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**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, December 17, 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. 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)

5a Approval of Minutes

Motion

The Board will consider approving the Minutes from the November 19, 2020, Regular Mound Basin GSA Board of Directors meeting.

5b Approval of Warrants

Motion

The Board will consider approving payment of outstanding vendor invoices.

5c Monthly Financial Reports

Information Item

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

6. BOARD MEMBER ANNOUNCEMENTS

6a Directors will provide updates on matters not on the agenda.

6b Directors will provide oral reports of time spent on grant eligible activities since the previous regular Board meeting.

7. EXECUTIVE DIRECTOR UPDATE

Information Item

The Executive Director will provide an informational update on non-GSP activities since the previous Board meeting.

8. MOTION ITEMS

8a 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.

8b Degraded Water Quality Sustainable Management Criteria

Motion

The Board will discuss proposed sustainable management criteria for the water quality sustainability indicator and consider providing feedback to staff.



MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY
REGULAR BOARD OF DIRECTORS MEETING

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

MINUTES

DIRECTORS IN ATTENDANCE:

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

STAFF IN ATTENDANCE:

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

PUBLIC IN ATTENDANCE:

Burt Handy
Kathleen Kuepper, UWCD
John Lindquist, UWCD
Steve Slack, CDFW
Jason Sun, UWCD
Ambry Tibay, 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. ROLL CALL

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

3. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

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

4. APPROVAL OF AGENDA

Motion

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

5. CONSENT CALENDAR

5a Approval of Minutes

Motion

The Board will consider approving the Minutes from the October 15, 2020, Regular Mound Basin GSA Board of Directors meeting.

5b Approval of Warrants

Motion

The Board will consider approving payment of outstanding vendor invoices.

**5c Monthly Financial Reports
Information Item**

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

No comments or questions were offered by the Directors.

No public comments were offered.

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

6. BOARD MEMBER ANNOUNCEMENTS

6a Since the previous Board meeting, no updates were offered from the Directors on matters not on the agenda. The Clerk of the Board reminded the Directors of their annual completion of California Form-700. Notifications from the County of Ventura would be coming soon. Deadline to file is April 1, 2021.

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

7. EXECUTIVE DIRECTOR UPDATE

Executive Director Bondy reviewed the written staff report with the Board. Regarding the proposed groundwater monitoring well, he reported that a site meeting was held earlier in the week with City staff to review the issues relevant to the coastal development permit application. Staff will proceed with preparing the coastal development permit application and working through the next step in the Department of Water Resources Technical Support Services application process. Looking ahead, Executive Director Bondy is optimistic about gaining TSS approval and drilling the monitoring well in 2021.

No comments or questions were offered by the Directors.

No public comments were offered.

8. INFORMATION ITEM

None.

9. MOTION ITEMS

9a GSP Monthly Update (Grant Category (c), Task 3 and Category (d), Task 4)

Motion

Executive Director Bondy reviewed the written staff report with the Board. The groundwater sustainability plan (GSP) schedule has been updated to account for United Water Conservation District's (UWCD's) modeling schedule; most of the contingency in the schedule has been taken up with model development. Model calibration and verification is now complete and UWCD staff is making preparations to perform modeling runs for the GSP planning process. Results from the first model run are expected by December 11. He noted that 2021 will be busy and it will likely be necessary to schedule special meetings in order to discuss all of the material for the draft GSP.

Director Chambers asked about the seawater intrusion "false alarm" in the Pierpont area in the 1960s. Executive Director Bondy explained that there were concerns about saline water at the former municipal wells in that area, but ultimately the investigators concluded that the wells were not properly sealed and the salinity was attributed to the downward movement of thought the wellbore, as opposed to lateral movement of seawater movement into the aquifer from the ocean.

No further comments or questions from the Directors.

No public comments were offered.

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

9b Board Meeting Schedule for Calendar Year 2021

Motion

The Clerk of the Board provided the Board with a proposed meeting schedule for review and approval.

No comments or questions from the Directors.

No comments or questions were offered by the public.

Motion to approve the Board Meeting Schedule for 2021, Director Everts; Second, Director Chambers. Roll call vote: five ayes (Chambers, Everts, Mobley, Rungren, Shephard), none opposed. Motion carried 5/0.

10. FUTURE AGENDA ITEMS

Executive Director Bondy recommended the Board review its calendars and provide feedback at the next meeting concerning potential dates that could be reserved ahead of time for GSP workshops. This would mitigate the need of having to poll the Board when the necessity arises. It is also likely that the Agency would see an increase for requests for special meetings in 2021.

11. ADJOURNMENT 1:33 PM

Chair Mobley adjourned the meeting at 1:33 PM to the next **Regular Board Meeting on Thursday, December 17, 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 November 19, 2020.

ATTEST: _____
Susan Rungren, Board Secretary

ATTEST: _____
Jackie Lozano, Clerk of the Board

Mound Basin Groundwater Sustainability Agency

Check Detail

December 1 - 9, 2020

Type	Num	Date	Name	Account	Original Amount
Bill Pmt -Check	11372	12/08/2020	INTERA Incorporated	10000 · Bank of the Sierra	-18,471.00
Bill Pmt -Check	11373	12/08/2020	United Water Conservation District	10000 · Bank of the Sierra	-3,534.11
Bill Pmt -Check	11374	12/08/2020	Bondy Groundwater Consulting, Inc	10000 · Bank of the Sierra	-7,909.77
Bill Pmt -Check	11375	12/09/2020	City of Ventura	10000 · Bank of the Sierra	-3,712.80
TOTAL					-33,627.68



MoundBasin
GROUNDWATER SUSTAINABILITY AGENCY

MOUND BASIN GROUNDWATER SUSTAINABILITY AGENCY

Item No. 5(c)

DATE: December 17, 2020
TO: Board of Directors and Executive Director
FROM: Ambry Tibay, 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 November 2020.

BACKGROUND

FISCAL SUMMARY

Not applicable.

ATTACHMENTS

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

Mound Basin Groundwater Sustainability Agency
Profit & Loss Budget Performance
 July 1 through November 30, 2020

	<u>Jul 1 - Nov 30, 20</u>	<u>Annual Budget</u>	<u>Budget</u>
Income			
40001 · Groundwater Extraction Fees	-0.12	150,000.00	
41000 · Grant revenue			
41001 · State Grants	94,717.62	493,277.00	
41000 · Grant revenue - Other	0.00		
Total 41000 · Grant revenue	<u>94,717.62</u>	<u>493,277.00</u>	
46000 · In-Kind Services - Revenue	0.00		
47000 · Other Revenue			
47001 · Late Fees	1,136.10		
47002 · Miscellaneous Revenue	0.00		
47000 · Other Revenue - Other	0.00		
Total 47000 · Other Revenue	<u>1,136.10</u>		
Total Income	<u>95,853.60</u>	<u>643,277.00</u>	
Cost of Goods Sold			
50000 · Cost of Goods Sold	0.00		
Total COGS	<u>0.00</u>		
Gross Profit	<u>95,853.60</u>	<u>643,277.00</u>	
Expense			
52200 · Professional Services			
52230 · Prof Svcs - Grant Solicitation	0.00		
52240 · Prof Svcs - IT Consulting	41.28	494.00	8.36%
52250 · Prof Svcs - Groundwater/GSP Pre			
52251 · Prof Svcs - UWCD GW Services	0.00		
52252 · Prof Svcs - GSP Consultant	135,054.95	469,842.00	
52250 · Prof Svcs - Groundwater/GSP Pre - Other	0.00		
Total 52250 · Prof Svcs - Groundwater/GSP Pre	<u>135,054.95</u>	<u>469,842.00</u>	28.74%
52270 · Prof Svcs - Accounting	4,351.54	15,000.00	29.01%
52275 · Prof Svcs - Admin/Clerk of Bd	4,692.35	12,500.00	37.54%
52280 · Prof Svcs - Executive Director	9,100.00	45,000.00	20.22%
52290 · Prof Svcs - Other	0.00		
52200 · Professional Services - Other	0.00		
Total 52200 · Professional Services	<u>153,240.12</u>	<u>542,836.00</u>	28.23%
52500 · Legal Fees			
52501 · Legal Counsel	1,888.00	35,000.00	
52500 · Legal Fees - Other	0.00		
Total 52500 · Legal Fees	<u>1,888.00</u>	<u>35,000.00</u>	5.39%
53000 · Office Expenses			
53010 · Public Information	2,417.92	5,000.00	48.36%
53020 · Office Supplies	14.58	7,500.00	0.19%
53026 · Postage & Mailing	195.15	200.00	97.58%
53060 · Computer Software	0.00		
53070 · Licenses, Permits & Fees	3,712.80		
53110 · Travel & Training	152.85	1,000.00	15.29%
53000 · Office Expenses - Other	0.00		
Total 53000 · Office Expenses	<u>6,493.30</u>	<u>13,700.00</u>	47.40%
53500 · Insurance			
53510 · Liability Insurance	1,945.00	3,700.00	
53500 · Insurance - Other	0.00		
Total 53500 · Insurance	<u>1,945.00</u>	<u>3,700.00</u>	52.57%
59000 · In-Kind Services - Expense	0.00		
66000 · Payroll Expenses	0.00		
70000 · Interest & Debt Service			
70120 · Interest Expense	0.00	1,238.00	
70000 · Interest & Debt Service - Other	0.00		
Total 70000 · Interest & Debt Service	<u>0.00</u>	<u>1,238.00</u>	
Total Expense	<u>163,566.42</u>	<u>596,474.00</u>	27.42%
Net Income	<u><u>-67,712.82</u></u>	<u><u>46,803.00</u></u>	<u><u>-144.68%</u></u>

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

	A - Grant Administration	Task 03 - Stakeholder Outreach (C - Planning Activities)	Total C - Planning Activities	Task 04 - GSP Development (D - GSP Development)	D - GSP Development - Other (D - GSP Development)	Total D - GSP Development	Unclassified	TOTAL
Income								
40001 - Groundwater Extraction Fees	0.00	0.00	0.00	0.00	0.00	0.00	-0.12	-0.12
41000 - Grant revenue								
41001 - State Grants	4,513.54	0.00	0.00	0.00	90,204.08	90,204.08	0.00	94,717.62
Total 41000 - Grant revenue	4,513.54	0.00	0.00	0.00	90,204.08	90,204.08	0.00	94,717.62
47000 - Other Revenue								
47001 - Late Fees	0.00	0.00	0.00	0.00	0.00	0.00	1,136.10	1,136.10
Total 47000 - Other Revenue	0.00	0.00	0.00	0.00	0.00	0.00	1,136.10	1,136.10
Total Income	4,513.54	0.00	0.00	0.00	90,204.08	90,204.08	1,135.98	95,853.60
Gross Profit	4,513.54	0.00	0.00	0.00	90,204.08	90,204.08	1,135.98	95,853.60
Expense								
52200 - Professional Services								
52240 - Prof Svcs - IT Consulting	0.00	0.00	0.00	0.00	0.00	0.00	41.28	41.28
52250 - Prof Svcs - Groundwater/GSP Pre								
52252 - Prof Svcs - GSP Consultant	5,800.00	3,900.00	3,900.00	115,618.95	0.00	115,618.95	9,736.00	135,054.95
Total 52250 - Prof Svcs - Groundwater/GSP Pre	5,800.00	3,900.00	3,900.00	115,618.95	0.00	115,618.95	9,736.00	135,054.95
52270 - Prof Svcs - Accounting	1,813.02	0.00	0.00	0.00	0.00	0.00	2,538.52	4,351.54
52275 - Prof Svcs - Admin/Clerk of Bd	0.00	170.55	170.55	149.23	0.00	149.23	4,372.57	4,692.35
52280 - Prof Svcs - Executive Director	0.00	0.00	0.00	0.00	0.00	0.00	9,100.00	9,100.00
Total 52200 - Professional Services	7,613.02	4,070.55	4,070.55	115,768.18	0.00	115,768.18	25,788.37	153,240.12
52500 - Legal Fees								
52501 - Legal Counsel	0.00	0.00	0.00	0.00	0.00	0.00	1,888.00	1,888.00
Total 52500 - Legal Fees	0.00	0.00	0.00	0.00	0.00	0.00	1,888.00	1,888.00
53000 - Office Expenses								
53010 - Public Information	0.00	1,775.60	1,775.60	0.00	0.00	0.00	642.32	2,417.92
53020 - Office Supplies	0.00	0.00	0.00	0.00	0.00	0.00	14.58	14.58
53026 - Postage & Mailing	0.00	0.00	0.00	0.00	0.00	0.00	195.15	195.15
53070 - Licenses, Permits & Fees	0.00	0.00	0.00	0.00	0.00	0.00	3,712.80	3,712.80
53110 - Travel & Training	0.00	0.00	0.00	0.00	0.00	0.00	152.85	152.85
Total 53000 - Office Expenses	0.00	1,775.60	1,775.60	0.00	0.00	0.00	4,717.70	6,493.30
53500 - Insurance								
53510 - Liability Insurance	0.00	0.00	0.00	0.00	0.00	0.00	1,945.00	1,945.00
Total 53500 - Insurance	0.00	0.00	0.00	0.00	0.00	0.00	1,945.00	1,945.00
Total Expense	7,613.02	5,846.15	5,846.15	115,768.18	0.00	115,768.18	34,339.07	163,566.42
Net Income	-3,099.48	-5,846.15	-5,846.15	-115,768.18	90,204.08	-25,564.10	-33,203.09	-67,712.82

Mound Basin Groundwater Sustainability Agency

Balance Sheet

As of November 30, 2020

	<u>Nov 30, 20</u>
ASSETS	
Current Assets	
Checking/Savings	
10000 · Bank of the Sierra	197,723.12
Total Checking/Savings	<u>197,723.12</u>
Accounts Receivable	
11000 · Accounts Receivable	125,605.85
Total Accounts Receivable	<u>125,605.85</u>
Total Current Assets	<u>323,328.97</u>
TOTAL ASSETS	<u><u>323,328.97</u></u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20000 · Accounts Payable	33,627.68
Total Accounts Payable	<u>33,627.68</u>
Other Current Liabilities	
20001 · Advance from City of Ventura	55,000.00
20510 · Interest Payable	1,958.30
Total Other Current Liabilities	<u>56,958.30</u>
Total Current Liabilities	<u>90,585.98</u>
Total Liabilities	90,585.98
Equity	
32000 · Retained Earnings	300,455.81
Net Income	-67,712.82
Total Equity	<u>232,742.99</u>
TOTAL LIABILITIES & EQUITY	<u><u>323,328.97</u></u>



Item No. 7

DATE: December 17, 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: No update.
2. Financial:
 - a. Extraction fee invoices for the 2020-1 semi-annual period (January-June 2020) were issued in mid-September. Payments were due October 15. Three invoices totaling \$4,957.80 are unpaid. The invoices are associated with a single operator. These particular invoices were sent via certified, return receipt mail. Delivery confirmation was received. Statements were mailed in early December, via certified, return receipt mail.
 - b. Three past due invoices totaling \$7,466.70 from the 2019-2 semi-annual period (July-December 2019) remain unpaid. The invoices were issued in March 2020 and are associated with a single operator. Staff sent statements with the 2020-1 period invoices in September via certified, return receipt mail. Delivery confirmation was received. Statements were mailed in December, via certified, return receipt mail.
3. Legal: No activity.
4. Groundwater Monitoring Well – DWR Technical Support Services (TSS): Intera continued work on the Coastal Development Permit application. DWR has indicated that the next phase of the TSS application process must be completed before yearend, which appears feasible.
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



MoundBasin

GROUNDWATER SUSTAINABILITY AGENCY

Motion Item No. 8a

DATE: December 17, 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. The Executive Director and Intera continued evaluating information relevant to developing sustainable management criteria (SMC) for the GSP. Proposed SMC for the degraded water quality sustainability indicator are presented in Item 9b.
- b. UWCD worked on the first of three model simulations needed to evaluate future baseline conditions in the Basin with varying degrees of climate change impact. UWCD previously committed to providing results for the first simulation by December 11. Staff selected the most conservative simulation first (future conditions with 2070 climate change conditions). The first simulation results have not been received as of staff report preparation on December 14.

2. **Outreach:**

- a. No activity since last Board meeting. Staff plans to prepare a newsletter for release in early 2021.

3. **GSP Development Schedule:** The updated GSP Development Schedule is provided in Attachment A.

Sustainable Groundwater Planning (SGWP) Grant:

1. Invoices:

- a. Grant Progress Report and Invoice No. 5 were submitted to DWR on July 14. DWR approved the invoice on October 1. Payment in the amount of \$53,253 is expected soon.
- b. Grant Progress Report and Invoice No. 6 were submitted to DWR on November 5 and are pending DWR review. Payment in the amount of \$85,246 is expected 1-2 months after approval.

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

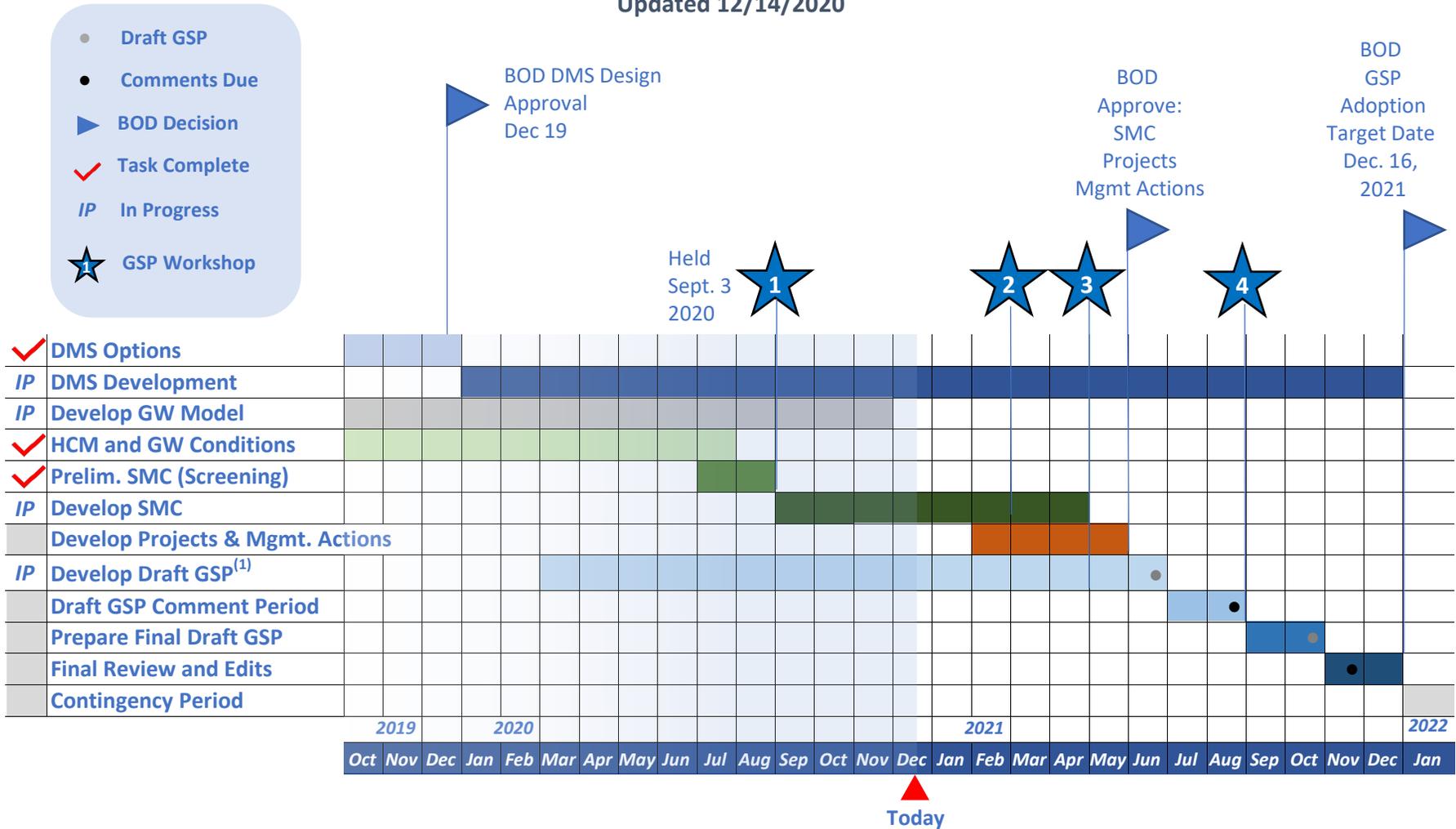
None.

ATTACHMENT

A. GSP Schedule

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

Mound Basin GSA GSP Development Schedule Updated 12/14/2020



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



Motion Item No. 8b

DATE: December 17, 2020
TO: Board of Directors
FROM: Executive Director
SUBJECT: **Degraded Water Quality Sustainable Management Criteria (Grant Category (d), Task 4)**

SUMMARY

Purpose

The purpose of this item is to present proposed sustainable management criteria (SMC) for the degraded water quality (DWQ) sustainability indicator. The proposed DWQ SMC were developed based on information presented in the draft Basin Setting section of the Groundwater Sustainability Plan (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/>.

Overview

The Sustainable Groundwater Management Act (SGMA) requires Groundwater Sustainability Agencies (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. Potential impacts related to elevated concentrations of common ions and nitrate are also considered.

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.

It is noted that the City of Ventura has experienced elevated TDS and sulfate concentrations relative to secondary maximum contaminant levels (MCLs) and detectable nitrate in pumped water from its wells. Based on comparison with monitoring data from other wells in the Basin, the elevated concentrations of sulfate and TDS in the City's wells appear to be related to well seal or casing integrity issues that facilitate intrusion of very poor quality water from the shallow groundwater system into the well. This is considered a well construction/condition issue and not an indicator of regional degradation of water quality in the principal aquifer that can or should be managed by the GSA. This same pattern is also observed in some agricultural 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. Nitrate is also detected frequently in one of the two City of Ventura wells at concentrations above background but below the MCL. The other City of Ventura well has periodic low level detections of nitrate. All of these wells 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. Occurrences of elevated sulfate, TDS, and nitrate concentrations appear to be related to well construction/condition issues that facilitate intrusion of very poor quality water from the shallow groundwater system into these wells, as opposed to being an indicator of regional water quality degradation in the principal aquifers. In conclusion, 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 is important to remember that MBGSA has no feasible means of changing in situ groundwater water quality.

Proposed SMCs

Undesirable Results

Current groundwater quality supports beneficial uses in the Basin. Therefore, it does not appear that significant or unreasonable groundwater quality degradation has occurred in the principal aquifers of the Mound Basin as a result of groundwater extractions.

Causes of Groundwater Conditions that Could Lead to Undesirable Results

Potential future increases in Mugu Aquifer pumping could potentially induce downward movement of very poor quality water from the shallow groundwater system into the Mugu Aquifer, which could potentially lead to undesirable results. Additionally, improperly constructed wells that remain in use and abandoned wells that have not been properly destroyed (backfilled) can provide conduits for downward movement of very poor quality water from the shallow groundwater system into the Mugu and/or Hueneme Aquifers.

Potential Effects on Beneficial Uses and Users

Potential effects on municipal beneficial uses would be increased costs for treatment or blending to meet drinking water standards. Potential effects on agricultural beneficial uses could include lower quality crops, increased water use to meet leaching requirements, and implementation of treatment or blending to reduce salinity. All of the potential effects on agricultural beneficial uses would result in increased costs and potential impacts on lease rates and land values.

Criteria Used to Define Undesirable Results

The effects of groundwater conditions deemed to cause undesirable results is considered to occur when all representative monitoring wells in a principal aquifer exceed the minimum threshold concentration for a constituent for two consecutive years.

Minimum Thresholds

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 thresholds 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

Criteria Used to Define Minimum Thresholds

- **Primary MCLs**: Applicable to nitrate only. It is desirable to maintain existing water quality at levels suitable potable water for human consumption for current and future beneficial uses. Widespread occurrence of nitrate in excess of the MCL is considered a significant and unreasonable effect.
- **Secondary MCLs**: Applicable to TDS, sulfate, and chloride. It is desirable to maintain water quality at levels acceptable to consumers. Widespread occurrence of TDS, sulfate, or chloride concentrations in excess of the Short Term Consumer Acceptance Level would be considered a significant and unreasonable effect.

- RWQCB WQOs: These standards are designed to protect beneficial uses and preserve existing water quality at the time of RWQCB Basin Plan development from degradation, consistent with the Porter-Cologne Act and State Water Resources Control Board Antidegradation Policy (Resolution No. 68-16).
- Agricultural Thresholds: Certain crops grown in the Basin are sensitive to chloride and boron in irrigation water. The RWQCB WQOs were developed, in part to protect agricultural beneficial uses of water. Therefore, widespread chloride or boron concentrations in excess of WQOs for these constituents would be considered a significant and unreasonable effect.
- Existing Water Quality: Current groundwater quality is known to support beneficial uses in the Basin and there is an absence of significant and unreasonable effects due to water quality. Therefore, minimum thresholds should be set equal to or greater than existing water quality to recognize the absence of significant and unreasonable effects at present.
- GSA's Ability to Improve Water Quality: TDS, sulfate, chloride, and boron are naturally occurring constituents that are derived from groundwater interaction with subsurface sediments. The GSA has no feasible means of reducing the existing in situ concentrations of these constituents in the Basin. The GSA can take measures to minimize the downward migration of these constituents and nitrate from the shallow groundwater into the principal aquifers.

The proposed minimum thresholds and corresponding rationales are listed in Table 1. The proposed minimum thresholds are shown on the water quality plots attached to this staff report (Attachment A).

Measureable Objectives

Measureable objectives are quantitative metrics that reflect desired conditions for the sustainability indicator. Measureable objectives must be established using the same metrics and monitoring sites as are used to define the minimum thresholds. Those metrics were described above. The proposed measureable objectives and corresponding rationales are listed in Table 1. The proposed measureable objectives are shown on water quality plots attached to this staff report (Attachment A).

Interim Milestones

Interim milestones are used to show the anticipated progress or path to achieving the measureable objectives within 20 years. The GSA must define the interim milestones using the same metric as the measureable objective in increments of five years. Because the measureable objectives for all water quality constituents are already met, there is no need to show interim milestones.

Table 1. Proposed Minimum Thresholds and Measureable Objectives

Constituent	MCL (mg/L)	Sec. MCL (R/U/ST) ¹ (mg/L)	RWQCB WQO (mg/L)	Average Conc. Representative Monitoring Wells Last 10 Years (mg/l)	Proposed MT ² (mg/L)	MT Rationale	Proposed MO ³ (mg/L)	MO Rationale
<i>Mugu Aquifer</i>								
Nitrate	45	N/A	45	Non-Detect	45	Protect water quality for potable uses.	5	Preserve existing water quality for potable uses.
TDS	N/A	500/1,000/1,500	1,200	973	1,200	Protect agricultural, municipal, and industrial beneficial uses consistent with RWQCB WQOs.	1,000	Preserve existing water quality for agricultural, municipal, and industrial beneficial uses. MO is set at Upper Consumer Acceptance Level to support potable uses.
Sulfate	N/A	250/500/600	600	387	600	Protect municipal beneficial use consistent with RWQCB WQOs and prevent exceedances of Short Term Consumer Acceptance Level.	500	Preserve existing water quality for municipal beneficial use. MO is set at Upper Consumer Acceptance Level to support potable uses.
Chloride	N/A	250/500/600	150	52	150	Protect agricultural beneficial use consistent with RWQCB WQOs.	75	Preserve existing water quality for agricultural beneficial use. MO is selected to preserve existing water quality.
Boron	N/A	N/A	1	0.50	1	Protect agricultural beneficial use consistent with RWQCB WQOs.	0.75	Preserve existing water quality for agricultural beneficial use. MO is selected to preserve existing water quality.
<i>Hueneme Aquifer</i>								
Nitrate	45	N/A	45	Non-Detect	45	Protect water quality for potable uses.	5	Preserve existing water quality for potable uses.
TDS	N/A	500/1,000/1,500	1,200	1,141	1,350	Protect agricultural, municipal, and industrial beneficial uses. MT is 150 mg/L higher than RWQCB WQO based on current and historical data at representative monitoring wells (set at upper range of data from past ten years).	1,180	Preserve existing water quality for agricultural, municipal, and industrial beneficial uses. MO is median value of representative monitoring wells during last 10 years.
Sulfate	N/A	250/500/600	600	472	600	Protect municipal beneficial use consistent with RWQCB WQOs and prevent exceedances of Short Term Consumer Acceptance Level.	500	Preserve existing water quality for municipal beneficial use. MO is set at Upper Consumer Acceptance Level to support potable uses.
Chloride	N/A	250/500/600	150	77	150	Protect agricultural beneficial use consistent with RWQCB WQOs.	100	Preserve existing water quality for agricultural beneficial use. MO is selected to preserve existing water quality.
Boron	N/A	N/A	1	0.62	1	Protect agricultural beneficial use consistent with RWQCB WQOs.	0.75	Preserve existing water quality for agricultural beneficial use. MO is selected to preserve existing water quality.

¹ Consumer Acceptance Levels, where R = Recommended, U = Upper, and ST = Short Term

² Undesirable results are considered to occur when all representative monitoring wells in a principal aquifer exceed the minimum threshold concentration for a constituent for two consecutive years.

³ Sustainability Goal for degraded water quality for a given constituent is considered to be met when the two-year running average concentration for at least one representative monitoring well is below the measureable objective.

RECOMMENDED ACTION

Discuss proposed sustainable management criteria for the water quality sustainability indicator and consider providing feedback to staff.

BACKGROUND

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 SMC will be a marriage of policy and technical elements. Policy elements will be approved by the Board in consultation with stakeholders. Technical information will be derived from the Basin Conditions section of the GSP and additional technical analysis. 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.

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. 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 indicating significant and unreasonable effects may occur for applicable Sustainability Indicators. 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 that reflect basin desired conditions for applicable Sustainability Indicators. 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.

FISCAL SUMMARY

Not applicable.

ATTACHMENTS

- A. Plots of Historical Water Quality, Minimum Thresholds, and Measureable Objectives
- B. Maps Showing Water Quality Monitoring Locations

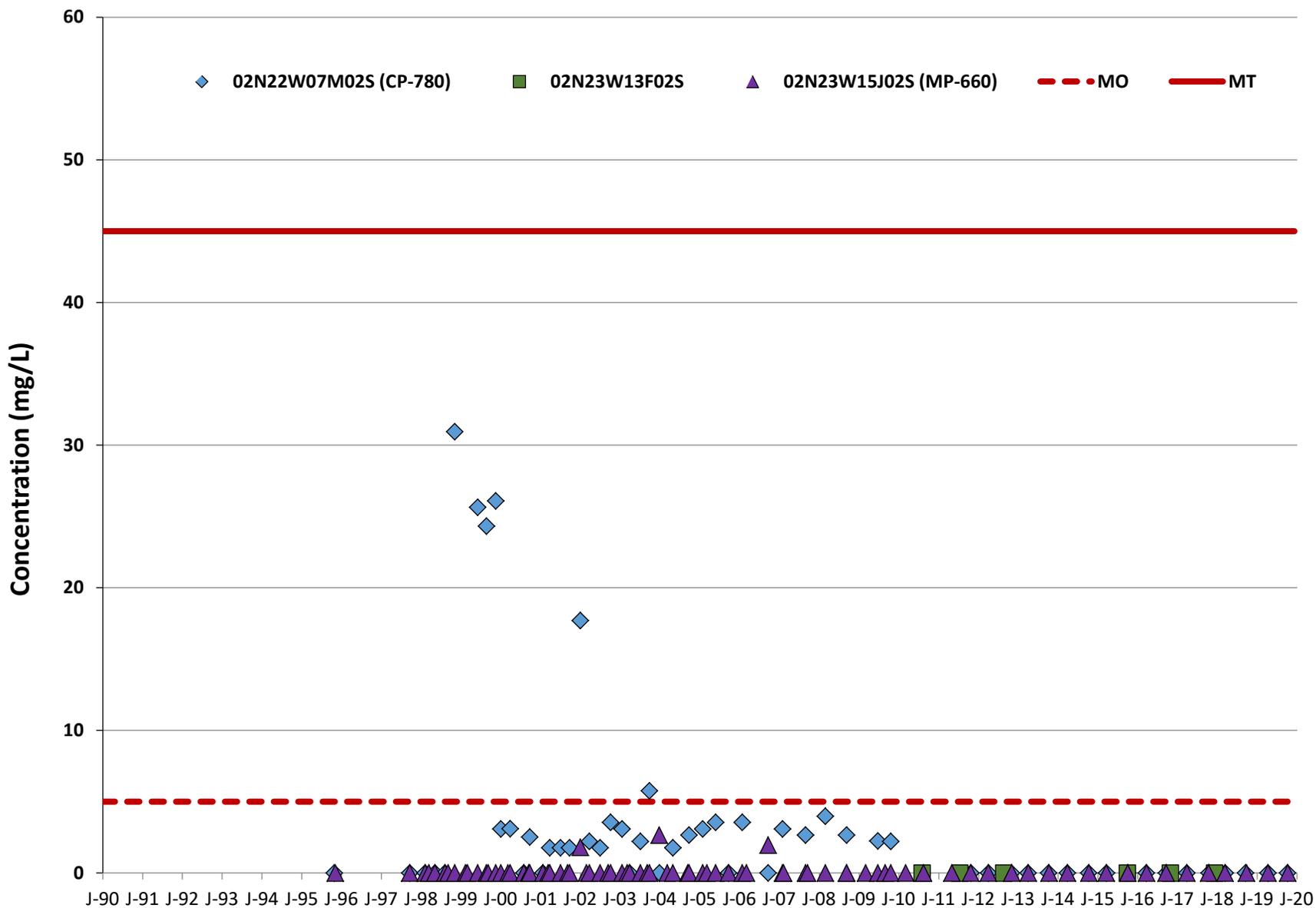
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Motion: _____ 2 nd : _____
J.Chambers: _____ C.Everts: _____ M.Mobley: _____ S.Rungren: _____ G.Shephard: _____

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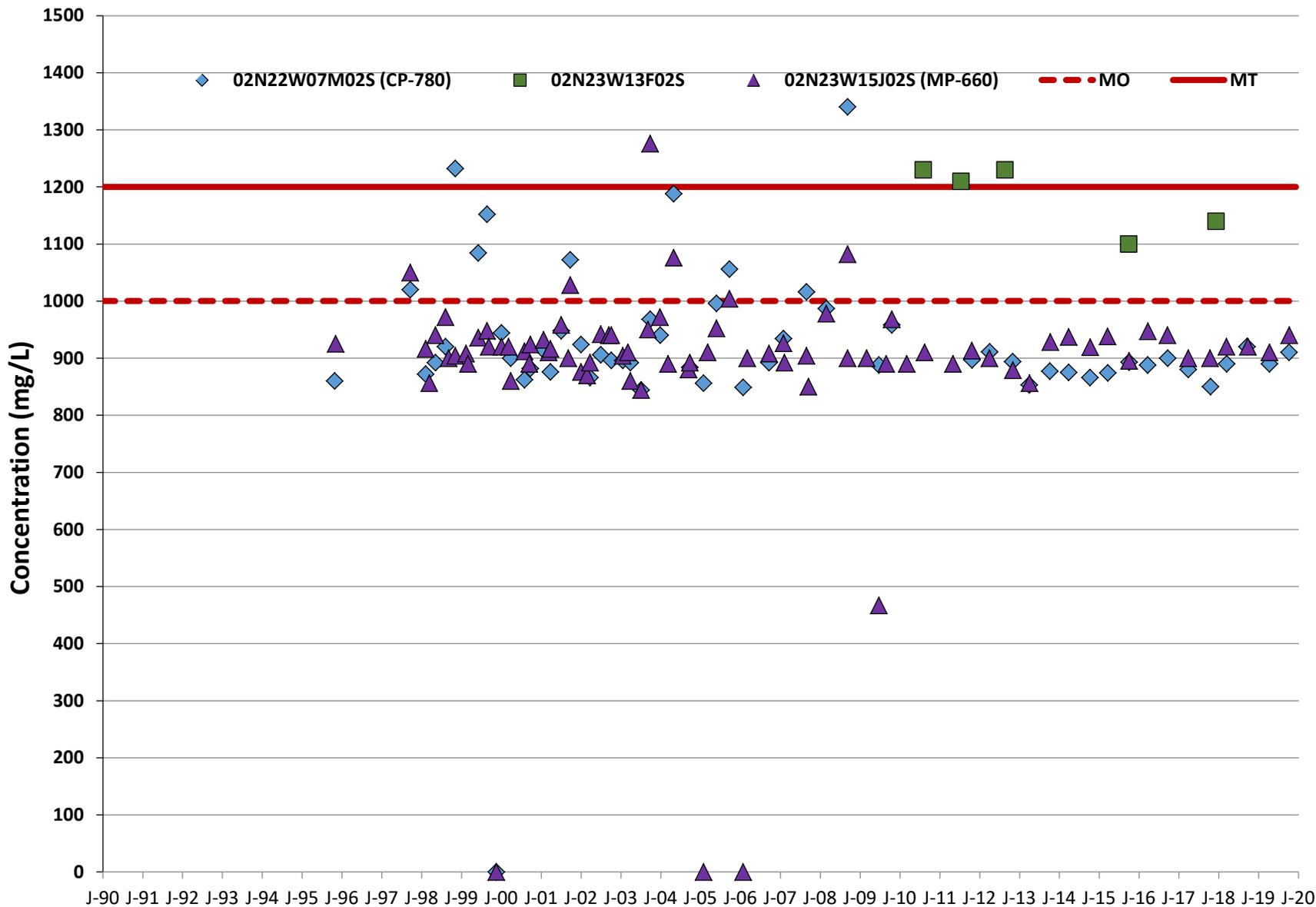
Attachment A

Plots of Historical Water Quality, Minimum Thresholds, and
Measureable Objectives

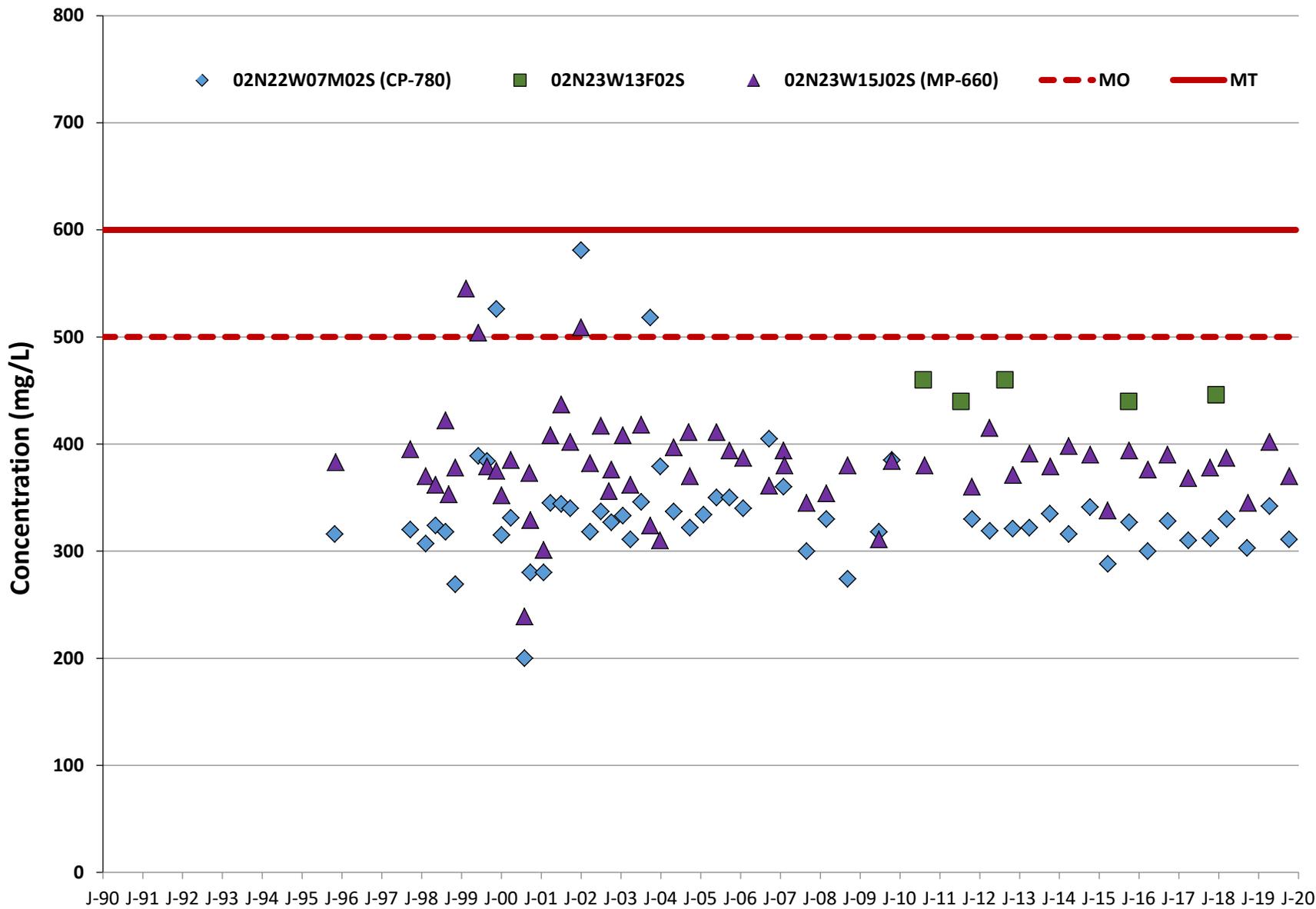
Mugu Aquifer - Nitrate



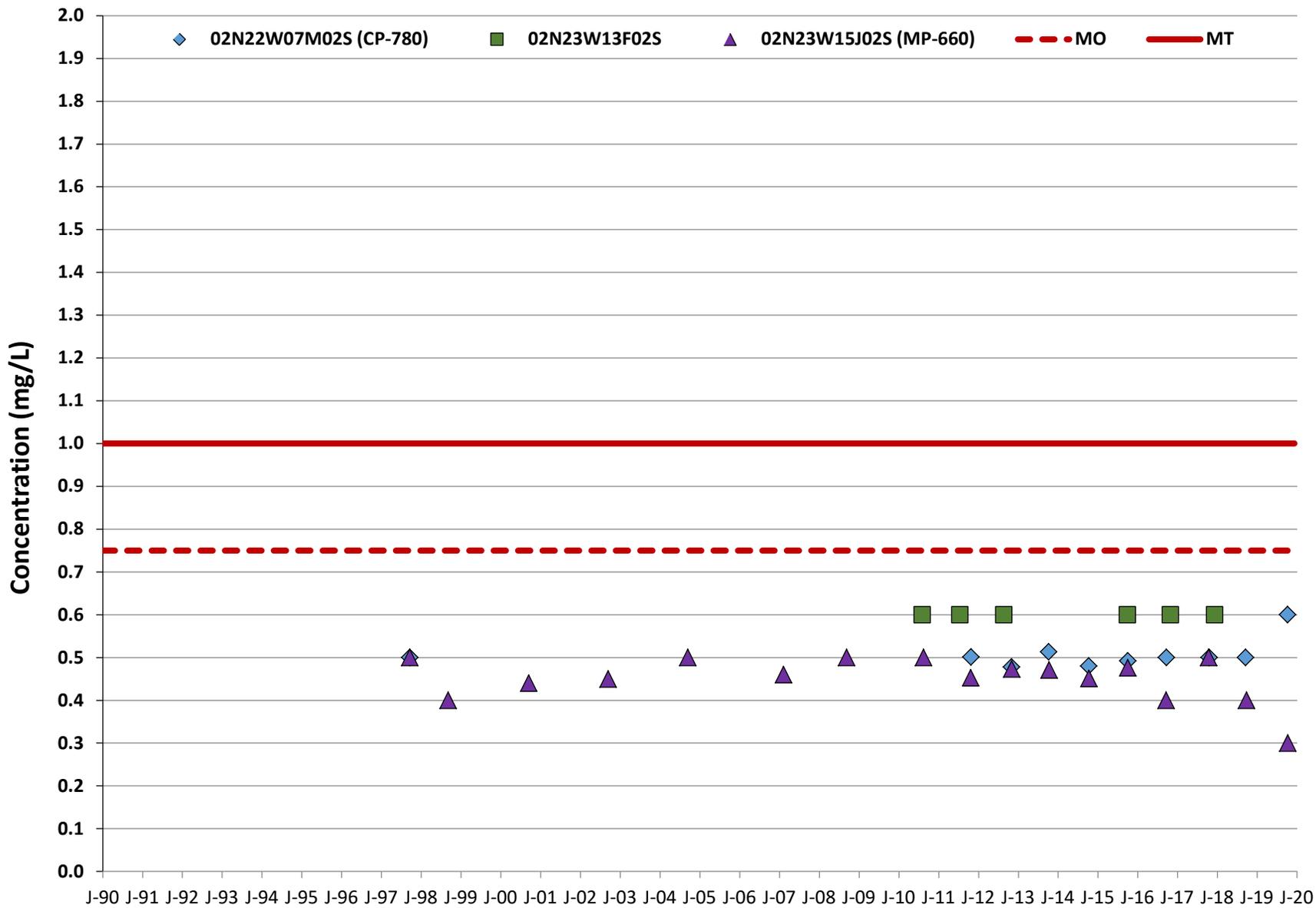
Mugu Aquifer - Total Dissolved Solids



Mugu Aquifer - Sulfate

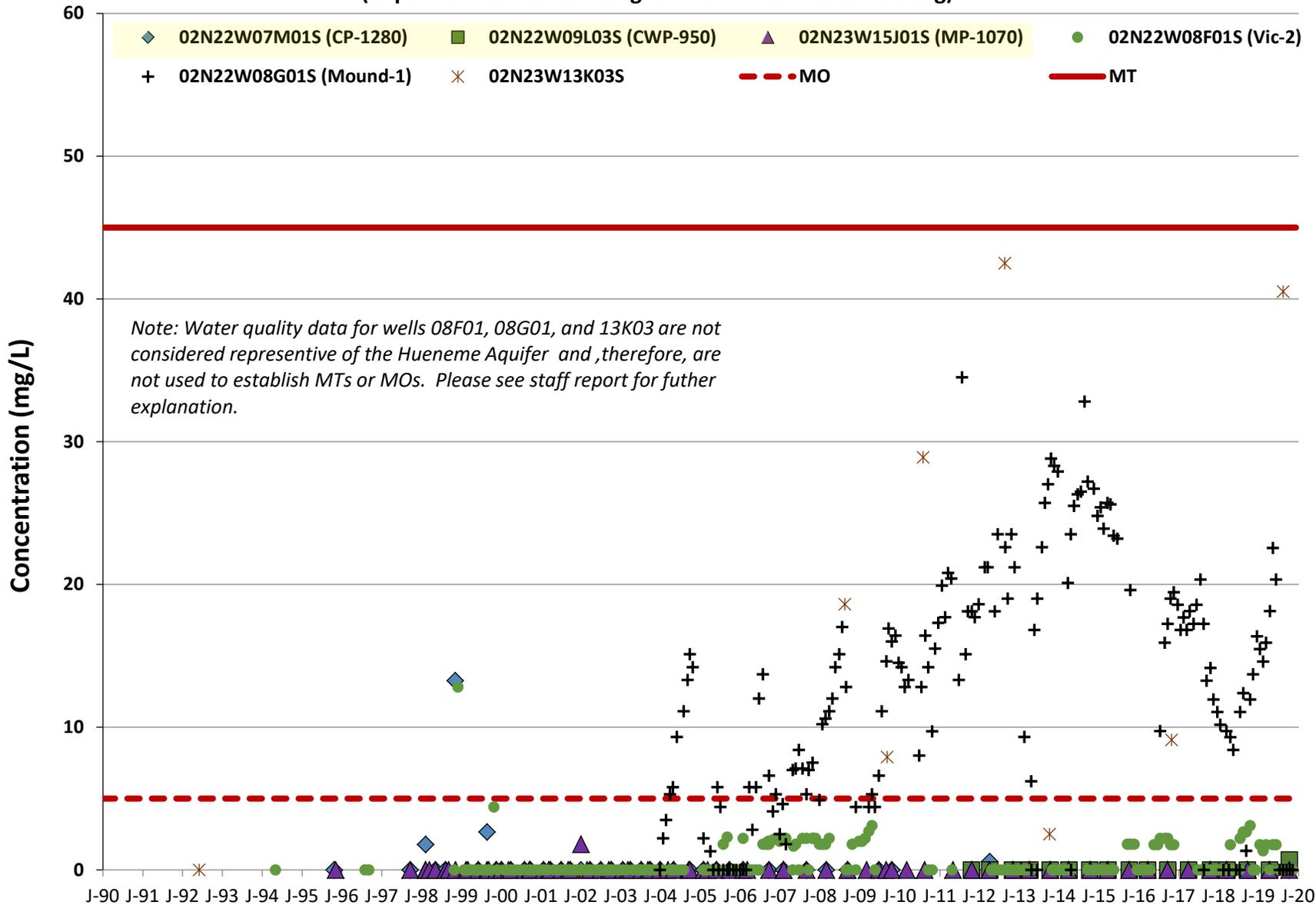


Mugu Aquifer - Boron



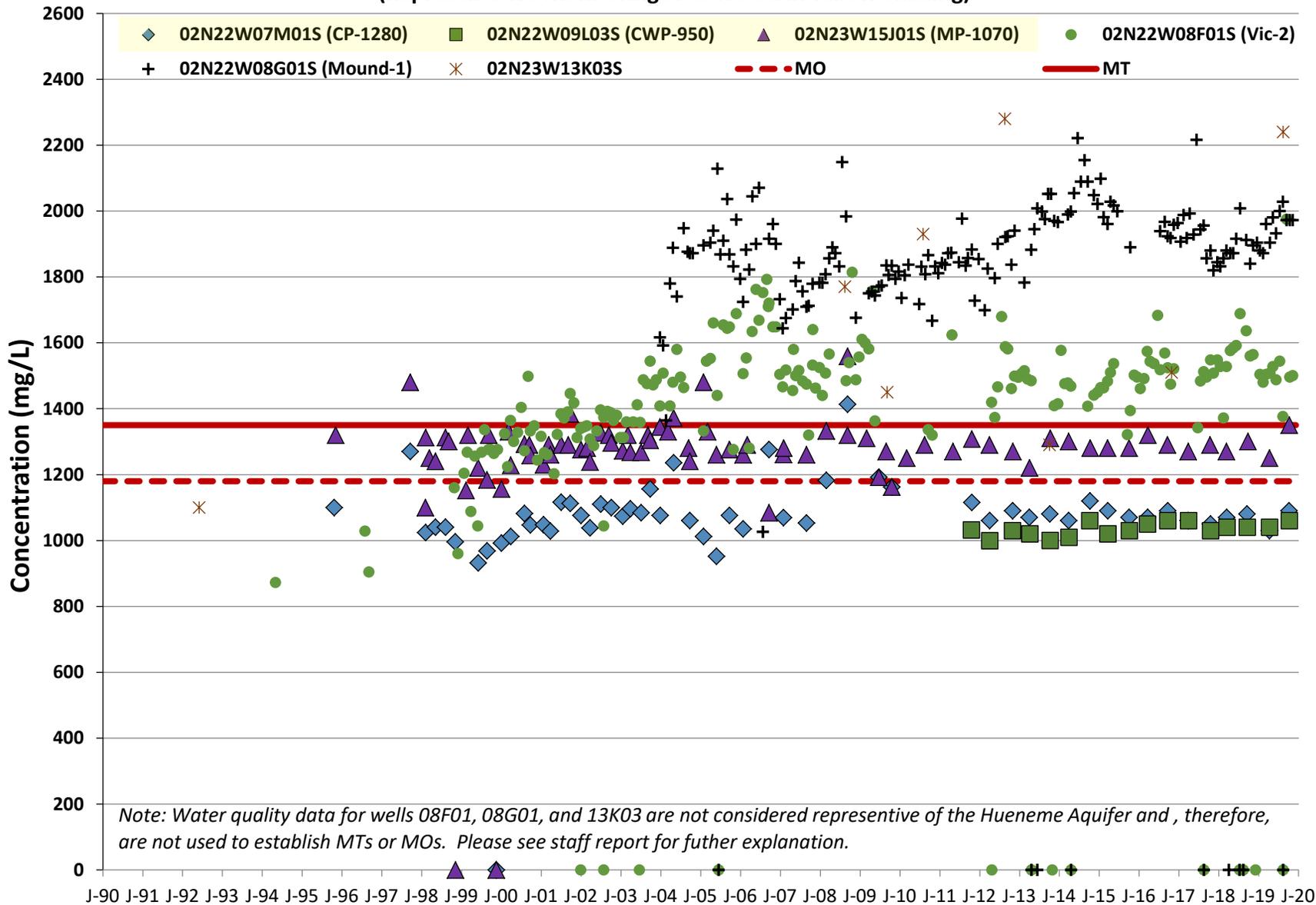
Hueneme Aquifer - Nitrate

(Representative Monitoring Sites Noted in Yellow Shading)

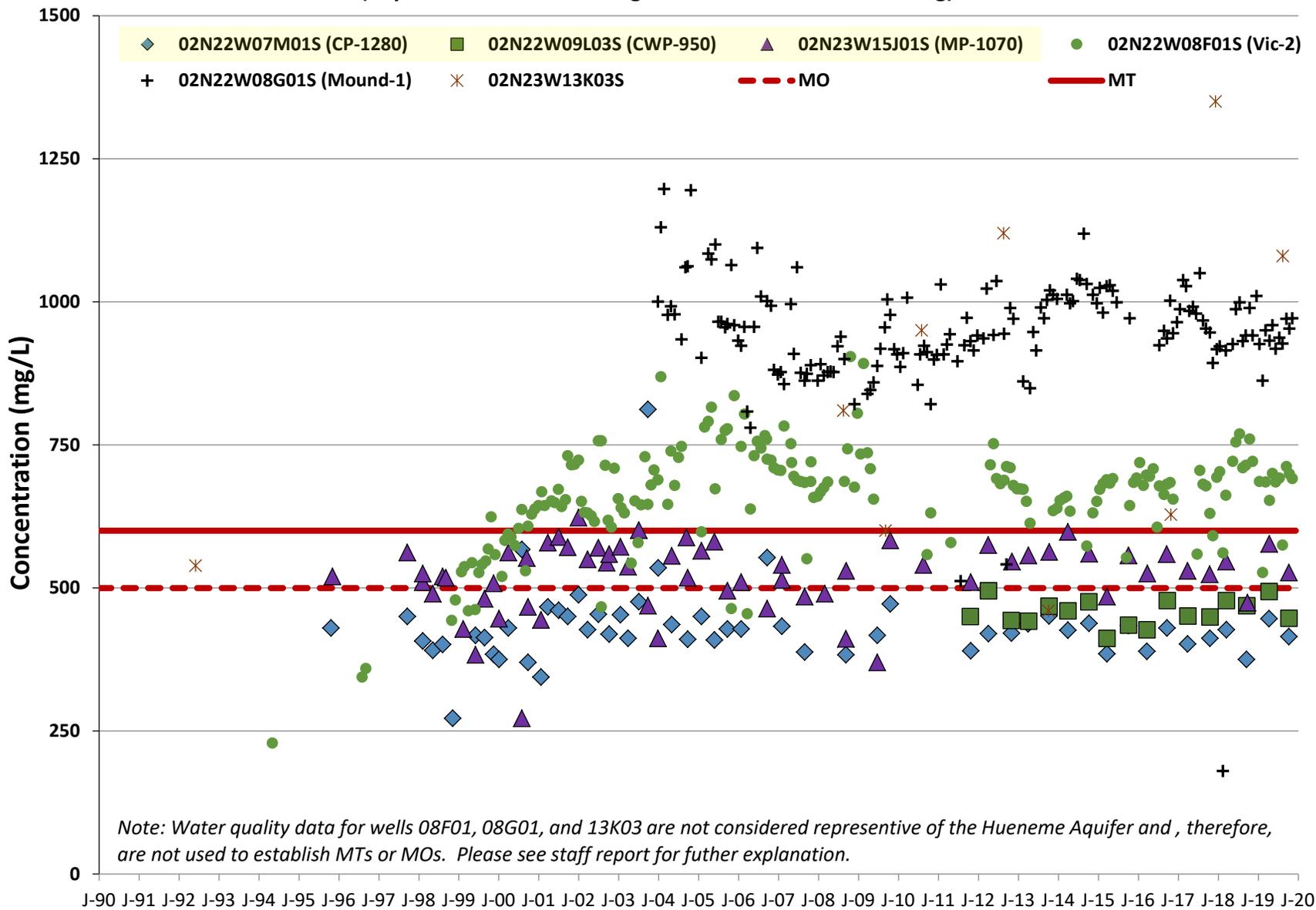


Hueneme Aquifer - Total Dissolved Solids

(Representative Monitoring Sites Noted in Yellow Shading)

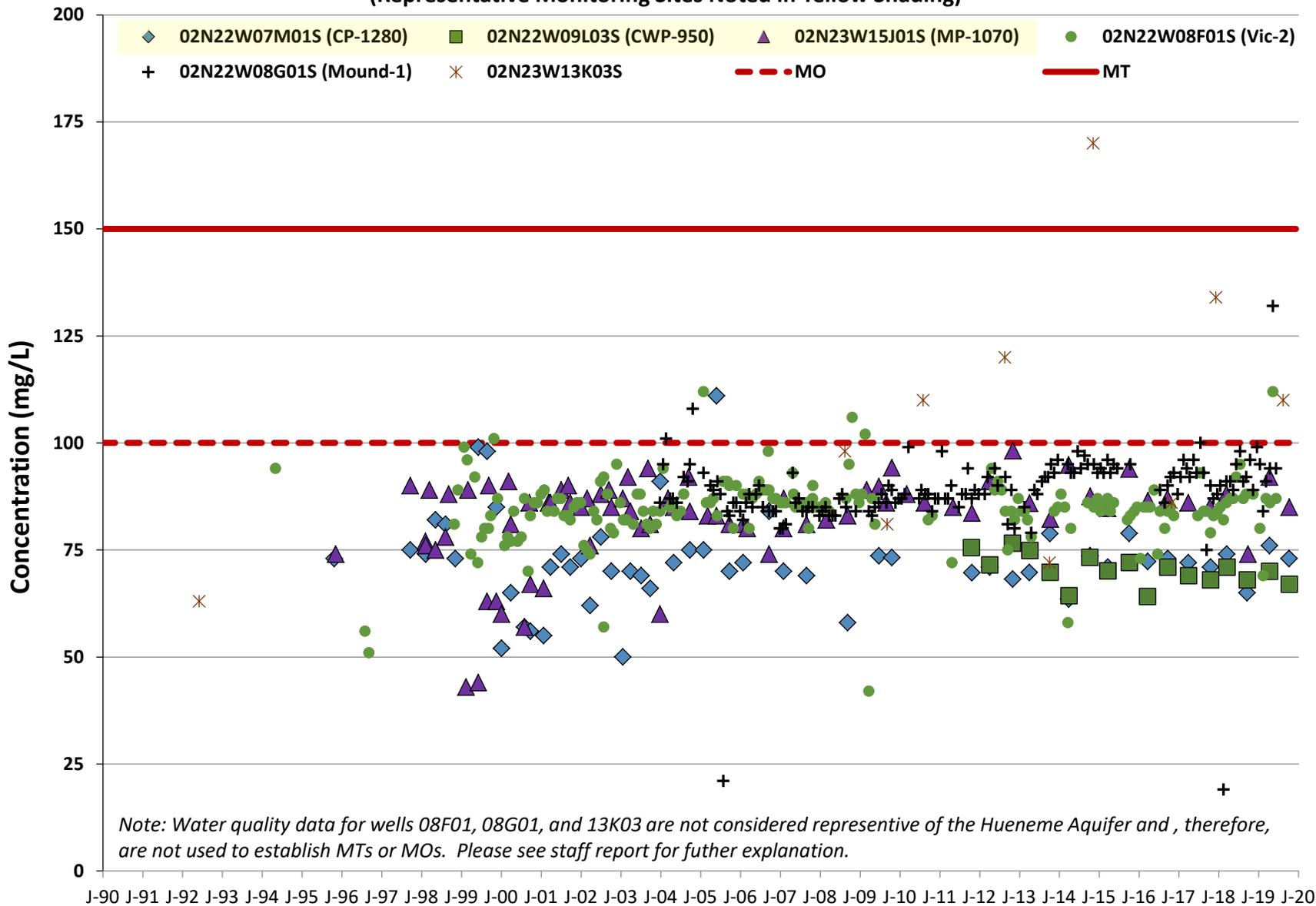


Hueneme Aquifer - Sulfate (Representative Monitoring Sites Noted in Yellow Shading)



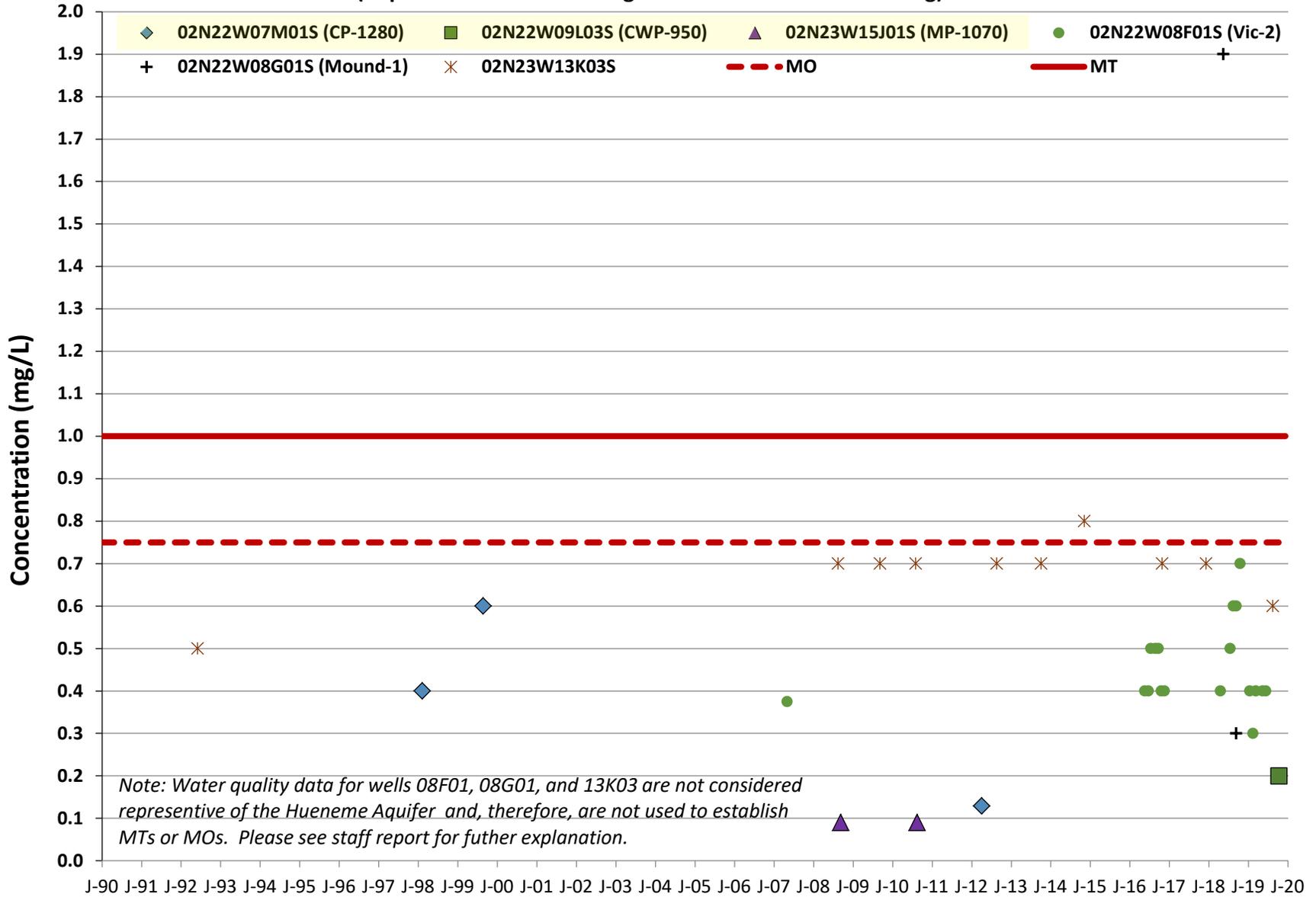
Hueneme Aquifer - Chloride

(Representative Monitoring Sites Noted in Yellow Shading)



Hueneme Aquifer - Boron

(Representative Monitoring Sites Noted in Yellow Shading)



Item 8b

Attachment B

Maps Showing Water Quality Monitoring Locations

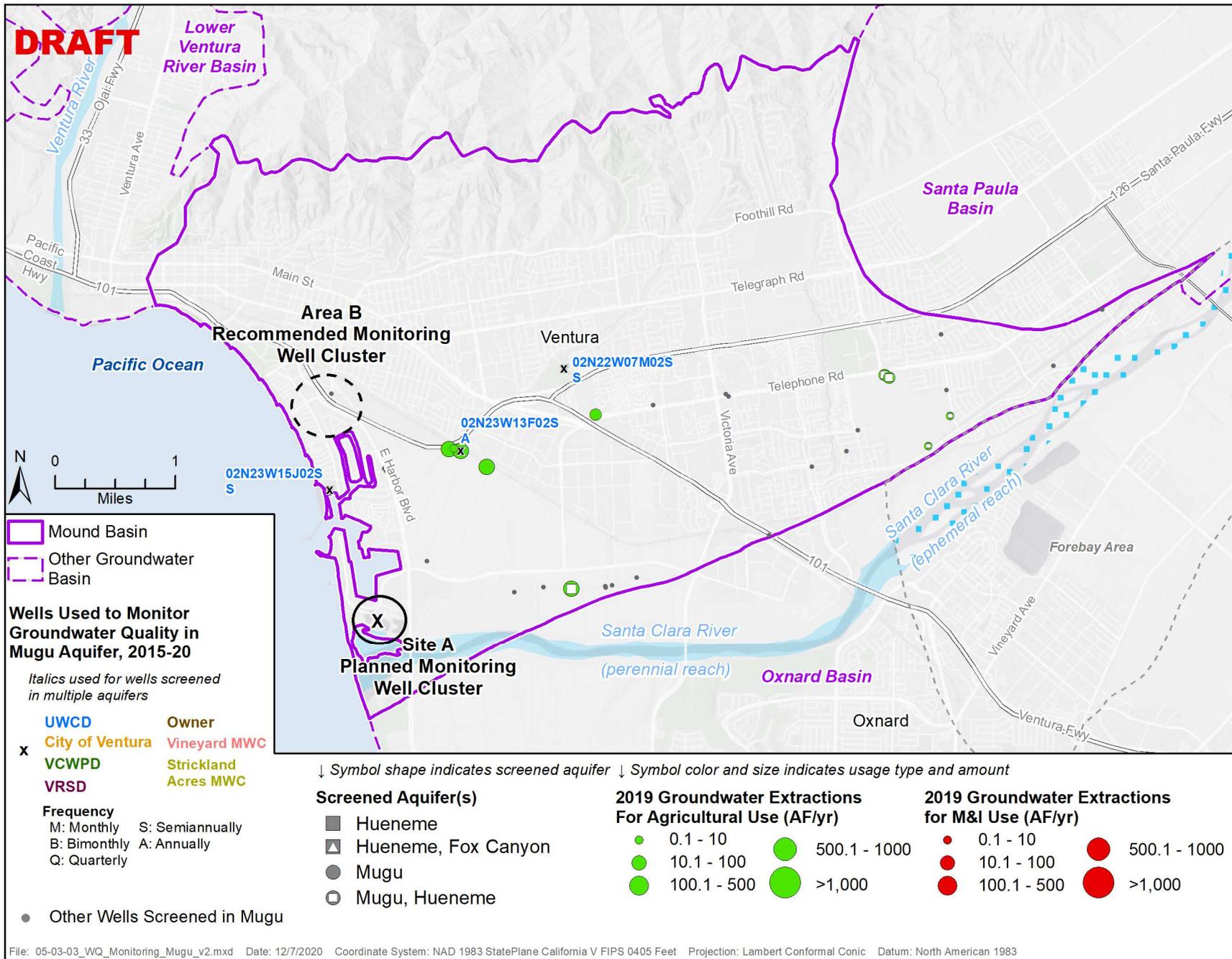


Figure 5.3-03 Map Showing the Groundwater Quality and Seawater Intrusion Monitoring Networks in the Mugu Aquifer of Mound Basin.

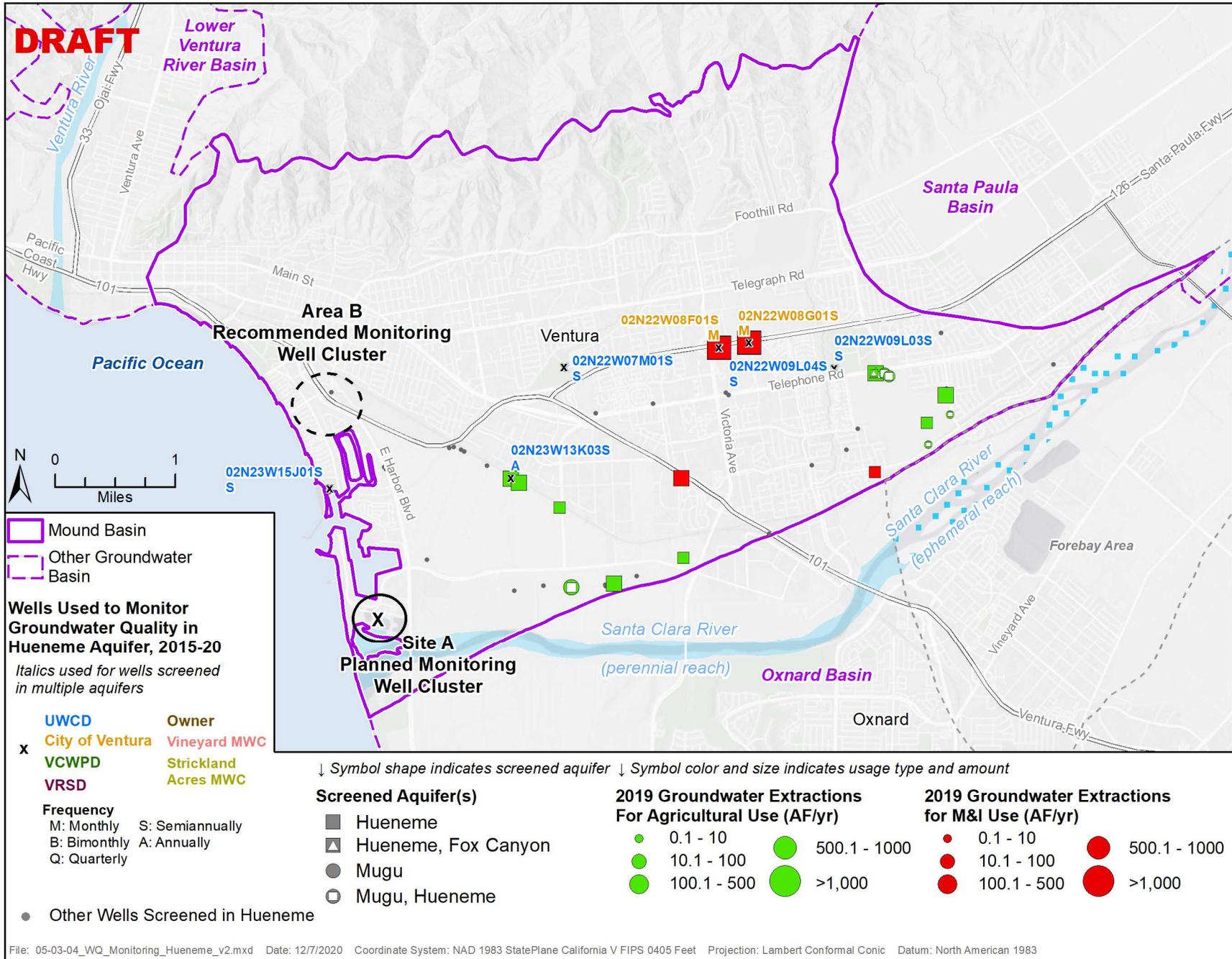


Figure 5.3-04 Map Showing the Groundwater Quality and Seawater Intrusion Monitoring Networks in the Hueneme Aquifer of Mound Basin.