



Post Office Box 3544
Ventura, CA 93006-3544
(805) 525-4431
<https://moundbasingsa.org>

**NOTICE IS HEREBY GIVEN that the
Mound Basin Groundwater Sustainability Agency (“Agency”)
Board of Directors (“Directors”) will hold a
REGULAR BOARD MEETING
at 1:00 P.M. on
Thursday, August 20, 2020**

In accordance with the **California Governor’s Executive Stay at Home Order** and the **County of Ventura Health Officer Declared Local Health Emergency** and **Be Well at Home Order** resulting from the novel coronavirus (COVID-19), the Ventura City Hall is closed to the public. Therefore, the Mound Basin GSA will hold its Regular Board of Directors meeting virtually using the Zoom video conferencing application.

If you are new to Zoom,
please click on this link and watch the short video tutorial:
<https://support.zoom.us/hc/en-us/articles/201362193-How-Do-I-Join-A-Meeting->

To participate in the Board of Directors meeting via Zoom, please access:
<https://us02web.zoom.us/j/84384530467>

Meeting ID: 843 8453 0467
To call into the meeting (audio only), call: 1 888 788 0099 US Toll-free
Meeting ID: 843 8453 0467

MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY
BOARD OF DIRECTORS MEETING AGENDA

CALL TO ORDER 1:00 P.M.

1. PLEDGE OF ALLEGIANCE

2. ROLL CALL

3. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

The Board will receive public comments on items not appearing on the agenda and within the subject matter jurisdiction of the Agency. The Board will not enter into a detailed discussion or take any action on any items presented during public comments. Such items may only be referred to the Executive Director or other staff for administrative action or scheduled on a subsequent agenda for discussion. Persons wishing to speak on specific agenda items should do so at the time specified for those items. In accordance with Government Code § 54954.3(b)(1), public comment will be limited to three (3) minutes per speaker.

4. APPROVAL OF AGENDA
Motion

5. Executive (Closed) Session 1:05p.m.

5a Conference with Legal Counsel – Anticipated Litigation:

Consideration of initiation of litigation pursuant to Paragraph (4) of Subdivision (d) of Government Code § 54956.9: Three cases.

6. SECOND OPEN SESSION CALL TO ORDER 1:45 P.M.

**6a Oral Report Regarding Executive (Closed) Session
Information Item**

Presented by Agency Legal Counsel Joseph Hughes

7. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered routine by the Board and will be enacted by one motion. There will be no separate discussion of these items unless a Board member pulls an item from the Calendar. Pulled items will be discussed and acted on separately by the Board. Members of the public who want to comment on a Consent Calendar item should do so under Public Comments. (ROLL CALL VOTE REQUIRED)

7a Approval of Minutes

Motion

The Board will consider approving the Minutes from the July 16, 2020, Regular Mound Basin GSA Board of Directors meeting.

7b Approval of Warrants

Motion

The Board will consider approving payment of outstanding vendor invoices.

7c Monthly Financial Reports

Information Item

The Board will receive monthly profit and loss statements and balance sheets for the month of July 2020.

8. BOARD MEMBER ANNOUNCEMENTS

8a Directors will provide updates on matters not on the agenda.

8b Directors will provide oral reports of time spent on grant eligible activities since the previous regular Board meeting.

9. EXECUTIVE DIRECTOR UPDATE

Information Item

Executive Director will provide an informational update on non-Groundwater Sustainability Plan (GSP) activities since the previous Board meeting.

10. INFORMATION ITEM

**10a Groundwater Model Presentation
Information Item**

The Board will receive a presentation from United Water Conservation District staff concerning groundwater model development.

11. MOTION ITEMS

**11a GSP Monthly Update (Grant Category (c), Task 3 and Category (d), Task 4)
Motion**

The Board will receive an update from the Executive Director concerning development of the Agency's Groundwater Sustainability Plan and grant status. The Board may provide feedback or direction to staff.

**11b Sustainability Goal (Grant Category (d), Task 4)
Motion**

The Board will consider approving the sustainability goal for the Agency's Groundwater Sustainability Plan.

**11c Sustainable Management Criteria Screening (Grant Category (d), Task 4)
Motion**

The Board will review sustainable management criteria screening results and consider providing feedback to staff.

**11d GSP Stakeholder Workshop Webinar Agenda (Grant Category (c), Task 3)
Motion**

The Board will discuss the draft agenda for Stakeholder Workshop No.1 and consider providing feedback to staff.

12. FUTURE AGENDA ITEMS

ADJOURNMENT

The Board will adjourn to **Special Board Meeting** scheduled for Thursday, **September 3, 2020** or call of the Chair. The next **Regular Board Meeting** is scheduled for Thursday, **September 17, 2020**.

Materials, which are non-exempt public records and are provided to the Board of Directors to be used in consideration of the above agenda items, including any documents provided subsequent to the publishing of this agenda, are available for inspection at UWCD's offices at 1701 North Lombard Street in Oxnard during normal business hours.

The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied the benefits of, the District's services, programs, or activities because of any disability. If you need special assistance to participate in this meeting, or if you require agenda materials in an alternative format, please contact the Mound Basin Clerk of the Board at (805) 525-4431 or the City of Ventura at (805) 654-7800. Notification of at least 48 hours prior to the meeting will enable the Agency to make appropriate arrangements.

Posted: August 17, 2020 **(time)** 12:15 p.m. **(attest)** *Jackie Lozano*
At: <https://moundbasingsa.org>

Posted: August 17, 2020 **(time)** 12:30 p.m. **(attest)** *Jackie Lozano*
At: <https://www.facebook.com/moundbasingsa/>

Posted: August 17, 2020 **(time)** 12:45 p.m. **(attest)** *Jackie Lozano*
At: **United Water Conservation District, 1701 N. Lombard Street, Oxnard CA 93030**



MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY
REGULAR BOARD OF DIRECTORS MEETING and PUBLIC RATES HEARING

Thursday, July 16, 2020 | 1:00 PM
via Zoom, due to COVID-19 Meeting Protocol

DRAFT MINUTES

DIRECTORS IN ATTENDANCE:

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

STAFF IN ATTENDANCE:

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

PUBLIC IN ATTENDANCE:

Burt Handy
Cutis Hopkins, Hopkins Groundwater Consulting
Neal Maguire, Mound Basin Ag Water Group (MBAWG)
Kathleen Kuepper, UWCD
John Lindquist, UWCD
Jason Sun, UWCD

CALL TO ORDER 1:00 PM

Chair Mobley called the meeting to order at 1:00 PM.

1. PLEDGE OF ALLEGIANCE

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

2. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

Chair Mobley asked if there were any public comments.

For the consideration of the Board, Mr. Burt Handy presented his research and recommendation for a potential new water source and monitoring well near the City of Ventura's Sanjon Road facilities. He feels this is an area that has untapped groundwater resources.

Chair Mobley asked if Executive Director Bondy had any thoughts. Executive Director Bondy replied that MBGSA does not develop groundwater resources and suggested that Mr. Handy take up the question of a new production with the City of Ventura. He added that the area in question is not a priority for new monitoring well because there is no pumping in that part of the basin. He added that new monitoring wells should be prioritized in areas where there is pumping and located to monitor for seawater intrusion.

Chair Mobley asked Mr. Handy if there was anything he would like to add. Mr. Handy added that the area he presented as a source of potential water for the City of Ventura should be checked by the City to see if it is available. The presentation is attached for reference.

3. ROLL CALL

The Clerk of the Board called the roll. All Directors were present for the meeting.

4. BRIEF OVERVIEW OF ZOOM FEATURES

None were offered.

5. APPROVAL OF AGENDA

Motion

Chair Mobley requested going forward to move Item 3 Roll Call to Item 2, after the Pledge of Allegiance.

Executive Director Bondy recommended removing Item 10d (Past Due Groundwater Extraction Fees) from the agenda per Agency Counsel recommendation.

The Clerk advised the Board that Consent Calendar Items 6b Approval of Warrants and 6c Monthly Financial Reports were revised after the initial posting and distribution of the meeting packet. Revisions were distributed to the Board, posted on the website, and emailed to the public on July 15, 2020. Revised documents are attached to these Minutes for reference.

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

6. CONSENT CALENDAR

6a Approval of Minutes

Motion

The Board will consider approving the Minutes from the June 18, 2020, Regular Mound Basin GSA Board of Directors meeting and Public Rates Hearing.

6b Approval of Warrants

Motion

The Board will consider approving payment of outstanding vendor invoices.

6c Monthly Financial Reports

Information Item

The Board will receive the monthly profit and loss statements and balance sheets for the month of June 2020.

Chair Mobley had a question about the income received for groundwater extraction fees as listed on the income statement for the year. Does the statement include two billing cycles?

Executive Director Bondy responded he does not believe so. He explained that the amount reflects the July through December 2019 billing period only and that invoicing for the January through June 2020 period has not yet occurred. He further explained that the Agency is on accrual accounting, so revenue for the January through June 2019 billing period would not appear on the fiscal year 2019-2020 income statement. The revenue is booked based on the pumping period, not the invoicing date. Executive Director Bondy will verify with finance staff.

Chair Mobley asked since so under budget, why the City of Ventura is not extracting as much as the Agency budgeted for and asked if that is why there is a large discrepancy? Executive Director Bondy replied that it was his understanding that finance has yet to book the January through June time period yet, which has the lesser pumping of the two

periods. After further review, it was noted by Chair Mobley that the staff report for Item 6c confirmed the Executive Director's explanation.

No further comments or questions by the Directors.

No public comments were offered.

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

7. BOARD MEMBER ANNOUNCEMENTS

7a None offered.

7b Since the previous Board meeting, the Directors reported no time spent on grant eligible activities.

8. EXECUTIVE DIRECTOR UPDATE

Executive Director Bondy reviewed the staff report with the Board. There was nothing critical to report regarding administration, financial or legal activities. Currently, he is working with counsel on an approach to address unpaid extraction fees. He reported progress on the groundwater monitoring well. The City is agreeable to siting a monitoring well at the wastewater treatment plan and drill site has been identified. An Administrative Coastal Development Permit will be required from the City. The City Planning Department is developing an application for the Agency use for the permit application. Executive Director Bondy will follow up with the City Planning Department. Once the requirements are known, he will circle back with DWR to check if the Agency is still able to receive funding for the monitoring well under the Technical Support Services program.

Chair Mobley was wondering if the Agency will require Coastal Commission approval for the well. Executive Director Bondy responded that, because the City has a local coastal development plan, it will be the lead permitting agency. However, the Coastal Commission does review all applications and reserves the right to take over the approval process.

No further comments or questions by the Directors.

No public comments were offered.

9. INFORMATION ITEMS

9a **Mound Basin Study Presentation** **Information Item**

Curtis Hopkins of Hopkins Groundwater Consulting presented a preliminary review of study findings of the Mound Basin groundwater conditions and perennial yield to the Board. The presentation is attached for reference.

Upon conclusion of the presentation, Chair Mobley opened the floor for questions or comments. Board members had questions about the timeframe used to calculate the perennial yield, how perennial yield might compare to sustainable yield, and potential sources of dissolved constituents detected in groundwater samples from the Community Park well. Mr. Hopkins explained that the study period was 1985 through 2015 with 2005 starting to get into the dryer years.

Executive Director Bondy commented that perennial yield is different than the sustainable yield that the Agency is required to estimate for the GSP. He cautioned the Board and

stakeholders not to assume the numbers presented by Mr. Hopkins would necessarily be the sustainable yield. He explained that the sustainable yield will depend on how the MBGSA defines its sustainability goal and management criteria. He added that the GSP sustainable yield will also need to consider conditions in the different principle aquifers and other factors not addressed in a perennial yield analysis. Mr. Bondy also noted that the recent isotope study concluded that evaporite deposits in the aquifer are a likely cause of the dissolved constituents detected at the Community Park well.

Chair Mobley thanked Mr. Hopkins for the presentation.

No further comments or questions by the Directors.

No public comments were offered.

10. MOTION ITEMS

10a Groundwater Sustainability Plan Monthly Update (Grant Category (d), Task 4)

Motion

Executive Director Bondy reviewed the staff report with the Board and provided a summary. The GSP Development Team is currently wrapping up the hydrogeologic conceptual model (HCM) and groundwater conditions sections of the GSP, which will be posted to the website in the next few weeks. The second GSP newsletter is ready and will be sent out soon. The GSP development process is not shifting to the sustainable management criteria (SMCs).

Executive Director Bondy has been meeting with UWCD staff concerning groundwater model development status. UWCD staff has been busy working on extending the regional groundwater model to include the Santa Paula, Fillmore, and Piru basins. The new model will better simulate groundwater flow from the Santa Paula Basin into the Mound Basin and other changes affect recharge in the Oxnard Forebay area, which has some influence in the Mound Basin. UWCD staff recommends, if possible, to wait for the updated version for analysis. However, there is some uncertainty regarding when the updated model will be done. If UWCD needs more time, then the Agency will use the existing model that does not include the Santa Paula, Fillmore, and Piru basins and then evaluate updating the work later.

Executive Director Bondy asked the Board to provide comments, questions, and approval to move forward on the release of the draft newsletter attached to the staff report.

Director Shephard provided comment regarding the model. UWCD is getting ready to perform model calibration and go through a peer review to get the system to work well. It was Director Shephard's understanding that UWCD staff would calibrate and self-certify to use for the GSP. There seems to be a sense of urgency with getting the GSP completed. Director Shephard asked if the Agency should wait for this process to proceed or use what is the most current? Executive Director Bondy replied that model peer review is in tandem. Those processes are coming together at the same time and UWCD has a version that the Agency can use for the GSP. The documentation will follow later. Executive Director recommended deciding no later than August whether to stick use the forthcoming or existing model.

Chair Mobley offered insight saying that UWCD staff discussed the model at their last board meeting and are obtaining feedback from experts. Things are moving along very well and hopefully the Agency will gain use of the model soon.

Regarding public outreach, there was a discussion about sending a bill stuffer with the City of Ventura's water bills. The bill stuffer would reach the general public, including

disadvantaged communities in the Basin. Director Rungren mentioned the cost of the mailing would be around \$2,500. The City's bills are split into two different time frames and because of different cycles and areas, Mound Basin covers a certain portion depending on water usage, so the Agency should plan on mailing the newsletter along with a map to all customers the Agency serves and have it ready soon. The timing of the mailing depends on how far a reach the Agency decides on. Chair Mobley mentioned there is an electronic version of the newsletter on the Agency's website. The format is simple and contains good and pertinent information. The mailing would not incur a huge expense. There is a need to reach out to disadvantaged communities. All the DACs are served by the city and this is one way to reach out to them and demonstrate the Agency has done that. Should also consider printing the newsletter two-sided and in Spanish and make the Board aware of the cost and update the budget mid-year. Executive Director Bondy will work with Director Rungren and her staff on a bill stuffer.

Director Chambers asked if the mailing will also be placed in the MBGSA billing. Executive Director Bondy said he will ask the finance staff to include the newsletter with the next bills.

No further comments or questions by the Directors.

No public comments were offered.

Motion to receive the GSP monthly update and approve the distribution of the newsletter, Director Chambers; Second, Director Shephard. Roll call vote: five ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carried unanimously 5/0.

10b Sustainability Goal Public Draft Release (Grant Category (d), Task 4)

Motion

Executive Director Bondy explained that the draft Sustainability Goal is being presented again for discussion and release for public comment. The plan is to revisit and consider Board adoption in August, so the Agency has a goal for planning. Executive Director Bondy recommended the Board approve the draft goal for public comment release.

Chair Mobley suggested spelling out "Groundwater Sustainability Plan" instead of abbreviating and putting "GSP" in parentheses. Chair Mobley further commented that the goal looks great, but "SGMA" should also be spelled out and the acronym placed in parentheses, similar to "GSP." Executive Director Bondy said he would make those improvements.

No further comments or questions by the Directors.

No public comment was offered.

Motion to adopt the draft Sustainability Goal for public comment release, Director Rungren; Second, Director Chambers. Roll call vote: five ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carries unanimously 5/0.

10c Set Date and Time for the Groundwater Sustainability Plan Stakeholder Workshop – Webinar (Grant Category (c), Task 3)

Motion

Executive Director Bondy requested the Board approve a date and time to hold the stakeholder workshop webinar. After reviewing their calendars and eliminating any meeting conflicts, the Board members agreed on Thursday, September 3, 2020, at 5:00 p.m.

Director Chambers questioned if the format is different as a webinar? Executive Director Bondy said yes and explained that the meeting organizer and panelists will have access to present and speak during the webinar, but public participants are muted and will be able to comment via texting within the webinar framework. Organizers will unmute attendees, one at a time, when attendees “raise their hand” to ask questions, and there will be polls presented throughout the webinar to engage the audience. Director Chambers thanked Executive Director Bondy.

No further comments or questions by the Directors.

No public comment was offered.

Motion approve the date and time for the Groundwater Sustainability Plan Stakeholder Workshop, Director Rungren; Second, Director Chambers. Roll call vote: five ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carries unanimously 5/0.

10e **Reappointment of Stakeholder Directors**

Motion

Chair Mobley asked if the Board or public had any comments or questions regarding the reappointment of the Agriculture and Environmental Stakeholder Directors for a new one-year term.

Chair Mobley stated that the Agency’s current directors, Director Everts and Director Chambers, had been nominated by their respective stakeholder organizations for another term. Both are representing their stakeholders well and he approves of them representing as stakeholder directors.

No further comments or questions by the Directors.

No public comment was offered.

Motion to approve the reappointment of Director Chambers as Agricultural Stakeholders Director and Director Everts as Environmental Stakeholder Director for a new one-year term, August 2020-August 2021, Director Rungren; Second, Director Shephard. Roll call vote: three ayes (Rungren, Shephard, Mobley) none opposed. Motion carried unanimously 3/0. (According to the Agency’s bylaws, only member directors vote on approving stakeholder representative directors)

11. FUTURE AGENDA ITEMS

- UWCD Groundwater Model presentation

Chair Mobley thanked Attorney Joe Hughes for being part of the meeting and asked for input at the next Agency meeting. Executive Director Bondy stated that he has asked Mr. Hughes to become more engaged than in the past as a means for staying up to speed on the GSP and to be ready to answer any questions during GSP development.

ADJOURNED 2:30 PM

Chair Mobley adjourned the meeting at 2:30 PM to the next **Regular Board Meeting** on **Thursday, August 20, 2020**, or call of the Chair.

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 July 16, 2020.

ATTEST: _____
Susan Rungren, Board Secretary

ATTEST: _____
Jackie Lozano, Clerk of the Board

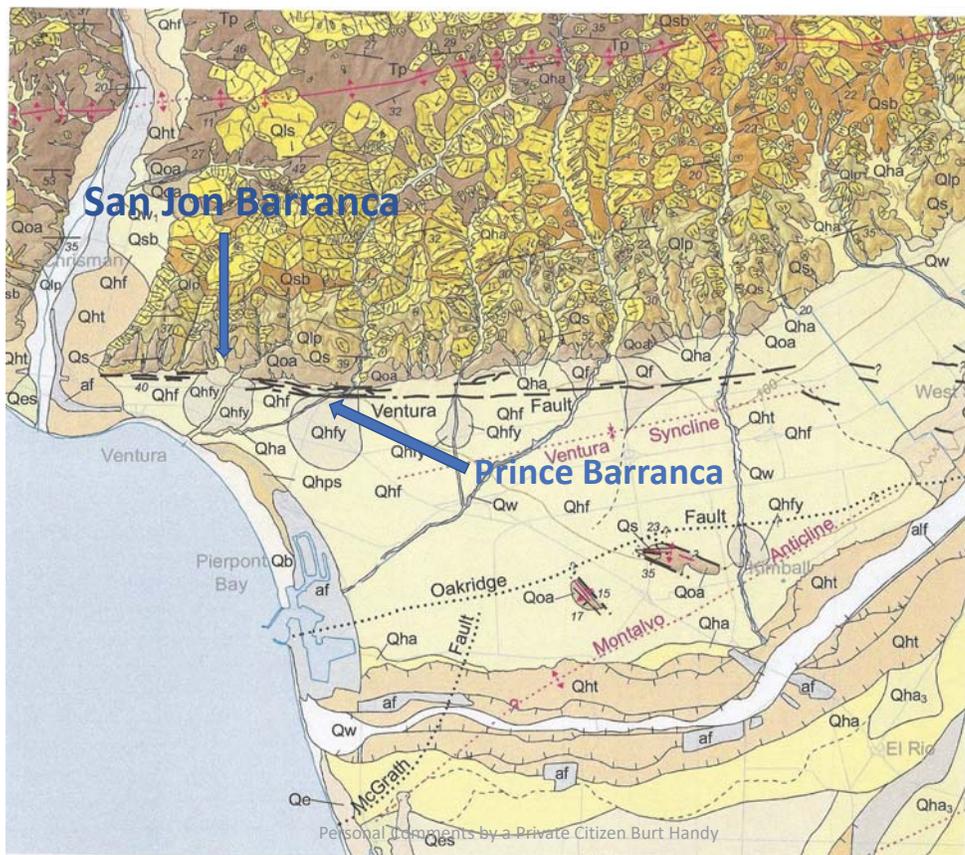
DRAFT

San Jon Canyon/Barranca and Hall Canyon/Prince Barranca



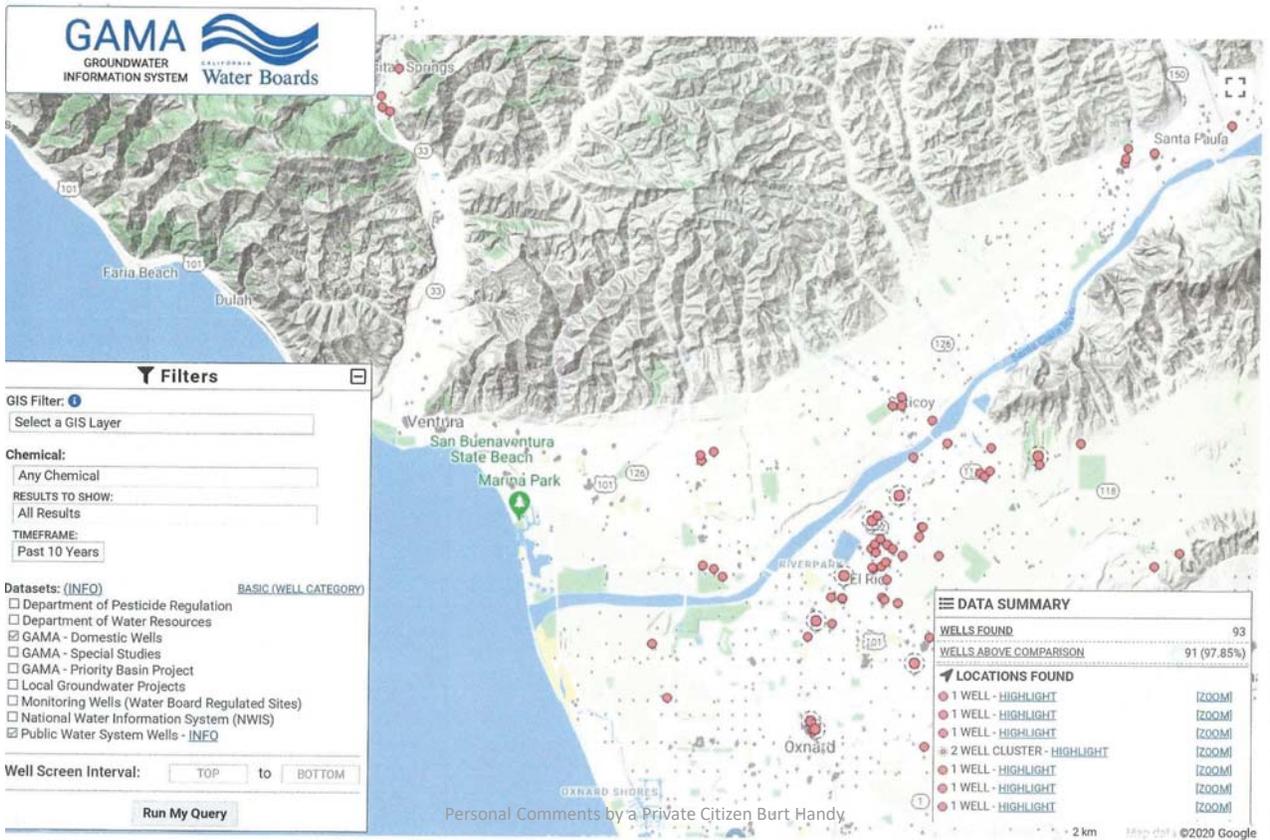
USGS
Geologic Map
of the
East Half

Santa Barbara
30' by 60'
Quadrangle
California
2008
Compiled by
Carlos
Gutierrez
Siang S Tan
Kevin B Clahan



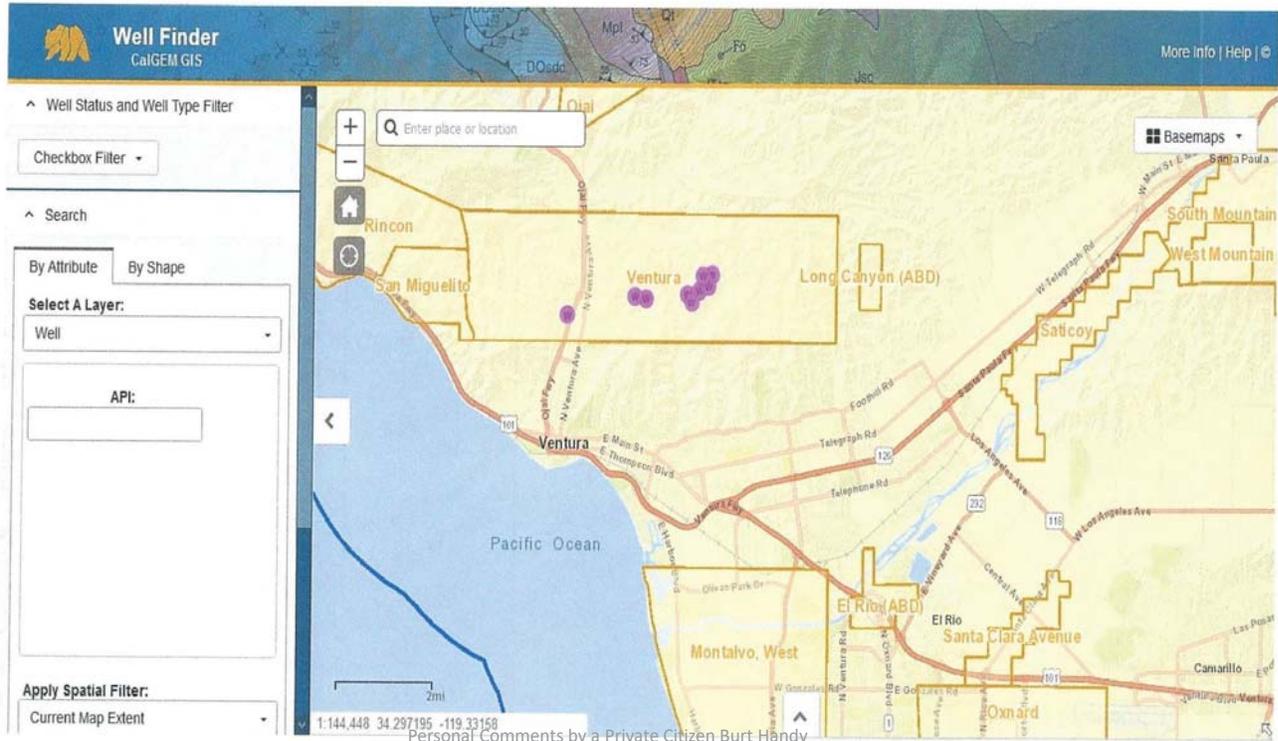


Personal Comments by a Private Citizen Burt Handy



Personal Comments by a Private Citizen Burt Handy

Water Wells, New, Active, Inactive in the Oil Patch above Ventura

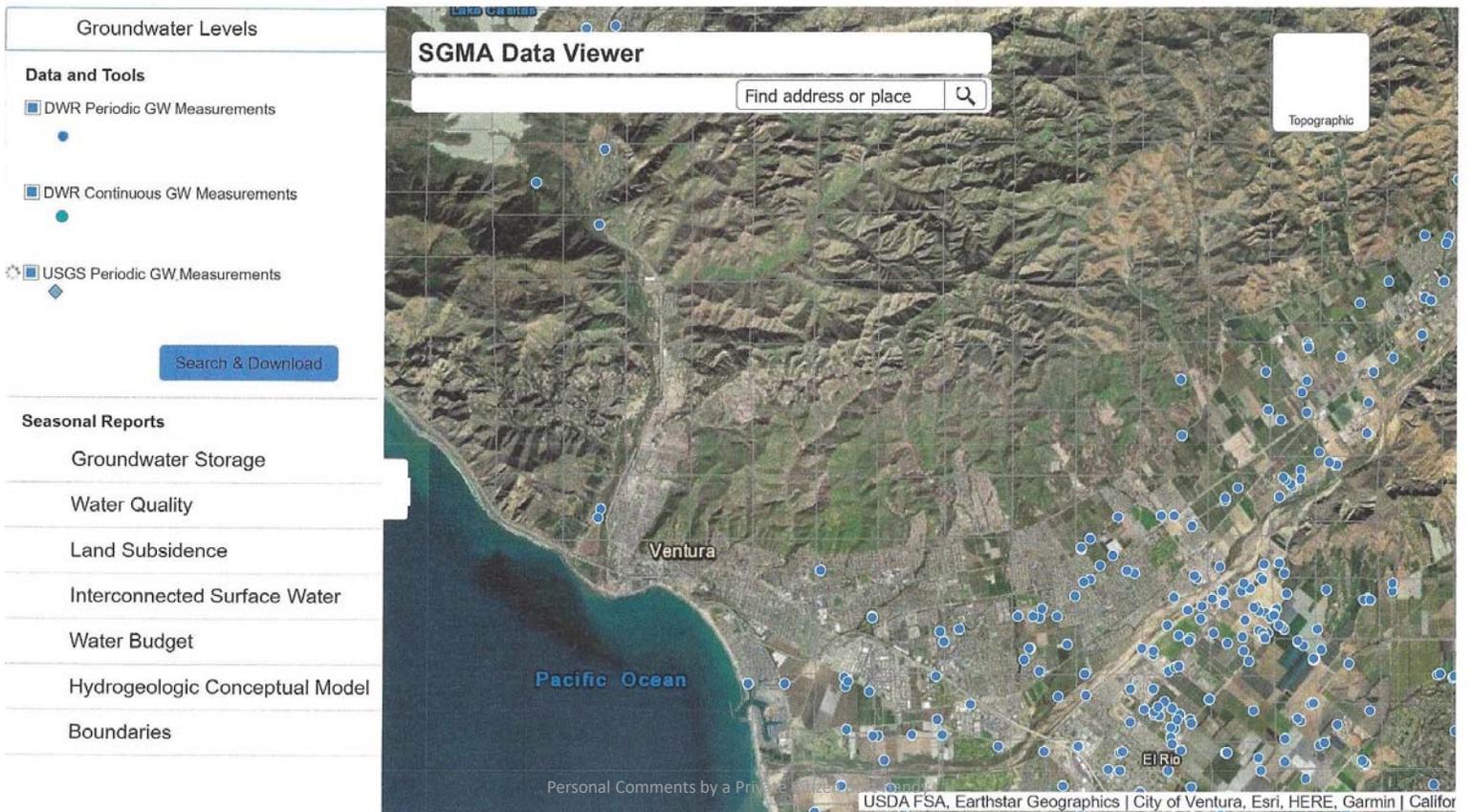
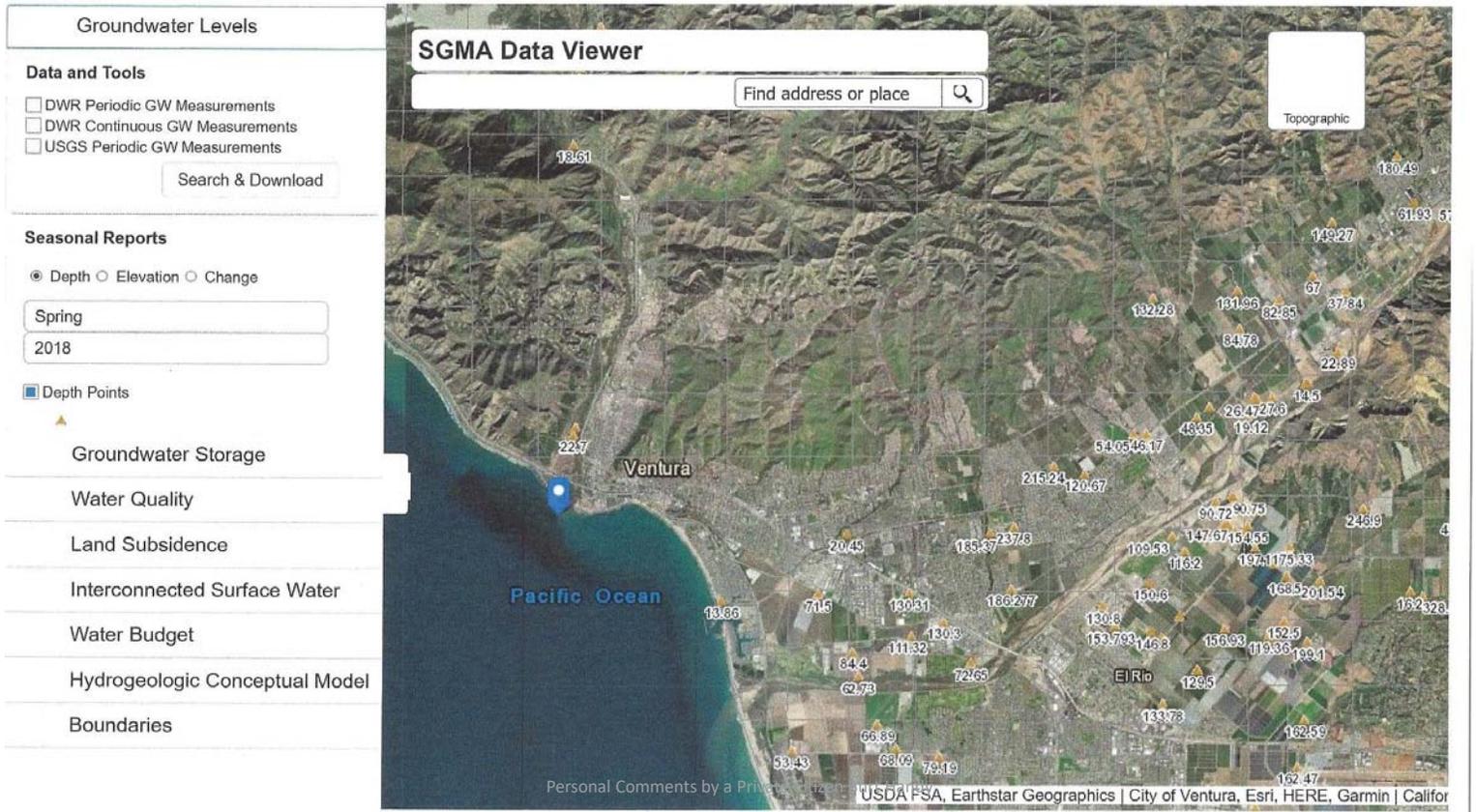


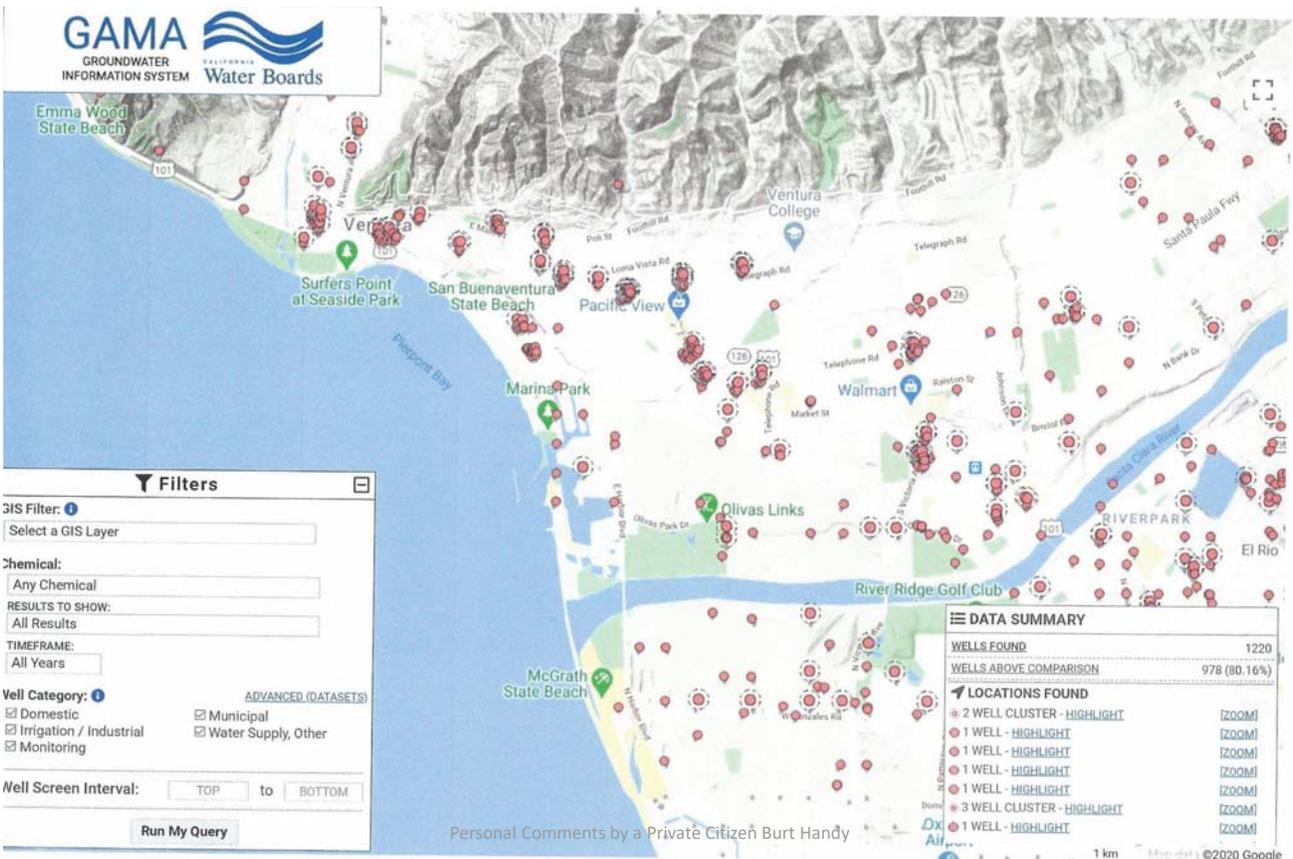
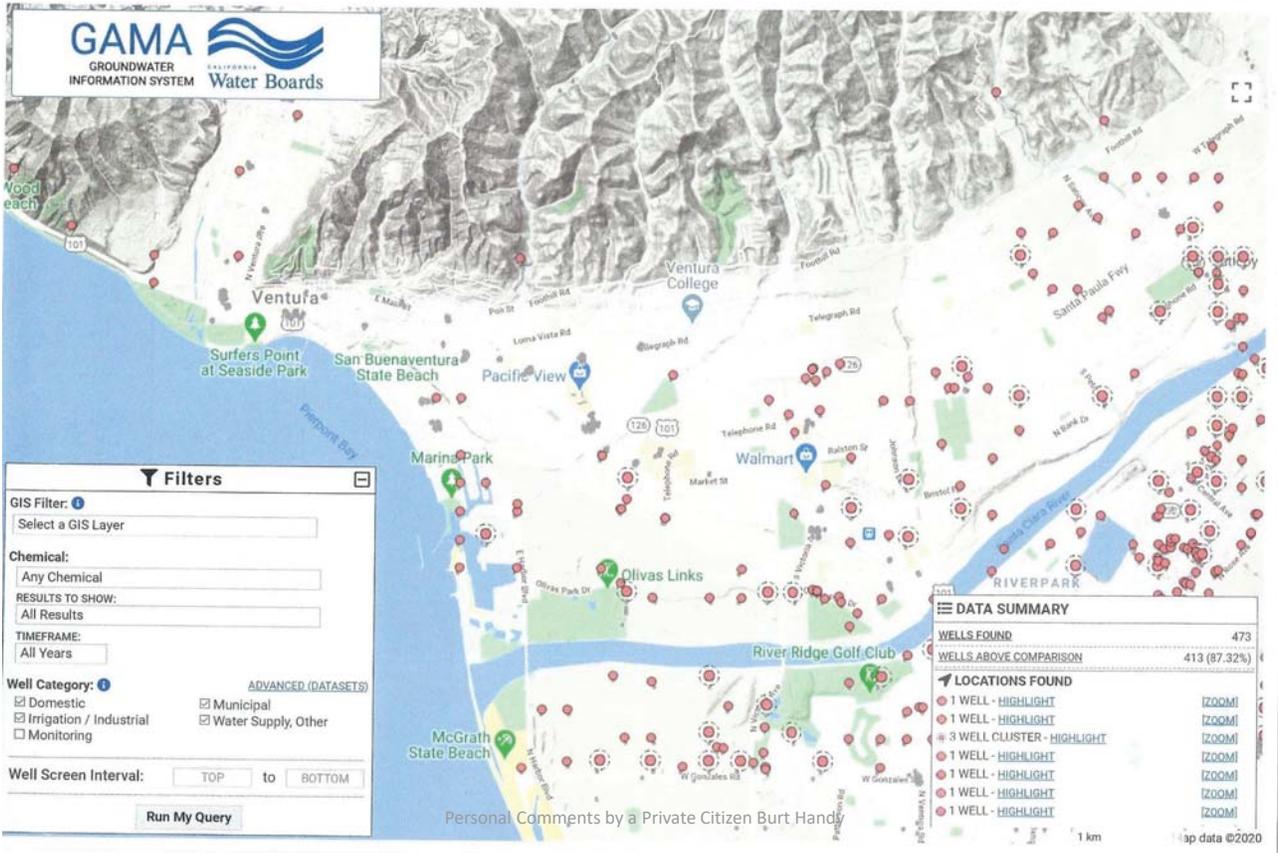
Personal Comments by a Private Citizen Burt Handy

Questions?



Photo by Burt Handy
Personal Comments by a Private Citizen Burt Handy





**Mound Basin
Groundwater Conditions and
Perennial Yield Study**

Preliminary Review of Study Findings

Mound Basin Groundwater Sustainability Agency
July 16, 2020

HOPKINS
GROUNDWATER
CONSULTANTS, INC.
THE WATER RESOURCE SPECIALISTS

1

Hydrogeologic Study Purpose

- To support City water supply planning efforts
- Estimate the Mound Basin perennial yield
- Refine our understanding of the complex hydrogeology of the basin
- Review sources of groundwater recharge and movement through the basin

2

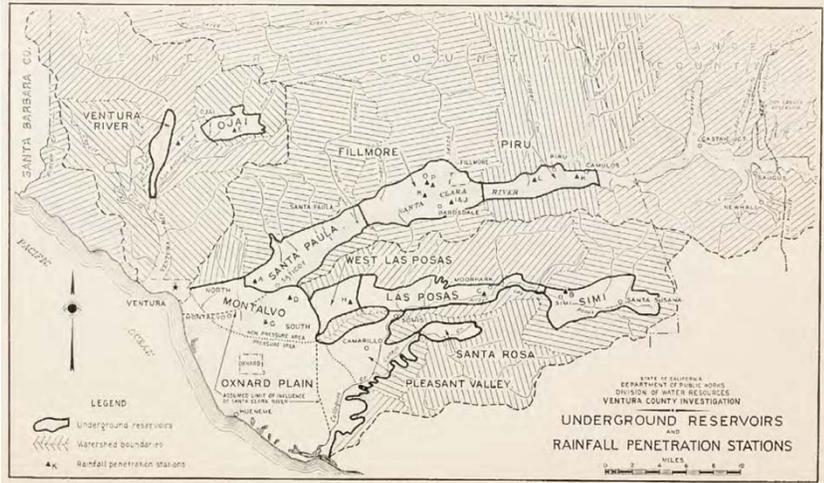
Data Sources

Data Type	Source
Precipitation and Evaporation	Ventura County Watershed Protection District Hydrologic Data Server (Hydrodata) http://vcwatershed.net/hydrodata/ California Irrigation Management Information System (CIMIS) – part of DWR
Streamflow	Ventura County Watershed Protection District Hydrologic Data Server (Hydrodata) http://vcwatershed.net/hydrodata/ U.S. Geological Survey
Groundwater Production and Imported Water Supplies	United Water Conservation District City of San Buenaventura
Groundwater Levels	Ventura County Watershed Protection District United Water Conservation District
Groundwater Quality	Ventura County Watershed Protection District United Water Conservation District
Well Geophysical Logs	Ventura County Watershed Protection District California Division of Oil, Gas, and Geothermal Resources
Spatial Feature Layers (GIS)	Ventura County Farm Bureau, Southern California Association of Governments (SCAG), United Water Conservation District

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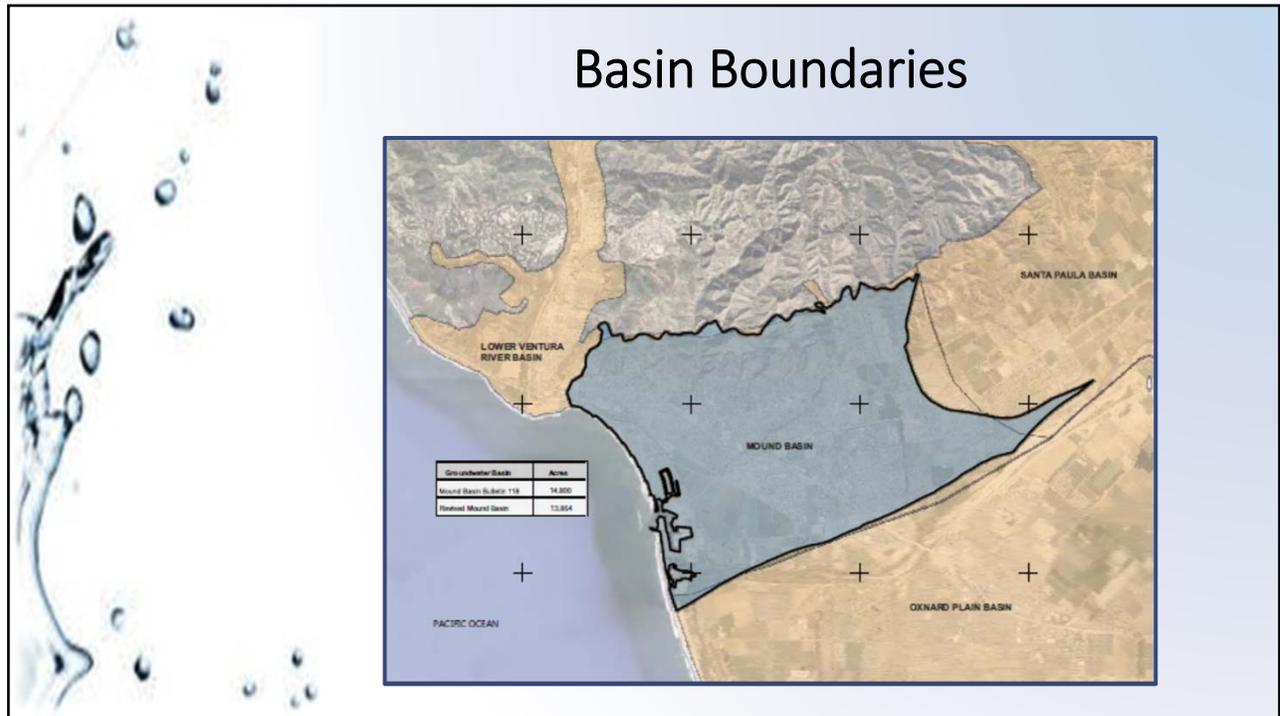
Historical Studies

CA Dept. Public Works, Division of Water Resources, Bulletin No. 46, 1933

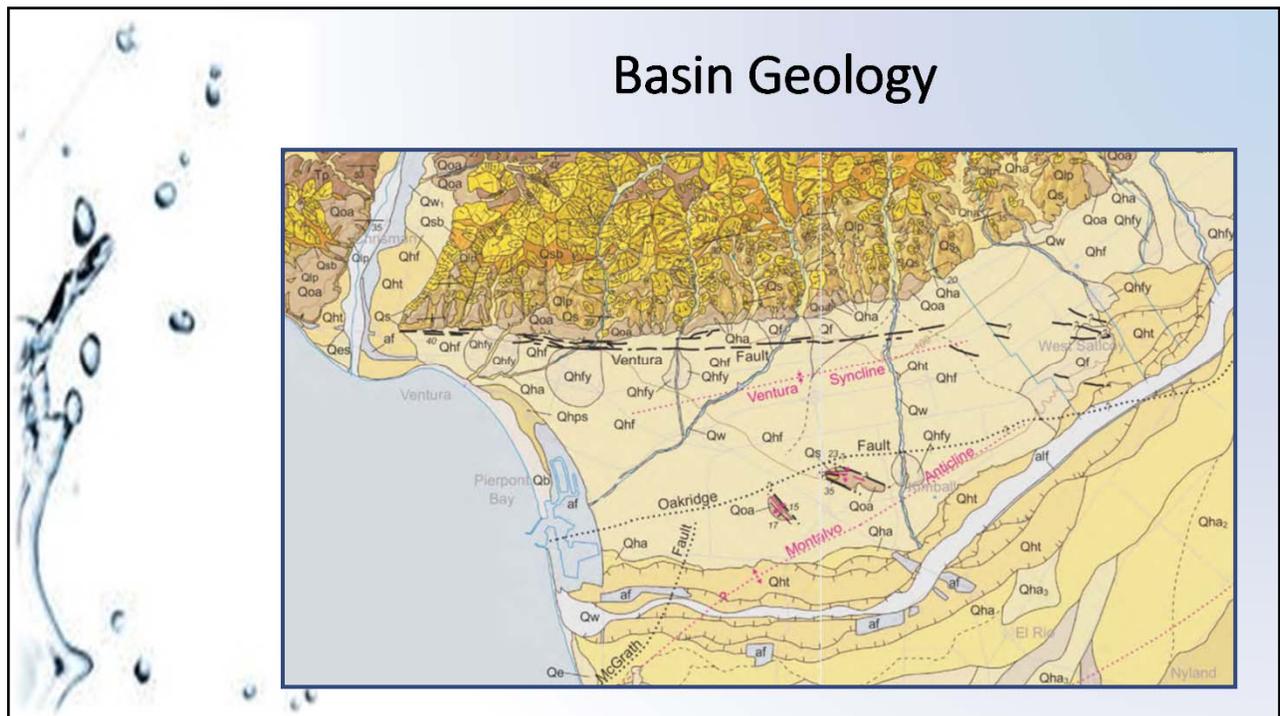


The map, titled 'UNDERGROUND RESERVOIRS AND RAINFALL PENETRATION STATIONS', shows the geographical layout of Ventura County with various sub-basins labeled. A legend in the bottom left corner identifies symbols for 'Underground reservoirs' (indicated by wavy lines), 'Watershed boundaries' (dashed lines), and 'Rainfall penetration stations' (marked with an 'X'). The map includes a north arrow and a scale bar in miles. The title and source information are printed in the bottom right corner.

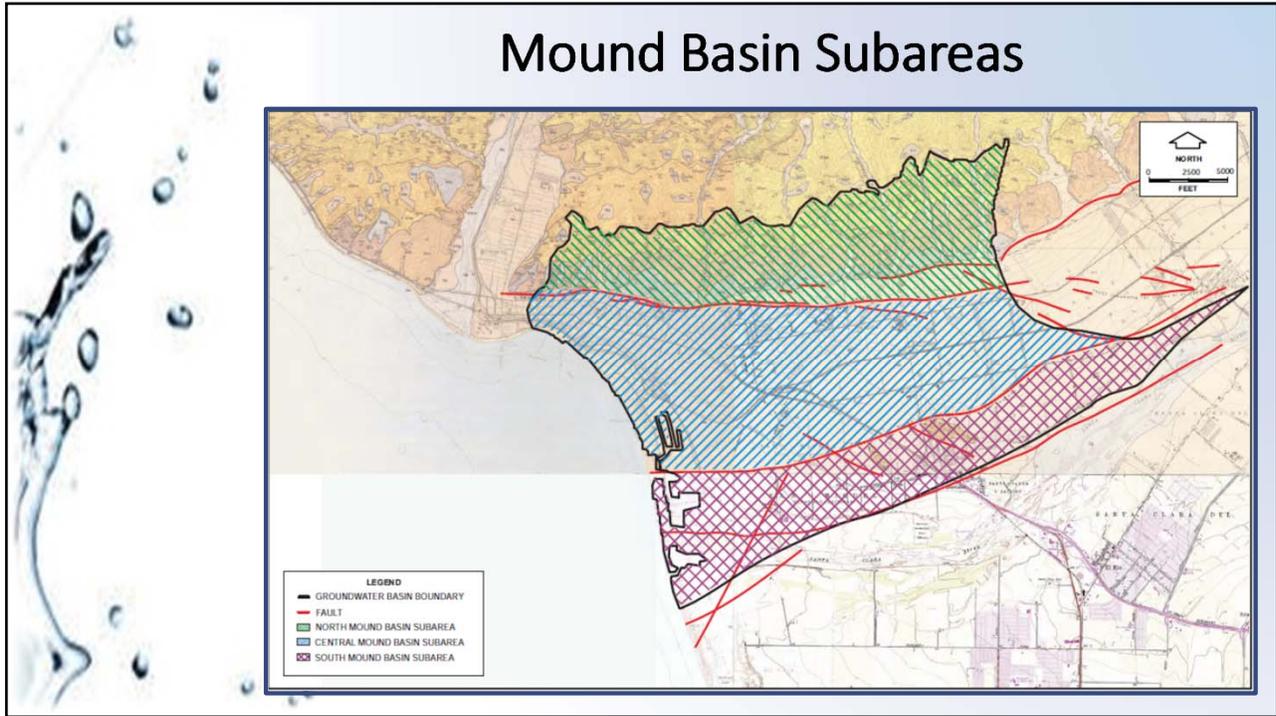
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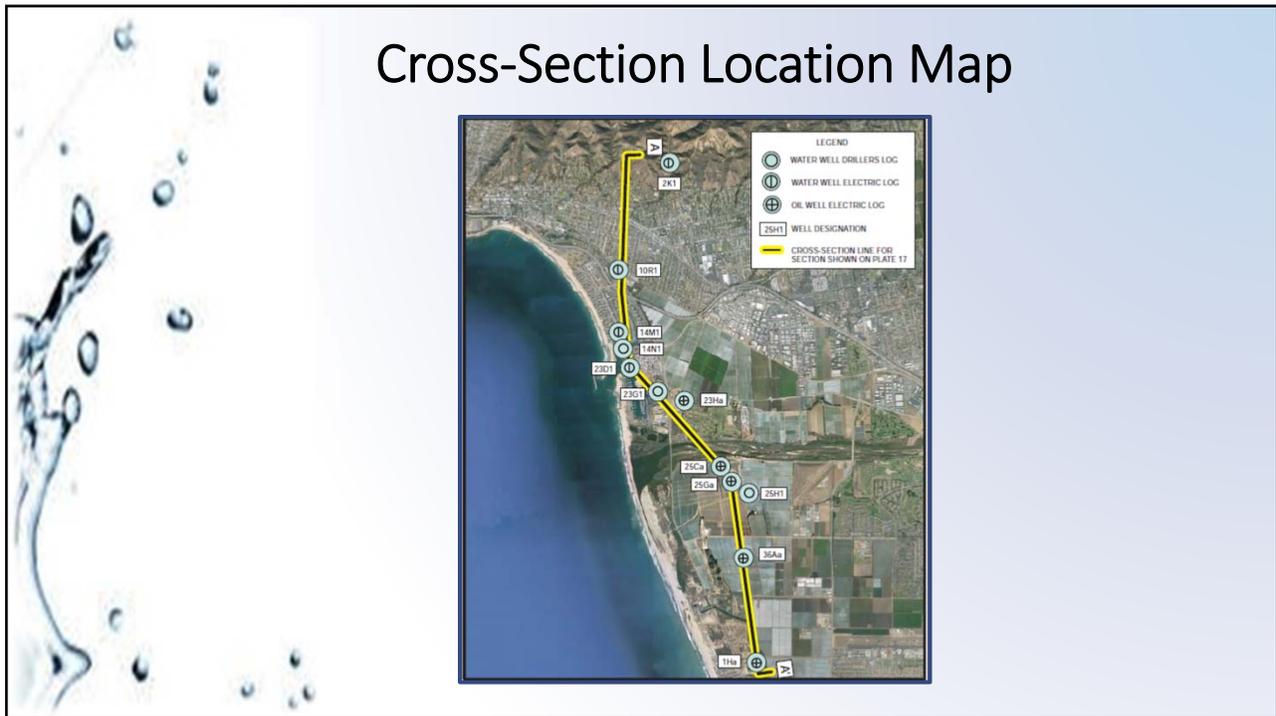
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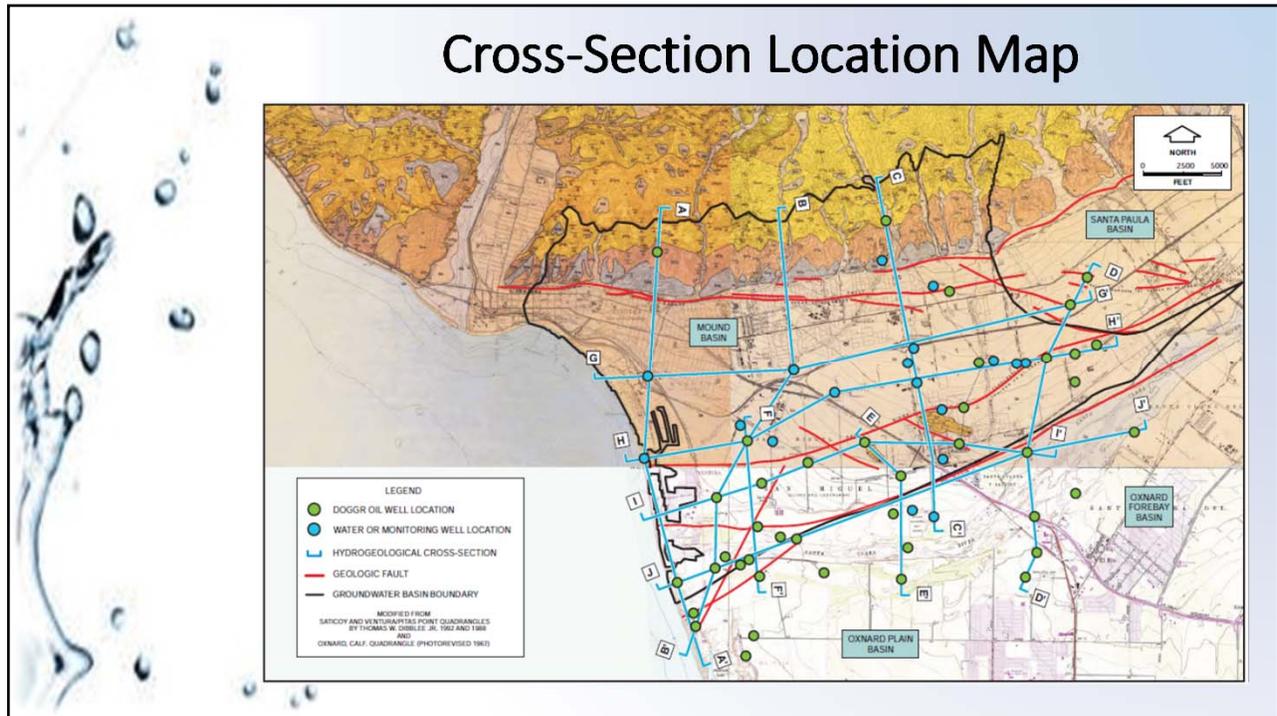
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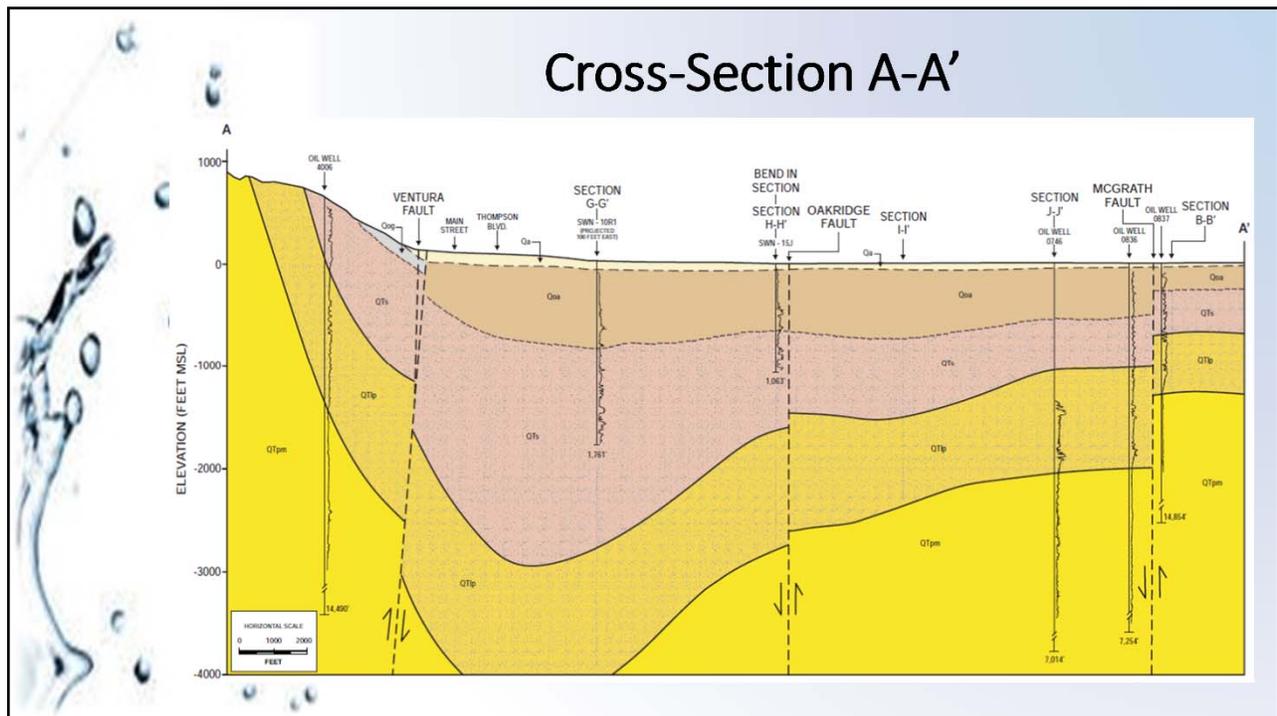
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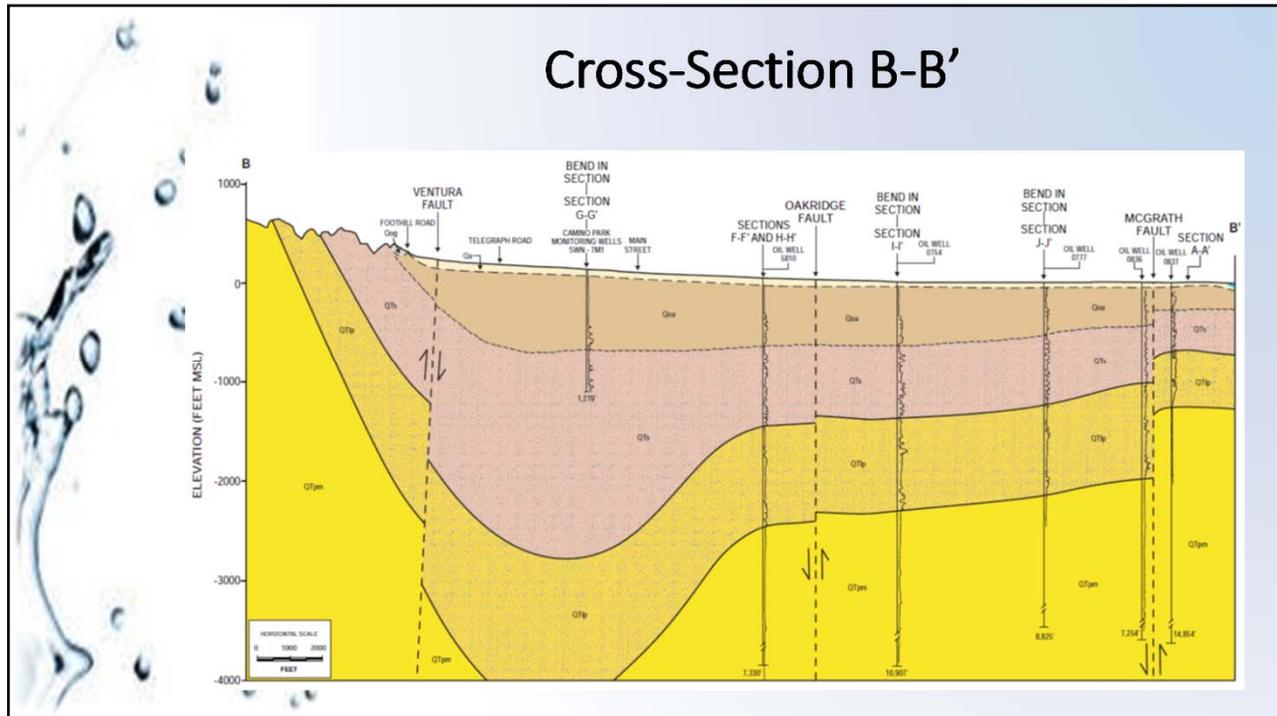
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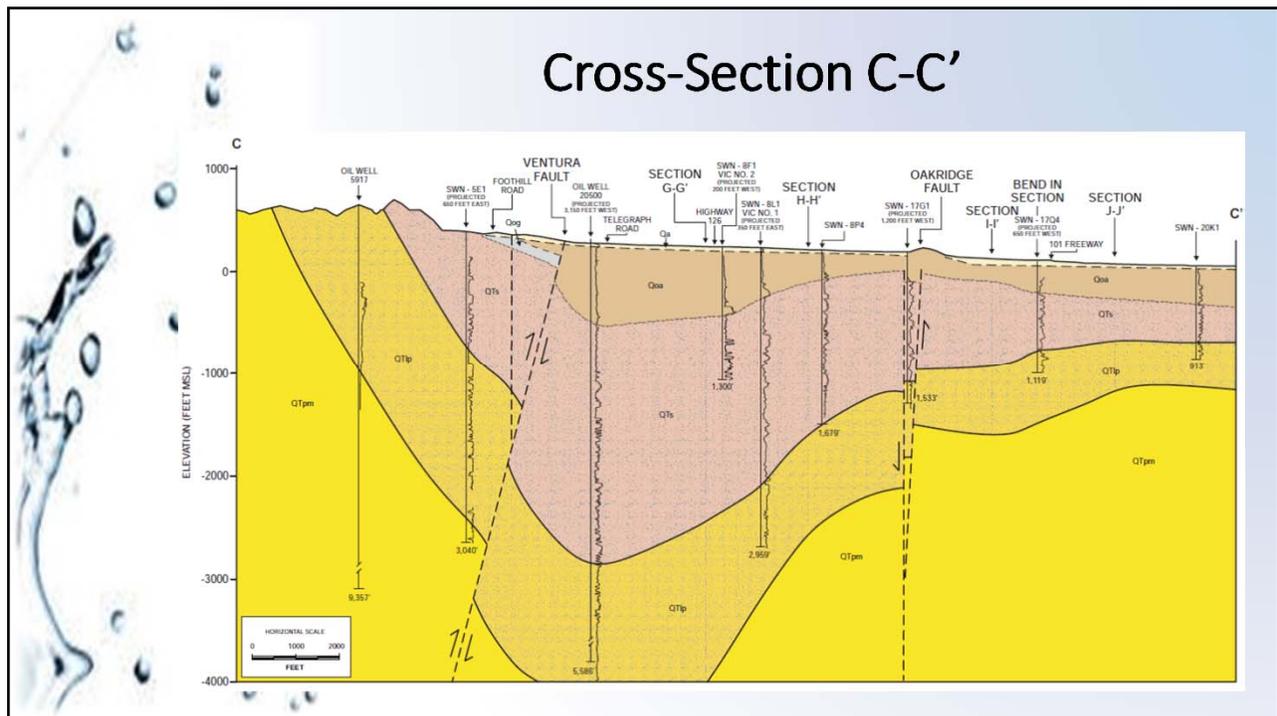
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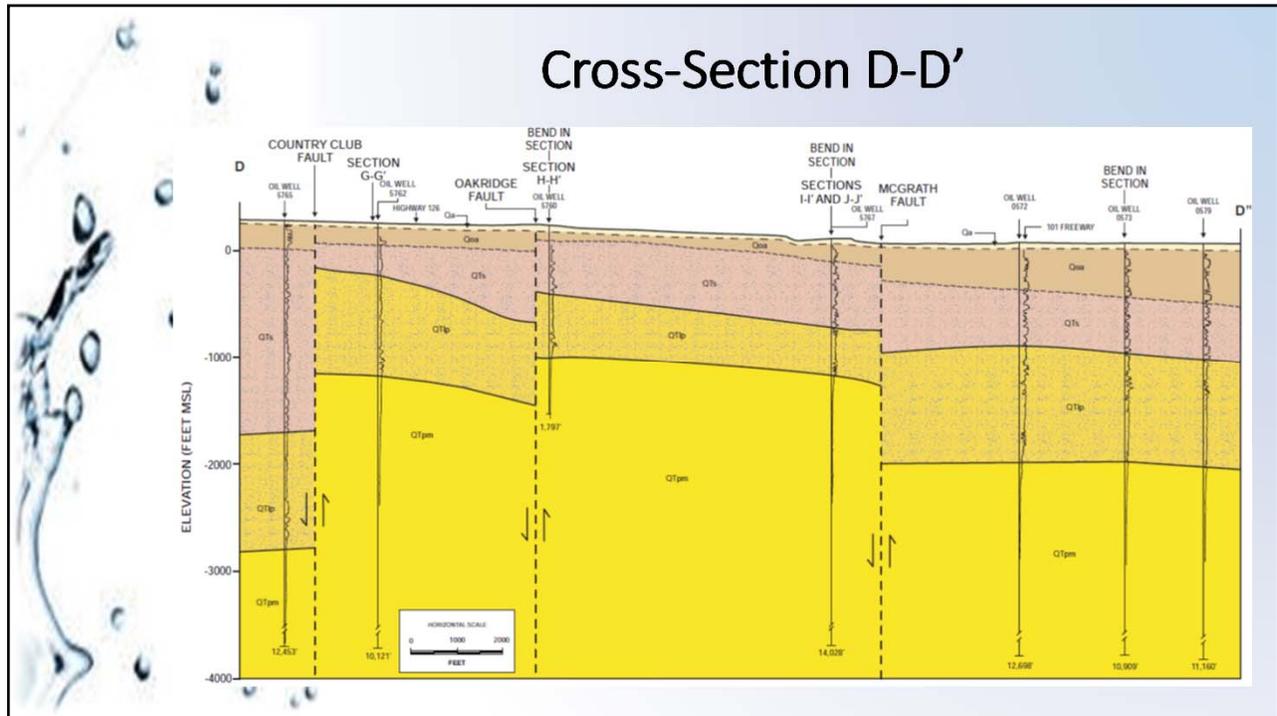
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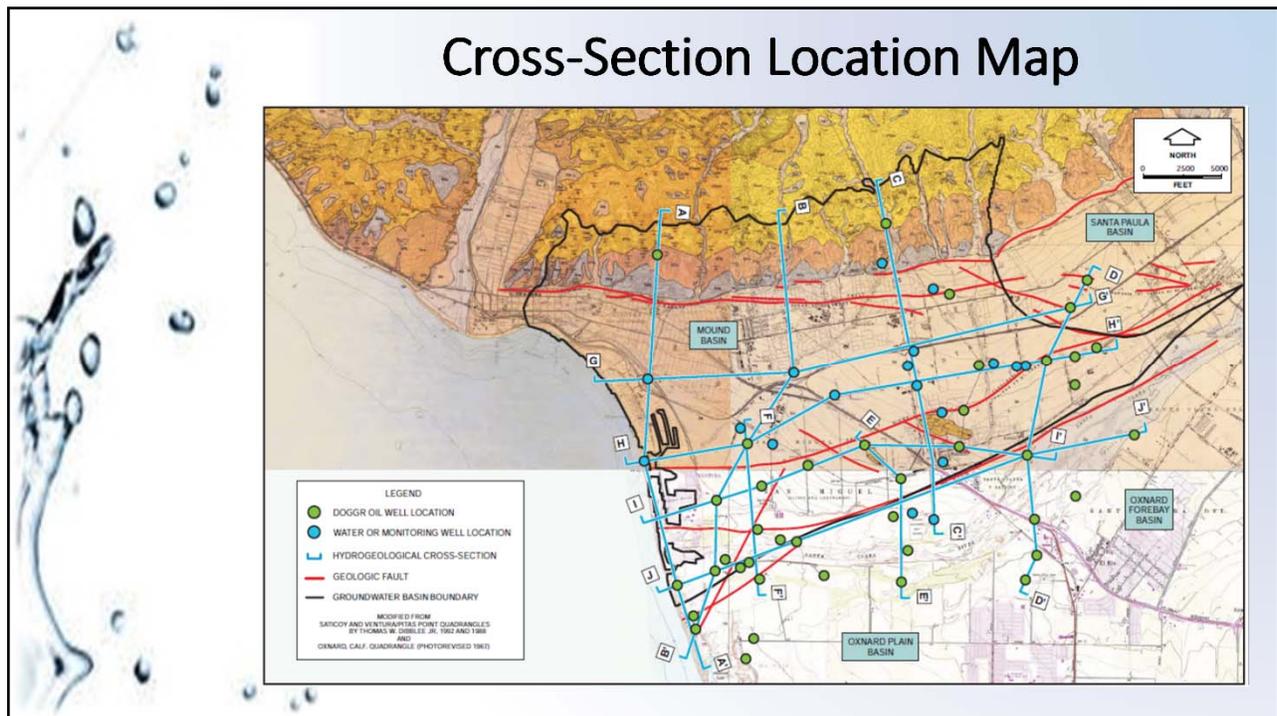
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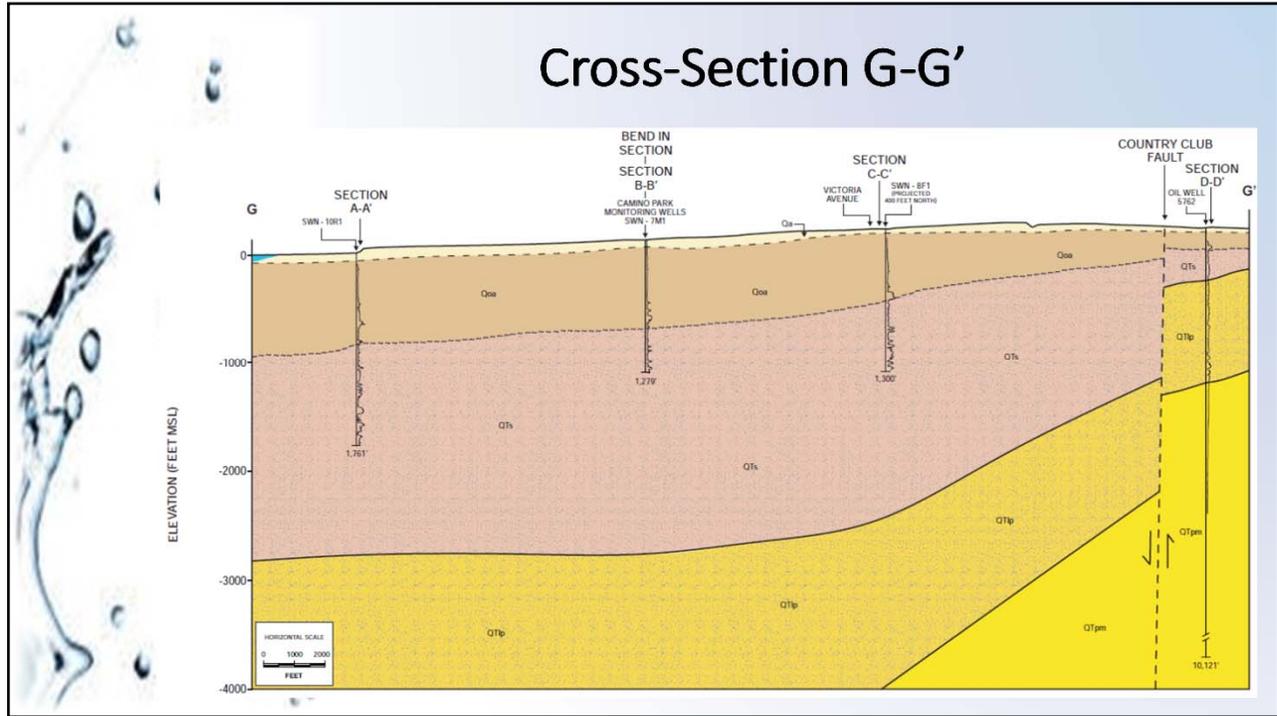
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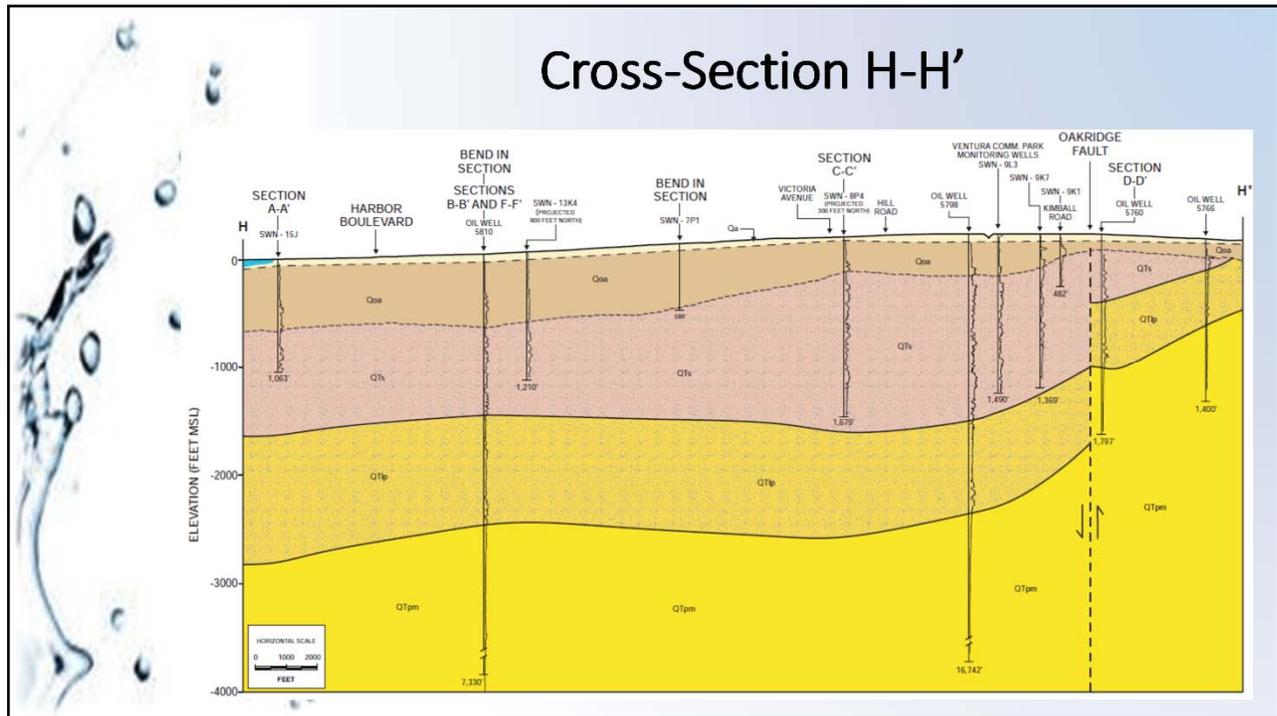
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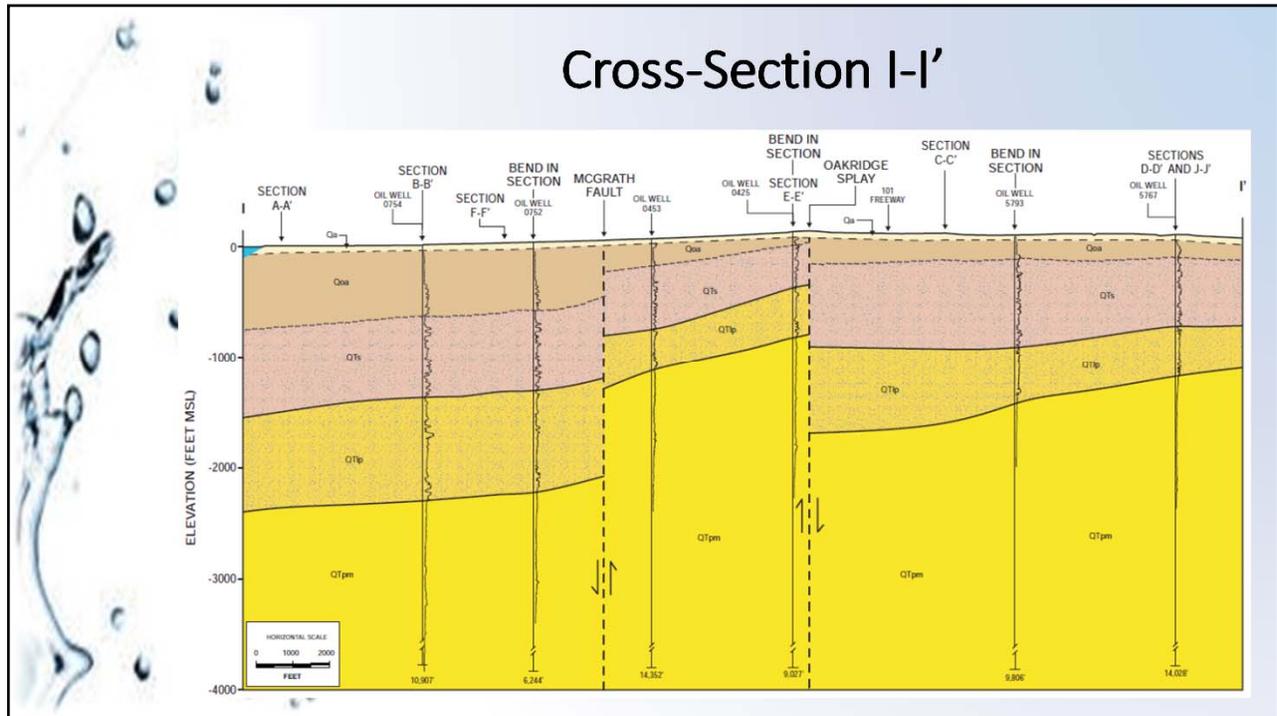
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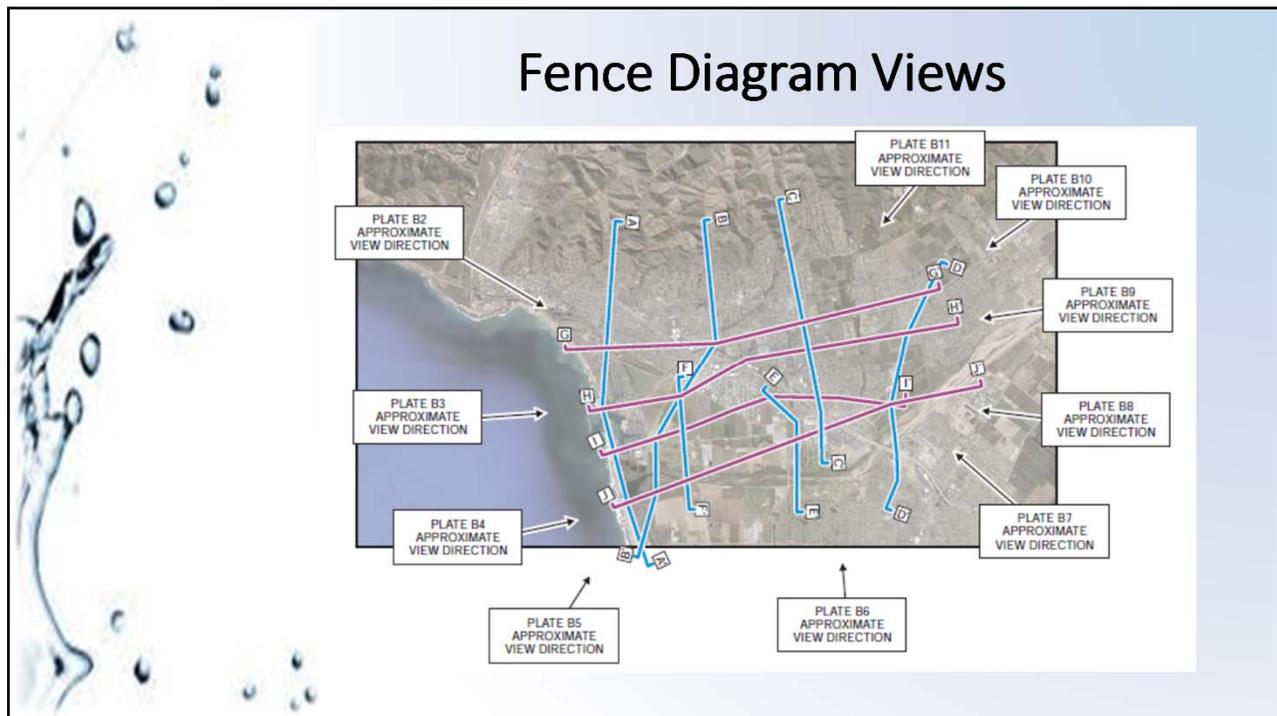
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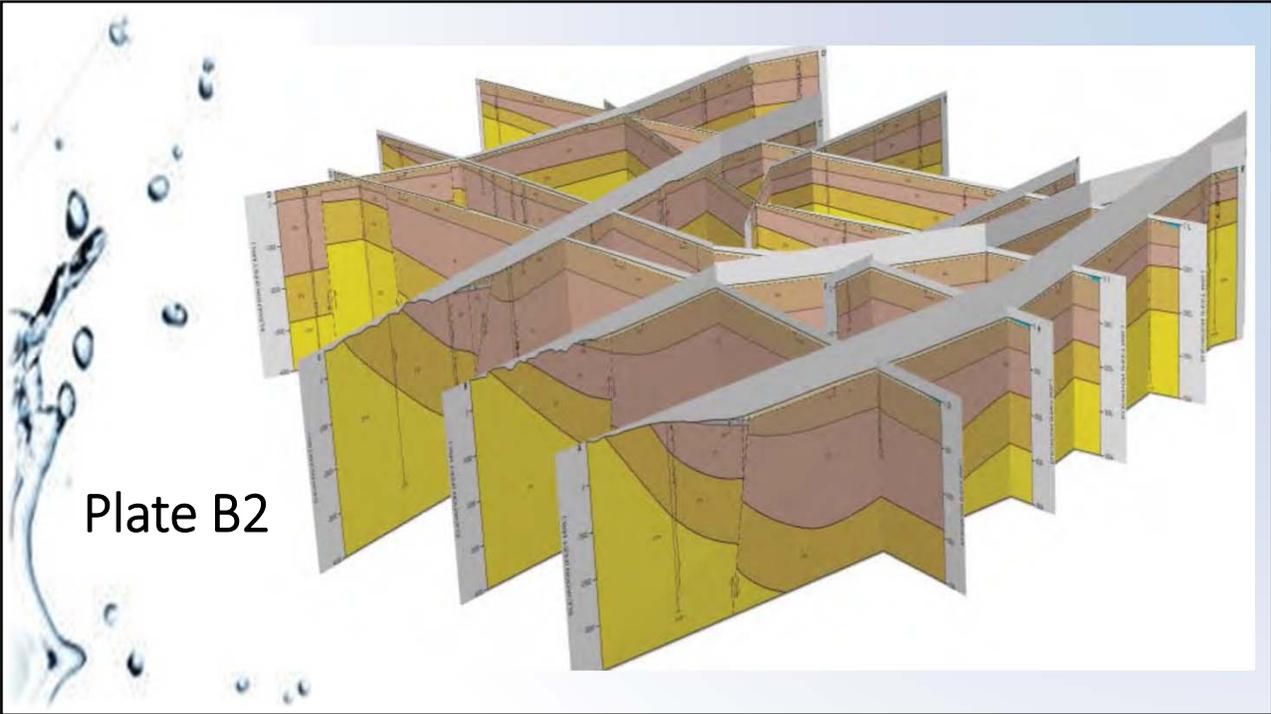
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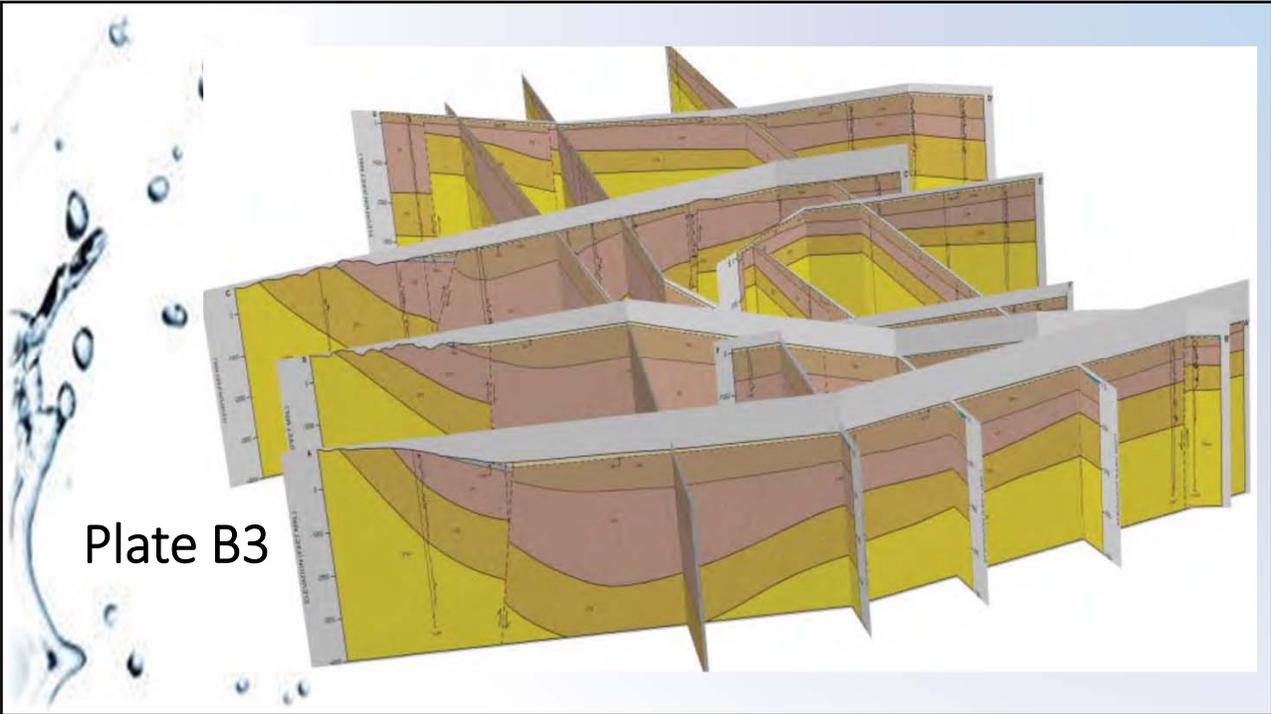
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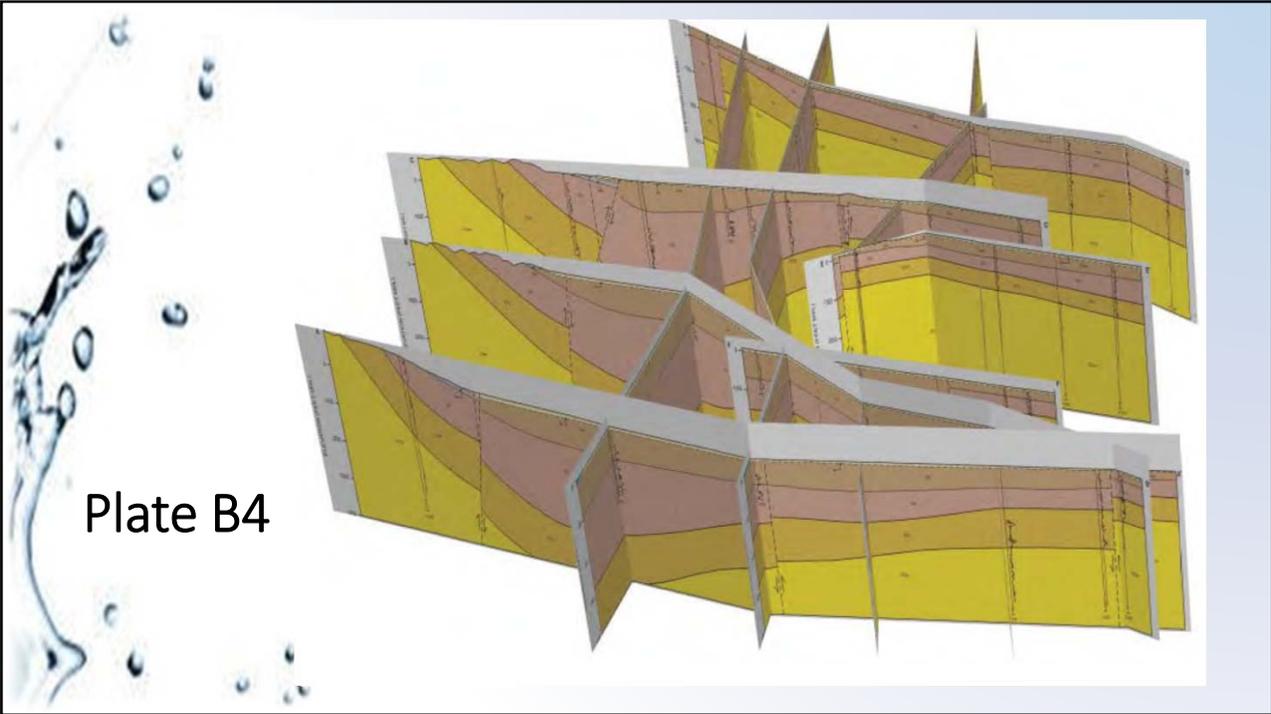
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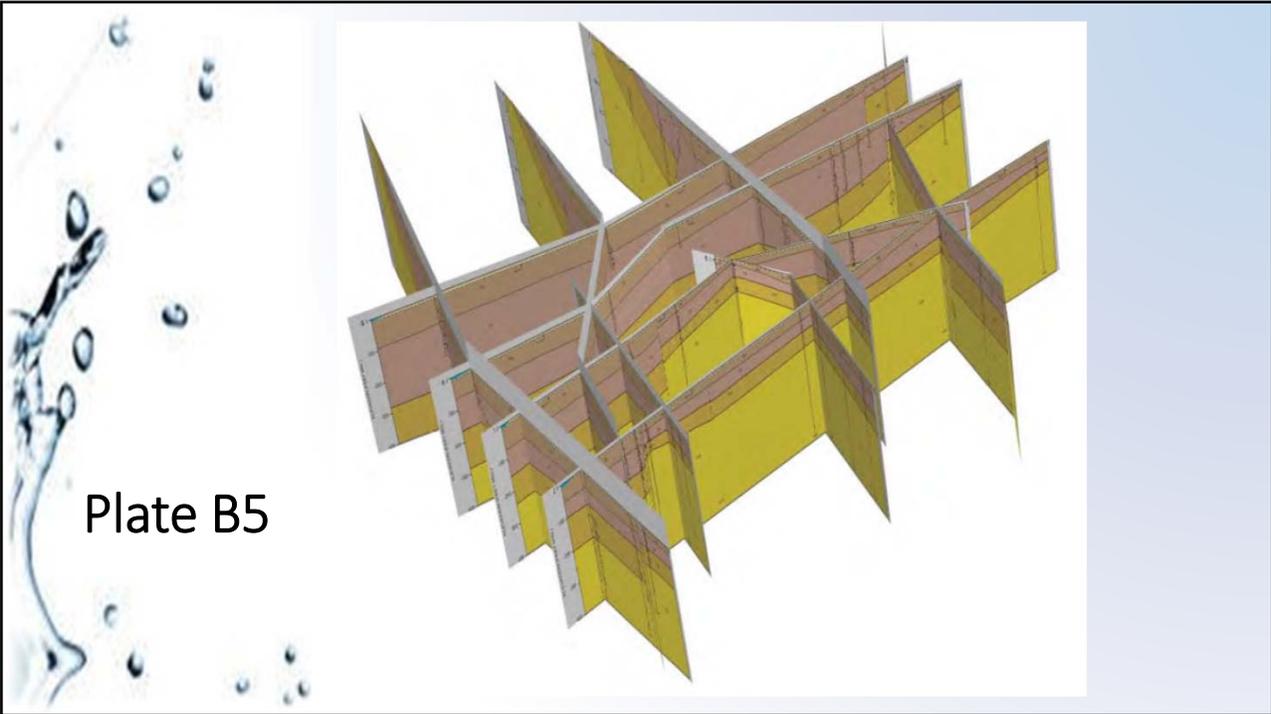
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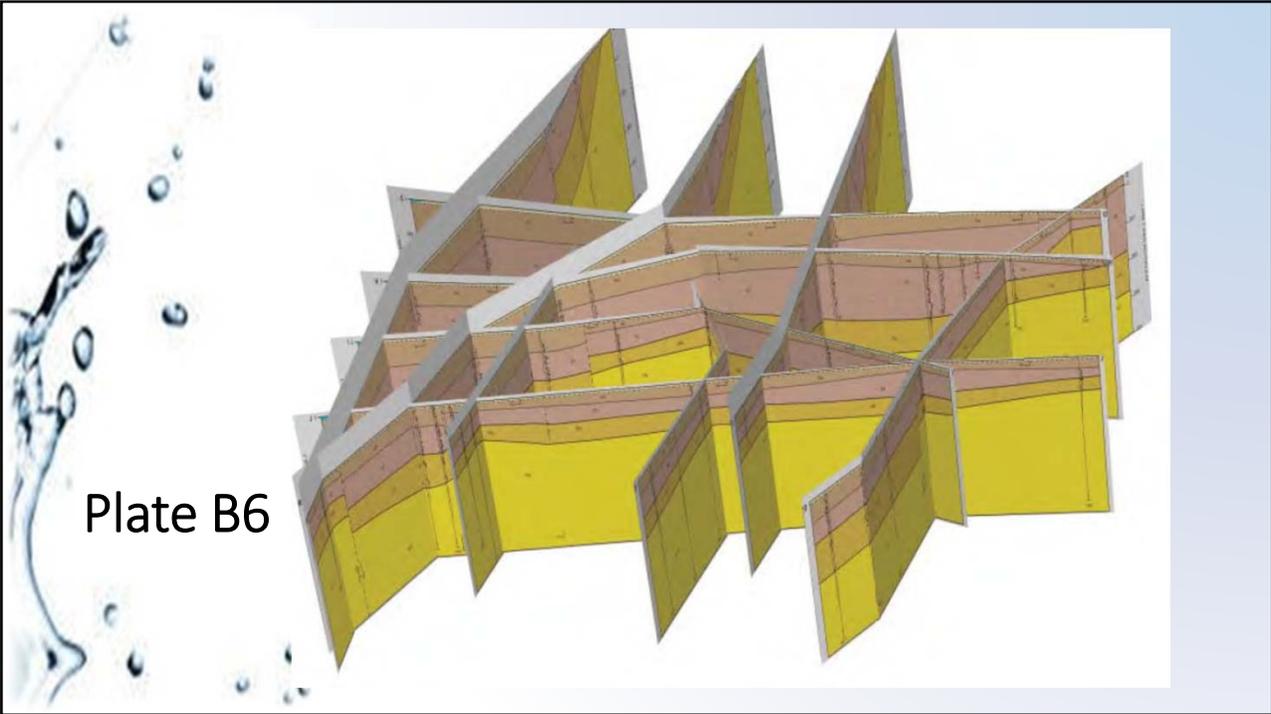
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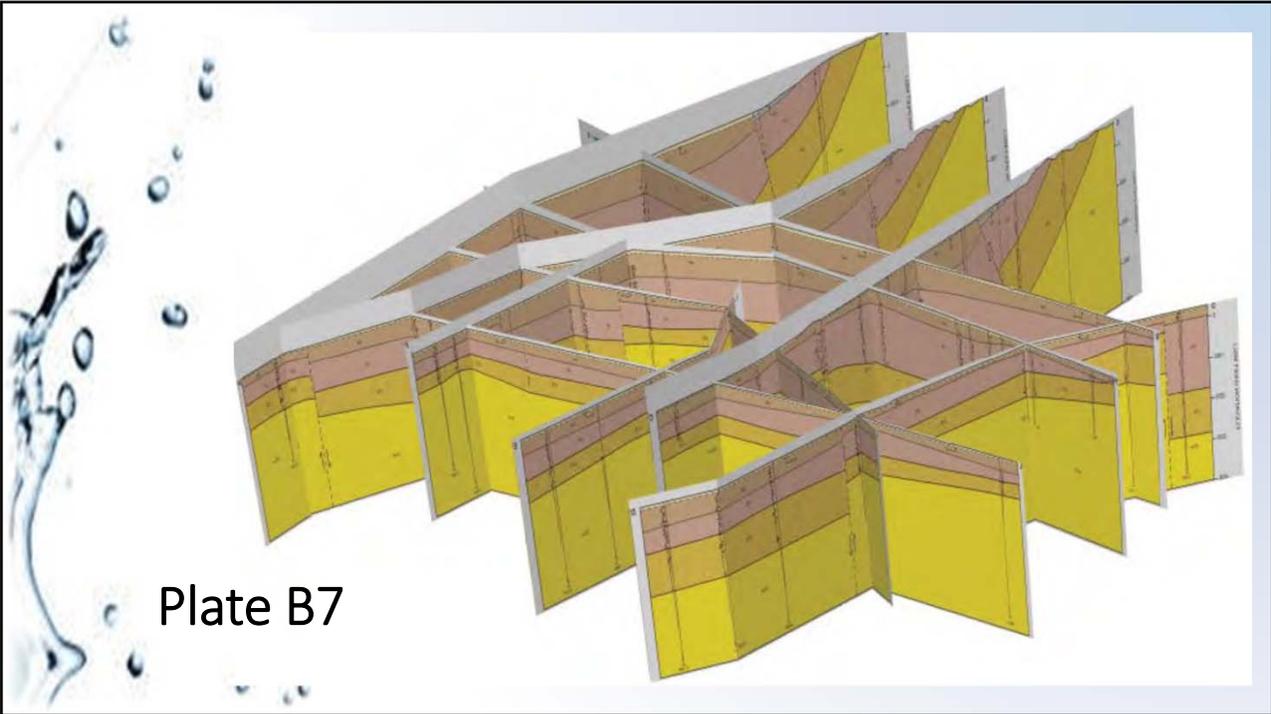
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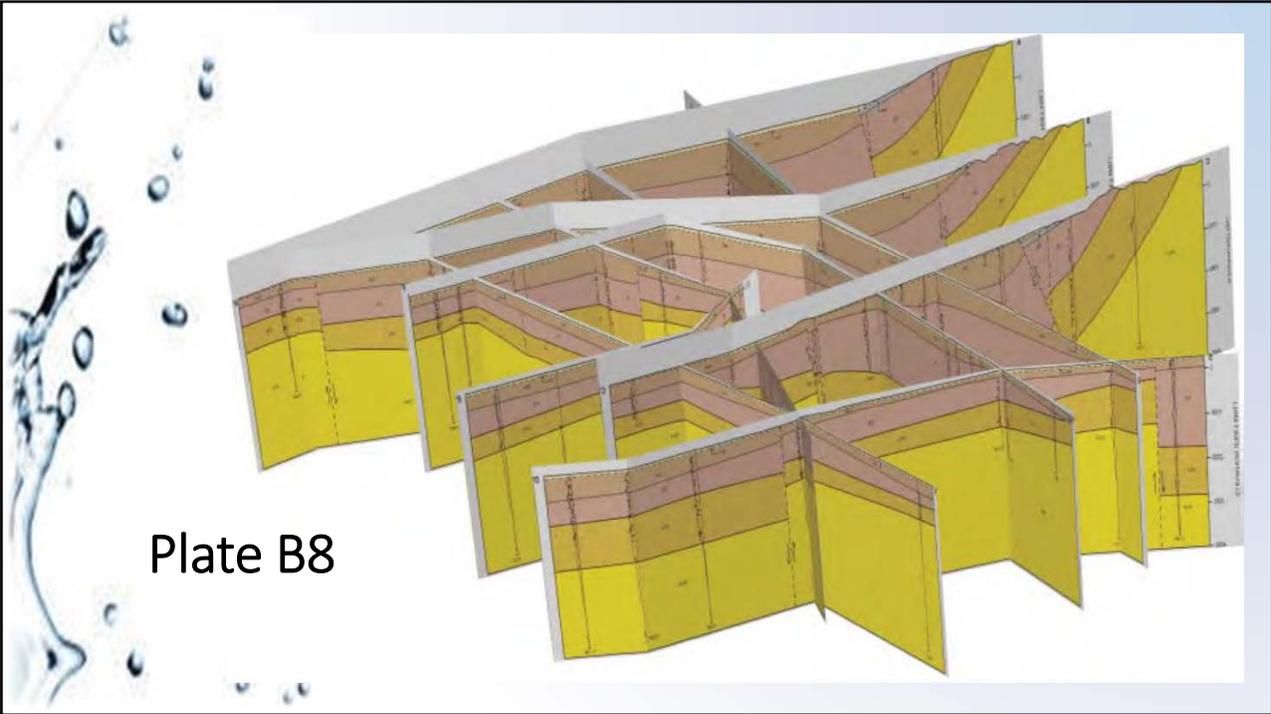
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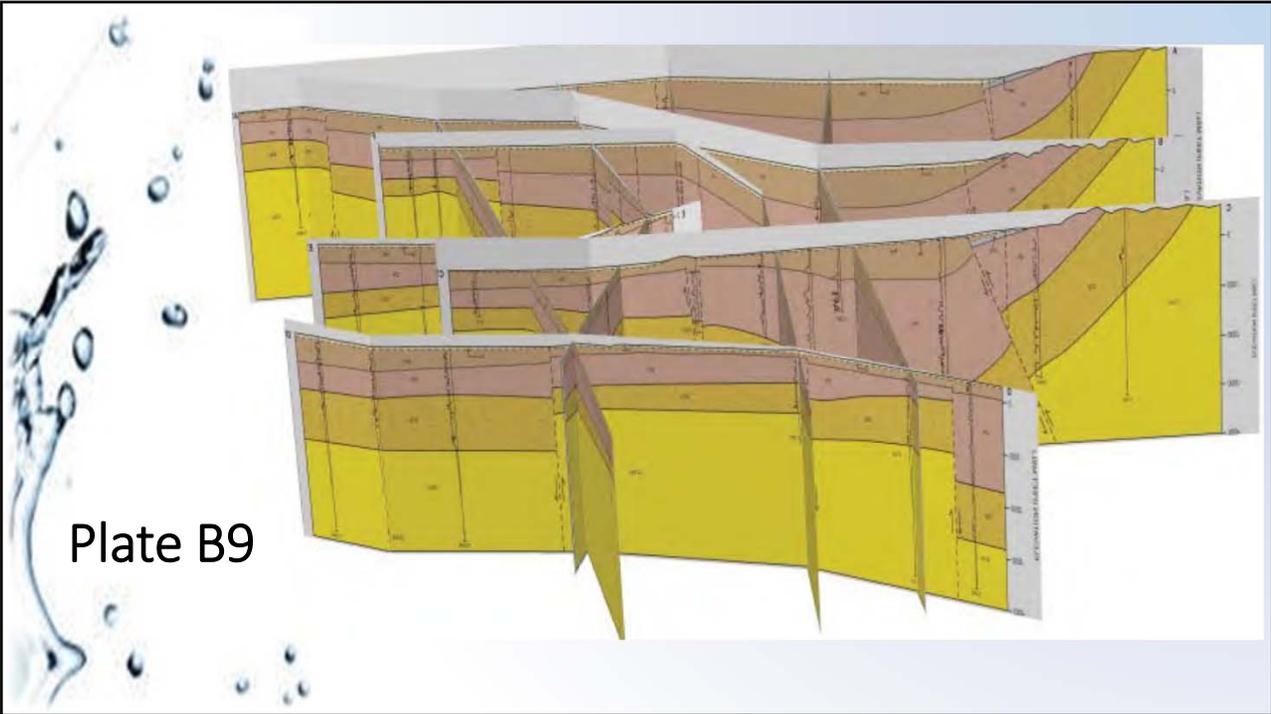
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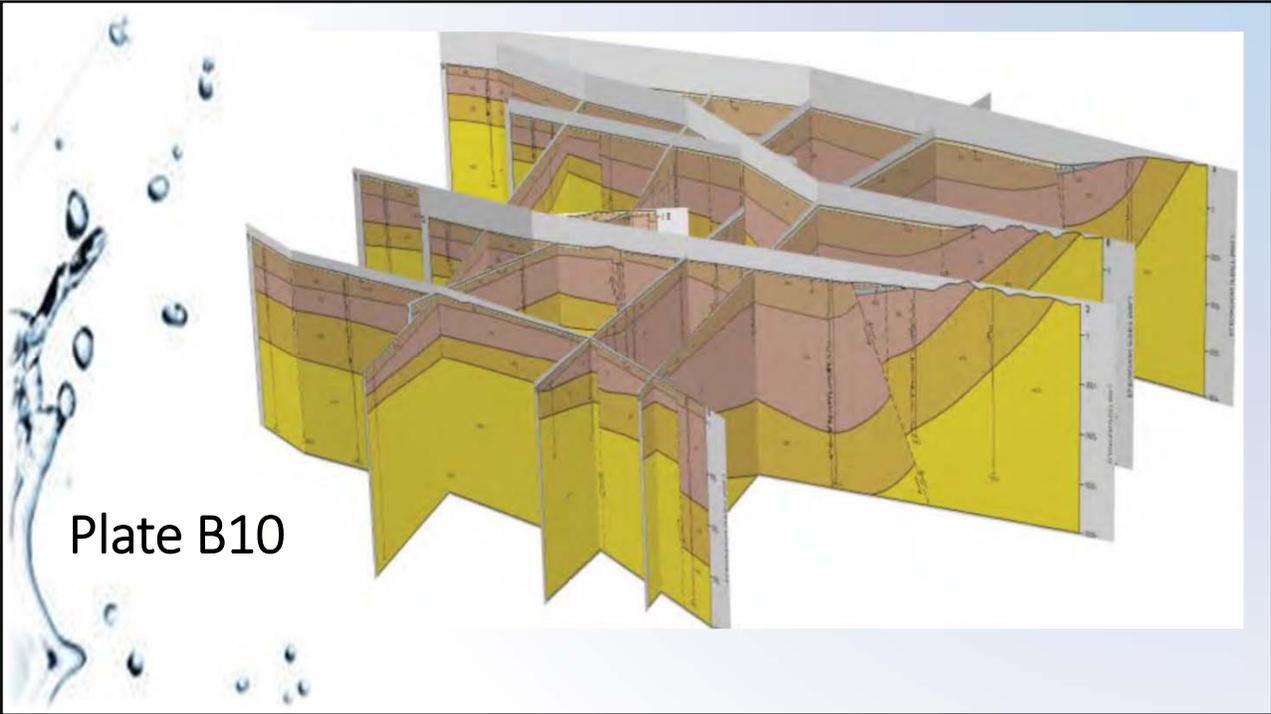
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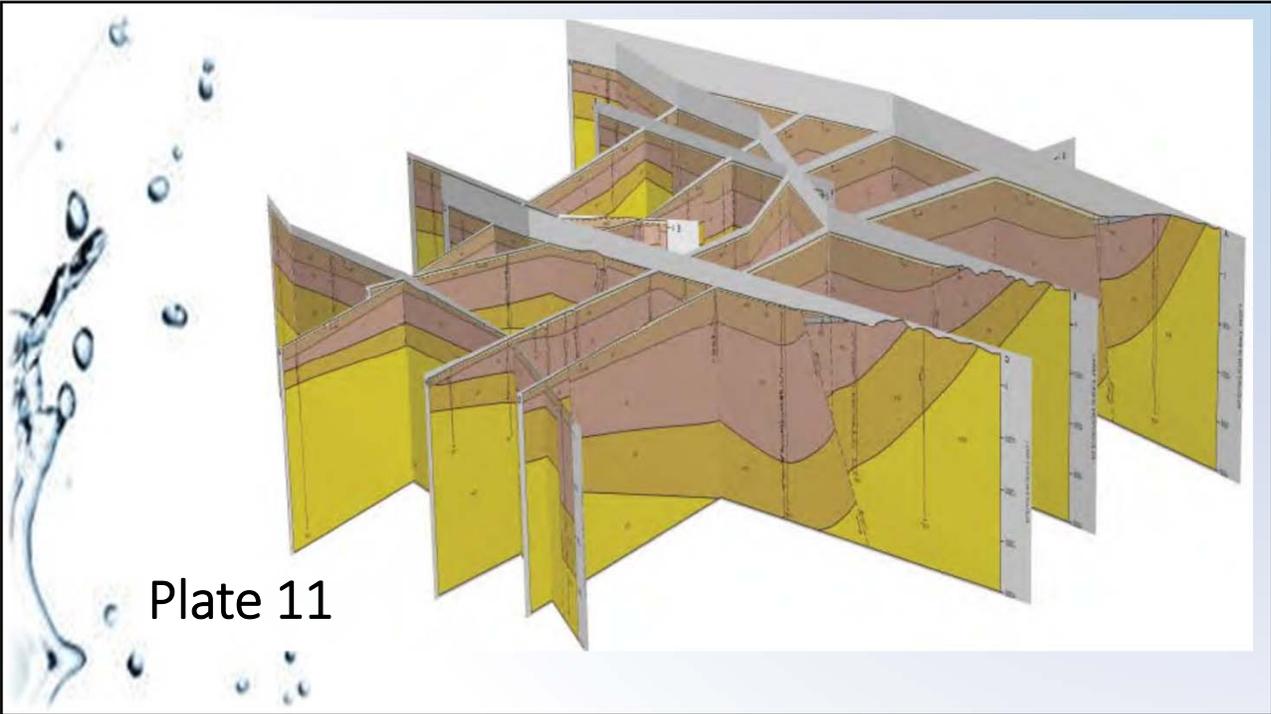
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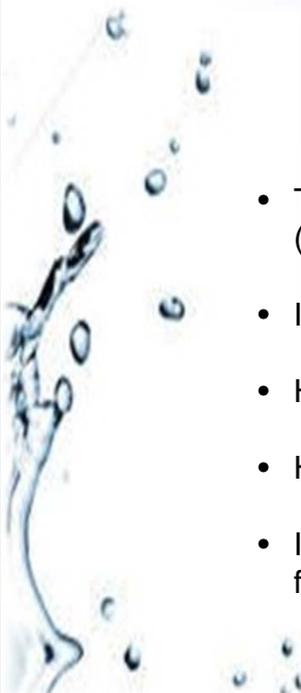
Perennial Yield

The amount of water that can be withdrawn from an aquifer on a sustained basis without exceeding the natural replenishment rate
(AWWA, 2010)

Water Budget

Basin Water Budget = Inflow – Outflow + Change in Storage

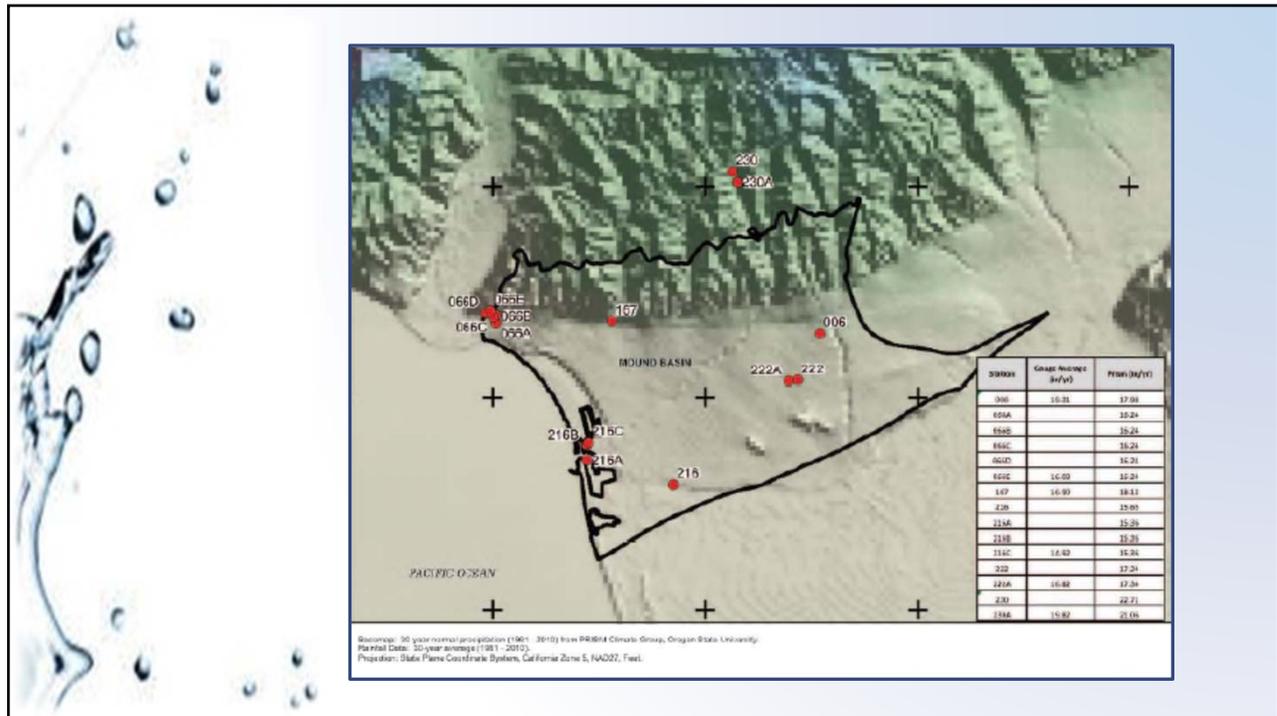
31



Hydrologic Base Period

- The beginning and ending climatic conditions should be similar (cumulative departure from the average)
- It should ideally contain a wet cycle and a dry cycle
- Have adequate rainfall data
- Have sufficient water level measurements
- It should ideally have reported groundwater extraction amounts from all wells in the basin

32



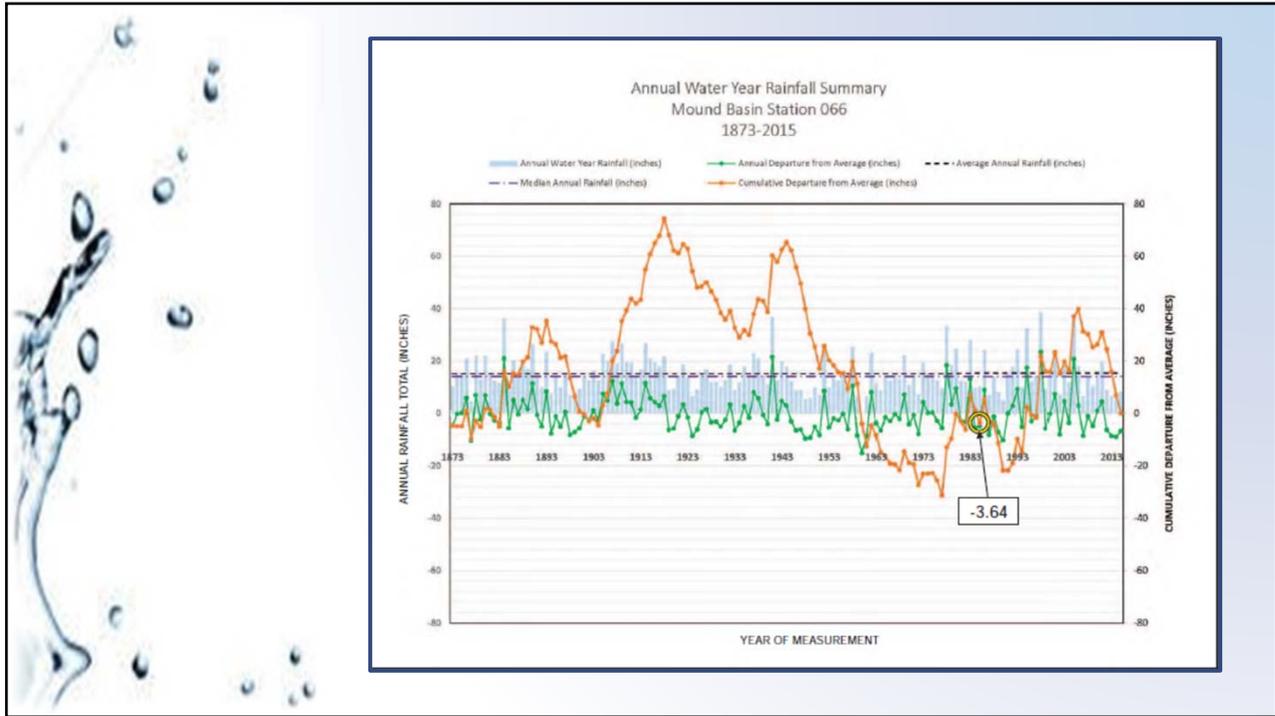
33

Historical Rain Gauges

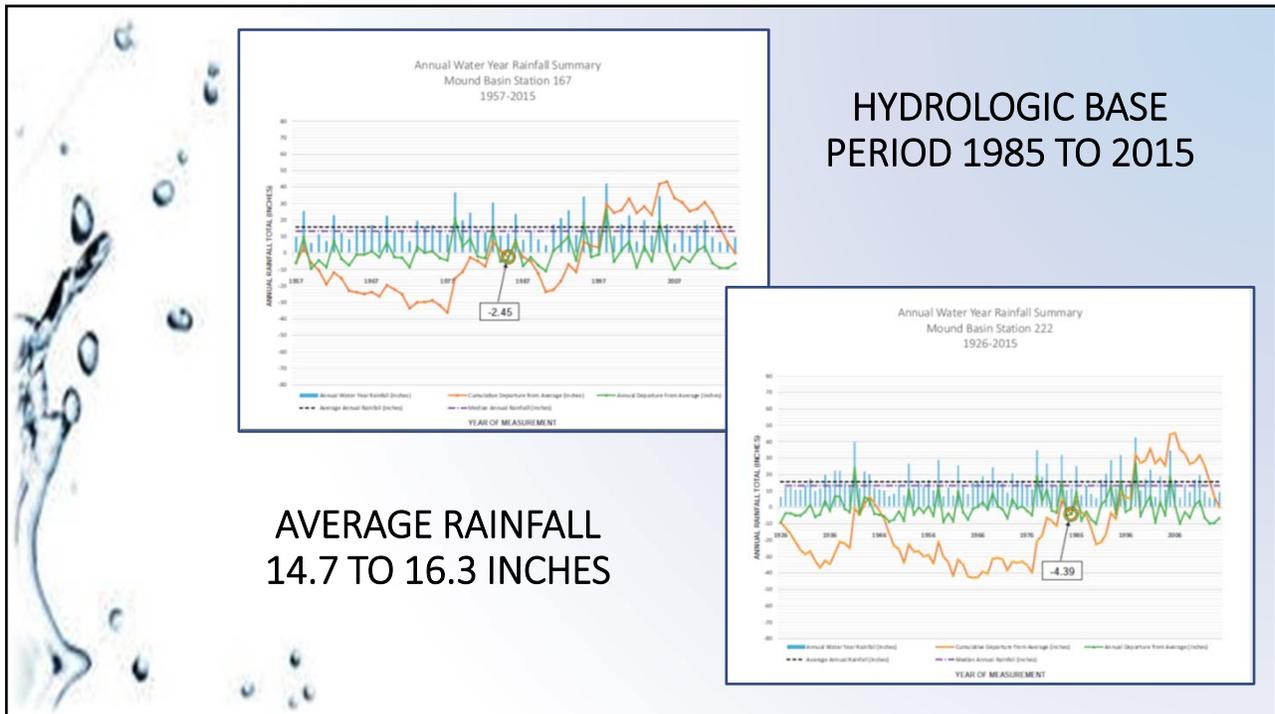
Station No. Description	General Location	Lat. / Long.	Data Range	Status	Average / Median Rainfall ¹ (in/yr)
006 Del Mar Ranch	Telephone Road, East Basin	Not available	1925 - 1998	Inactive	16.3 / 14.4
066 Downtown Ventura	West Basin	34.2811 -119.2917	1873 - 2016	Active	15.2 / 14.1
167 Hall Canyon	Central Basin	34.2805 -119.2595	1957 - 2016	Active	15.8 / 13.3
216 Ventura Marina	West Basin	34.2521 -119.2659	1965 - 2016	Active	14.7 / 12.9
222 Ventura Govt. Center	Central Basin	34.2673 -119.2112	1926 - 2016	Active	15.6 / 13.3

¹ - Average/median rainfall values are for the entire data range listed in column 4, *Data Range*

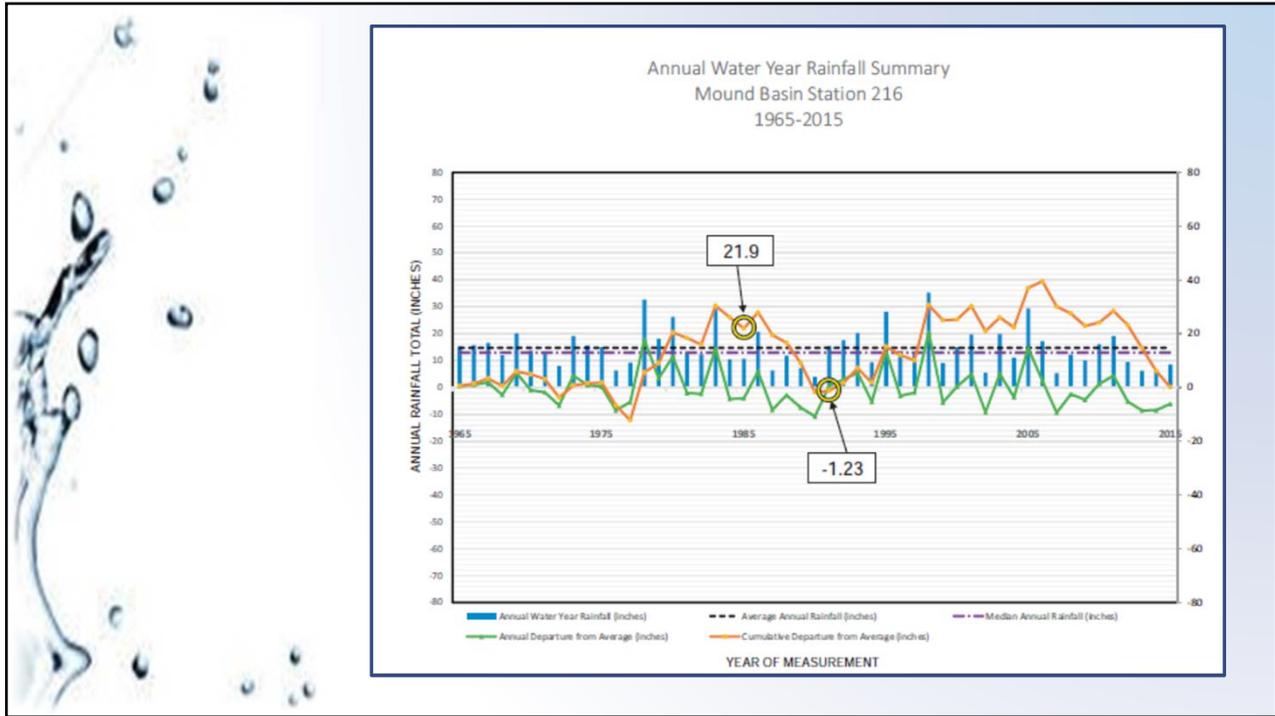
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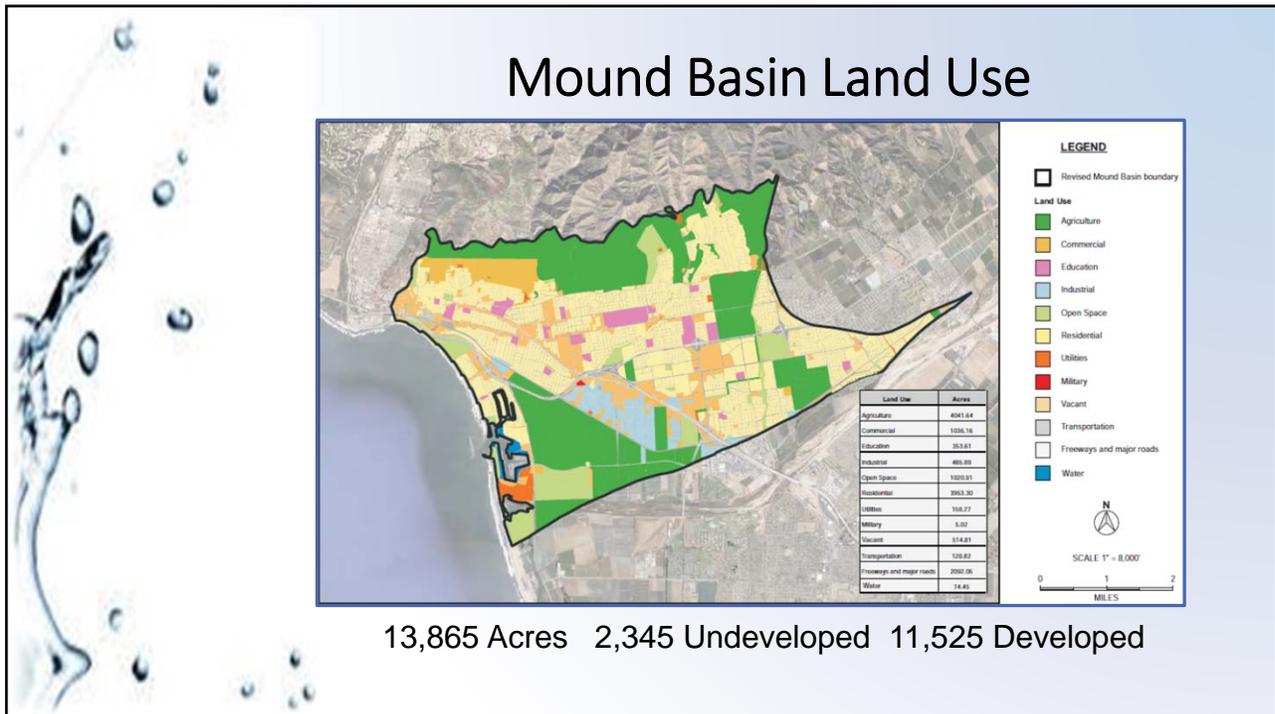
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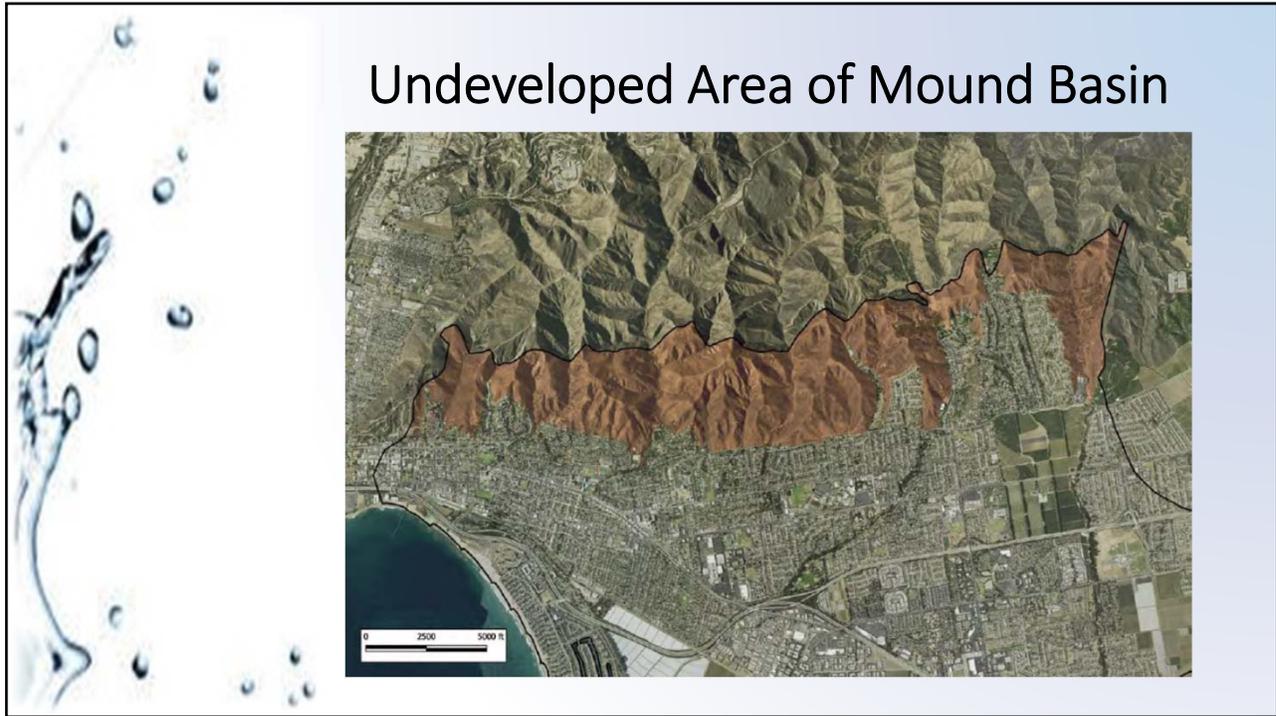
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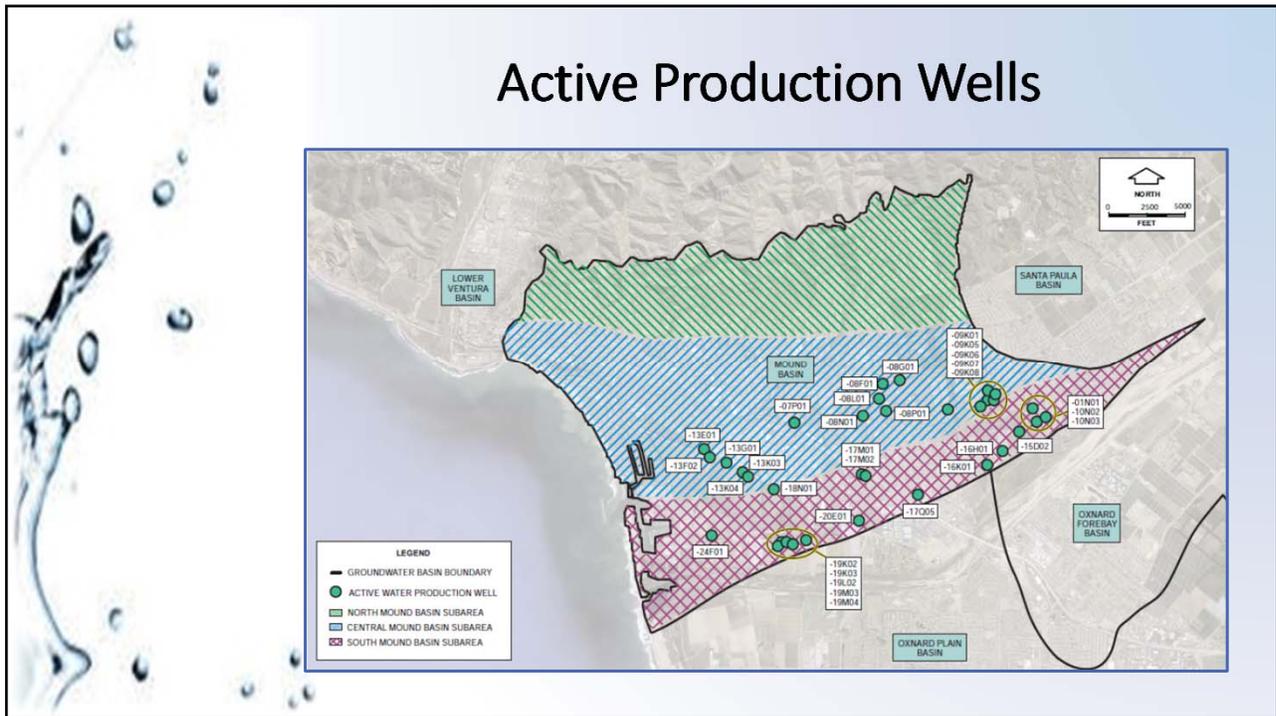
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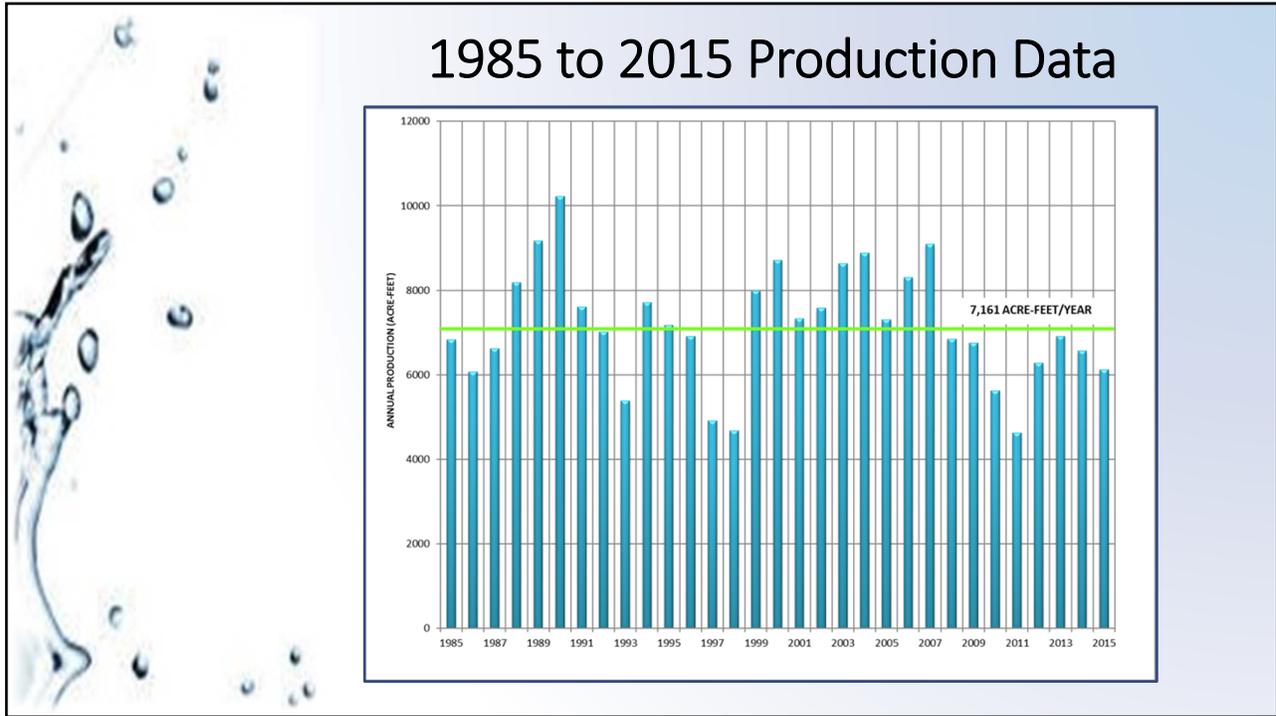
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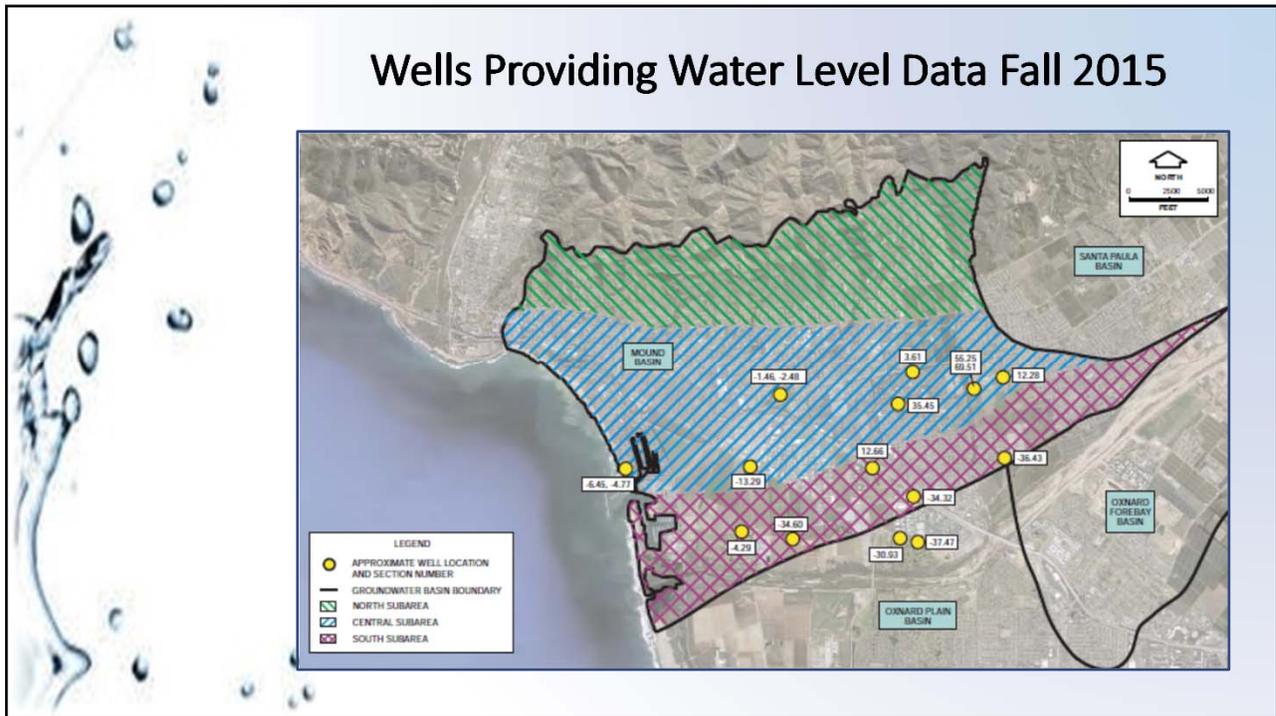
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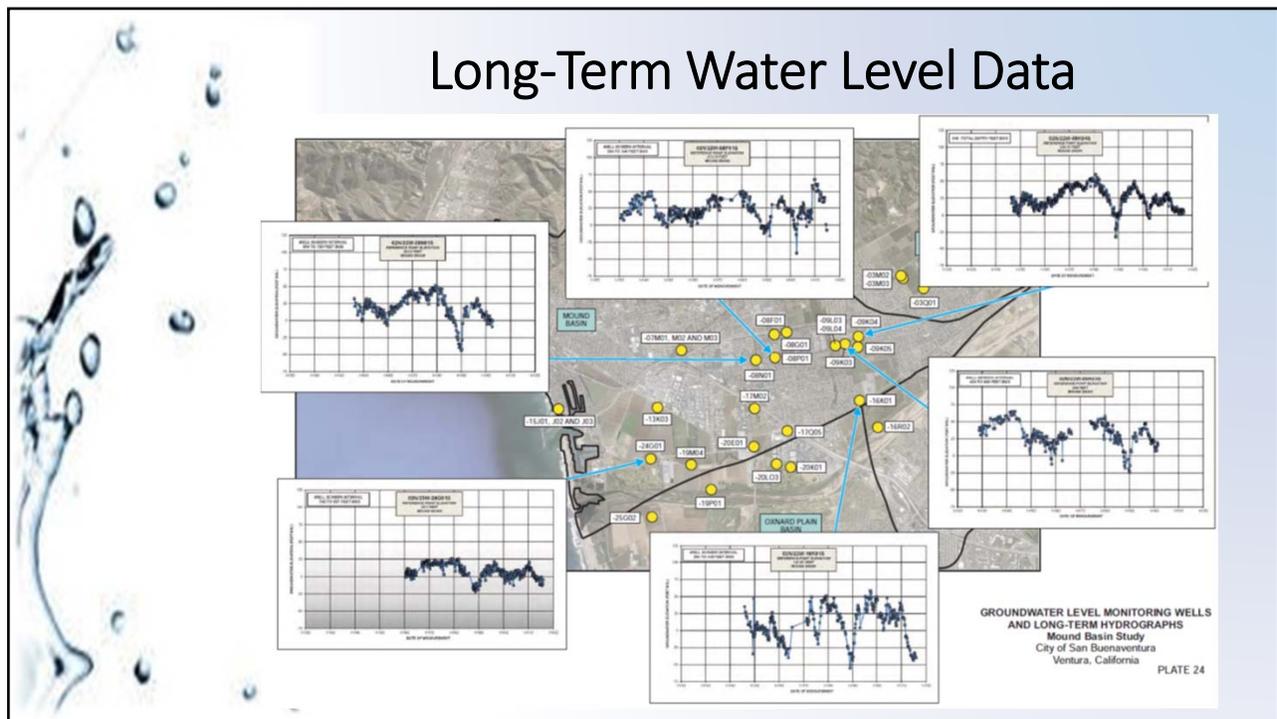
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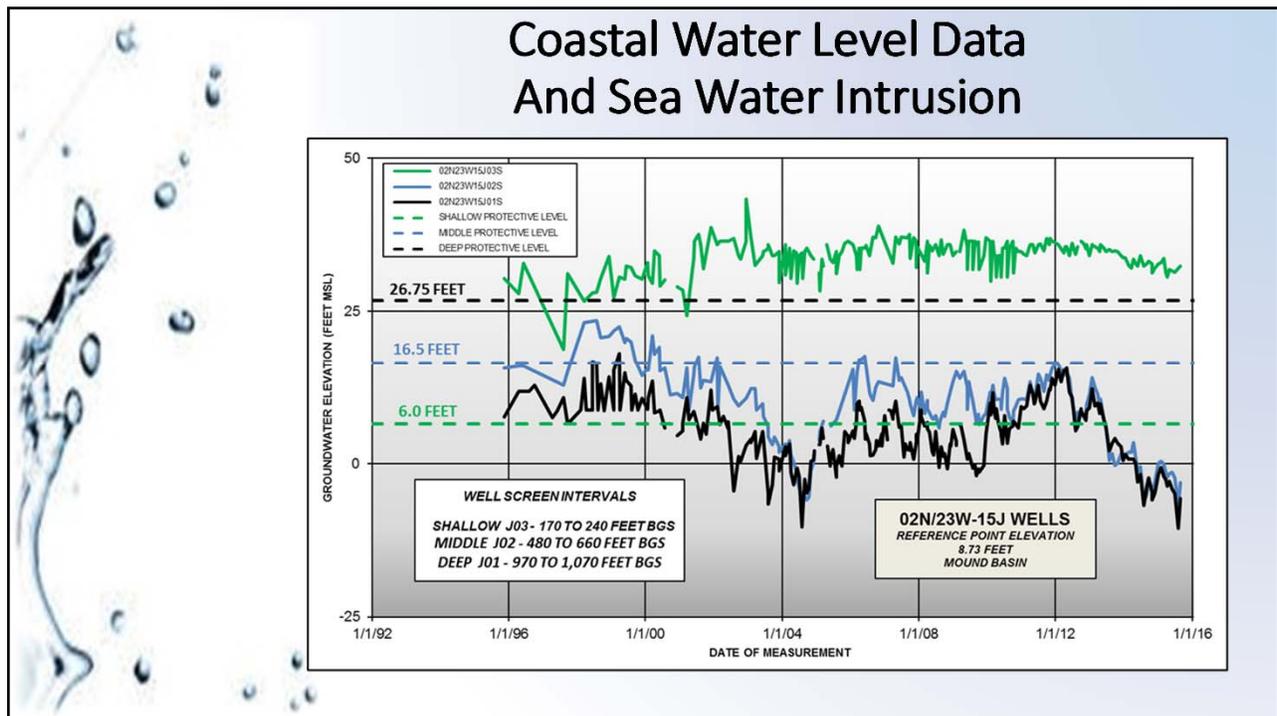
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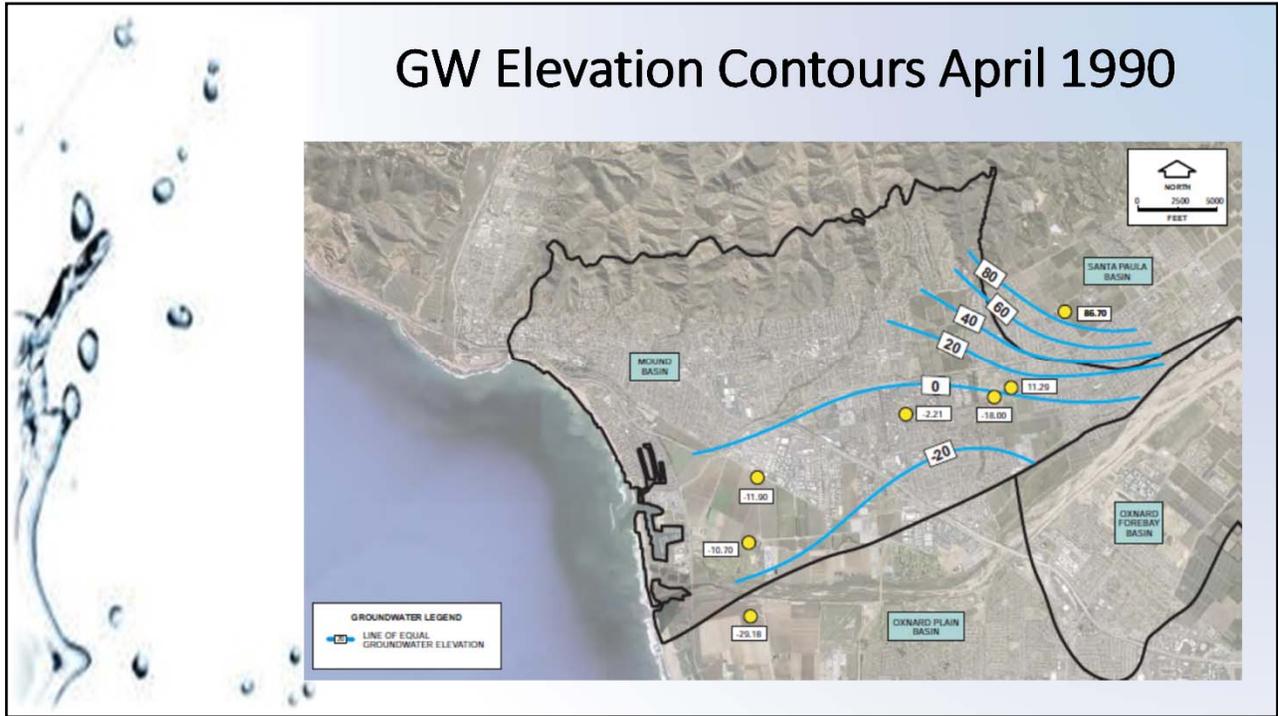
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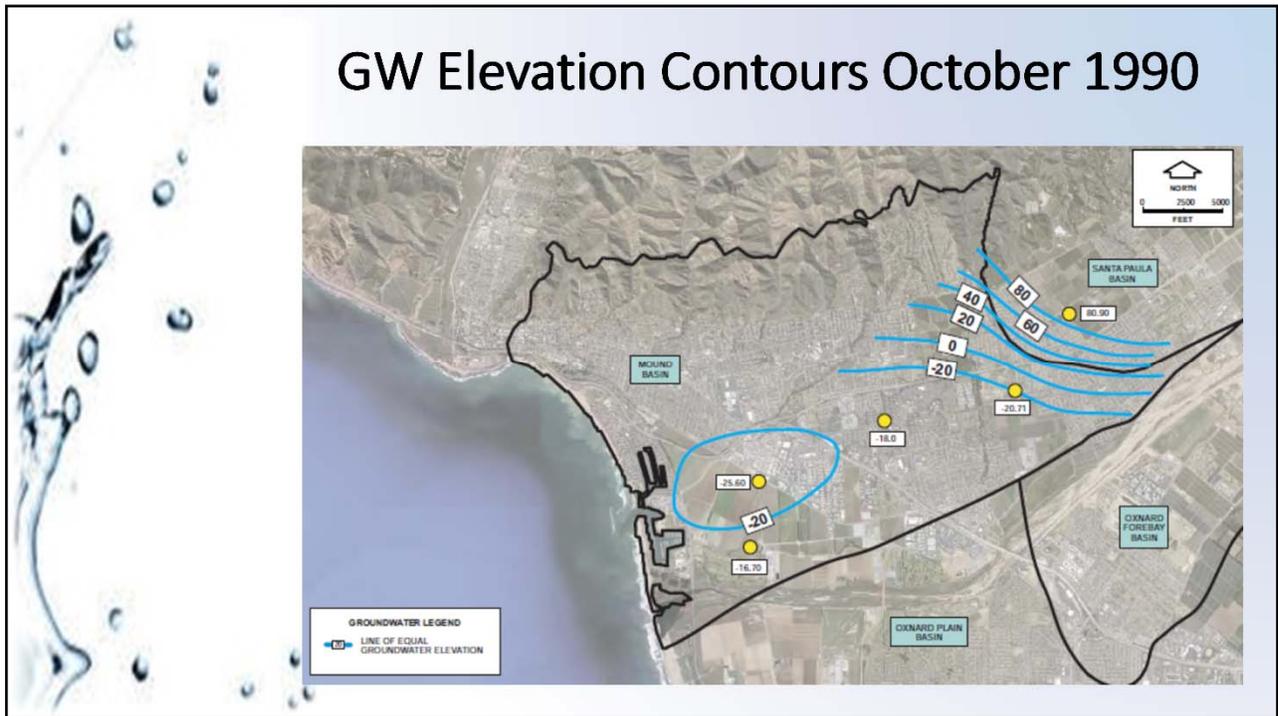
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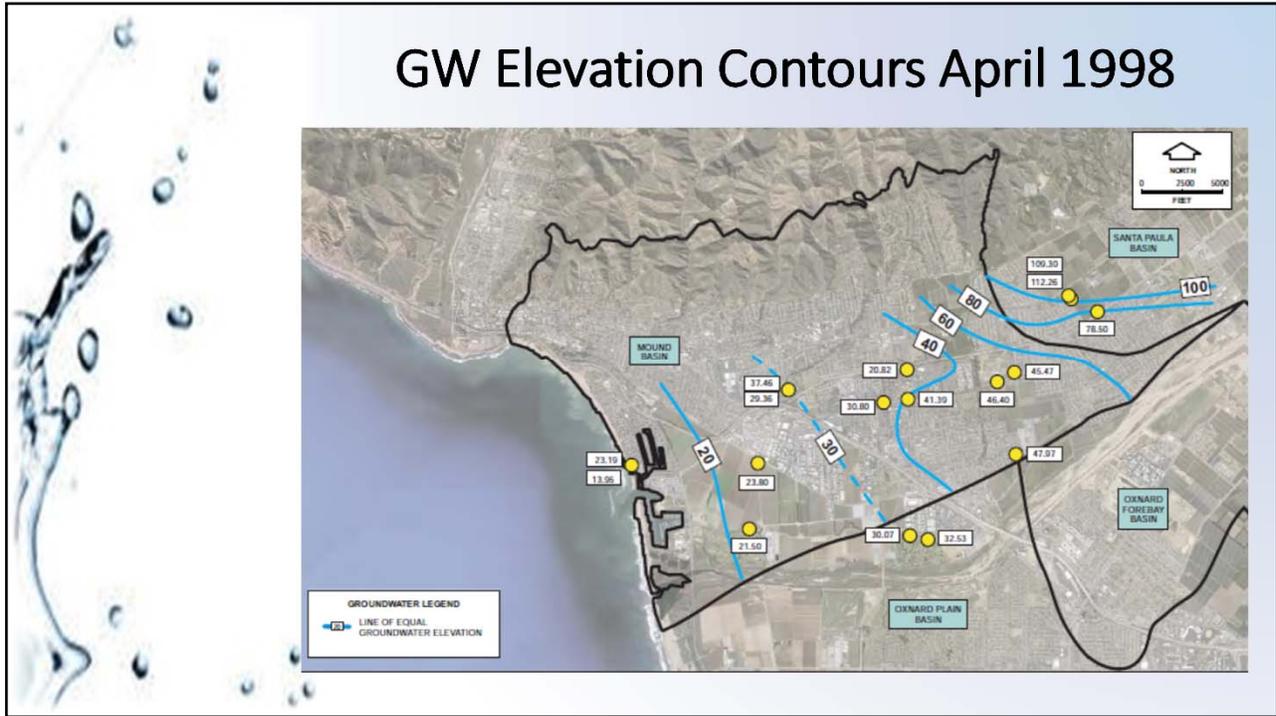
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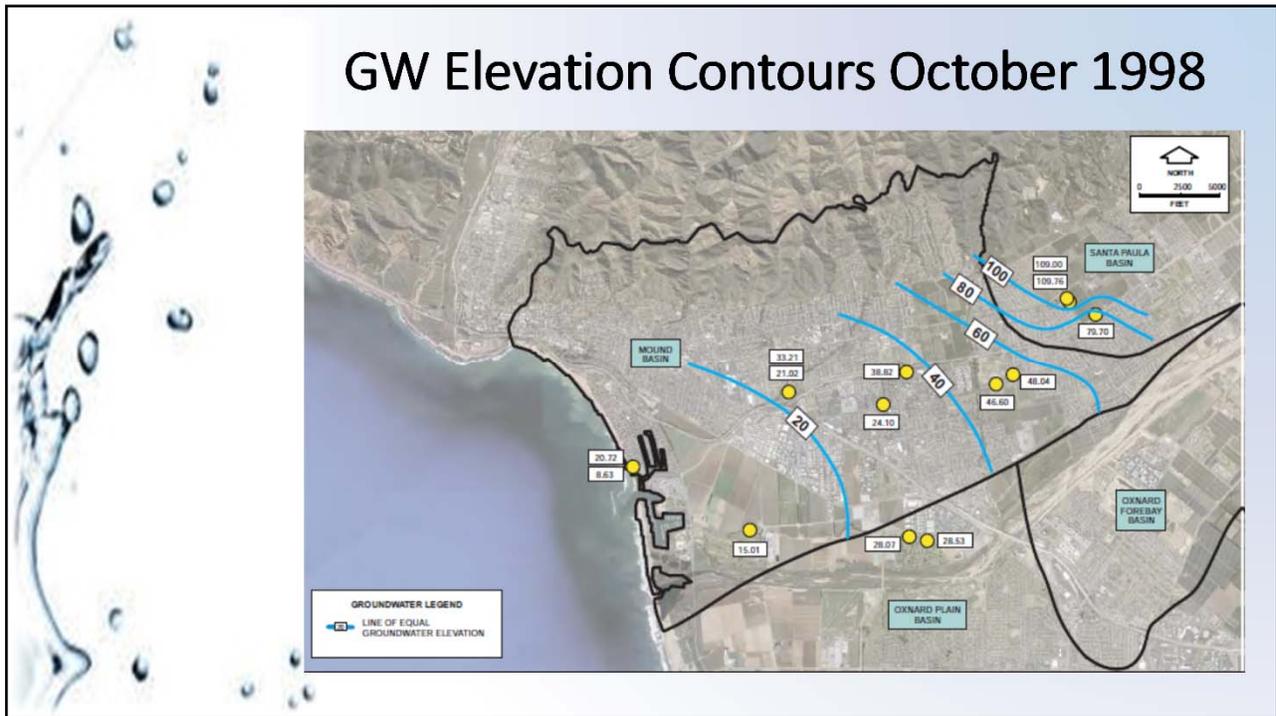
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48

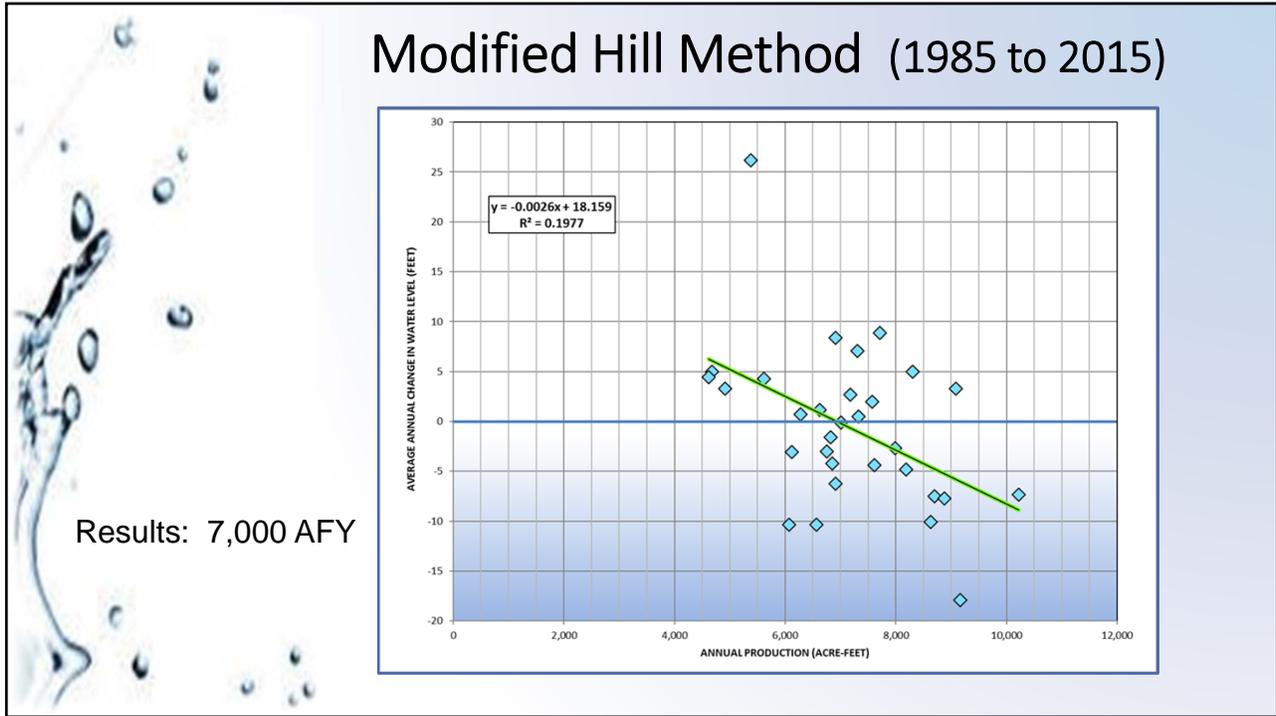
Water Quality Data

WELL LOCATION	STATE WELL NUMBER	WELL SCREEN DEPTH (FEET)	TDS (MG/L)	Ca (MG/L)	Mg (MG/L)	Na (MG/L)	HCO3 (MG/L)	SO4 (MG/L)	Cl (MG/L)
MARINA PARK	02N23W15JO3	170-240	3,293	322	233	371	1,150	1,486	98
MARINA PARK	02N23W15JO2	480-660	919	132	38	103	291	383	44
MARINA PARK	02N23W15JO1	970-1070	1,284	170	46	168	375	519	84
CAMINO REAL PARK	02N22W07MO3	210-280	4,638	590	238	491	606	2,012	439
CAMINO REAL PARK	02N22W07MO2	710-780	946	125	41	109	357	342	57
CAMINO REAL PARK	02N22W07MO1	1200-1280	1,087	134	43	145	347	438	73
VENTURA COMMUNITY PARK	02N22W09LO4	480-510	6,294	524	243	1,144	366	3,733	191
VENTURA COMMUNITY PARK	02N22W09LO3	890-950	1,022	120	33	157	204	462	72

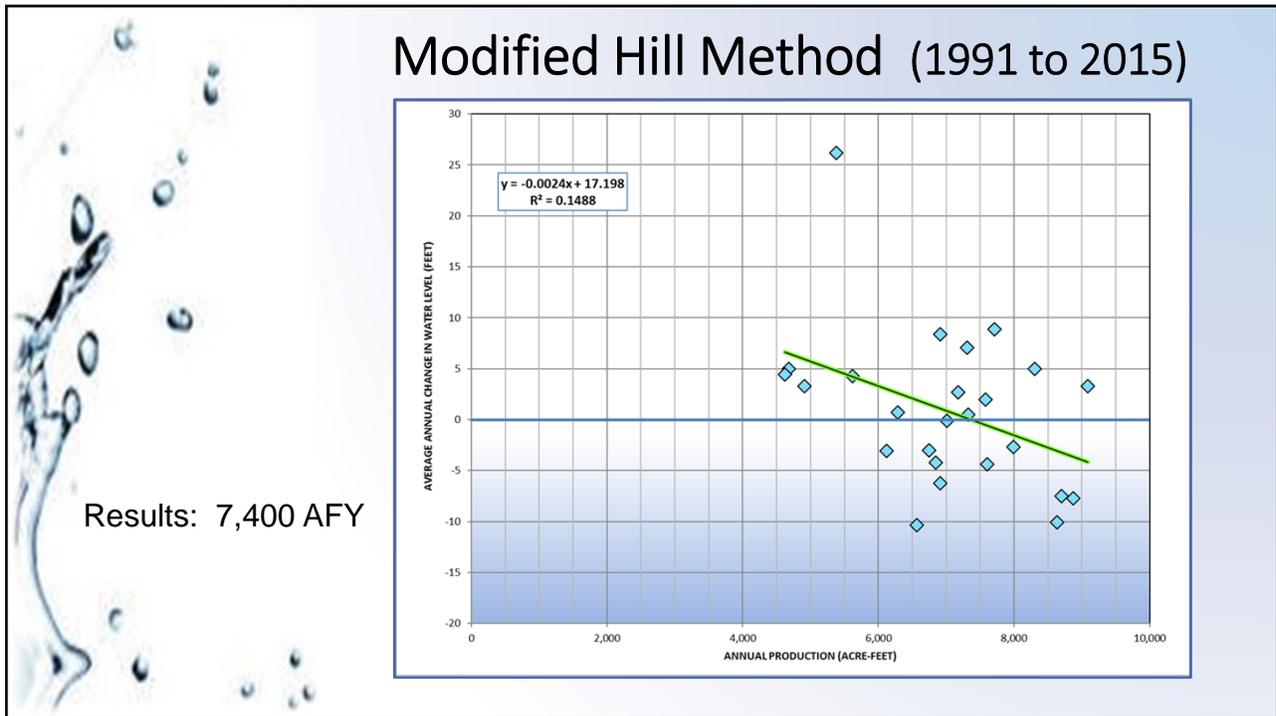
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- ## Perennial Yield Methods of Estimation
- Modified Hill Method
 - Groundwater Budget Calculation
 - Groundwater Level Change Over a Hydrologic Base Period
 - Computer Model Simulation (not used)

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Groundwater Budget Calculation Scenario No. 1

TABLE II - MOUND BASIN WATER BUDGET ESTIMATE USING SANTA PAULA BASIN SAFE YIELD STUDY INFLOW ESTIMATE AND OXNARD PLAIN/MOUND BASIN MODEL

Calendar Year	Basin Inflow								Basin Outflow					Total Groundwater Recharge	Total Groundwater Discharge	Groundwater Balance (Change in Storage)
	Groundwater Inflow					Precipitation Deep Percolation	Irrigation Return Flow	Groundwater Outflow				Pumping Reported Groundwater Extractions				
	Santa Paula	Oxnard Forebay	Lower Ventura River	Santa Clara River Percolation	Coastline			Oxnard Plain	Lower Ventura River	Santa Clara River Percolation	Coastline					
Data Source	RCS	UWCD	ASSUMED	ASSUMED	ASSUMED	HGC	HGC	UWCD	ASSUMED	UWCD	ASSUMED	UWCD	CALCULATED	CALCULATED	CALCULATED	
1985	1,750	1,890	0	0	500	1,535	2,994	1,500	0	1,170	0	6,826	8,669	9,496	-827	
1986	1,750	1,890	0	0	500	3,329	2,786	1,500	0	1,170	0	6,066	10,256	8,736	1,519	
1987	1,750	1,890	0	0	500	1,952	2,801	1,500	0	1,170	0	6,626	8,893	9,296	-402	
1988	1,750	1,890	0	0	500	1,827	3,083	1,500	0	1,170	0	8,189	9,049	10,859	-1,809	
1989	1,750	1,890	0	0	500	783	3,176	1,500	0	1,170	0	9,164	8,099	11,834	-3,735	
1990	1,750	1,890	0	0	500	792	3,353	1,500	0	1,170	0	10,222	8,285	12,892	-4,606	
1991	1,750	1,890	0	0	500	3,275	2,817	1,500	0	1,170	0	7,608	10,232	10,278	-46	
1992	1,750	1,890	0	0	500	3,481	2,835	1,500	0	1,170	0	7,013	10,456	9,683	774	
1993	1,750	1,890	0	0	500	3,655	2,757	1,500	0	1,170	0	5,380	10,552	8,050	2,502	
1994	1,750	1,890	0	0	500	1,950	2,968	1,500	0	1,170	0	7,710	9,059	10,380	-1,321	
1995	1,750	1,890	0	0	500	5,194	3,145	1,500	0	1,170	0	7,173	12,479	9,843	2,635	
1996	1,750	1,890	0	0	500	3,183	2,843	1,500	0	1,170	0	6,911	10,166	9,551	585	
1997	1,750	1,890	0	0	500	2,468	2,733	1,500	0	1,170	0	4,912	9,341	7,582	1,758	
1998	1,750	1,890	0	0	500	5,309	2,738	1,500	0	1,170	0	4,678	12,187	7,348	4,839	
1999	1,750	1,890	0	0	500	1,542	2,669	1,500	0	1,170	0	7,988	8,351	10,658	-2,307	
2000	1,750	1,890	0	0	500	2,769	2,910	1,500	0	1,170	0	8,703	9,820	11,373	-1,554	
2001	1,750	1,890	0	0	500	4,260	2,330	1,500	0	1,170	0	7,325	10,730	9,995	735	
2002	1,750	1,890	0	0	500	1,846	2,583	1,500	0	1,170	0	7,577	8,570	10,247	-1,678	
2003	1,750	1,890	0	0	500	2,965	2,702	1,500	0	1,170	0	8,630	9,207	11,300	-2,093	
2004	1,750	1,890	0	0	500	3,111	2,821	1,500	0	1,170	0	8,875	10,922	11,545	-1,473	
2005	1,750	1,890	0	0	500	4,205	2,383	1,500	0	1,170	0	7,309	10,727	9,979	748	
2006	1,750	1,890	0	0	500	2,657	2,682	1,500	0	1,170	0	8,305	9,478	10,975	-1,496	
2007	1,750	1,890	0	0	500	1,245	3,025	1,500	0	1,170	0	9,088	8,410	11,758	-3,348	
2008	1,750	1,890	0	0	500	2,484	2,448	1,500	0	1,170	0	6,850	9,071	9,520	-448	
2009	1,750	1,890	0	0	500	1,651	2,671	1,500	0	1,170	0	6,751	8,462	9,411	-959	
2010	1,750	1,890	0	0	500	3,995	2,422	1,500	0	1,170	0	5,617	10,557	8,287	2,269	
2011	1,750	1,890	0	0	500	1,949	2,162	1,500	0	1,170	0	4,619	8,251	7,289	962	
2012	1,750	1,890	0	0	500	1,635	2,474	1,500	0	1,170	0	6,282	8,249	8,952	-704	
2013	1,750	1,890	0	0	500	589	2,365	1,500	0	1,170	0	6,913	7,094	9,583	-2,489	
2014	1,750	1,890	0	0	500	1,733	2,325	1,500	0	1,170	0	6,562	8,198	9,232	-1,034	
2015	1,750	1,890	0	0	500	762	2,116	1,500	0	1,170	0	6,124	7,017	8,794	-1,776	
Average	1,750	1,890	0	0	500	2,501	2,713	1,500	0	1,170	0	7,161	9,354	9,831	-477	
Total	54,250	58,590	0	0	15,500	77,531	84,115	46,500	0	36,270	0	221,995	289,987	304,765	-14,779	

Notes:
Ephemeral stream recharge is included with precipitation deep percolation
Percolation of City recycled water ponds and discharge to the estuary is assumed to flow to the Ocean and does not add appreciable recharge
Model values from UWCD from Table 4-4 Summary of Simulated Annual-Average Flows in Mound Basin

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Groundwater Budget Calculation Scenario No. 2

TABLE II - MOUND BASIN WATER BUDGET ESTIMATE USING OXNARD PLAIN/MOUND BASIN MODEL INFLOWS AND OUTFLOWS

Calendar Year	Basin Inflow								Basin Outflow					Total Groundwater Recharge	Total Groundwater Discharge	Groundwater Balance (Change in Storage)
	Groundwater Inflow					Precipitation Deep Percolation	Irrigation Return Flow	Groundwater Outflow				Pumping Reported Groundwater Extractions				
	Santa Paula	Oxnard Forebay	Lower Ventura River	Santa Clara River Percolation	Coastline			Oxnard Plain	Lower Ventura River	Santa Clara River Percolation	Coastline					
Data Source	UWCD	UWCD	ASSUMED	UWCD	ASSUMED	HGC	HGC	UWCD	UWCD	UWCD	UWCD	UWCD	CALCULATED	CALCULATED	CALCULATED	
1985	3,100	1,890	0	0	0	1,535	2,994	1,500	0	1,170	270	6,826	9,519	9,766	-249	
1986	3,100	1,890	0	0	0	3,329	2,786	1,500	0	1,170	270	6,066	11,106	9,006	2,097	
1987	3,100	1,890	0	0	0	1,952	2,801	1,500	0	1,170	270	6,626	9,743	9,566	178	
1988	3,100	1,890	0	0	0	1,827	3,083	1,500	0	1,170	270	8,189	9,899	11,129	-1,229	
1989	3,100	1,890	0	0	0	783	3,176	1,500	0	1,170	270	9,164	8,949	12,104	-3,155	
1990	3,100	1,890	0	0	0	792	3,353	1,500	0	1,170	270	10,222	9,135	13,162	-4,026	
1991	3,100	1,890	0	0	0	3,275	2,817	1,500	0	1,170	270	7,608	11,082	10,548	534	
1992	3,100	1,890	0	0	0	3,481	2,835	1,500	0	1,170	270	7,013	11,306	9,953	1,354	
1993	3,100	1,890	0	0	0	3,655	2,757	1,500	0	1,170	270	5,380	11,402	8,320	3,082	
1994	3,100	1,890	0	0	0	1,950	2,968	1,500	0	1,170	270	7,710	9,909	10,650	-741	
1995	3,100	1,890	0	0	0	5,194	3,145	1,500	0	1,170	270	7,173	13,329	10,113	3,215	
1996	3,100	1,890	0	0	0	3,183	2,843	1,500	0	1,170	270	6,911	11,016	9,851	1,165	
1997	3,100	1,890	0	0	0	2,468	2,733	1,500	0	1,170	270	4,912	10,191	7,852	2,338	
1998	3,100	1,890	0	0	0	5,309	2,738	1,500	0	1,170	270	4,678	13,037	7,618	5,419	
1999	3,100	1,890	0	0	0	1,542	2,669	1,500	0	1,170	270	7,988	9,201	10,928	-1,727	
2000	3,100	1,890	0	0	0	2,769	2,910	1,500	0	1,170	270	8,703	10,670	11,643	-974	
2001	3,100	1,890	0	0	0	4,260	2,330	1,500	0	1,170	270	7,325	11,580	10,265	1,315	
2002	3,100	1,890	0	0	0	1,846	2,583	1,500	0	1,170	270	7,577	9,420	10,517	-1,098	
2003	3,100	1,890	0	0	0	2,965	2,702	1,500	0	1,170	270	8,630	10,057	11,570	-1,513	
2004	3,100	1,890	0	0	0	3,111	2,821	1,500	0	1,170	270	8,875	10,922	11,815	-893	
2005	3,100	1,890	0	0	0	4,205	2,383	1,500	0	1,170	270	7,309	10,577	10,249	1,328	
2006	3,100	1,890	0	0	0	2,657	2,682	1,500	0	1,170	270	8,305	10,328	11,245	-916	
2007	3,100	1,890	0	0	0	1,245	3,025	1,500	0	1,170	270	9,088	9,260	12,028	-2,768	
2008	3,100	1,890	0	0	0	2,484	2,448	1,500	0	1,170	270	6,850	9,921	9,790	132	
2009	3,100	1,890	0	0	0	1,651	2,671	1,500	0	1,170	270	6,751	9,312	9,691	-379	
2010	3,100	1,890	0	0	0	3,995	2,422	1,500	0	1,170	270	5,617	11,407	8,557	2,849	
2011	3,100	1,890	0	0	0	1,949	2,162	1,500	0	1,170	270	4,619	9,101	7,559	1,542	
2012	3,100	1,890	0	0	0	1,635	2,474	1,500	0	1,170	270	6,282	9,099	9,222	-124	
2013	3,100	1,890	0	0	0	589	2,365	1,500	0	1,170	270	6,913	7,944	9,853	-1,909	
2014	3,100	1,890	0	0	0	1,733	2,325	1,500	0	1,170	270	6,562	9,048	9,502	-454	
2015	3,100	1,890	0	0	0	762	2,116	1,500	0	1,170	270	6,124	7,867	9,064	-1,196	
Average	3,100	1,890	0	0	0	2,501	2,713	1,500	0	1,170	270	7,161	10,204	10,101	103	
Total	96,100	58,590	0	0	0	77,531	84,115	46,500	0	36,270	8,370	221,995	316,337	313,135	3,201	

Notes:
Ephemeral stream recharge is included with precipitation deep percolation
Percolation of City recycled water ponds and discharge to the estuary is assumed to flow to the Ocean and does not add appreciable recharge
Model values from UWCD from Table 4-4 Summary of Simulated Annual-Average Flows in Mound Basin

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Groundwater Budget Calculations Summary

- Scenario 1 – 1985 to 2015
 Total Change of Storage –14,779 AF
 Average Annual Change of Storage – 477 AFY
- Scenario 2 – 1985 to 2015
 Total Change of Storage 3,201 AF
 Average Annual Change of Storage 103AFY
- Results: Scenario 1 7,161 AFY – 477 AFY = 6,684 AFY
- Results: Scenario 2 7,161 AFY + 103 AFY = 7,264 AFY

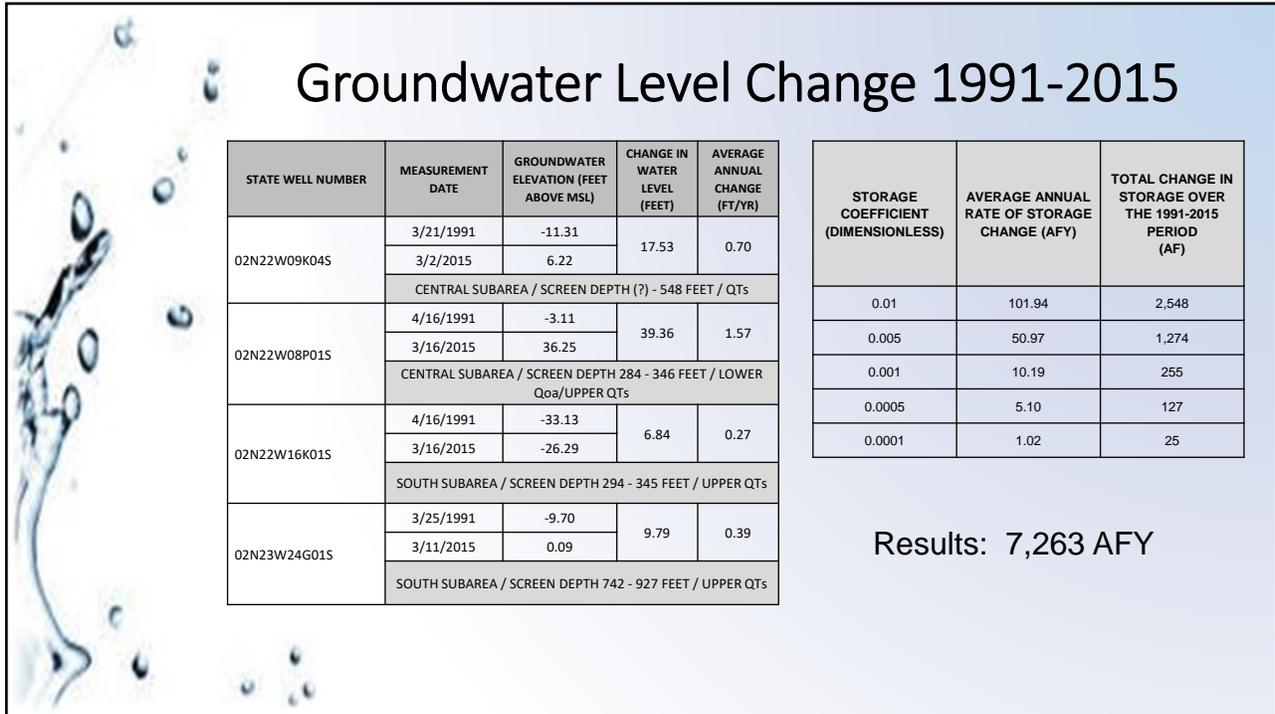
55

Groundwater Level Change 1985-2015

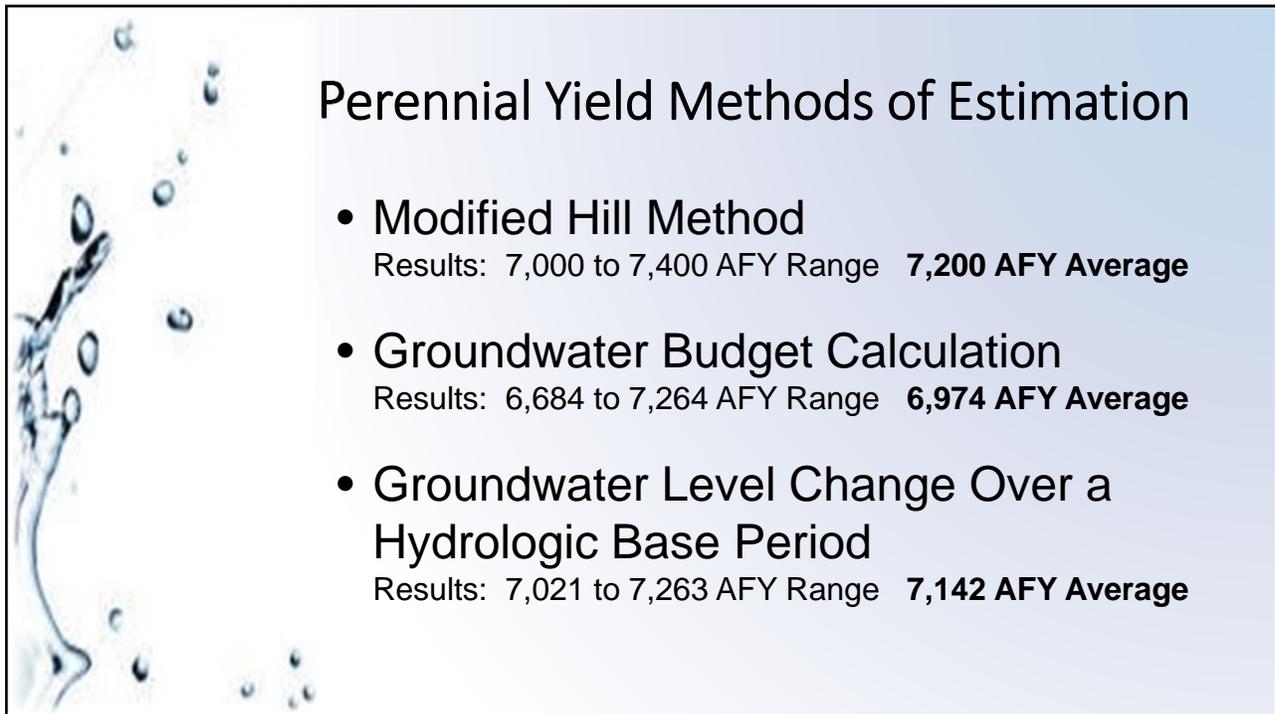
STATE WELL NUMBER	MEASUREMENT DATE	GROUNDWATER ELEVATION (FEET ABOVE MSL)	CHANGE IN WATER LEVEL (FEET)	AVERAGE ANNUAL CHANGE (FT/YR)	STORAGE COEFFICIENT (DIMENSIONLESS)	AVERAGE ANNUAL RATE OF STORAGE CHANGE (AFY)	TOTAL CHANGE IN STORAGE OVER THE BASE PERIOD (AF)			
02N22W09K04S	4/3/1985	43.69	-37.47	-1.21	0.01	-139.32	-4,319			
	3/2/2015	6.22								
	CENTRAL SUBAREA / SCREEN DEPTH (?) - 548 FEET / QTs									
02N22W08P01S	4/15/1985	40.79	-7.65	-0.25						
	3/18/2015	33.14								
	CENTRAL SUBAREA / SCREEN DEPTH 284 - 346 FEET / LOWER Qoa/UPPER QTs									
02N22W16K01S	2/8/1985	36.47	-62.76	-2.02						
	3/16/2015	-26.29								
	SOUTH SUBAREA / SCREEN DEPTH 294 - 345 FEET / UPPER QTs									
02N23W24G01S	2/13/1985	16.80	-16.71	-0.54	0.0005	-69.66	-2,159			
	3/11/2015	0.09								
	SOUTH SUBAREA / SCREEN DEPTH 742 - 927 FEET / UPPER QTs									
								0.001	-13.93	-432
								0.0005	-6.97	-216
								0.0001	-1.39	-43

Results: 7,021 AFY

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Conclusions

- We believe 1985 to 2015 was an acceptable base period given available data
- Study estimates indicate the Mound Basin is capable of providing an average annual perennial yield in the range of 6,700 to 7,400 AFY which is believed reasonable
- Data across the Mound Basin are lacking to allow refinement of the yield estimate at this time
- The complexity of the Basin should be considered when evaluating data in the future and planning to establish additional monitoring locations

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Questions

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Mound Basin Groundwater Sustainability Agency
Check Detail
August 14, 2020

<u>Type</u>	<u>Num</u>	<u>Date</u>	<u>Name</u>	<u>Account</u>	<u>Original Amount</u>
Bill Pmt -Check	11352	08/14/2020	A.J. Klein, Inc T. Denatale, B. Goldner	10000 · Bank of the Sierra	-1,386.50
Bill Pmt -Check	11353	08/14/2020	Bondy Groundwater Consulting, Inc	10000 · Bank of the Sierra	-22,350.00
Bill Pmt -Check	11354	08/14/2020	County of Ventura- IT Servces Department	10000 · Bank of the Sierra	-98.00
Bill Pmt -Check	11355	08/14/2020	INTERA Incorporated	10000 · Bank of the Sierra	-31,413.00
Bill Pmt -Check	11356	08/14/2020	United Water Conservation District	10000 · Bank of the Sierra	-13,963.16
					<hr/> -69,210.66



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY

MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY

Item No. 7(c)

DATE: August 20, 2020
TO: Board of Directors and Executive Director
FROM: Erin Gorospe, UWCD
SUBJECT: Monthly Financial Reports

SUMMARY

The Board will receive the monthly financial reports for the Mound Basin GSA.

INFORMATIONAL ITEM

UWCD accounting staff has prepared financial reports based on the Mound Basin GSA revenue and expenses for the month of July 2020.

BACKGROUND

FISCAL SUMMARY

Not applicable.

ATTACHMENTS

- A. July 2020 Profit/Loss Statement
- B. July 2020 Profit/Loss by Class
- C. July 2020 Balance Sheet

Mound Basin Groundwater Sustainability Agency
Profit & Loss Budget Performance
 July 2020

	<u>Jul 20</u>	<u>Annual Budget</u>	<u>Budget</u>
Income			
40001 · Groundwater Extraction Fees	0.00	150,000.00	
41000 · Grant revenue			
41001 · State Grants	0.00	493,277.00	
Total 41000 · Grant revenue	<u>0.00</u>	<u>493,277.00</u>	
Total Income	<u>0.00</u>	<u>643,277.00</u>	
Gross Profit	0.00	643,277.00	
Expense			
52200 · Professional Services			
52240 · Prof Svcs - IT Consulting	0.00	494.00	
52250 · Prof Svcs - Groundwater/GSP Pre			
52252 · Prof Svcs - GSP Consultant	63,418.48	469,842.00	13.50%
Total 52250 · Prof Svcs - Groundwater/GSP Pre	<u>63,418.48</u>	<u>469,842.00</u>	
52270 · Prof Svcs - Accounting	1,434.82	15,000.00	9.57%
52275 · Prof Svcs - Admin/Clerk of Bd	1,648.65	12,500.00	13.19%
52280 · Prof Svcs - Executive Director	1,200.00	45,000.00	2.67%
Total 52200 · Professional Services	<u>67,701.95</u>	<u>542,836.00</u>	12.47%
52500 · Legal Fees			
52501 · Legal Counsel	855.50	35,000.00	
Total 52500 · Legal Fees	<u>855.50</u>	<u>35,000.00</u>	2.44%
53000 · Office Expenses			
53010 · Public Information	0.00	5,000.00	
53020 · Office Supplies	3.15	7,500.00	0.04%
53026 · Postage & Mailing	170.20	200.00	85.10%
53110 · Travel & Training	18.86	1,000.00	1.89%
Total 53000 · Office Expenses	<u>192.21</u>	<u>13,700.00</u>	1.40%
53500 · Insurance			
53510 · Liability Insurance	0.00	3,700.00	
Total 53500 · Insurance	<u>0.00</u>	<u>3,700.00</u>	
70000 · Interest & Debt Service			
70120 · Interest Expense	0.00	1,238.00	
Total 70000 · Interest & Debt Service	<u>0.00</u>	<u>1,238.00</u>	
Total Expense	<u>68,749.66</u>	<u>596,474.00</u>	11.53%
Net Income	<u>-68,749.66</u>	<u>46,803.00</u>	<u>-146.89%</u>

Mound Basin Groundwater Sustainability Agency
Profit & Loss by Class
July 2020

	A - Grant Administration	Task 03 - Stakeholder Outreach (C - Planning Activities)	Total C - Planning Activities	Task 04 - GSP Development (D - GSP Development)	Total D - GSP Development	Unclassified	TOTAL
Expense							
52200 · Professional Services							
52250 · Prof Svcs - Groundwater/GSP Pre							
52252 · Prof Svcs - GSP Consultant	2,450.00	1,250.00	1,250.00	59,718.48	59,718.48	0.00	63,418.48
Total 52250 · Prof Svcs - Groundwater/GSP Pre	2,450.00	1,250.00	1,250.00	59,718.48	59,718.48	0.00	63,418.48
52270 · Prof Svcs - Accounting	764.75	0.00	0.00	0.00	0.00	670.07	1,434.82
52275 · Prof Svcs - Admin/Clerk of Bd	0.00	0.00	0.00	0.00	0.00	1,648.65	1,648.65
52280 · Prof Svcs - Executive Director	0.00	0.00	0.00	0.00	0.00	1,200.00	1,200.00
Total 52200 · Professional Services	3,214.75	1,250.00	1,250.00	59,718.48	59,718.48	3,518.72	67,701.95
52500 · Legal Fees							
52501 · Legal Counsel	0.00	0.00	0.00	0.00	0.00	855.50	855.50
Total 52500 · Legal Fees	0.00	0.00	0.00	0.00	0.00	855.50	855.50
53000 · Office Expenses							
53020 · Office Supplies	0.00	0.00	0.00	0.00	0.00	3.15	3.15
53026 · Postage & Mailing	0.00	0.00	0.00	0.00	0.00	170.20	170.20
53110 · Travel & Training	0.00	0.00	0.00	0.00	0.00	18.86	18.86
Total 53000 · Office Expenses	0.00	0.00	0.00	0.00	0.00	192.21	192.21
Total Expense	3,214.75	1,250.00	1,250.00	59,718.48	59,718.48	4,566.43	68,749.66
Net Income	-3,214.75	-1,250.00	-1,250.00	-59,718.48	-59,718.48	-4,566.43	-68,749.66

Mound Basin Groundwater Sustainability Agency
Balance Sheet
As of July 31, 2020

	Jul 31, 20
ASSETS	
Current Assets	
Checking/Savings	
10000 · Bank of the Sierra	207,009.00
Total Checking/Savings	207,009.00
Accounts Receivable	
11000 · Accounts Receivable	120,788.83
Total Accounts Receivable	120,788.83
Total Current Assets	327,797.83
TOTAL ASSETS	327,797.83
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20000 · Accounts Payable	69,210.66
Total Accounts Payable	69,210.66
Other Current Liabilities	
20001 · Advance from City of Ventura	55,000.00
20510 · Interest Payable	894.60
Total Other Current Liabilities	55,894.60
Total Current Liabilities	125,105.26
Total Liabilities	125,105.26
Equity	
32000 · Retained Earnings	271,274.23
Net Income	-68,749.66
Total Equity	202,524.57
TOTAL LIABILITIES & EQUITY	327,629.83



Information Item No. 9

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: Executive Director Update

SUMMARY

The following are updates on non-GSP matters since the last Board meeting.

1. Administrative: Jackie Lozano continued training to take over as Clerk of the Board.
2. Financial: No non-routine activity.
3. Legal: Staff requested legal input on unpaid groundwater extraction fees.
4. Groundwater Monitoring Well – DWR Technical Support Services (TSS): On July 7, the City of Ventura Planning Department staff agreed to provide an application for MBGSA to complete for the monitoring well Coastal Development Permit. On July 30, the Executive Director followed-up with the City of Ventura concerning the permit application. No response has been received. The Executive Director will continue following-up.
5. Correspondence: None.

INFORMATIONAL ITEM

Receive an update from the Executive Director concerning non-GSP matters since the previous board meeting.

BACKGROUND

Not applicable

FISCAL SUMMARY

Not applicable



Information Item No. 10a

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: **Groundwater Model Presentation**

SUMMARY

A groundwater flow model is a mathematical representation of the groundwater flow system that is used to estimate groundwater levels and flows. Models are calibrated to historical measured conditions, typically measured groundwater levels. Once calibrated, models can be used to estimate future groundwater levels and water budgets for a given set of assumed future conditions (i.e. future climate, groundwater pumping, land use, etc.). Importantly, models can be used to evaluate different groundwater management approaches during groundwater sustainability plan (GSP) development. At a minimum, the GSP must include projected water budgets representing potential future conditions during the 50-year GSP implementation period. The model will also be used to support sustainable management criteria development and to evaluate potential GSP projects and management actions.

In 2018, United Water Conservation District (UWCD) staff completed a groundwater flow model of the Mound, Oxnard, Pleasant Valley and West Las Posas groundwater basins. The model was documented in a comprehensive report, which is available on-line at <https://www.unitedwater.org/reports-5/groundwater-conditions>. That version of the model was used to assist Fox Canyon Groundwater Management Agency with development of its GSPs for the Oxnard, Pleasant Valley, and Las Posas Valley Basins.

Since 2018, UWCD staff has been working to extend the model to include the Santa Paula, Fillmore, and Piru Basins. As part of this effort, the Mound Basin portion of the model has also been updated to reflect the 2018 basin boundary modification. Because the newer version of the model will provide improved predictive capability for the Mound Basin, MBGSA staff intends to utilize the newer version to prepare the required elements of its GSP, provided the model remains on track for being available in early October 2020.

UWCD staff will provide a presentation describing the groundwater flow model, including model calibration results.

RECOMMENDED ACTION

Receive a presentation from United Water Conservation District staff concerning groundwater model development

BACKGROUND

N/A

FISCAL SUMMARY

N/A



Motion Item No. 11a

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: **GSP Monthly Update (Grant Category (c), Task 3 and (d), Task 4)**

SUMMARY

The following is a monthly status update on the Groundwater Sustainability Plan (GSP) and associated grant. An updated GSP development schedule is attached for discussion (Attachment A).

GSP Development:

1. **GSP Status:**
 - a. Draft text and figures for the hydrogeologic conceptual model (HCM) and description of current and historical groundwater conditions were released for public comment. As these are preliminary draft materials, no specific deadline for comments was set.
 - b. Preliminary sustainable management criteria screening was completed in July and early August.
 - c. The sustainability goal is pending adoption by the Board (please see Item 10b).
 - d. The Executive Director has continued corresponding with United Water Conservation District (UWCD) staff concerning availability to begin the groundwater flow modeling tasks for the GSP. The model is anticipated to be available by October. The Executive Director has updated the GSP Development Schedule accordingly.
2. **GSP Development Schedule:** The updated GSP Development Schedule is provided in Attachment A. The schedule was updated and reorganized based on progress to date and UWCD's groundwater model development schedule. A new line-item was added to the schedule to track groundwater model development.

3. Outreach:

- a. The draft sustainability goal and draft GSP sections (HCM and groundwater conditions) were posted to the website in July. The interested parties were notified concerning the availability of these items via e-mail.
- b. The MBGSA Summer 2020 newsletter was posted on the website and emailed to the interested parties.
- c. Ventura Water's July 2020 customer newsletter included information about MBGSA and the upcoming public workshop (Attachment B).
- d. A bill stuffer introducing MBGSA was designed and approved for inclusion in Ventura Water's upcoming customer billings. The bill stuffer will be included with bills mailed during August and September (Attachment C).

Sustainable Groundwater Planning (SGWP) Grant:

1. Invoices:

- a. Invoice No. 4 for \$71,531 was approved by DWR on May 7, 2020. After accounting for cost share, payment will be \$4,328. Payment is expected soon.
- b. Grant Progress Report and Invoice No. 5 were submitted to DWR on July 14. Payment in the amount of \$53,253 is expected in this fall.

2. Grant Deliverables:

- a. Remaining grant deliverables include quarterly progress reports and invoices, final report, and the GSP. These deliverables will be submitted as they become due.

RECOMMENDED ACTION

Receive an update from the Executive Director concerning Groundwater Sustainability Plan development and associated grant and consider providing feedback or direction to staff.

BACKGROUND

None.

FISCAL SUMMARY

None.

ATTACHMENTS

- A. GSP Schedule
- B. Ventura Water Newsletter
- C. Ventura Water Bill Stuffer

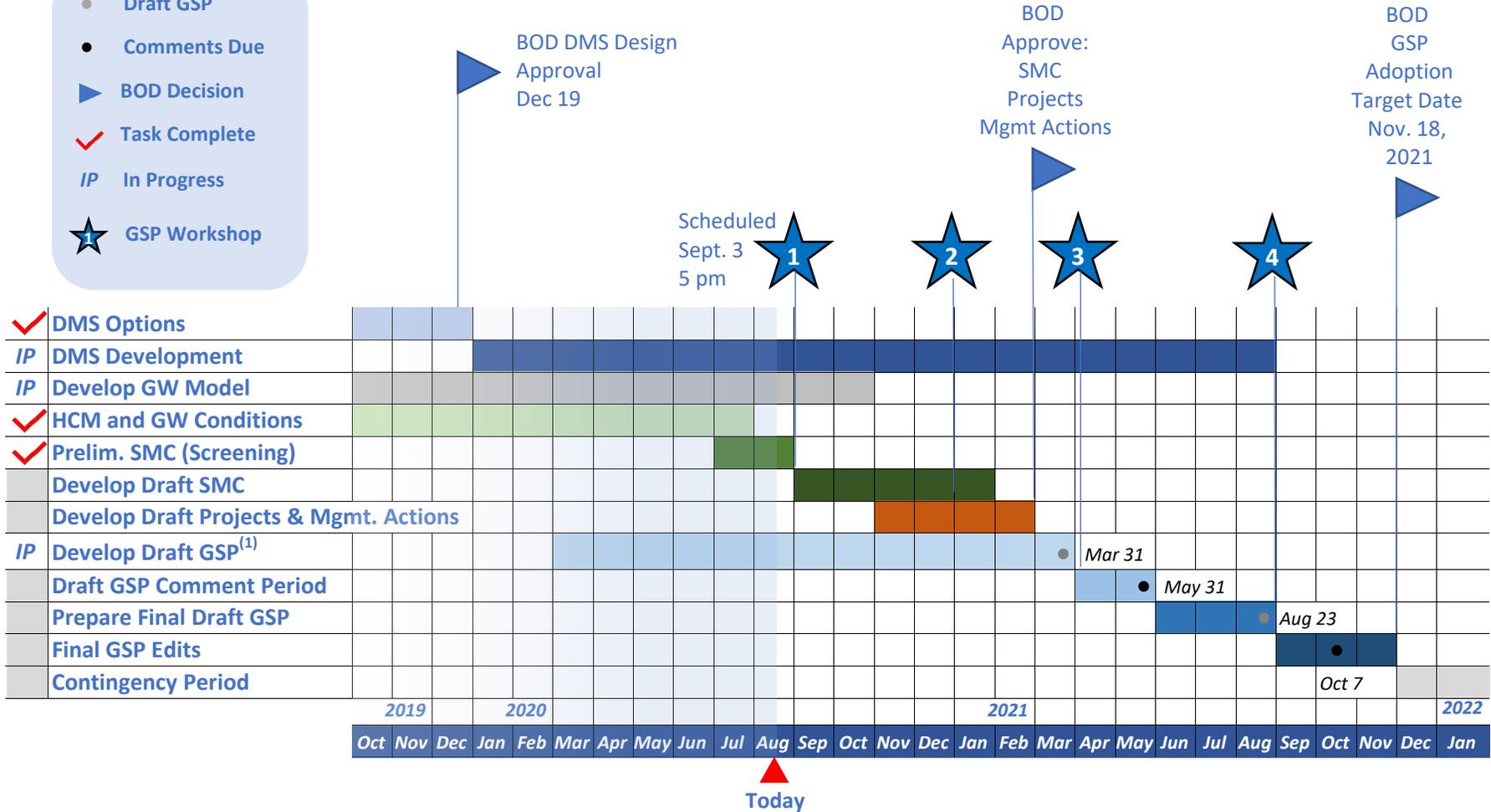
Action: _____

Motion: _____ 2nd: _____

J.Chambers: _____ C.Everts: _____ M.Mobley: _____ S.Rungren: _____ G.Shephard: _____

Mound Basin GSA GSP Development Schedule Updated 8/15/2020

- Draft GSP
- Comments Due
- ▶ BOD Decision
- ✓ Task Complete
- IP In Progress
- ★ GSP Workshop



Notes:

(1) GSP topics not listed above generally consist of background or supporting information and will be prepared concurrently with the above-listed tasks.

BOD = Board of Directors; DMS = Data Management System; HCM = Hydrogeologic Conceptual Model; GSA = Groundwater Sustainability Agency;

GSP = Groundwater Sustainability Plan; GW = Groundwater

SHARE:

[Join Our Email List](#)



How to Detect a Toilet Leak

Toilet leaks can waste hundreds of gallons of water a day! Help conserve water by checking your home for a leaky toilet. For additional water conservation tips, schedule a free Water Efficiency Survey by calling Customer Care at 805-667-6500.

RESIDENTIAL Recycled Water Mobile Reuse Program



UPDATE

Program Update

The health and safety of our community is our top priority. On March 15, 2020, the City of Ventura declared a local Health Emergency in response to COVID-19 (Coronavirus).

To date, City facilities remain closed to the public, including the Sanjon Maintenance Yard and the Ventura Water Reclamation Facility. As a result, the Residential Recycled Water Mobile Reuse Program has been suspended until further notice.

For questions regarding the Residential Recycled Water Mobile Reuse Program contact Jason Wong at (805) 677-4135.

The City continues to follow the guidelines and best practices identified by the State, CDC, and County Health Officials. We appreciate your understanding as we navigate this dynamic situation. As a reminder, wearing a face covering, practicing social distancing, and staying home if you are sick can help slow the spread and protect the most vulnerable in our community. For more City information, visit www.CityofVentura.ca.gov/COVID19

**MOUND BASIN
GROUNDWATER
SUSTAINABILITY AGENCY**



Mound Basin Groundwater Sustainability Agency

Ventura Water produces a significant portion of its water supply from wells that tap the Mound Groundwater Basin, which falls under the jurisdiction of the recently formed **Mound Basin Groundwater Sustainability Agency** (MBGSA). MBGSA is charged with managing the groundwater resources of the Basin pursuant to the Sustainable Groundwater Management Act (SGMA).

Pursuant to SGMA, MBGSA must develop and implement a groundwater sustainability plan (GSP) to achieve sustainable groundwater management by 2042. The GSP is currently under development. Although Ventura Water is a voting member of MBGSA, your direct participation in the GSP development process is encouraged!

Upcoming Public Workshop
Mound Basin Groundwater Sustainability Plan
Thursday, September 3, 2020 at 5:00 pm
[Meeting Details here.](#)

To receive regular e-mail updates, contact the MBGSA Clerk of the Board at Jackiel@unitedwater.org. For additional information visit www.moundbasingsa.org

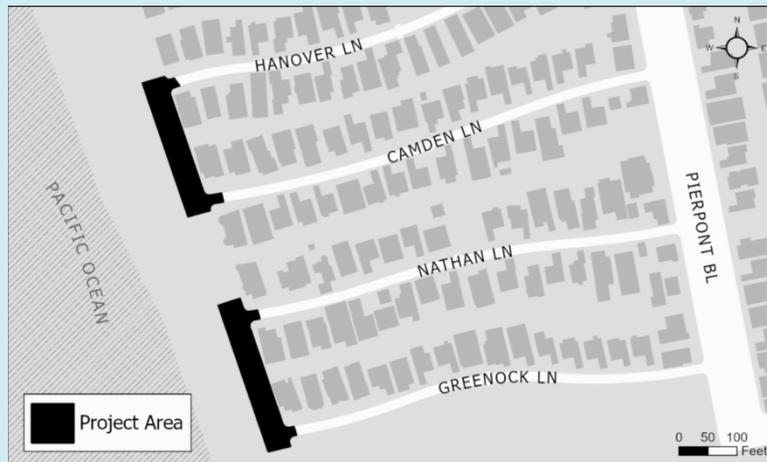


Take the Census Today!

In March, homes across the country received invitations to complete the **2020 Census**. We strongly encourage our community to respond to the **2020 Census** online if you haven't already done so.

Over the next decade, Ventura County will use the 2020 Census data to make critical decisions! Your response will help shape public services like healthcare clinics, emergency response preparedness, and education programs.

Take the Census today at www.my2020census.gov



Pierpont Waterline Replacement

On July 27, 2020, the City of Ventura's Public Works Department will begin the **Pierpont Waterline Replacement**. The capital improvement project will replace pipelines along the City's right-of-way on the beach along Shore Drive and at the ends of the lanes between Hanover Lane to Camden Lane and between Nathan Lane and Greenock Lane (see map above).

For additional information, view the [Pierpont Waterline Replacement project description](#). For questions or concerns, contact:

Zach Bryant, Assistant Construction Manager - (805) 886-0206
Burt Yanez, Sr. Construction Inspector - (805) 275-6279

Public Meetings

- Join us virtually on Monday, July 27, 2020 at the City Council Meeting for a Ventura Water Workshop that includes information on water and wastewater resources, capital improvement projects, and long-term planning efforts. [View agenda](#).
- The Water Commission scheduled for July 28, 2020 has been canceled.

myvtawater@cityofventura.ca.gov
www.venturawater.net
805-667-6500

Connect with us



Ventura Water introduces the
**MOUND BASIN GROUNDWATER
SUSTAINABILITY AGENCY**



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY

Your input is critical to ensuring the
Mound Basin GSP reflects local values.

Ventura Water produces a significant portion of its water supply from wells that tap the Mound Groundwater Basin, which falls under the jurisdiction of the recently formed Mound Basin Groundwater Sustainability Agency (MBGSA). MBGSA is charged with managing the groundwater resources of the Basin pursuant to the Sustainable Groundwater Management Act (SGMA).

Pursuant to SGMA, MBGSA must develop and implement a groundwater sustainability plan (GSP) to achieve sustainable groundwater management by 2042. The GSP is currently under development. Although Ventura Water is a voting member of MBGSA, your direct participation in the GSP development process is encouraged.

Join the MBGSA interested parties e-mail list to receive regular updates by contacting the MBGSA Clerk of the Board at e-mail Jackiel@unitedwater.org

Please visit MBGSA's website for more information:
www.moundbasingsa.org

Ventura Water presenta la AGENCIA DE SOSTENIBILIDAD DEL AGUA SUBTERRÁNEA DE LA CUENCA DE LOMA



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY

Su comentario es fundamental para garantizar que el GSP de la Cuenca de Loma refleje los valores locales.

Ventura Water produce una porción significativa de provisiones de agua de pozos que provienen de la Cuenca de Agua Subterránea de Loma, que cae bajo la jurisdicción de la Agencia de Sostenibilidad del Agua Subterránea de la Cuenca de Loma (MBGSA) recientemente formada. MBGSA se encarga de administrar los recursos de aguas subterráneas de la Cuenca de conformidad con la Ley de Gestión Sostenible de Aguas Subterráneas (SGMA).

De acuerdo con SGMA, MBGSA debe desarrollar e implementar un plan de sostenibilidad de aguas subterráneas (GSP) para lograr una gestión sostenible de las aguas subterráneas para el 2042. Este plan se encuentra actualmente en desarrollo. Aunque Ventura Water es un miembro de MBGSA con derecho a voto, animamos su participación directa en el proceso de desarrollo del plan de sostenibilidad de aguas subterráneas.

Inclúyase en el listado de correo electrónico para partidos interesados de MBGSA para recibir actualizaciones frecuentes contactando al Secretario de la Consejo de MBGSA por correo electrónico a Jackiel@unitedwater.org

Visite el sitio web de MBGSA para obtener más información:
www.moundbasingsa.org



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

Motion Item No. 11b

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: Sustainability Goal (Grant Category (d), Task 4)

SUMMARY

During the July 16 meeting, the Board approved a draft sustainability goal for public comment release (Attachment A).

Outreach concerning the draft sustainability goal has included:

1. Posting the sustainability goal on the Agency's website;
2. Requesting comments from the interested parties list via e-mail; and
3. Requesting comments in the Summer 2020 GSP Newsletter.

Comments were requested by August 7. No comments have been received to date. Staff recommends adopting the sustainability goal to provide policy guidance for development of the sustainable management criteria for the GSP. Alternatively, the Board could extend the comment period and wait to adopt the sustainability goal during its September 17 meeting, which will occur after the stakeholder workshop webinar on September 3. Staff is comfortable with either approach.

RECOMMENDED ACTION

Approve the sustainability goal.

BACKGROUND

Not applicable.

FISCAL SUMMARY

Not applicable.

ATTACHMENTS

A. Draft Sustainability Goal

Action: _____
Motion: _____ 2 nd : _____
J.Chambers: _____ C.Everts: _____ M.Mobley: _____ S.Rungren: _____ G.Shephard: _____

Item 11b

Attachment A

Draft Sustainability Goal



MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY (MBGSA) DRAFT SUSTAINABILITY GOAL

On July 16, 2020, the MBGSA Board of Directors approved the following draft sustainability goal description for release. The purpose of releasing the draft sustainability goal is to obtain your feedback and comments. The MBGSA Board is scheduled to consider adopting the sustainability goal at its August 20, 2020 meeting. Your input on the goal is valued and will help make it better reflect the local values in the basin. Please send comments by August 7 to the Clerk of the Board Jackie Lozano: Jackiel@unitedwater.org.

Stakeholders are encouraged to review background information concerning the sustainability goal included in the staff report for the June 18 Board of Directors Meetings and California Department of Water Resources draft Sustainable Management Criteria Best Management Practice document (SMC BMP):

<https://s33630.pcdn.co/wp-content/uploads/2020/06/2020-06-18-Mound-Basin-GSA-Board-of-Directors-Meeting-Agenda-Packet-FINAL-ks.pdf>

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf

[Draft Sustainability Goal follows on next page].

Draft Sustainability Goal July 16, 2020

The goal of this Groundwater Sustainability Plan (GSP) is to sustainably manage the groundwater resources of the Mound Basin for the benefit of current and anticipated future beneficial users of groundwater and the welfare of the general public who rely directly or indirectly on groundwater. Sustainable groundwater management will ensure the long-term reliability of the Mound Basin groundwater resources by avoiding undesirable results pursuant to the Sustainable Groundwater Management Act (SGMA) no later than 20 years from GSP adoption through implementation of a data-driven and performance-based adaptive management framework. It is the express goal of this GSP to develop sustainable management criteria and plan implementation measures to avoid undesirable results for the applicable SGMA sustainability indicators by:

- 1. Using best available science and information, including consideration of uncertainty in the basin setting and groundwater conditions;*
- 2. Conducting active and meaningful stakeholder engagement;*
- 3. Considering potential impacts on the management of adjacent basins and, where necessary coordinating with adjacent basins; and*
- 4. Balancing economic, social, and environmental impacts and benefits associated with the all current and anticipated future beneficial users of groundwater, by considering:*
 - a. Water supply reliability for agriculture enterprises and potable and industrial users;*
 - b. Availability of alternative water sources for domestic groundwater beneficial users;*
 - c. Identifying and considering potential impacts to groundwater dependent ecosystems and, where possible, opportunities to enhance those ecosystems;*
 - d. State, federal, or local standards relevant to applicable sustainability indicators;*
 - e. Feasibility of projects and management actions necessary to achieve proposed measureable objectives; and*
 - f. Economic impact of projects and management actions necessary to achieve proposed measureable objects on all beneficial users, with special consideration of disadvantage communities and agricultural enterprises lacking alternative land use options.*



Motion Item No. 11c

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: Sustainable Management Criteria Screening Results (Grant Category (d), Task 4)

SUMMARY

Discussion of the Sustainable Management Criteria (SMC) with the Board of Directors began in June 2020 with a focus on the Sustainability Goal. During that meeting, the Board reviewed a proposed process for SMC development (Figure 1) and subsequently released a draft Sustainability Goal for comment in July. The Sustainability Goal is also the subject of Item 10b.

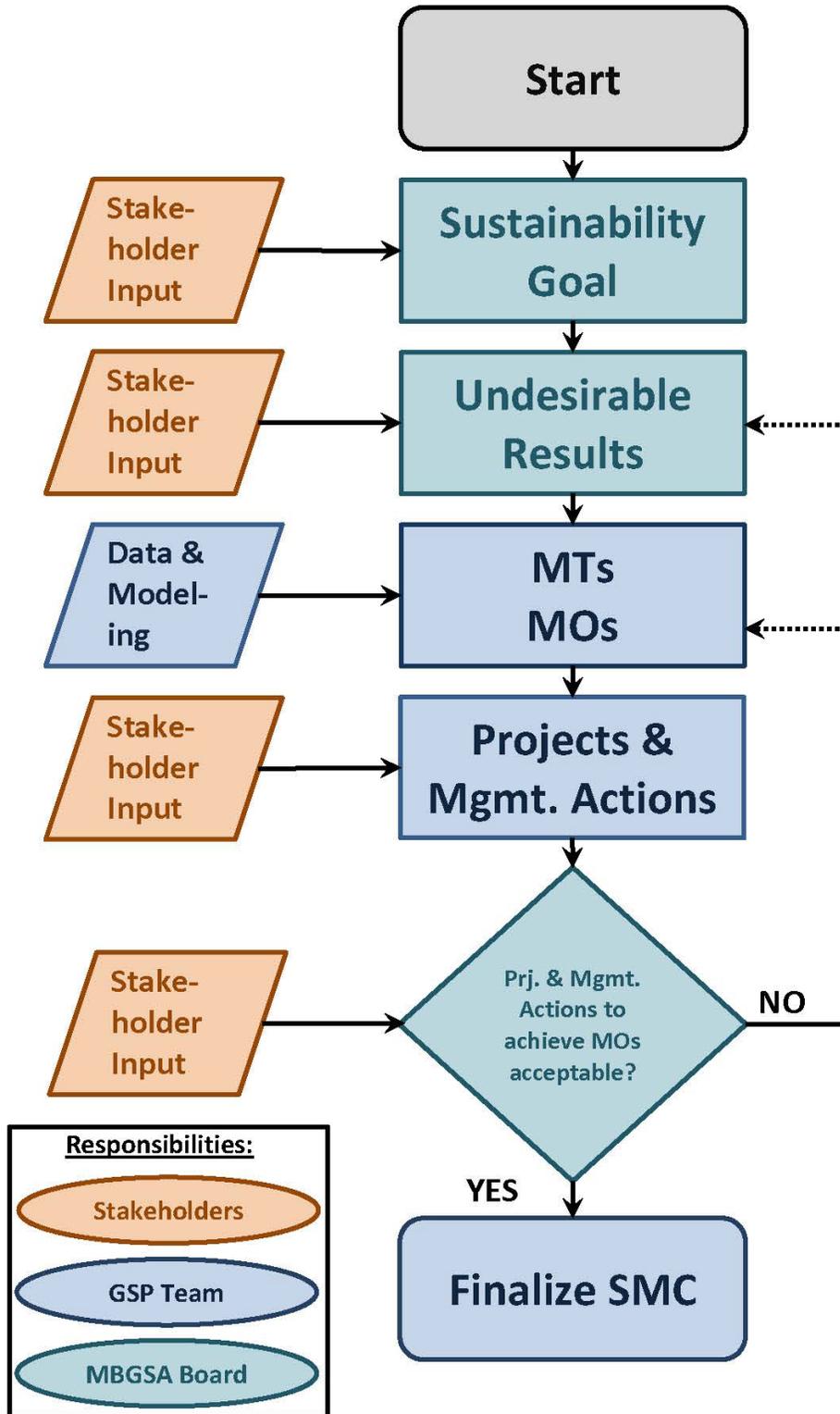
The purpose of this item is to continue the SMC discussion, now turning our attention to the Sustainability Indicators (SIs). Pursuant to the Groundwater Sustainability Plan (GSP) Development schedule, a preliminary screening of the Sustainability Indicators was performed to help focus the discussion. The screening results are presented after a brief recap of key SMC concepts. The screening is based on information developed in the draft Basin Setting section of the GSP. Therefore, readers may find it helpful to review the draft GSP Basin Setting section in conjunction with this staff report. The draft GSP Basin setting is available at <https://www.moundbasingsa.org/gsp/>.

Foundational SMC Concepts

SMC are the most important GSP component because they define certain conditions in the basin that will be desirable to avoid and certain conditions that are desirable to achieve. The SCM will be a marriage of policy and technical elements. Policy elements will be approved by the Board in consultation with stakeholders. Technical information will derived from the Basin Conditions section of the GSP and additional technical analysis that will be performed using the forthcoming groundwater model. The SMC will be achieved through implementation of projects and management actions, as necessary and appropriate. Progress toward meeting and/or maintain the SMC will be evaluated via monitoring programs associated with each applicable Sustainability Indicator.

While developing the SMC, it will be important to remember that sustainable groundwater management will be achieved through adaptive management over a 20 year period. New data obtained from future actions to address data gaps and from monitoring actions will lead to improved understanding of the basin, which will form the basis for refinement of the SMC and projects and management actions over time, which will be memorialized in GSP updates. The forthcoming GSP, including the SMC, should be viewed as a flexible roadmap for a 20 year journey to sustainable management for the Mound Basin.

Figure 1
SMC Development Process



The central goal of SGMA is to avoid undesirable results in a basin for applicable Sustainability Indicator (Figure 2).

Figure 2
SGMA Sustainability Indicators

Sustainability Indicators	 Lowering GW Levels	 Reduction of Storage	 Seawater Intrusion	 Degraded Quality	 Land Subsidence	 Surface Water Depletion
Metric(s) Defined in GSP Regulations	<ul style="list-style-type: none"> • Groundwater Elevation 	<ul style="list-style-type: none"> • Total Volume 	<ul style="list-style-type: none"> • Chloride concentration isocontour 	<ul style="list-style-type: none"> • Migration of Plumes • Number of supply wells • Volume • Location of isocontour 	<ul style="list-style-type: none"> • Rate and Extent of Land Subsidence 	<ul style="list-style-type: none"> • Volume or rate of surface water depletion

The SMC includes of the following elements.

- Sustainability Goal
 - Statement of the GSA’s objectives and desired conditions of the groundwater basin.
- Undesirable Results
 - Significant and unreasonable effects related to any applicable Sustainability Indicator (Figure 1). For example, a possible undesirable result might be the loss of well pumping capacity due to lowering of groundwater levels in some areas or the entire basin. It is important to note that, even if a basin does not currently have undesirable results, the GSP Regulations require GSAs to describe the significant unreasonable effects that, if they were to occur, would be considered an undesirable result.
- Minimum Thresholds
 - Quantitative metrics (such as groundwater levels) indicating undesirable results exist for applicable Sustainability Indicators (Figure 1). The GSP seeks to avoid the MTs in order to avoid undesirable results. In the above example, groundwater

levels at which the well pumping capacity is lost would be determined using information about the wells and modeling to determine under what conditions those water levels might occur.

- Measureable Objectives (MOs)
 - Quantitative metrics (such as groundwater levels) that reflect basin desired conditions for applicable Sustainability Indicators (Figure 1). The GSP seeks to achieve the MO within 20 years to provide operational flexibility above the MT to accommodate droughts, climate change, and other factors. In the above example, modeling would be performed to estimate groundwater levels that would prevent MTs from being reached after accounting for expected groundwater level fluctuations.

As can be seen above, the sustainability goal and undesirable results are largely policy oriented aspects of the SMC. The MTs and MOs can be thought of as the technical translation of the policy.

Sustainability Indicator Screening Results

The following sections present a screening level review of the Sustainability Indicators.

Seawater Intrusion

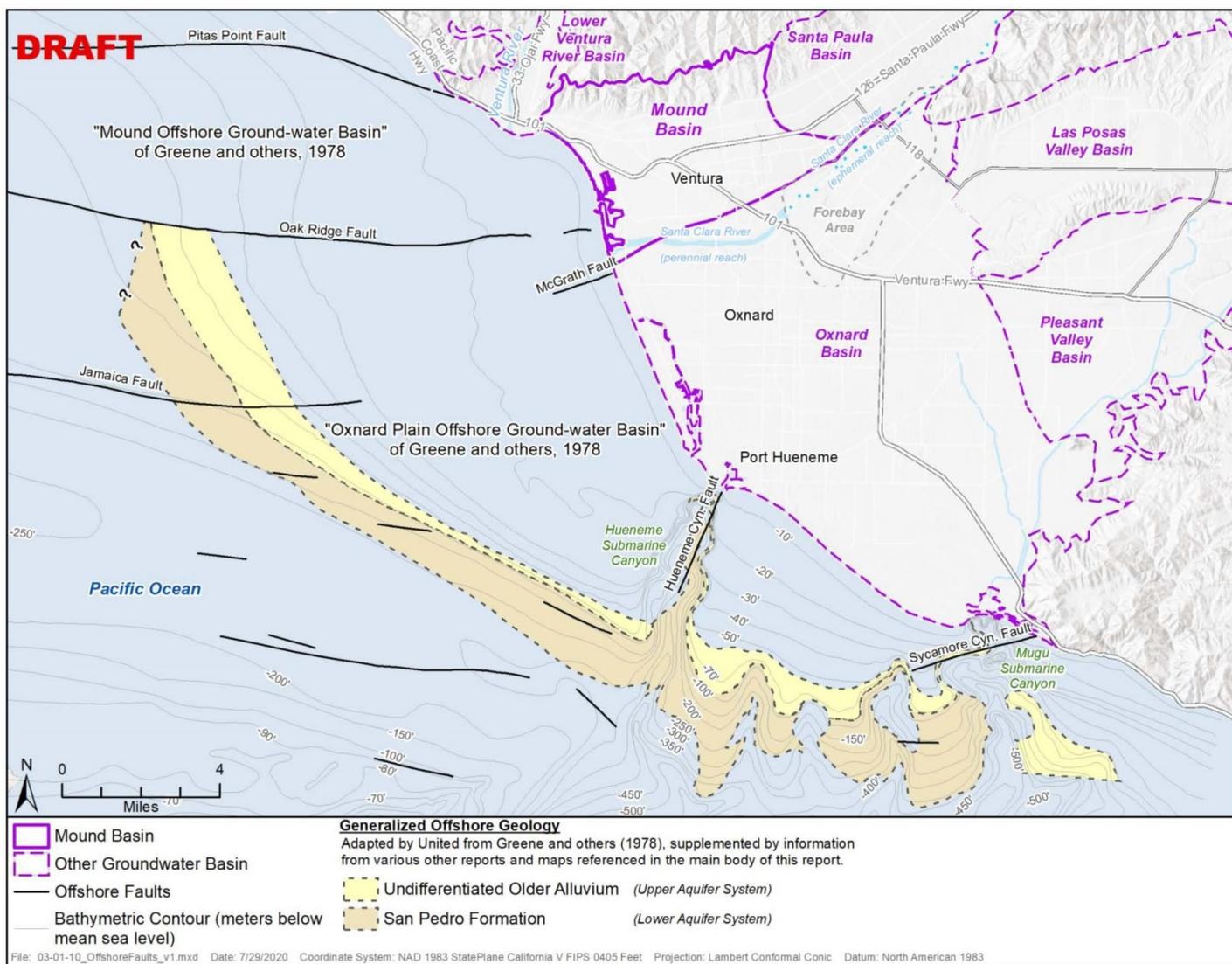
Regulatory Requirement:

The minimum threshold for seawater intrusion shall be defined by a chloride concentration isocontour for each principal aquifer where seawater intrusion may lead to undesirable results.

Discussion:

As discussed in the draft GSP Basin Setting, the basin aquifers are connected to Pacific Ocean; thus, the potential for seawater intrusion exists. However, the risk of seawater intrusion appears low because of the large distance between the shoreline and the edge of the continental shelf offshore where the aquifers are hydraulically connected to seawater (Figure 3). This is in contrast with the adjacent Oxnard Plain Basin, where the aquifers are highly vulnerable to lateral seawater intrusion due to the existence of two deep submarine canyons at Port Hueneme and Point Mugu that expose the aquifers to seawater at a very close distance to the shoreline (Figure 3). No such submarine canyons exist offshore of Mound Basin, greatly reducing the likelihood that seawater can find a near-shore pathway for intrusion into the principal aquifers (Figure 3).

Figure 3
Location of Offshore Aquifer Subcrops

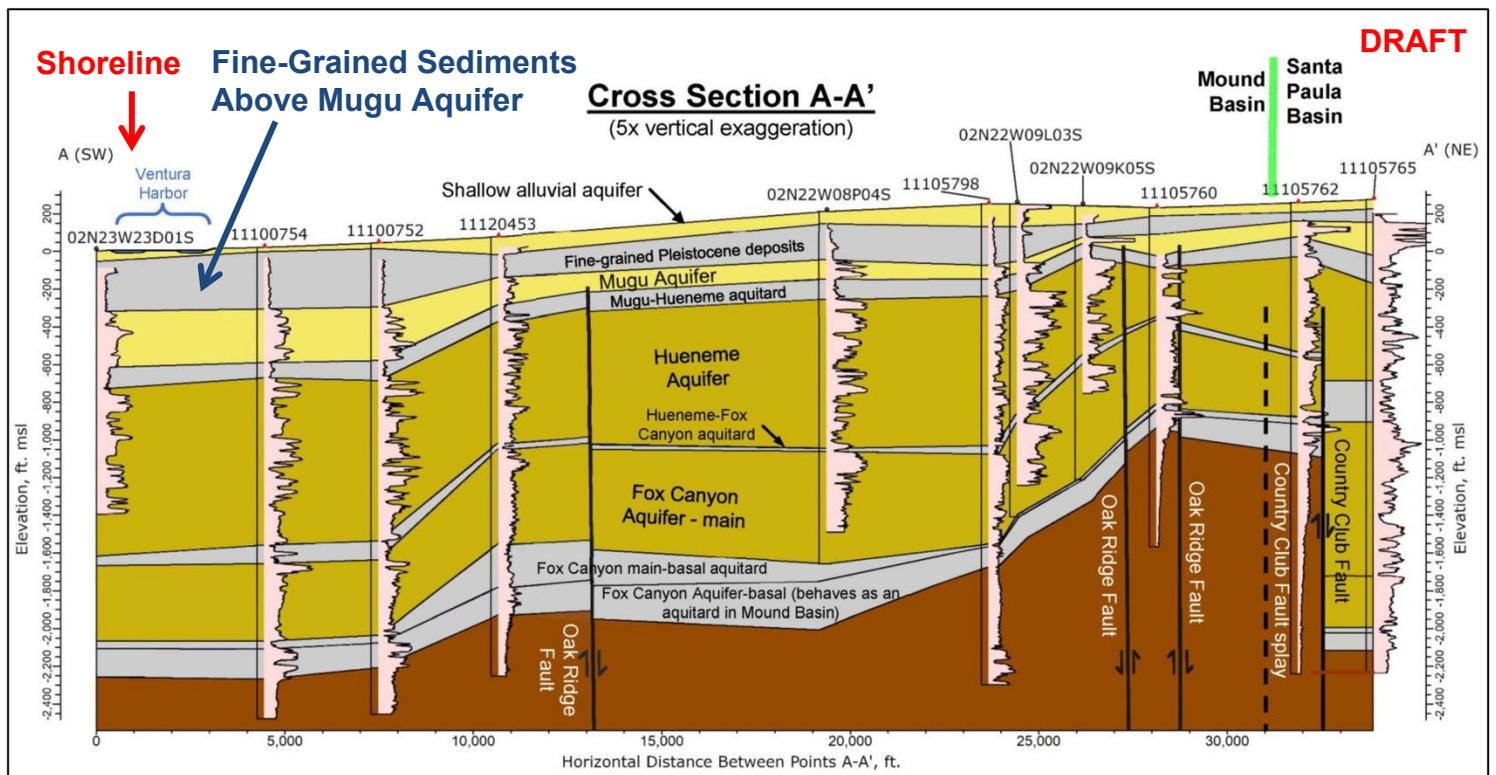


Groundwater levels in the principal aquifers have occasionally dropped to levels that indicate onshore flow of groundwater from the offshore portions of the aquifers. However, available data do not indicate that seawater is or has been present in the onshore portions of the Mound Basin principal aquifers to date. There are no available data concerning the location of seawater in the offshore portions of the aquifers.

Preliminary groundwater modeling was performed to assess the timeframe required for seawater to travel from the offshore subcrops to the Mound Basin shoreline. If groundwater levels were held continuously at historical low levels, it would take hundreds of years for seawater to migrate to the shoreline. Based on the preliminary modeling results, it does not appear likely that seawater is located near the shoreline in the principal aquifers and onshore movement of seawater is not expected to occur during 50-year SGMA planning horizon.

The above conclusions assume that seawater does not have a viable vertical pathway to migrate into the principal aquifers. The principal aquifers appear to be protected from vertical migration of seawater by a several hundred foot thick layer of fine-grained sediments (Figure 4). However, stratigraphic or structural discontinuities in this fine-grained layer, if present, could provide “short-circuit” pathways for seawater migration into the shallowest principal aquifer (Mugu Aquifer).

Figure 4
Cross Section Showing Fine-Grained Sediments that Protect the Mugu Aquifer from Vertical Intrusion of Seawater



Based on the foregoing, it will be necessary to establish SMC for seawater intrusion. The GSP will need to identify the extent of seawater intrusion that would cause significant and unreasonable impacts to current and future beneficial uses of groundwater (minimum threshold). A second, more conservative, extent of seawater intrusion will also need to be established that represents the goal for the Basin (measureable objective). The groundwater model will be used to evaluate potential seawater migration rates to help define how far apart the measureable objective should be from the minimum threshold. It is suggested that the distance between the measureable objective and minimum threshold be established so as to provide sufficient time for actions to be implemented to prevent seawater from reaching the minimum threshold in the event seawater is detected and confirmed at the measureable objective location.

When developing the seawater intrusion SMC, the Agency will need to consider how it will monitor for seawater intrusion. Currently there is only one monitoring well location near the coast. Additional monitoring wells will be needed in order to establish and monitor measurable objectives and minimum thresholds. A second monitoring well is being pursued for installation near the coast at the City of Ventura's wastewater treatment plant. Additional monitoring wells will be needed.

Lastly, the Agency will need to determine what actions it will take in the event of onshore detection of seawater during plan implementation. This will likely take the form of a contingency plan.

Land Subsidence

Regulatory Requirement:

The minimum threshold for land subsidence shall be the rate and extent of subsidence that substantially interferes with surface land uses and may lead to undesirable results. Minimum thresholds for land subsidence shall be supported by identification of land uses and property interests that have been affected or are likely to be affected by land subsidence in the basin, including an explanation of how the Agency has determined and considered those uses and interests, and the Agency's rationale for establishing minimum thresholds in light of those effects.

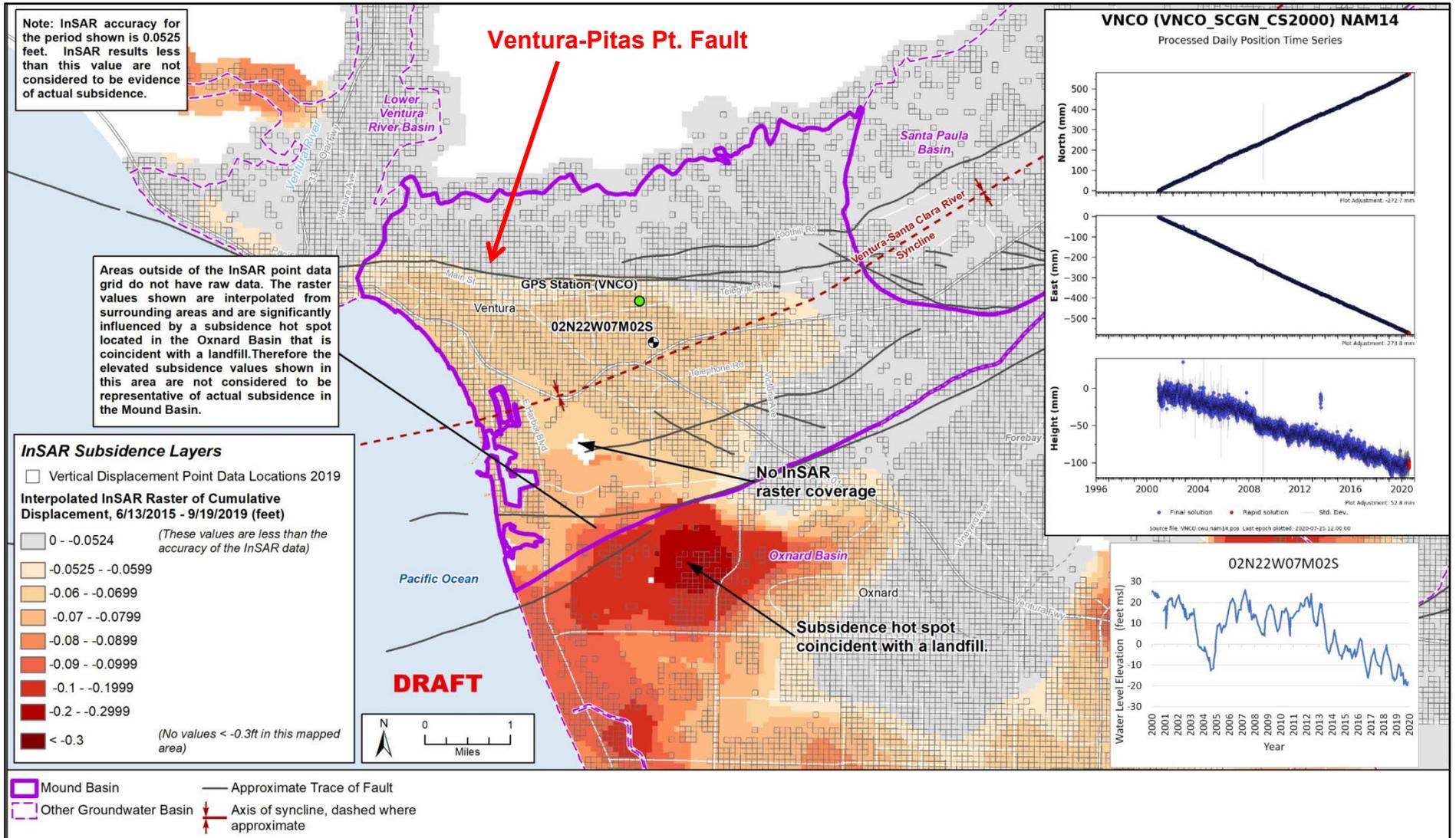
Discussion:

As discussed in the draft GSP Basin Setting, subsidence due to groundwater withdrawal has not been reported in the Basin. Recent data suggest that the southern ~2/3 of the Mound Basin (south of the Ventura-Pitas Point Fault) is subsiding at a steady rate of approximately 5 millimeters (mm) per year, apparently due to tectonic activity (Figure 5). Future subsidence due to groundwater withdrawal cannot be ruled out because the subsurface stratigraphy includes clay layers that could compact as a result of groundwater withdrawal (Figure 4).

The risk of future subsidence due to groundwater withdrawal could be essentially eliminated by simply managing the groundwater basin to prevent groundwater levels from falling below historical low levels (inelastic subsidence potential is very limited when groundwater levels are above historical low levels). However, such an approach may limit beneficial uses of groundwater during future droughts. If it is instead desirable to have the flexibility to temporarily draw the basin down below historical low groundwater levels during future droughts, the GSP will need to identify the rate and extent of subsidence that would substantially interfere with surface land uses and then monitor for subsidence. The primary considerations for subsidence effects include, but are not necessarily limited to, the City's sewer system (gravity portions) and coastal areas that will be subject to impacts from sea level rise. Monitoring would involve periodic surveys and/or installation of continuous global positioning system (GPS) monitoring stations.

The groundwater model will be used to evaluate potential future groundwater levels to support further evaluation of subsidence.

Figure 5
Subsidence Map



Degraded Water Quality

Regulatory Requirement:

The minimum threshold for degraded water quality shall be the degradation of water quality, including the migration of contaminant plumes that impair water supplies or other indicator of water quality as determined by the Agency that may lead to undesirable results. The minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the Agency to be of concern for the basin. In setting minimum thresholds for degraded water quality, the Agency shall consider local, state, and federal water quality standards applicable to the basin

Discussion:

SGMA requires GSAs to address contaminant plumes and other water quality issues that could cause significant and unreasonable impacts on beneficial uses. There are no known contaminant plumes in the basin. Common ion chemistry of the basin groundwater is discussed below.

The Agency must consider local, state, and federal water quality standards when establishing water quality SMC. It is noted that the Agency is required to consider, but not necessarily adopt, such standards. Justification must be provided in cases where the GSP water quality SMC do not align with other standards. The applicable standards for consideration include drinking water maximum contaminant levels (MCLs) and Regional Water Quality Control Board Basin Plan Water Quality Objectives (WQOs).

The common ion chemistry of the groundwater in the Mugu and Hueneme principal aquifers is not ideal, but is beneficially used by municipal and agricultural users across the Basin. Common ions with RWQCB WQOs include sulfate, boron, and chloride. Total dissolved solids (TDS) also has a WQO. In general, TDS, sulfate, boron, and chloride concentrations are lower in the Mugu Aquifer and meet the WQOs with few exceptions. In general, TDS, sulfate, boron, and chloride concentrations are higher in the Hueneme Aquifer and meet the WQOs at more locations than not. The dissolved constituents are derived from natural sources, and pumping does not appear to be correlated with common ion chemistry concentrations. Elevated TDS and sulfate concentrations relative to drinking water secondary MCLs are mitigated by blending with other water sources by the City of Ventura. The City of Ventura is pursuing its Water Pure Project (fully advanced treated recycled water) and an interconnection to facility to deliver of its State Water Project entitlement, both of which may provide further opportunities to blend water produced from its Mound Basin wells.

Nitrate can impact drinking water beneficial uses. The nitrate maximum contaminant level (MCL) is 45 milligrams per liter (mg/L) as NO_3 (equivalent to 10 mg/L as N). Nitrate concentrations in excess of the drinking water MCL have been detected in groundwater samples from three agricultural wells that are screened in principal aquifers (Mugu and Hueneme Aquifers) in Mound Basin. However, these wells also exhibit anomalously high concentrations of TDS, sulfate, and chloride, suggesting influence of shallow groundwater through a possibly compromised well seal or well casing, rather than presence of nitrate “plumes” in the Mugu and Hueneme Aquifers in Mound Basin. It is further noted that other wells in the Basin do not

exhibit elevated nitrate concentrations, further reinforcing the conclusion that nitrate is not a widespread issue in the Mound Basin principal aquifers.

In summary, groundwater quality in the Mound Basin is marginal due to natural geochemical processes and groundwater pumping does not appear to exacerbate these natural processes. Therefore it does not appear that significant or unreasonable groundwater quality degradation has occurred in the Mound Basin. Nonetheless, MBGSA must establish water quality sustainability criteria and monitor groundwater quality relative to those criteria. The GSP regulations require consideration of existing WQOs and drinking water standards and potential impacts to beneficial uses. When developing the water quality SMC, it will be important to remember that MBGSA's options for changing groundwater water quality are limited. Thus it is recommended that the water quality SMC be set at levels that reflect background conditions in the Basin, perhaps with a factor of safety. These concepts will be developed further in the coming months as staff works with the Board and stakeholders to develop draft water quality SMCs.

Chronic Lowering of Groundwater Levels

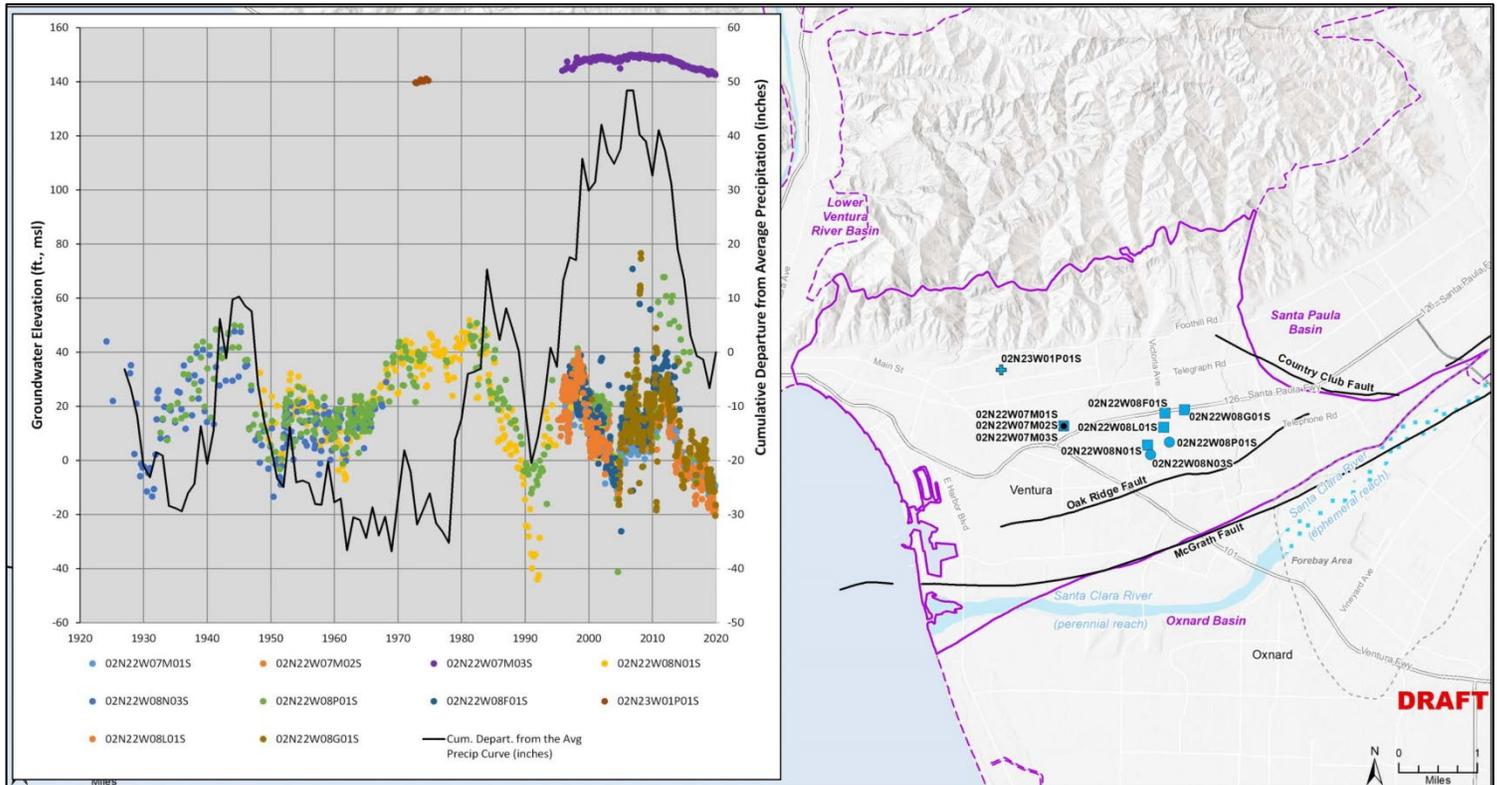
Regulatory Requirement:

The minimum threshold for chronic lowering of groundwater levels shall be the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results. Minimum thresholds for chronic lowering of groundwater levels shall be supported by the rate of groundwater elevation decline based on historical trends, water year type, and projected water use in the basin.

Discussion:

There is no evidence of chronic lowering of groundwater levels in the Basin. Instead, groundwater levels have declined during droughts and recovered during wet periods (Figure 6). This cyclic pattern of groundwater levels does not appear to have resulted in significant and unreasonable effects historically. Going forward, it would likely be considered significant and unreasonable if the basin was to be pumped so much that groundwater levels are persistently chronically low and/or do not recover during wet periods. The above-described concepts will be evaluated using the groundwater model prior to proposing SMC.

Figure 6
Selected Historical Groundwater Levels



Reduction of Groundwater Storage

Regulatory Requirement:

The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. Minimum thresholds for reduction of groundwater storage shall be supported by the sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.

Discussion:

Considerations for the reduction of groundwater storage sustainability indicator are similar to the chronic lowering of groundwater levels sustainability indicator because groundwater levels have a relationship with storage. In fact many GSPs consider these two sustainability indicators together. Evaluation of groundwater storage using the groundwater model will be performed prior to proposing SMC.

Depletions of Interconnected Surface Water

Regulatory Requirement:

The minimum threshold for depletions of interconnected surface water shall be the rate or volume of surface water depletions caused by groundwater use that has adverse impacts on beneficial uses of the surface water and may lead to undesirable results. The minimum threshold established for depletions of interconnected surface water shall be supported by the location, quantity, and timing of depletions of interconnected surface water.

Discussion:

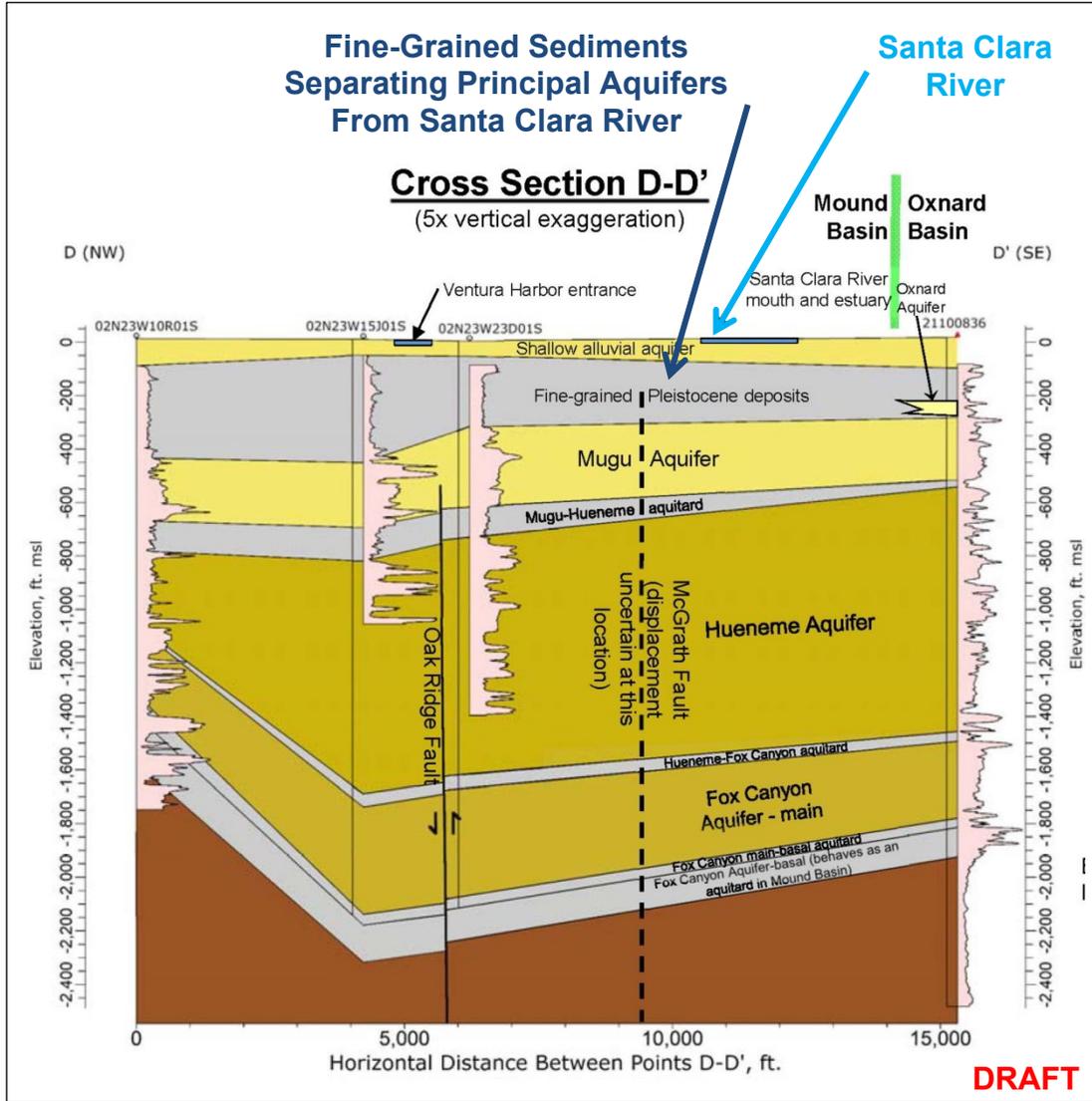
The first consideration for evaluating SMC for the depletions of interconnected surface water sustainability indicator is whether the groundwater table and surface water are physically connected and, if so, where and when. The Santa Clara River flows perennially in the 5-mile reach upstream from the river mouth at the Pacific Ocean, with the lowest approximately 1.5-miles located within the Mound Basin. The perennial flow suggests that surface water is interconnected with shallow groundwater of the Oxnard and Mound Basins. The primary interconnection with the Santa Clara River in Mound Basin could be limited to perched groundwater in the localized stream terrace deposits immediately adjacent to the river, as opposed to the Shallow Aquifer that exists elsewhere in the Basin. Perched water within the stream terrace deposits, fed by percolating rainfall and agricultural return flows, may be the primary groundwater from Mound Basin that contributes to Santa Clara River baseflow within Mound Basin. Surface water flow in the various barrancas crossing Mound Basin in response to precipitation events may also be briefly interconnected with the shallow alluvial aquifer or perched groundwater, but this cannot be verified with available data.

The other consideration is whether interconnected surface water is depleted by groundwater use (pumping). The draft basin setting section of the GSP concludes that there is little or no depletion of interconnected surface water because the shallow water-bearing units that are connected to the surface water bodies do not have any known groundwater extractions within Mound Basin. Furthermore, the isotope study concluded that there is no significant evidence for interactions between groundwater in the principal aquifers and shallow groundwater, which is consistent with the several hundred feet of fine-grained materials that lie between the shallow aquifer and the principal aquifers near the Santa Clara River and barrancas (Figure 7).

Because pumping from the principal aquifers in Mound Basin is not believed to deplete surface water in the Santa Clara River or barrancas, this sustainability indicator can be screened out for the initial GSP. However, the GSP could include a management action to monitor well permit applications for proposed uses of shallow groundwater. If any shallow wells are proposed, MBGSA could require the applicant to evaluate surface water depletion pursuant to the California Environmental Quality Act prior to issuing a permit. Proposed uses that would cause a significant depletion of surface water could be required to mitigate those impacts as a condition of MBGSA permit approval.

Figure 7

Cross Section Showing Fine-Grained Sediments that Separate the Principal Aquifers from the Santa Clara River



Next Steps

In the coming months, Staff will work with Board on developing SMC aspects that do not require groundwater modeling support. Staff intends to start with water quality.

RECOMMENDED ACTION

Review the sustainable management criteria screening results and consider providing feedback to staff.

BACKGROUND

Not applicable.

FISCAL SUMMARY

Not applicable.

Action: _____
Motion: _____ 2 nd : _____
J.Chambers: _____ C.Everts: _____ M.Mobley: _____ S.Rungren: _____ G.Shephard: _____



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

Motion Item No. 11d

DATE: August 20, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: GSP Stakeholder Workshop Webinar Agenda (Grant Category (c), Task 3)

SUMMARY

A draft agenda for Stakeholder Workshop No. 1 is attached for discussion.

RECOMMENDED ACTION

Discuss the draft agenda for Stakeholder Workshop No.1 and consider providing feedback to staff

BACKGROUND

Not applicable.

FISCAL SUMMARY

GSP workshops are included in the Agency's budget.

ATTACHMENTS

A. Draft Stakeholder Workshop No. 1 Webinar Agenda

Action: _____
Motion: _____ 2 nd : _____
J.Chambers: _____ C.Everts: _____ M.Mobley: _____ S.Rungren: _____ G.Shephard: _____



Mound Basin Groundwater Sustainability Plan (GSP)
Online Public Workshop No 1

Thursday, September 3, 2020 at 5:00 PM

To participate in the Zoom Online Workshop, please access:

<https://us02web.zoom.us/j/81631917746>

Meeting ID: 816 3191 7746

To call into the meeting (audio only), call: **1 877 853 5247 US Toll-free**

Meeting ID: 816 3191 7746

A G E N D A

No.	Time	Topic
1	5:00 – 5:05 pm	Meeting Call to Order, Roll Call, and Public Comments
2	5:05 – 5:10 pm	Welcome, Overview Webinar Features, and Agenda Review
3	5:10 – 5:15 pm	Get to Know the Audience (Attendee Poll Nos. 1 -3)
4	5:15 – 5:35 pm	Introduction to SGMA and GSPs <ul style="list-style-type: none">• Presentation• Q&A
5	5:35 – 5:55 pm	Overview of Basin Setting <ul style="list-style-type: none">• Presentation• Q&A
6	5:55 – 6:00 pm	Break
7	6:00 – 6:20 pm	Groundwater Model Summary <ul style="list-style-type: none">• Presentation• Q&A
8	6:20 – 6:40 pm	Next Steps for GSP Development <ul style="list-style-type: none">• Presentation• Q&A• Attendee Poll No. 4
9	6:40 – 7:00 pm	<ul style="list-style-type: none">• Stakeholder Questions and Feedback• Attendee Poll Nos. 5 & 6
10	7:00 – 7:10 pm	Mound Basin GSA Director Comments
11	7:00 – 7:15 pm	Wrap-up