed with additional monitoring data
- Land subsidence not observed
- MW-A seawater not observed
- Less pumping forecasted, further supporting basin balance projection

- MW-A drilled; MW-B pending

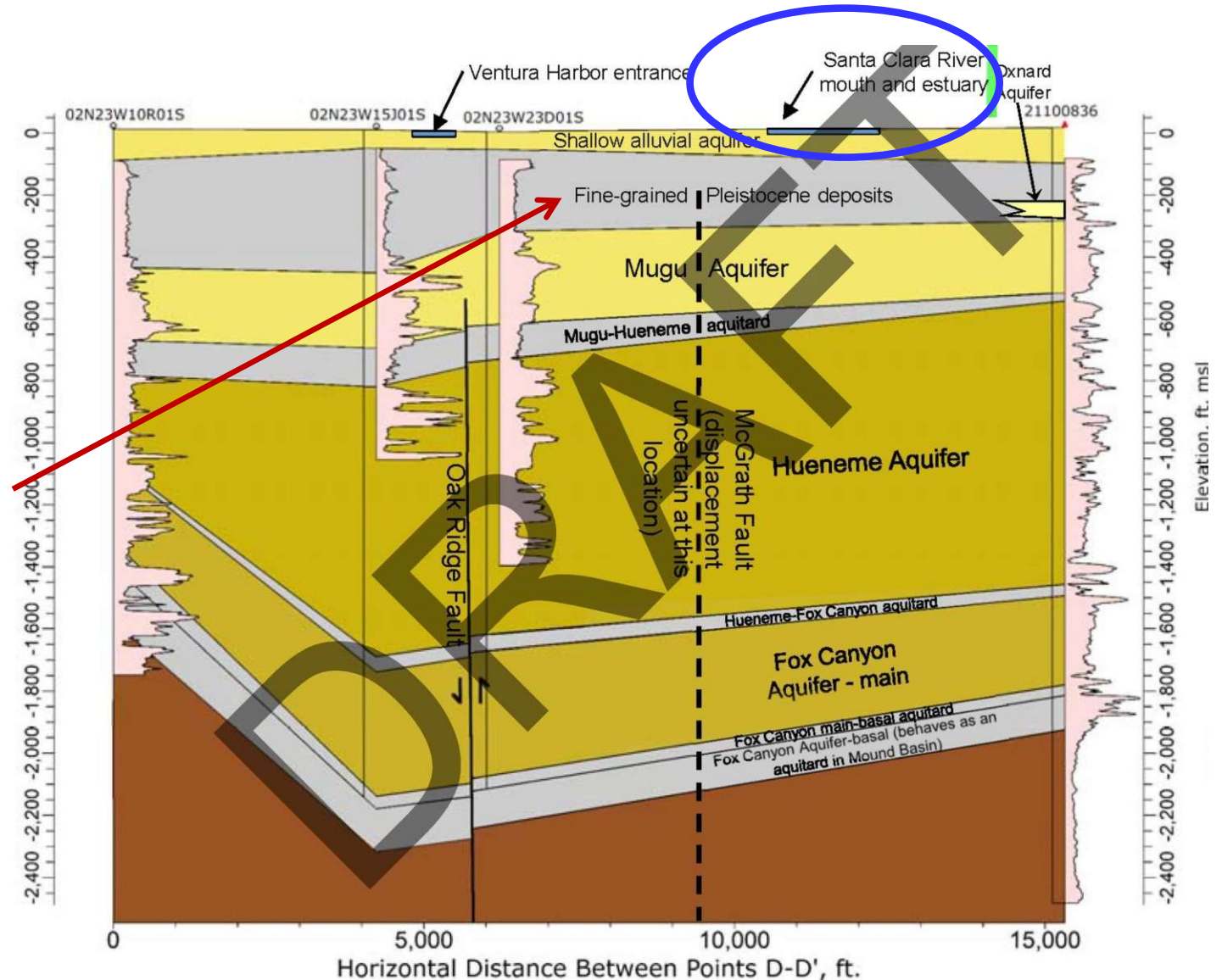
REVIEW OF HCM KEY INFO: AQUIFERS

- Two “principal” aquifers:
 - Deep
 - Confined
- Other units do not provide significant quantities of water to wells and will not be managed by MBGSA



INTERCONNECTED SURFACE WATER

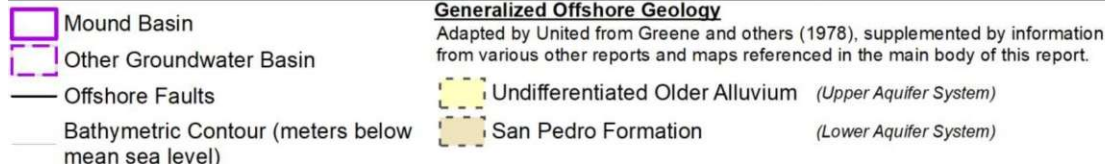
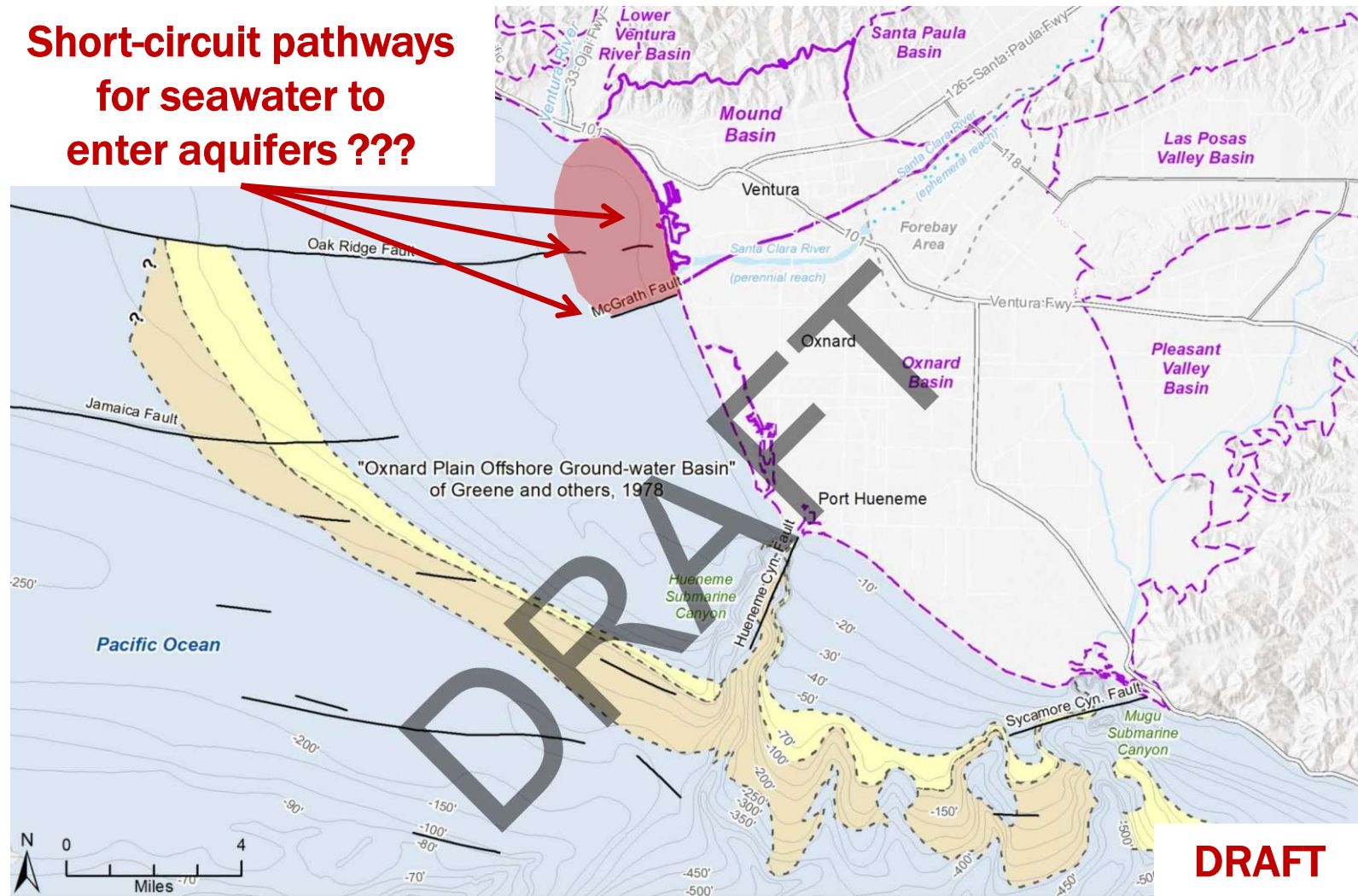
- **Shallow GW likely interconnected with river, however, there is no pumping from shallow aquifer.**
- **Surface water and principal aquifers are separate by thick aquitards. Pumping in principal aquifers is not believed to materially affect surface water (i.e., no measurable depletion of surface water by pumping).**



SEAWATER INTRUSION (CONTINUED)

Potential gaps in the confining layer above the aquifers and/or faulting could possibly provide short-circuit pathways for seawater intrusion near the shoreline. If such short-circuit pathways exist, seawater could reach the shoreline within the GSP implementation period.

Short-circuit pathways for seawater to enter aquifers ???



Note: Area depicted in red is conceptual and provided for discussion purposes only.

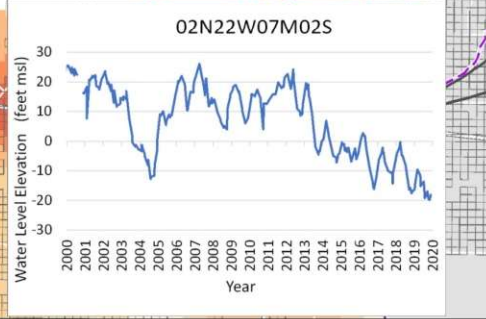
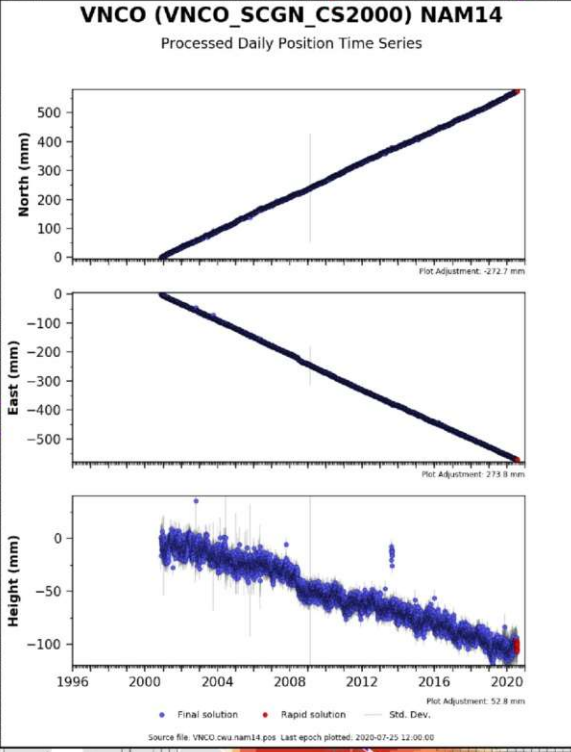
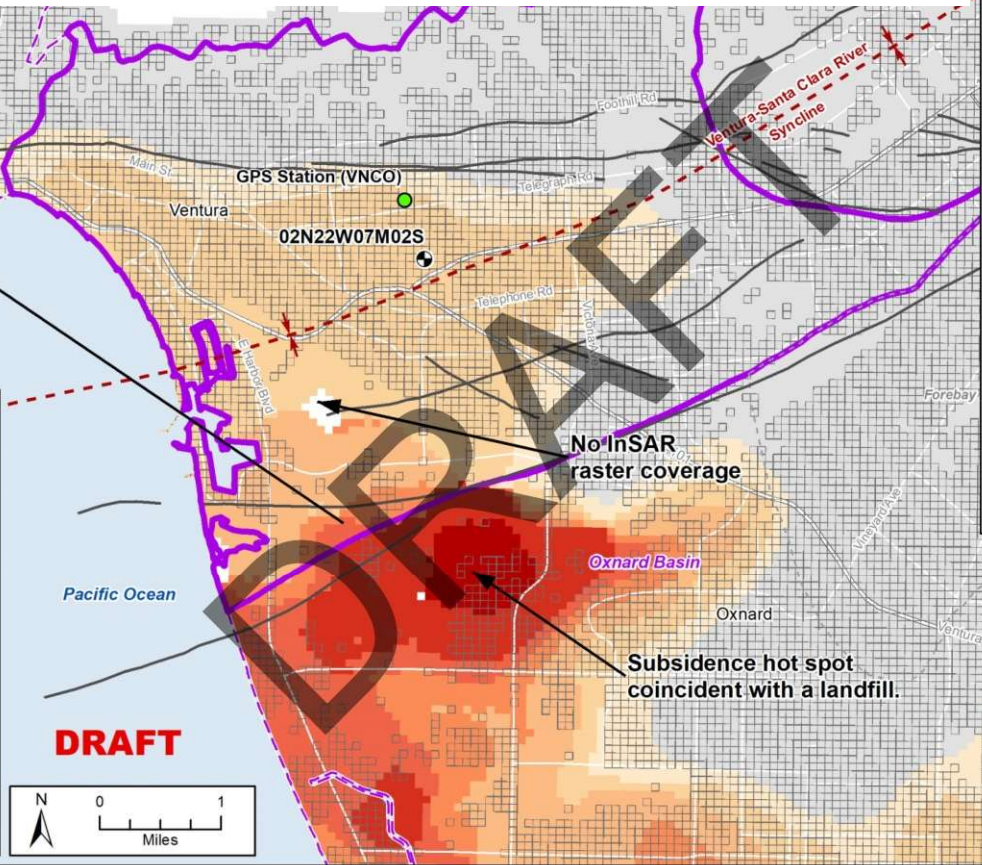
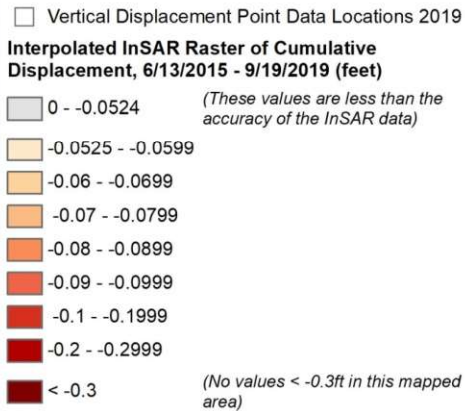
LAND SUBSIDENCE

**LAND SUBSIDENCE IS BELIEVED TO BE
 PRIMARILY THE RESULT OF TECTONIC ACTIVITY,
 NOT GROUNDWATER WITHDRAWAL**

Note: InSAR accuracy for the period shown is 0.0525 feet. InSAR results less than this value are not considered to be evidence of actual subsidence.

Areas outside of the InSAR point data grid do not have raw data. The raster values shown are interpolated from surrounding areas and are significantly influenced by a subsidence hot spot located in the Oxnard Basin that is coincident with a landfill. Therefore the elevated subsidence values shown in this area are not considered to be representative of actual subsidence in the Mound Basin.

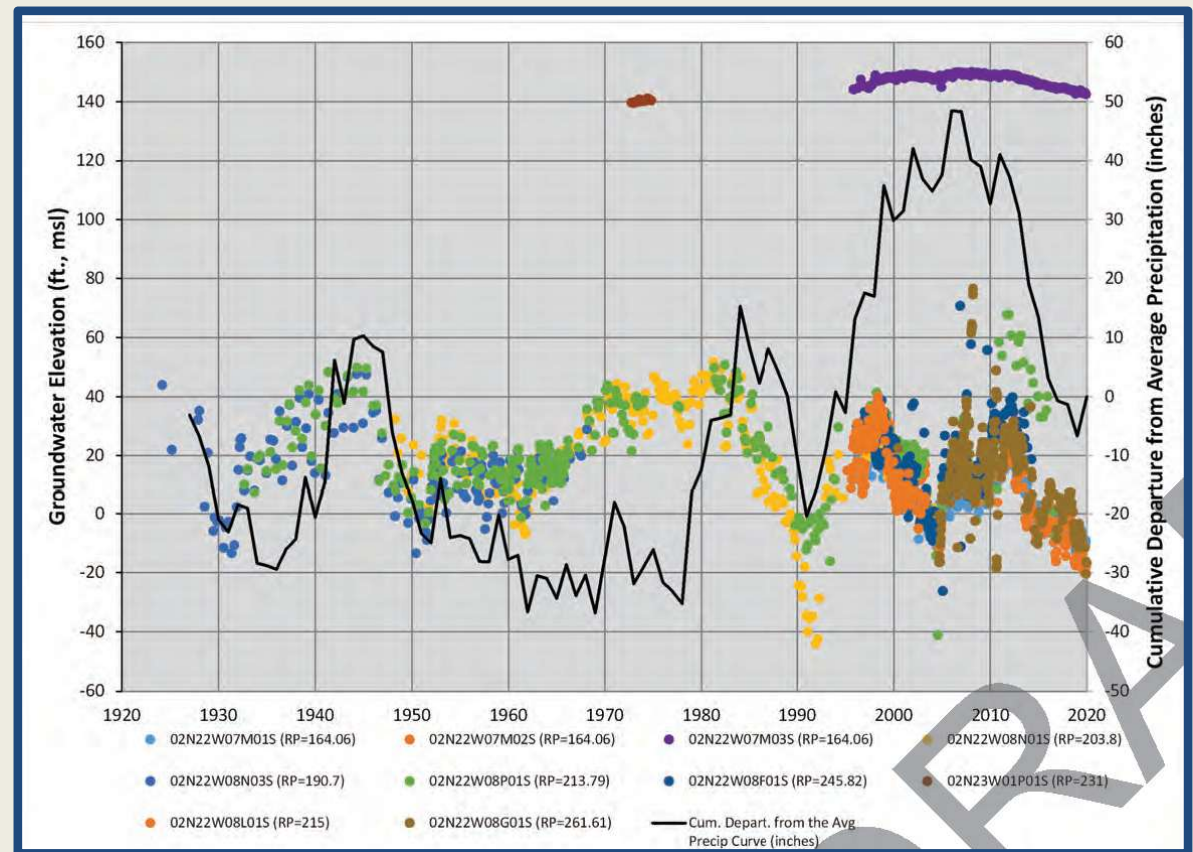
InSAR Subsidence Layers



- Mound Basin
- Approximate Trace of Fault
- Axis of syncline, dashed where approximate

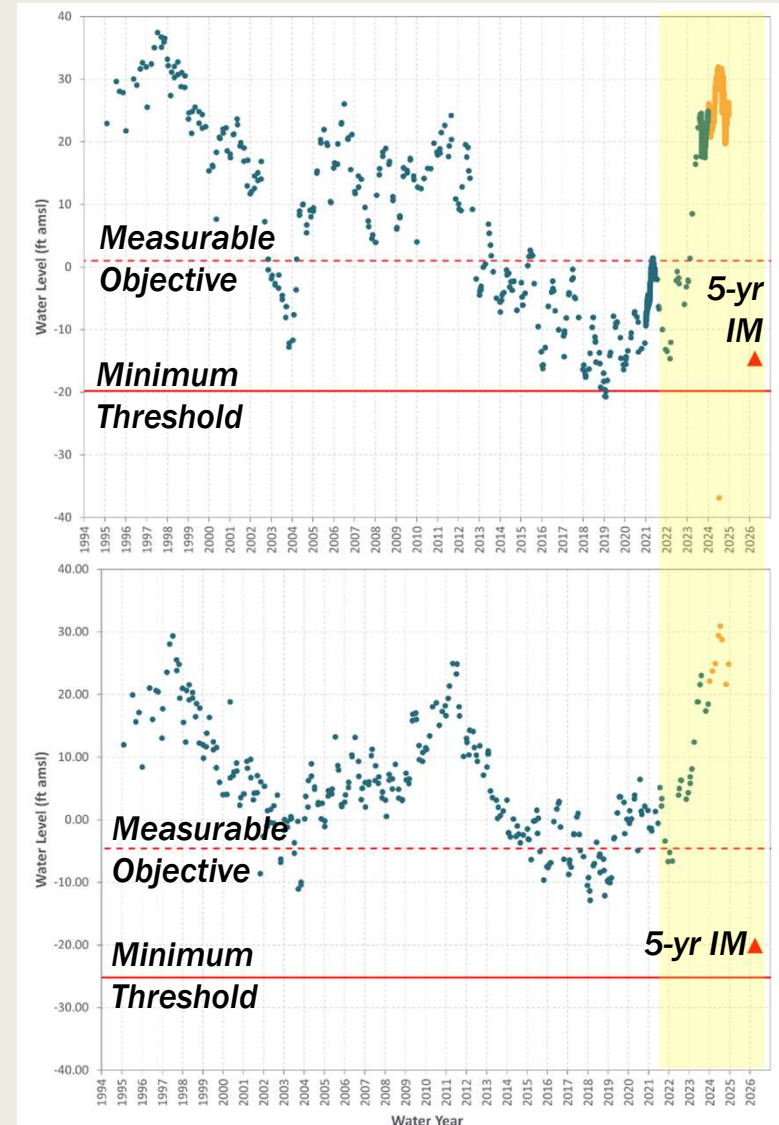
GROUNDWATER ELEVATIONS SUGGEST BASIN IS IN BALANCE

- *Groundwater levels have historically risen and fallen in sync with climatic trends.*
- *Chronic lowering of groundwater levels or long-term reduction of groundwater storage has not been observed.*

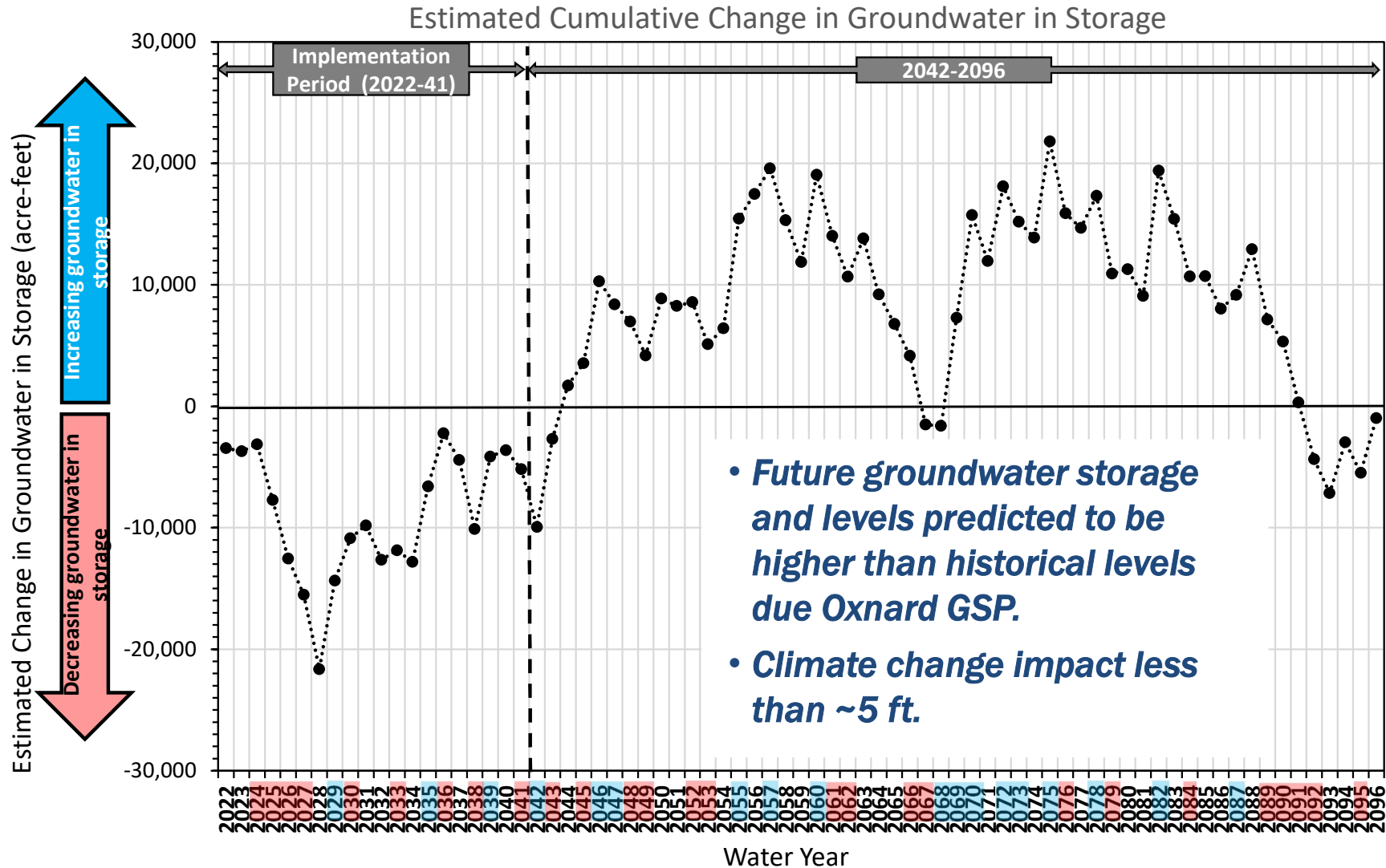


GROUNDWATER ELEVATIONS POST-GSP

- ***Groundwater levels recovered from drought that existed during GSP development.***
- ***Supports basin balance conclusion.***
- ***Measurable Objective and 5-YR Interim Milestones Met***



GSP PROJECTED BASIN STORAGE WITH CLIMATE CHANGE



UPDATED PUMPING PROJECTIONS

- Projected groundwater pumping 29% to 62% less than GSP.
- Basin was already projected to be in balance.
- Updated modeling not necessary for this periodic evaluation.

| Type | GSP Average Pumping (AFY) | Updated Projection (AFY) |
|--------------|---------------------------|--------------------------|
| City | 4,000 | 0 - 2,462 |
| Ag | 3,300 | 2,700 |
| Other | 161 | 106 |
| Total | 7,461 | 2,806 - 5,268 |

SECTION 5

MONITORING NETWORKS

GSP

■ Contents

- Groundwater Level Monitoring Network
- Groundwater Quality & Seawater Intrusion Monitoring Network
- Land Subsidence Monitoring Network

■ Actions

- Implement monitoring
- Drill MW-A and MW-B
- Optional MW-C

Periodic Evaluation

- No changes anticipated
- No changes anticipated
- No changes anticipated

- Monitoring implemented
- MW-A drilled; MW-B pending
- Applied for grant

SECTION 6

PROJECTS / MANAGEMENT ACTIONS

GSP

■ Contents

- Drill New Monitoring Wells
- Shallow GW Level Monitoring
- Seawater Contingency Plan
- Land Subsidence Contingency Plan
- Groundwater Quality Protection Measures

Periodic Evaluation

- MW-A drilled; MW-B in progress
- Shallow GW monitoring implemented
- Optional actions deferred due to rising GW levels & decreased pumping

SECTION 7

GSP IMPLEMENTATION

GSP

- **Contents**
 - **GSP Implementation Costs**
 - **GSP Implementation Schedule**

Periodic Evaluation

- **Update costs and schedule based on latest information**



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

DWR GSP RECOMMENDED CORRECTIVE ACTIONS



GSP RECOMMENDED CORRECTIVE ACTION NO. 1

RCA

Investigate the hydraulic connectivity of the Santa Clara River, the shallow alluvial deposits, and the principal aquifers. Update discussion of the potential for management of the principal aquifers to address interconnected surface water (ISW) depletion.

Status

GSP included a shallow groundwater monitoring program and construction of two monitoring wells.

Shallow groundwater monitoring ongoing and 1/2 monitoring wells completed.

GSP RECOMMENDED CORRECTIVE ACTION NO. 2

RCA

Clarify projected water budgets with respect to availability of surface water and impact on groundwater pumping.

Status

Additional context will be provided in PE report concerning City of Ventura's water supply portfolio. City unlikely to increase pumping due to WaterPure project and Mound Basin water quality.

GSP RECOMMENDED CORRECTIVE ACTION NO. 3

RCA

Provide further justification for water quality undesirable results definition or amend.

Status

To be addressed during PE development.

GSP RECOMMENDED CORRECTIVE ACTION NO. 4

RCA

Provide further justification for groundwater levels undesirable results definition or amend.

Status

To be addressed during PE development.

GSP RECOMMENDED CORRECTIVE ACTION NO. 5

RCA

Develop sustainable management criteria for depletions of ISW.

Use DWR ISW guidance, as appropriate.

Status

To be addressed during PE development.

DWR ISW guidance not finalized.

GSP RECOMMENDED CORRECTIVE ACTION NO. 5 (CONTINUED)

RCA

Continue filling data gaps & monitoring of ISW.

Collaborate with regulatory agencies and interested parties concerning identification of surface water beneficial uses.

Status

Monitoring was proposed in GSP and is being implemented.

Stakeholder engagement plan was updated.

Targeted outreach was performed in early December.



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

SHALLOW GROUNDWATER MONITORING RESULTS





MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

Q&A & FEEDBACK



PLEASE STAY ENGAGED!

- Track status at:

<https://www.moundbasingsa.org/>

- Join the MBGSA Interested Parties List:

<https://www.moundbasingsa.org/contact-us/>

- Email inquiries to: Jackie Lozano

admin@moundbasingsa.org

Mound Subbasin (4-004.03) Updated Evaluation of Interconnected Surface Water

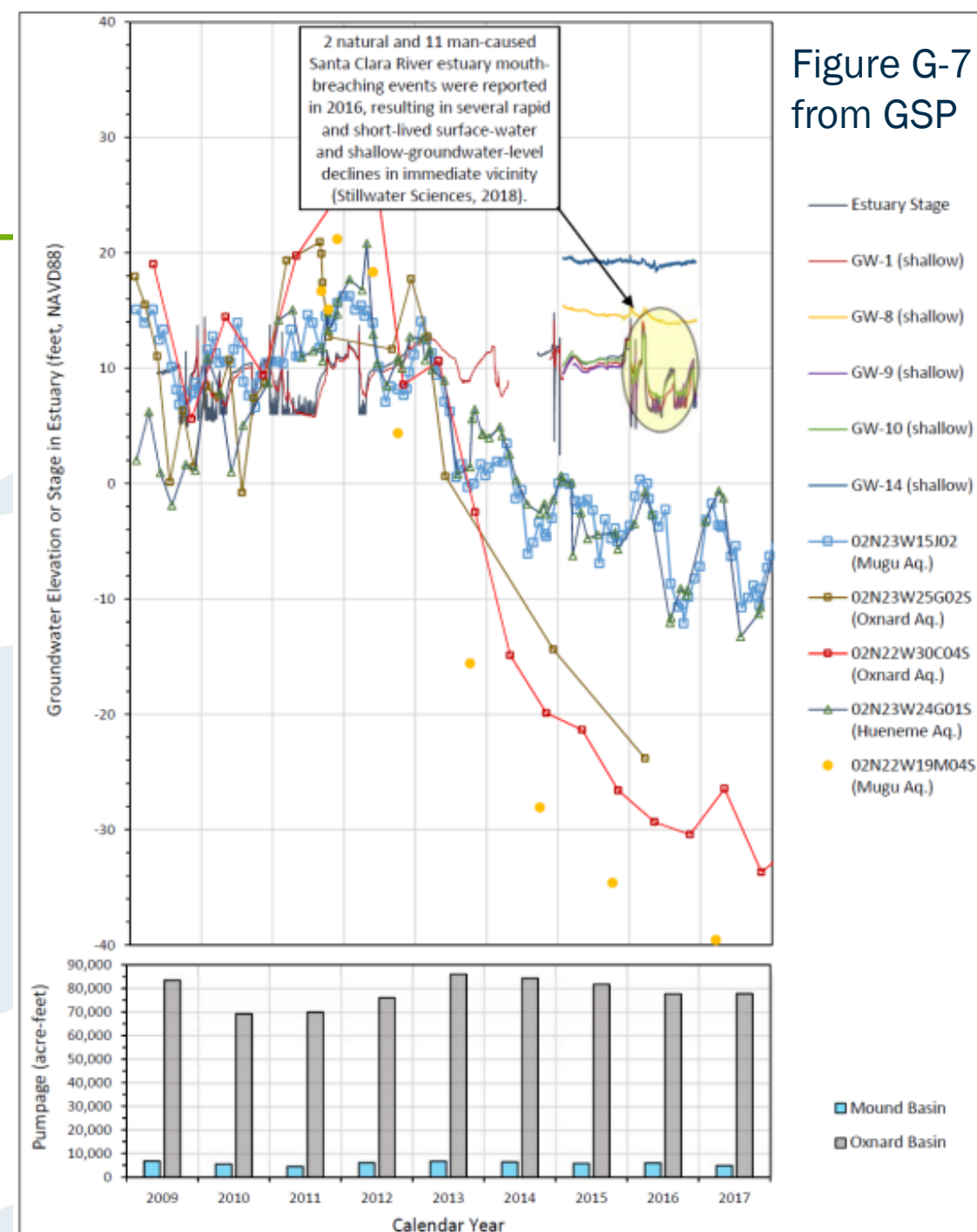
Presented to Mound Subbasin Groundwater
Sustainability Agency

December 18, 2025



Summary of GSP Findings

- Surface water features in the Subbasin:
 - Santa Clara River and its estuary
 - Smaller barrancas that convey storm flows
- GSP found **no direct depletion of surface waters**, based on:
 - Hydrogeologic Conceptual Model
 - Measured groundwater levels
 - Numerical groundwater flow model results
- GSA planned to confirm this finding with new data obtained from a planned monitoring well.



New Information Collected Since Adoption of the GSP





Groundwater Elevation Data

- New clustered Monitoring well located near SCORE:
 - 02N23W23Q03S – Shallow Alluvial Deposits
 - 02N23W23Q02S – Mugu Aquifer
 - 02N23W23Q01S – Hueneme Aquifer
 - **Direct measure of relationship between shallow alluvial deposits and principal aquifers**
- Higher-frequency groundwater level data characterizing sub-seasonal variations
- Periodic groundwater quality sampling

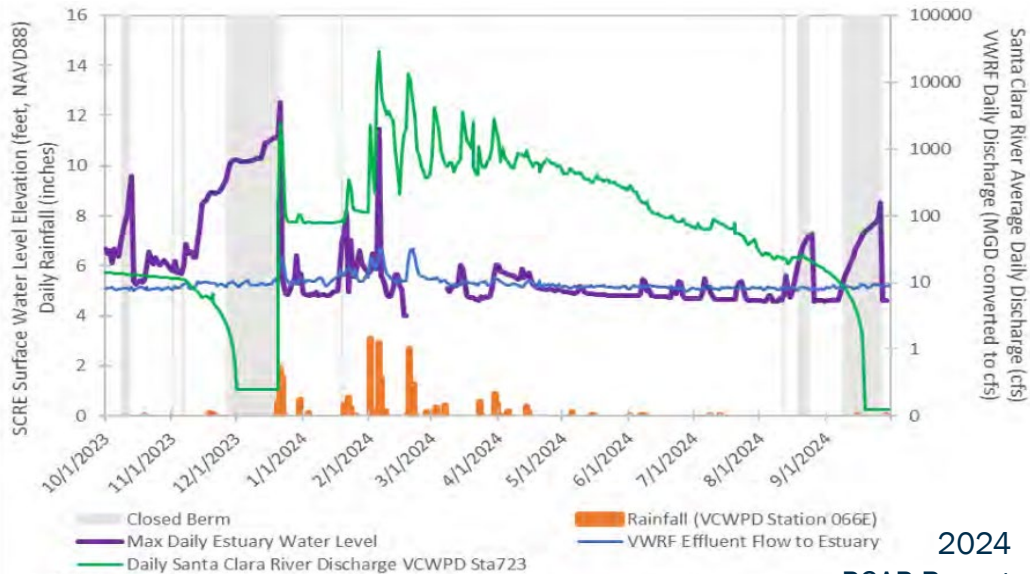
Santa Clara River Estuary Conditions

- City of Ventura Pre-Construction Assessment Program (PCAP)
 - Regular monitoring of physical and ecological conditions of the Santa Clara River Estuary
 - Regular estuary water quality sampling (organic

New Information Collected Since Adoption of the GSP

-  Shallow monitoring well
-  Wastewater Discharges
-  Santa Clara River Flows
-  Discharges to Pacific Ocean

- Three primary drivers of estuary conditions:
 - Santa Clara River Flows
 - Discharges from Ventura Water Reclamation Facility
 - **Berm Status**



2024
PCAP Report

- Notes:
1. Estuary water surface level continuous monitoring displays data from the northern levellogger for WY2024.
 2. Ventura County Watershed Protection District WY2024 Santa Clara River Sta723 (Victoria Avenue Bridge) discharge data are preliminary.
 3. Values of 0 cfs river streamflow are shown as 0.1 cfs because of the logarithmic scale of the y-axis.



Ventura Water PCAP
Aerial Imagery and
Satellite Imagery
collected for Habitat Mapping




GIS Specialist:
actare
Preparation Date:
2/7/2023

0 500 1,000
Feet
1 in = 1,400 feet
Projection: Ca. Stateplane, Zone 6
Datum: NAD 83

Groundwater Data Evaluated for the Current Study

Shallow Alluvial Deposits

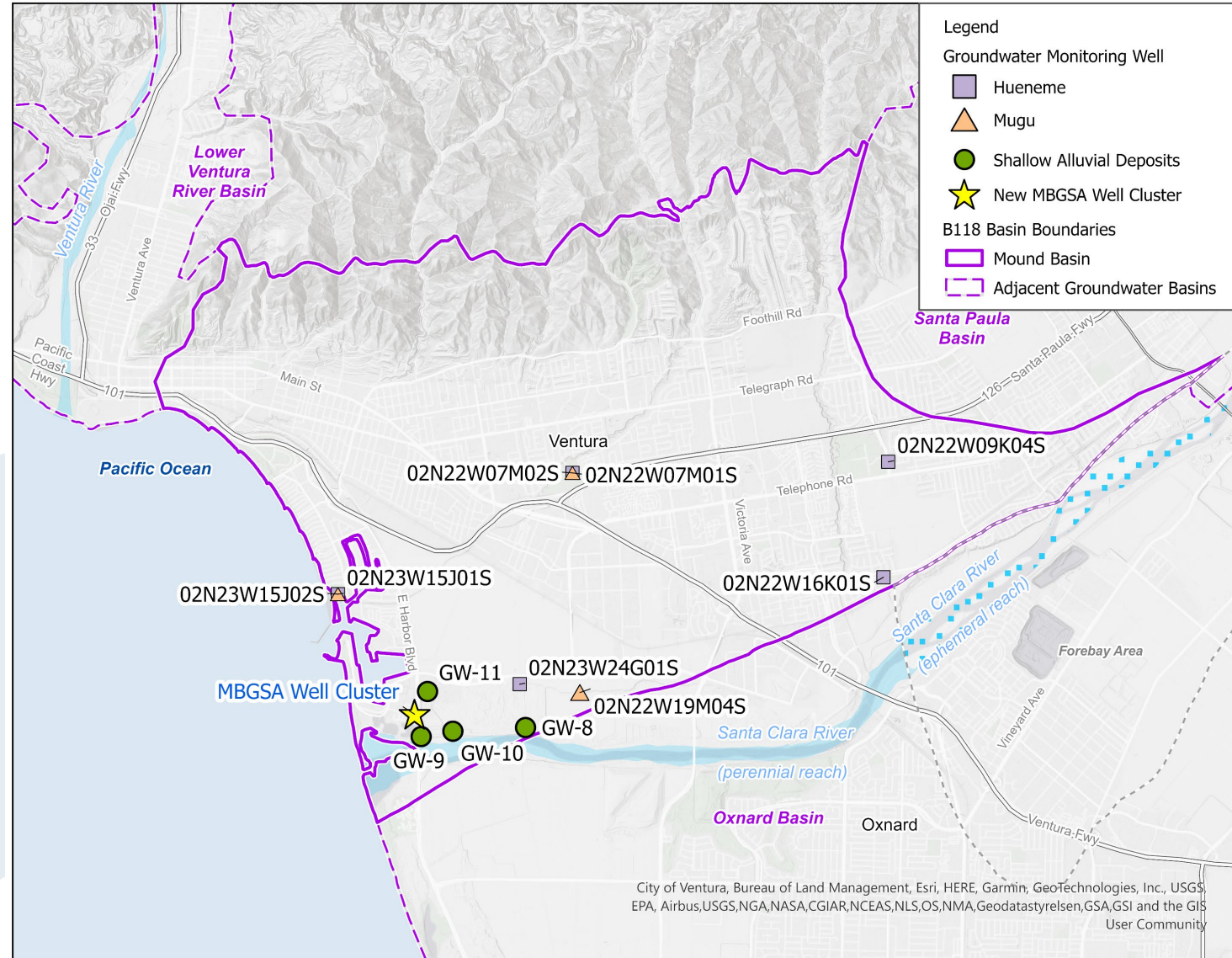
- 5 wells, located proximal to Santa Clara River and its estuary

Mugu Aquifer

- 4 wells, distributed across the Subbasin

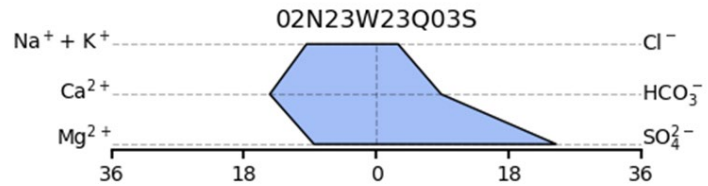
Hueneme Aquifer

- 6 wells, distributed across the Subbasin

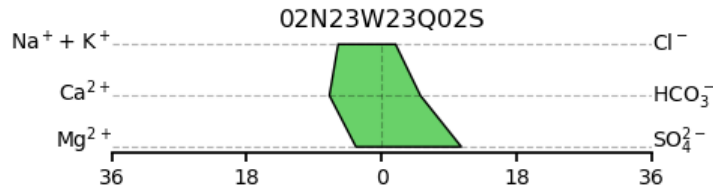


MBGSA Clustered Well Groundwater Elevations and Quality

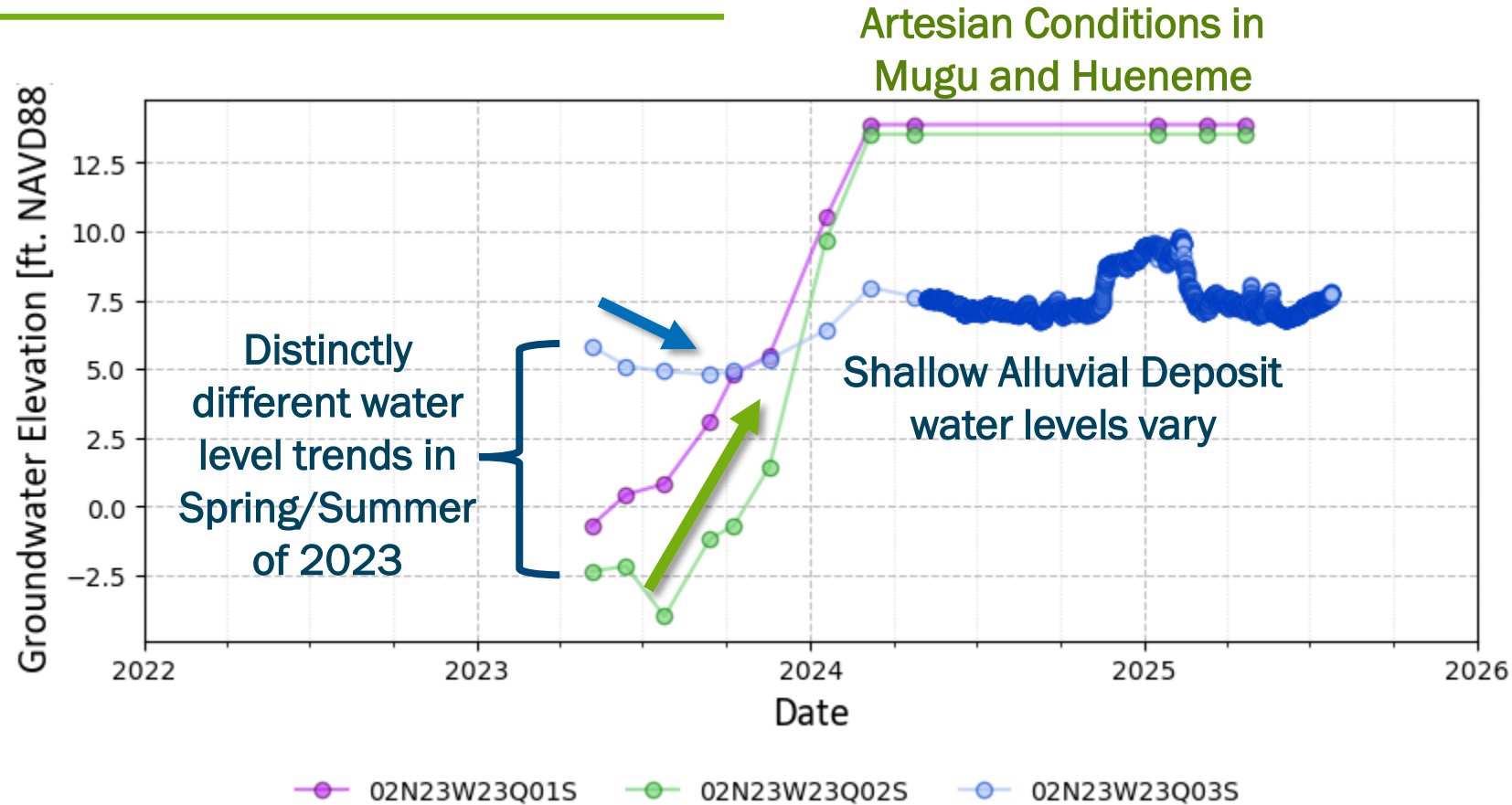
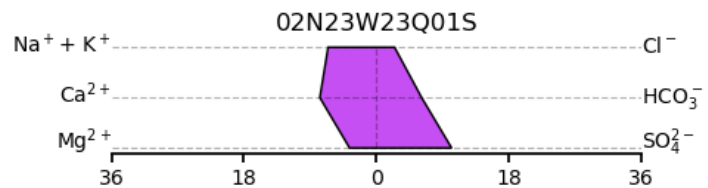
Shallow Alluvial Deposits



Mugu Aquifer

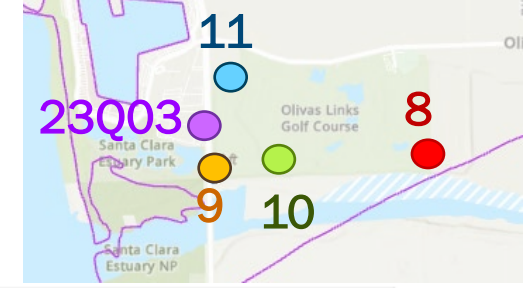


Hueneme Aquifer



Shallow alluvial deposits and principal aquifers show distinct differences in water quality and groundwater elevations.

Shallow groundwater conditions vary along the Santa Clara River

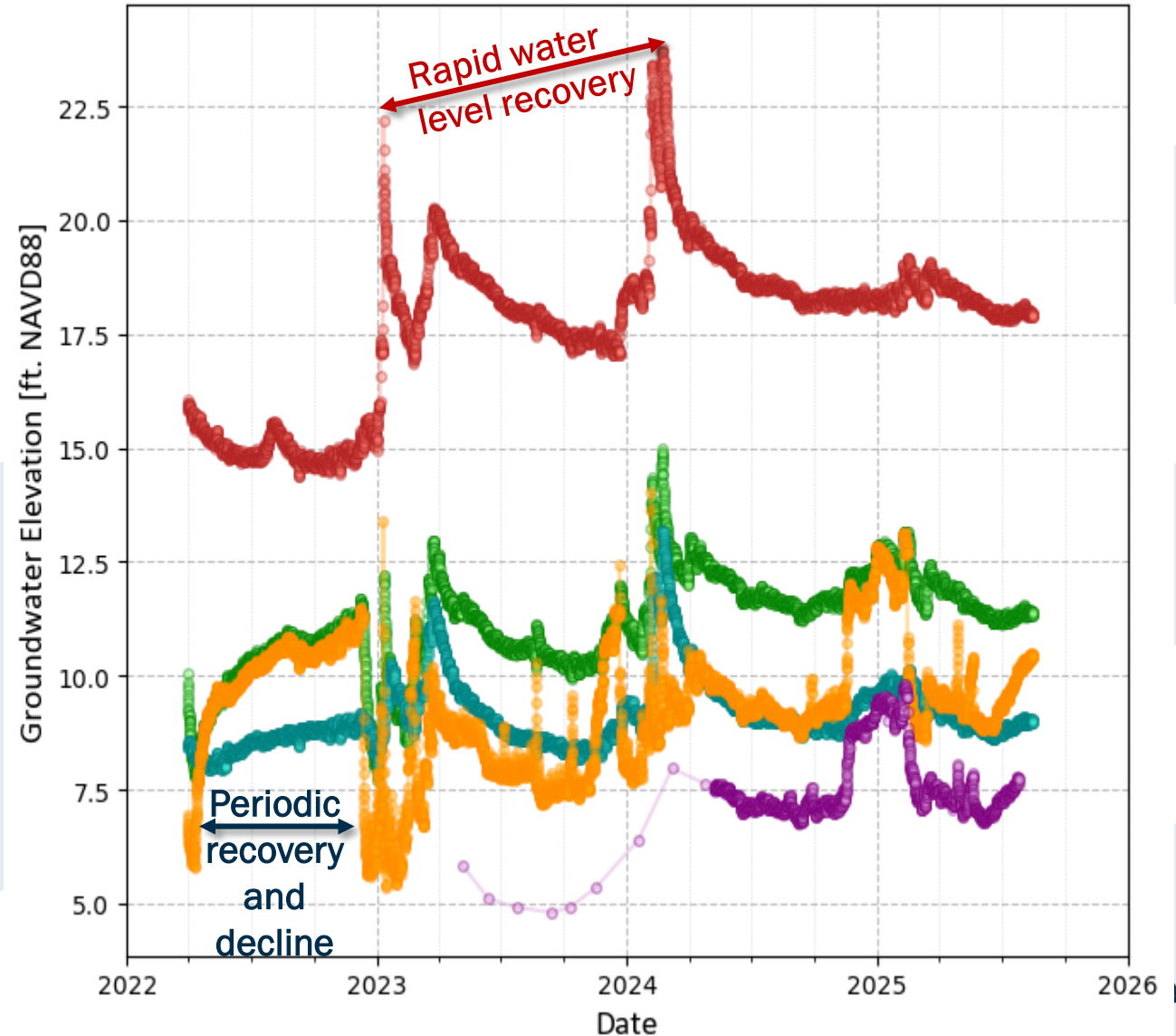


Far from estuary (at MW8):

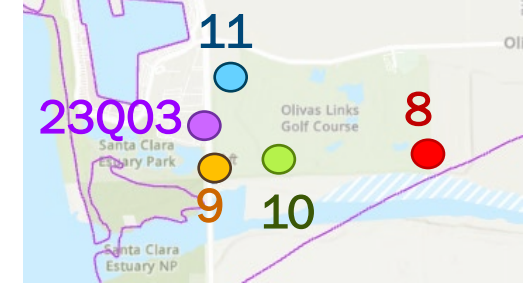
- Rapid increase in winter months
- Gradually decline through spring into fall

Near the estuary (MWs 9-11, 23Q03)

- Rapid increase in winter months, similar to those measured at MW8
- Periodic water level recoveries followed by rapid declines.
 - Timing is not correlated with trends measured at MW8



Shallow groundwater conditions vary along the Santa Clara River

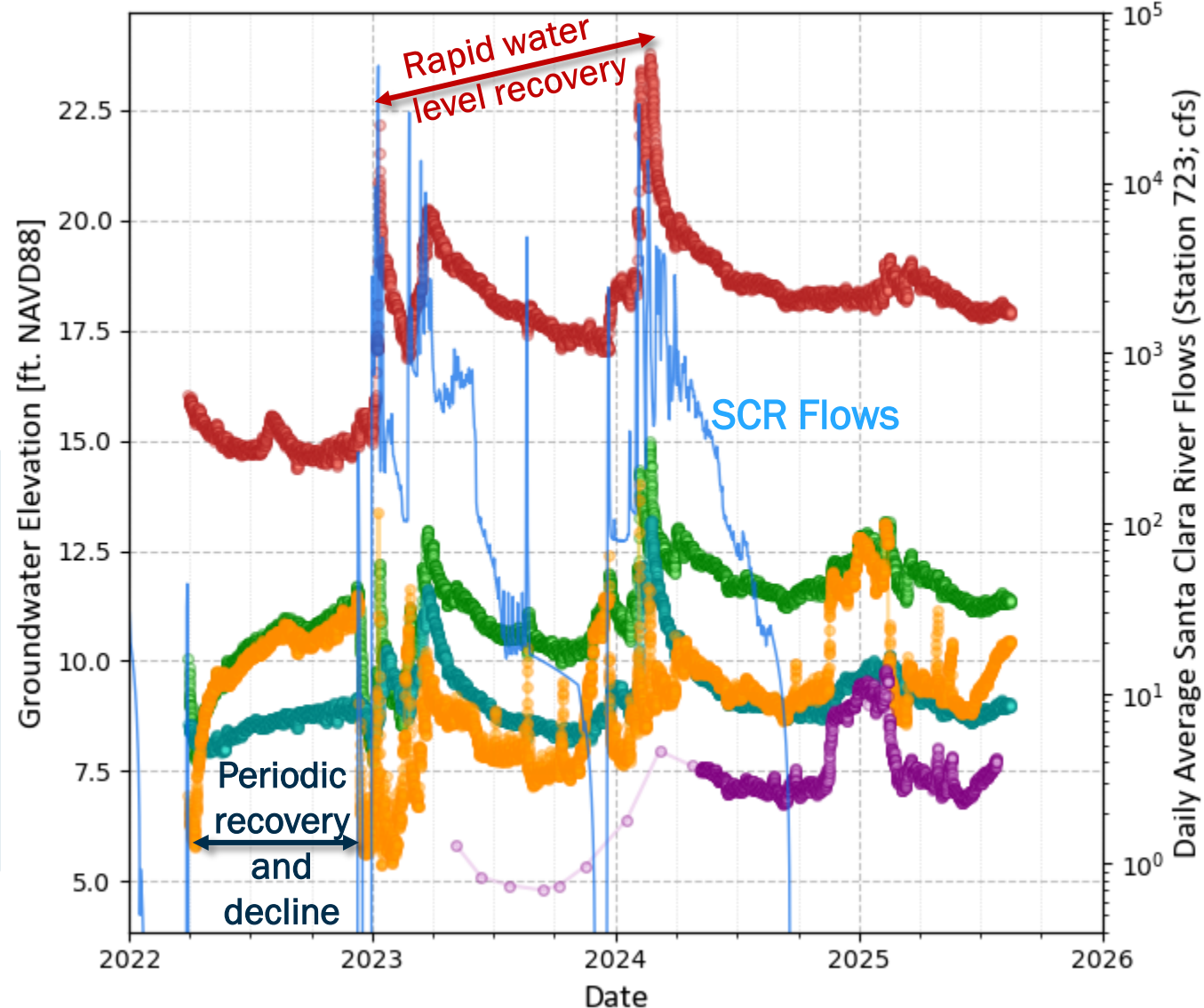


Far from estuary (at MW8):

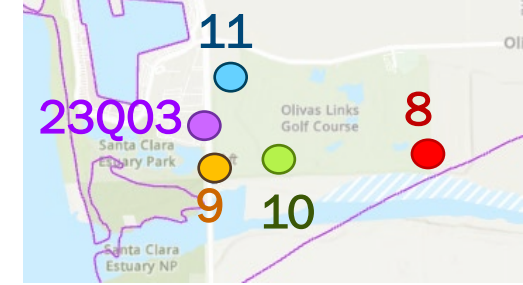
- Rapid increase in winter months
- Gradually decline through spring into fall
 - ✓ Driven by flows in Santa Clara River

Near the estuary (MWs 9-11, 23Q03)

- Rapid increase in winter months, similar to those measured at MW8
- Periodic water level recoveries followed by rapid declines.
 - Timing is not correlated with trends measured at MW8



Shallow groundwater conditions vary along the Santa Clara River

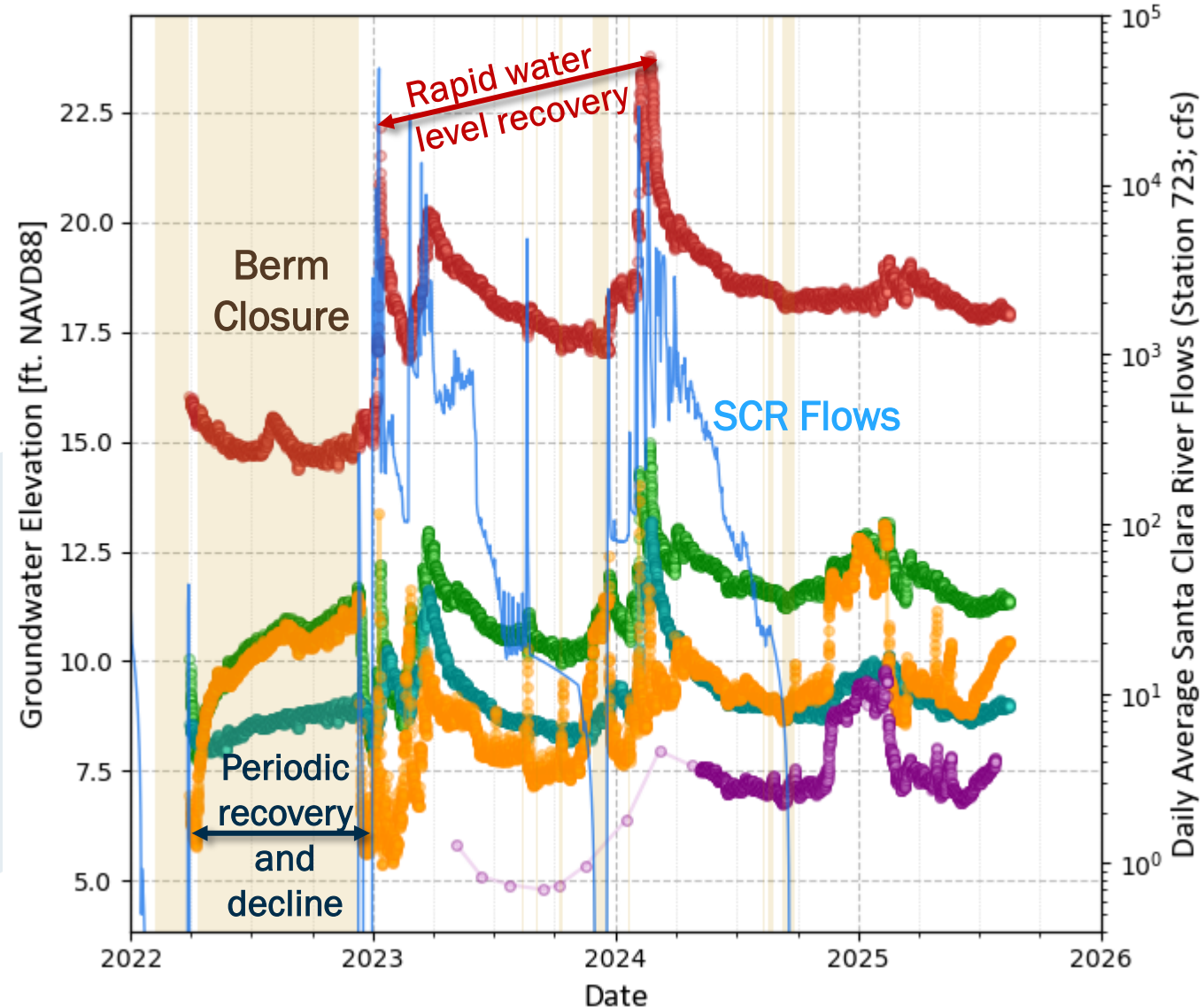


Far from estuary (at MW8):

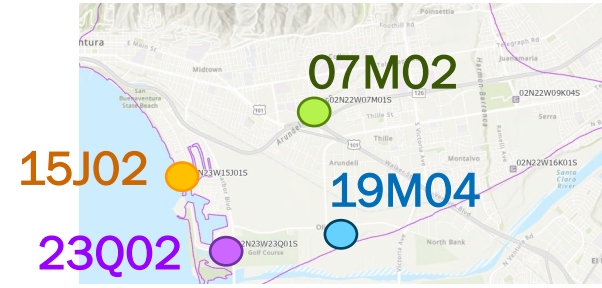
- Rapid increase in winter months
- Gradually decline through spring into fall
 - ✓ Driven by flows in Santa Clara River

Near the estuary (MWs 9-11, 23Q03)

- Rapid increase in winter months, similar to those measured at MW8
- Periodic water level recoveries followed by rapid declines.
 - Timing is not correlated with trends measured at MW8
 - ✓ Periodic water level recoveries and rapid declines driven by berm status



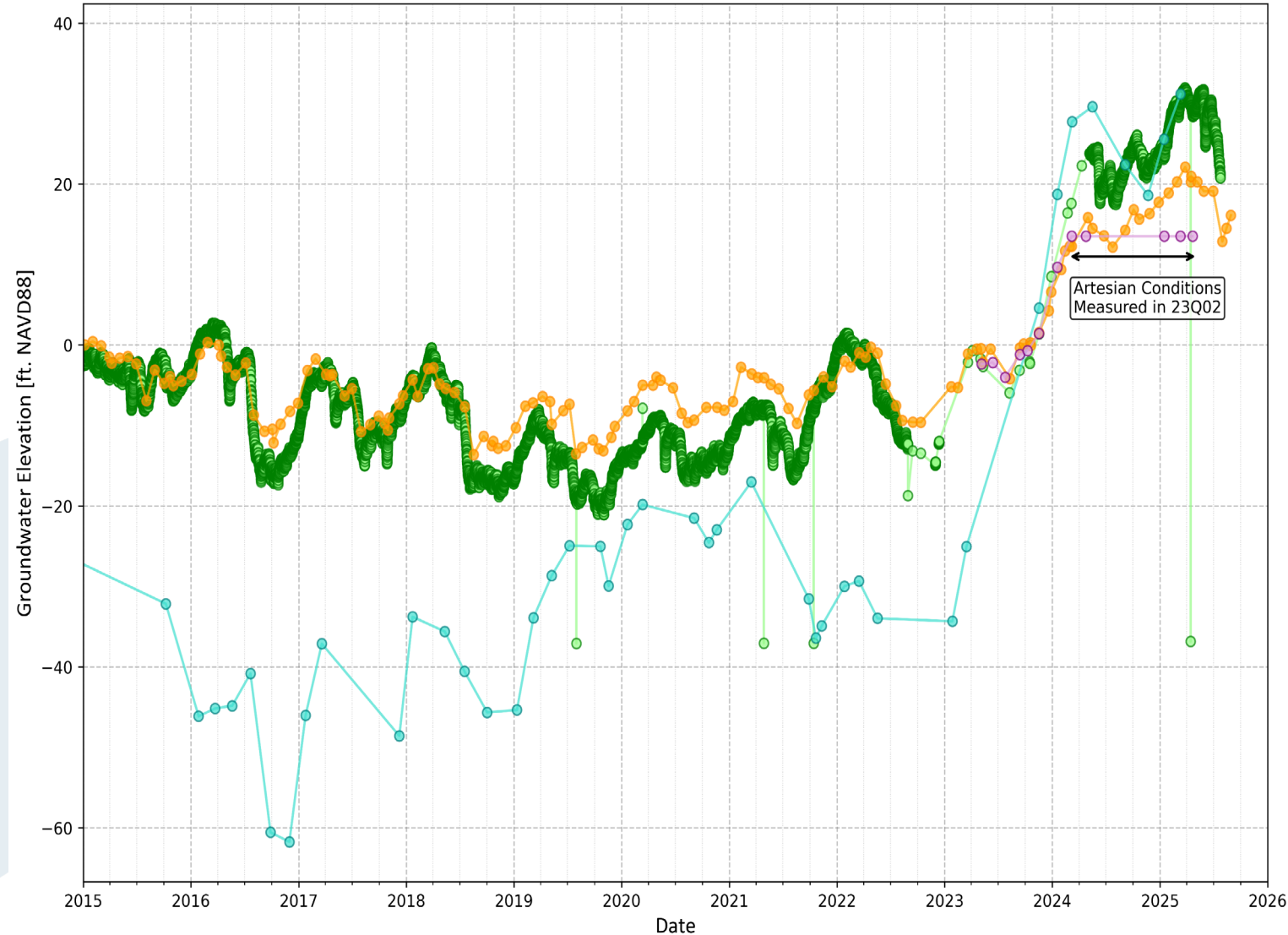
Principal Aquifer Groundwater Levels



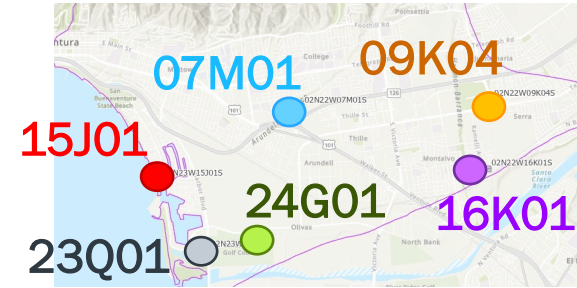
Mugu Aquifer:

- Trends are consistent across the Subbasin.
 - Gradual decline from 2015 through 2019.
 - Large (50 to 80 foot) 2020 through 2024

Groundwater Elevations in the Mugu Aquifer



Principal Aquifer Groundwater Levels



Mugu Aquifer:

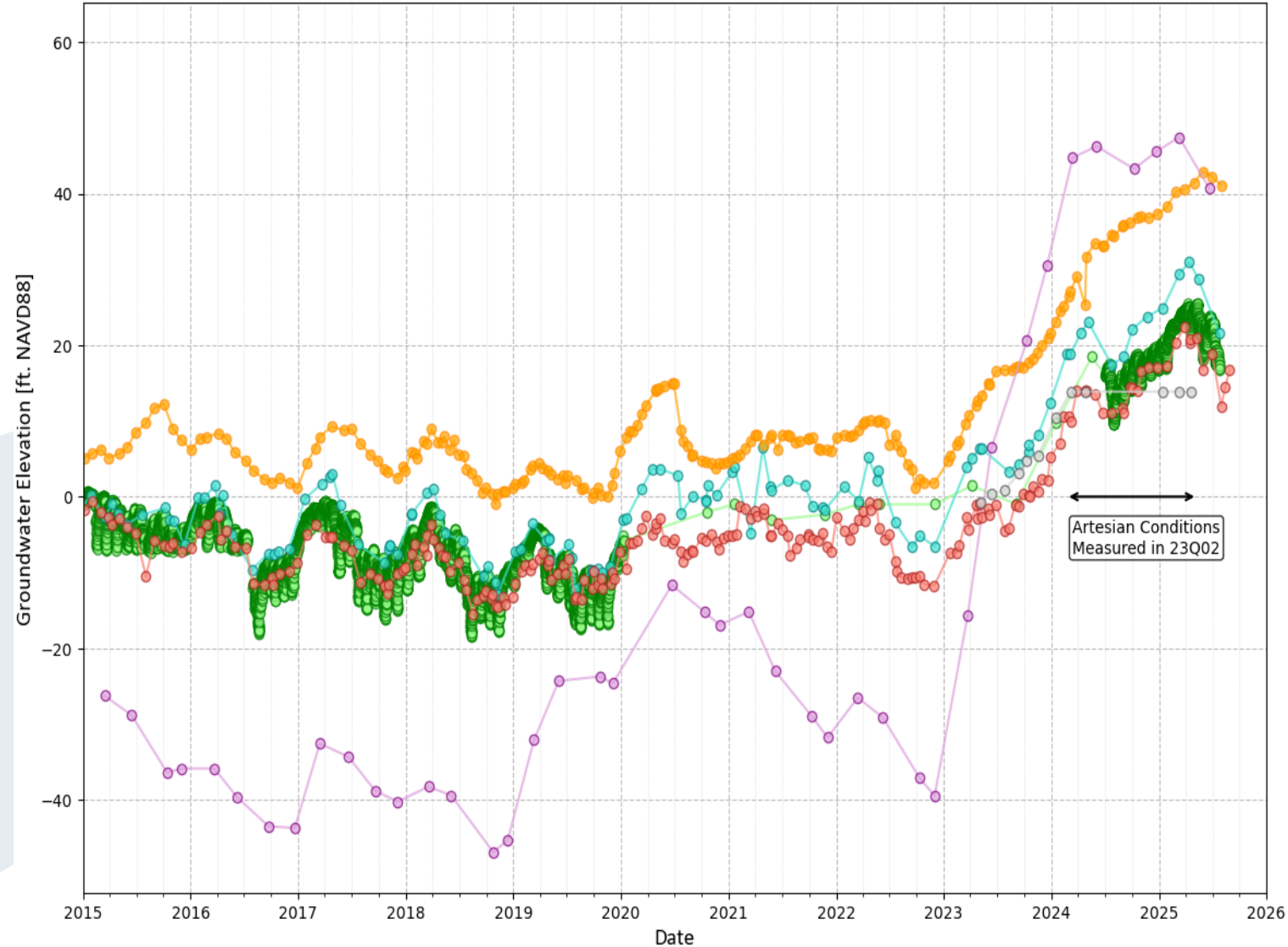
- Trends are consistent across the Subbasin.
 - Gradual decline from 2015 through 2019.
 - Large (50 to 80 foot) 2020 through 2024

Hueneme Aquifer:

- Trends are consistent across the Subbasin.
 - ~Stable from 2015 through 2022.
 - Large (50 to 80 foot) recoveries 2023 through 2024

No signature of water level variability observed in the shallow alluvial deposits

Groundwater Elevations in the Hueneme Aquifer



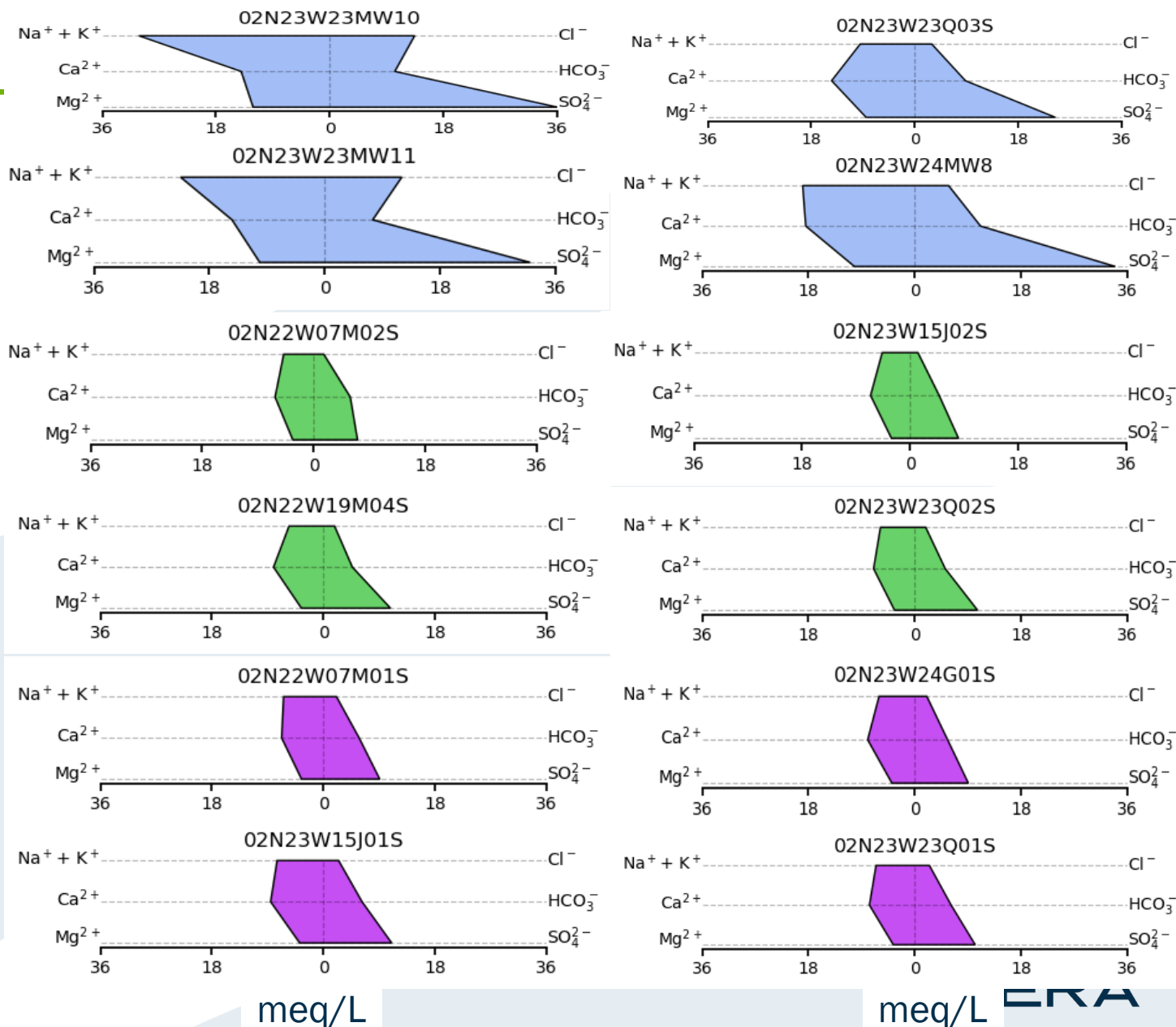
Groundwater Quality

- Shallow alluvial deposits have much **higher salinity** than the Mugu and Hueneme aquifers
- Water-quality patterns indicate **limited exchange** between the shallow alluvial deposits and principal aquifers near Santa Clara River and its estuary

Shallow
Alluvial
Deposits

Mugu

Hueneme



Summary

- Groundwater level data collected since adoption of the GSP demonstrate that the shallow alluvial deposits are hydraulically disconnected from the Mugu and Hueneme aquifers.
 - Supported by measured differences in water quality composition
- City of Ventura PCAP monitoring indicates that groundwater conditions in the shallow alluvial deposits are driven by hydrologic conditions and physical status of the berm that separates the estuary from the Pacific Ocean.
- ✓ Data confirms that there is no direct depletion of surface water from the Subbasin.