

**Wyandotte Creek GSA
Advisory Committee (WAC)**

Date: Wednesday, November 7, 2024

Time: 9:00-11:00 AM

Location: Butte County Public Health, Klamath Room,
202 Mira Loma Drive, Oroville, CA 95965

MEETING AGENDA

1. CALL TO ORDER AND ROLL CALL

2. BUSINESS FROM THE FLOOR

The public and WAC members will have an opportunity to comment on items not on the agenda and that are relevant to the WAC. Committee members and Management Committee staff are not required to respond to any issues raised during the public comment period. Commenters are asked to respect differing perspectives and to keep remarks within three minutes.

3. *REVIEW AND APPROVE BY CONSENSUS THE 05/02/23 WAC MEETING MINUTES

4. *DISCUSSION AND POTENTIAL RECOMMENDATIONS ON PROPOSED NEW MONITORING NETWORK LOCATIONS (Report – Ryan Fulton, Larry Walker Associates)

5. *DISCUSSION AND POTENTIAL RECOMMENATION ON SGM GRANT BUDGET AMENDMENT – REALLOCATION OF COMPONENT 5 FUNDS (Report – Becky Fairbanks, GSA SGM Grant Project Manager)

6. *SGM GRANT PROJECTS PROGRESS REPORT (Report – Becky Fairbanks, GSA SGM Grant Project Manager)

7. GSA PROGRAM MANAGER REPORT (Report – Dillon Raney, GSA Program Manager)

8. ADJOURNMENT:

*Materials included in agenda packet



Wyandotte Creek Advisory Committee (WAC)

May 2, 2023, 9:00am-11:00am

In-Person Meeting Location:

Butte County Public Health, Klamath Room
202 Mira Loma Drive, Oroville, CA 95965

WAC MEETING SUMMARY

1. ROLL CALL

Present in person: Colleen Duncan, Joe Gleason, Ethan Schmeltzer, and Kristen McKillop.

Member Agency Staff Present: Chris Heindell, Thermalito Water and Sewer District and Dillon Raney, Becky Fairbanks, Christina Buck, Kamie Loeser, and Kelly Peterson, Butte County

2. BUSINESS FROM THE FLOOR

None

3. Approval of Meeting Summary for the 10/5/23 WAC Meeting

The meeting summary was approved by consensus.

4. Introduction of new WAC members, GSA Program Manager, and management committee member. (Kamie Loeser, Butte County)

Since the 10/5/23 WAC meeting, three new members have joined the Wyandotte Creek GSA Advisory Committee: two domestic well users and one businesses representative. Butte County's Water & Resource Conservation team has also expanded with three new additions for GSA-related work: a GSA Program Manager, a Project Coordinator, and an Administrative Analyst III. The meeting began with introductions from both the staff and WAC members.

5. Charter Review and Launching the New Phase of the Advisory Committee (Dillon Raney, Butte County)

Staff provided a summary of the WAC charter and reviewed the staggered term setup. The WAC prioritizes consensus-building over formal voting procedures. In instances where consensus cannot be reached, differing opinions are communicated to the board. Presently, there are no designated chair or vice-chair positions, nor is there an official voting mechanism, though these may be established in the future by group consensus. Additionally, the Committee retains the authority to propose amendments to the charter if necessary.

6. User Classification Change Request and Appeal Policy Update (Dillon Raney, Butte County)

Staff provided an update on the User Classification Change Request and Appeal Policy, offering background information on its necessity and the approval and revisions of the policy since the last WAC meeting.

Advisory members raised questions regarding the policy's impact, significance, and the data utilized by staff. Staff addressed these inquiries, emphasizing the policy's importance and its aim for greater equity among users. Additionally, staff stressed the urgency of outreach efforts to promptly inform users about the policy, allowing them to address any discrepancies on their current tax bills. Currently, data management is handled internally by staff, but future consideration may involve hiring a consultant for this purpose.

7. 2023 Annual Report Presentation (Kelly Peterson)

Staff presented the 2023 Annual Report, eliciting inquiries from attendees. Questions arose regarding the basis for the MO basis on historical lows, prompting clarification. Regarding RMS well selection, staff outlined criteria based on accessibility, extensive data history, and strategic spacing.

Concerns regarding water quality were also addressed. Staff highlighted the hope to utilize potential grant funds for further investigation, particularly in areas with historically high salinity. The discussion emphasized the multifactorial nature of Electric Conductivity (EC) readings and the need for thorough investigation. Suggestions included engaging drillers and agricultural groundwater users for insights, as well as collaborating with Environmental Health.

Members suggested exploring alternate and/or additional monitoring to include additional wells. Overall, the dialogue emphasized the importance of public education and clear communication to mitigate concerns and foster understanding.

8. SGMA Grant Projects Update (Becky Fairbanks)

Staff provided an update on all SGMA projects, detailing their current status.

During the discussion, advisory members inquired about grant opportunities for farmers regarding the regional conjunctive use project. Staff acknowledged the availability of limited grant funds, emphasizing the project's pilot status and the aim to gather data for optimized future funding allocation. Additionally, concerns were raised regarding PG&E incentives for inefficient water usage in crop irrigation.

The conversation shifted to outreach strategies, with an emphasis on public engagement. Suggestions included gathering insights from neighboring basins and streamlining education and outreach efforts to minimize the need for people to attend extensive meetings. Plans were discussed to create shorter informational videos for easy access to relevant information, thereby enhancing public accessibility and engagement.

Discussion also included the potential to monitor different and/or additional wells.

Wyandotte Creek

GROUNDWATER SUSTAINABILITY
AGENCY

9. **Committee Members Wishing to Address Items not Listed on the Agenda**
None

10. **Adjournment**

The Committee will adjourn to their next meeting, anticipated in 2024.

Wyandotte Creek Subbasin Update on Proposed Monitoring Network Enhancements

Prepared by

The LWA Team in coordination with the Wyandotte Creek GSA

Funding provided by the California Department of Water Resources

November 2024



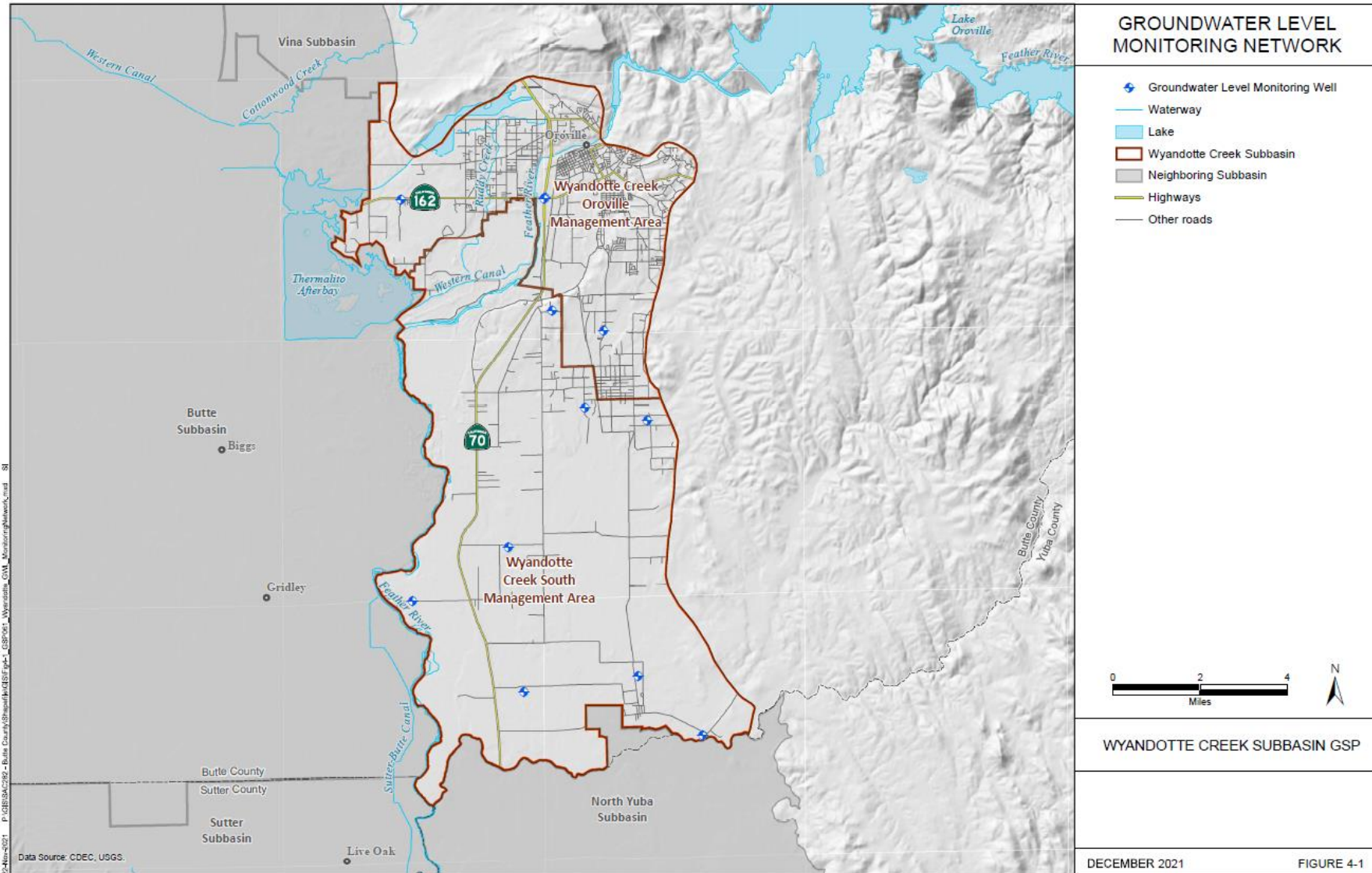
Outline

- Project Objectives
- Overview Existing Groundwater Level Monitoring Network
- Monitoring Network Development Steps
- Proposed Enhancements
- Next Steps

Objectives

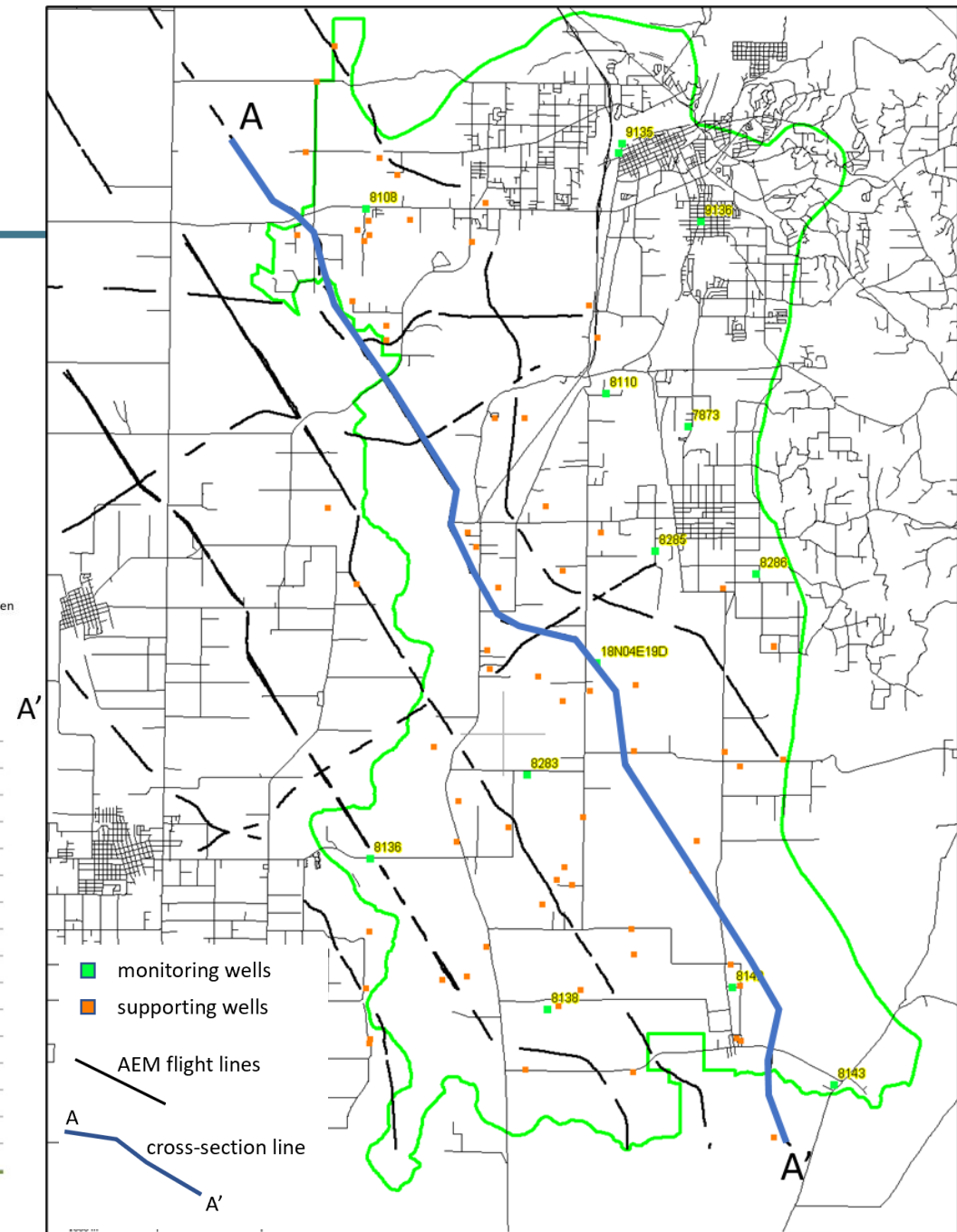
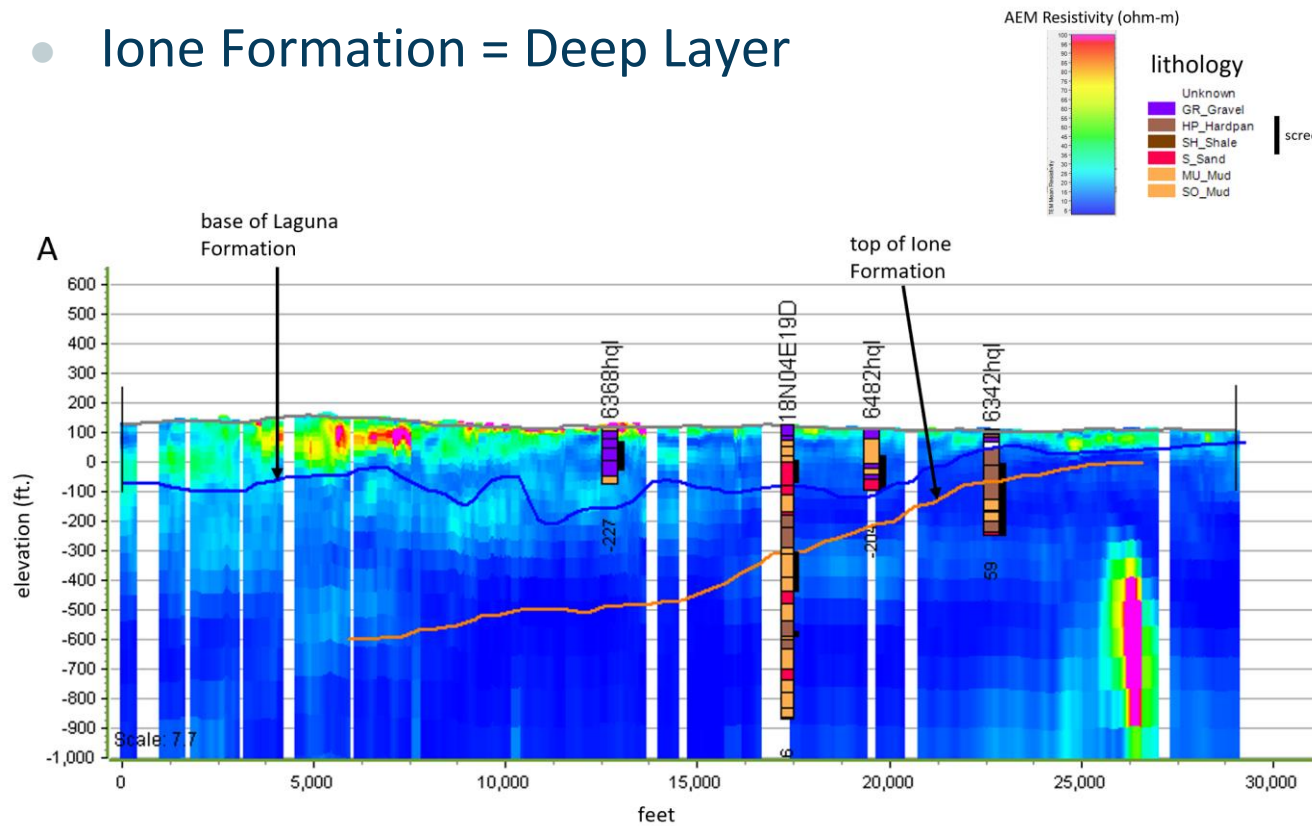
- Address data gaps identified in the Wyandotte Creek GSP & comments in DWR's Determination Letter
- Monitor all beneficial uses and users of groundwater including:
 - ✓ Interconnected surface waters (ISWs),
 - ✓ Groundwater dependent ecosystems (GDEs),
 - ✓ Domestic well owners, and
 - ✓ Agricultural users
- Available funding to drill/install a minimum of **fifteen (15) shallow wells, three (3) multi-completion wells, and five (5) stream gages**

Existing Groundwater Level Monitoring Network



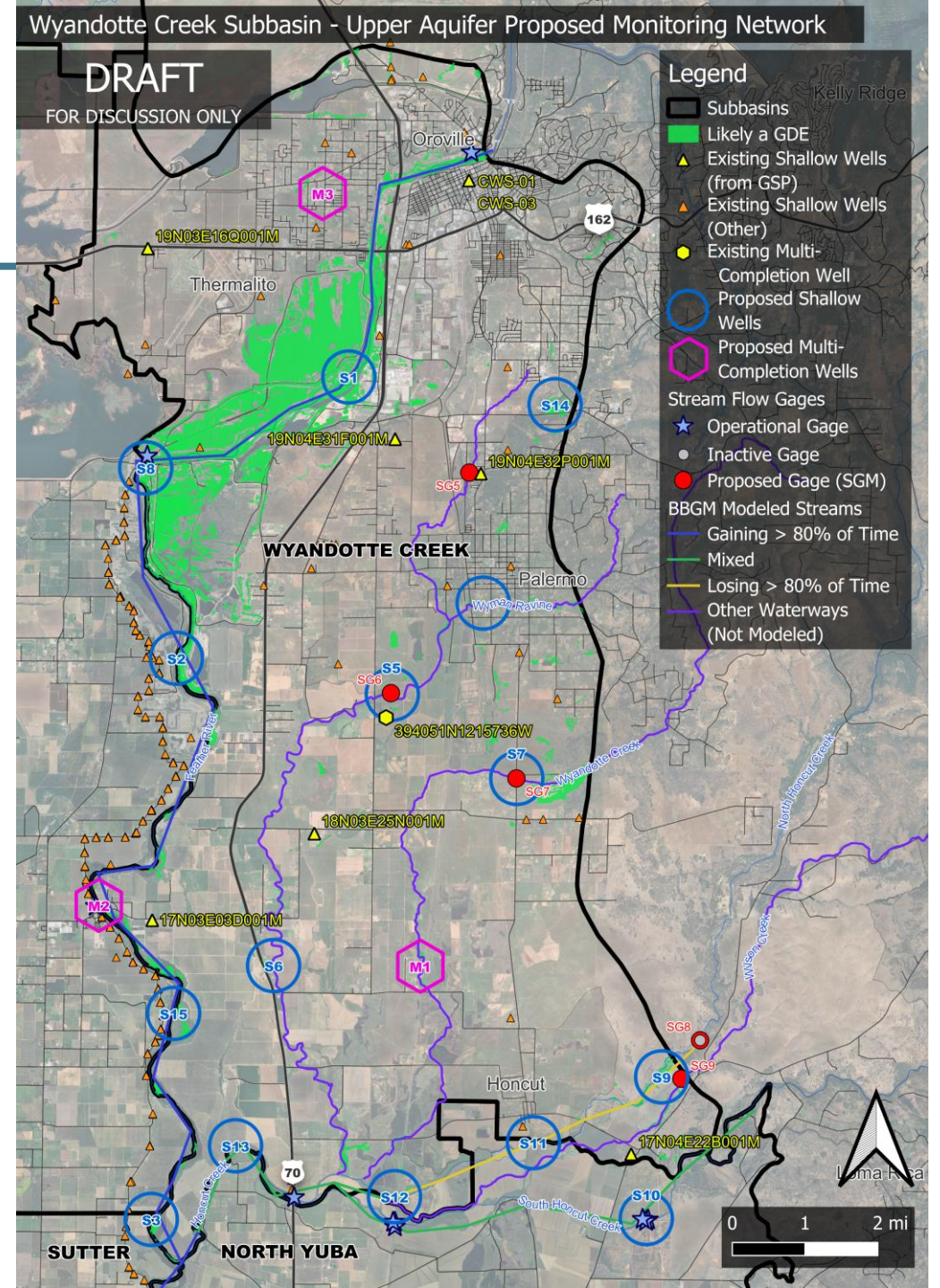
Monitoring Network Development

- Identified existing shallow and deep wells using DWR AEM Surveys
- Laguna Formation = Shallow Layer
- Lone Formation = Deep Layer



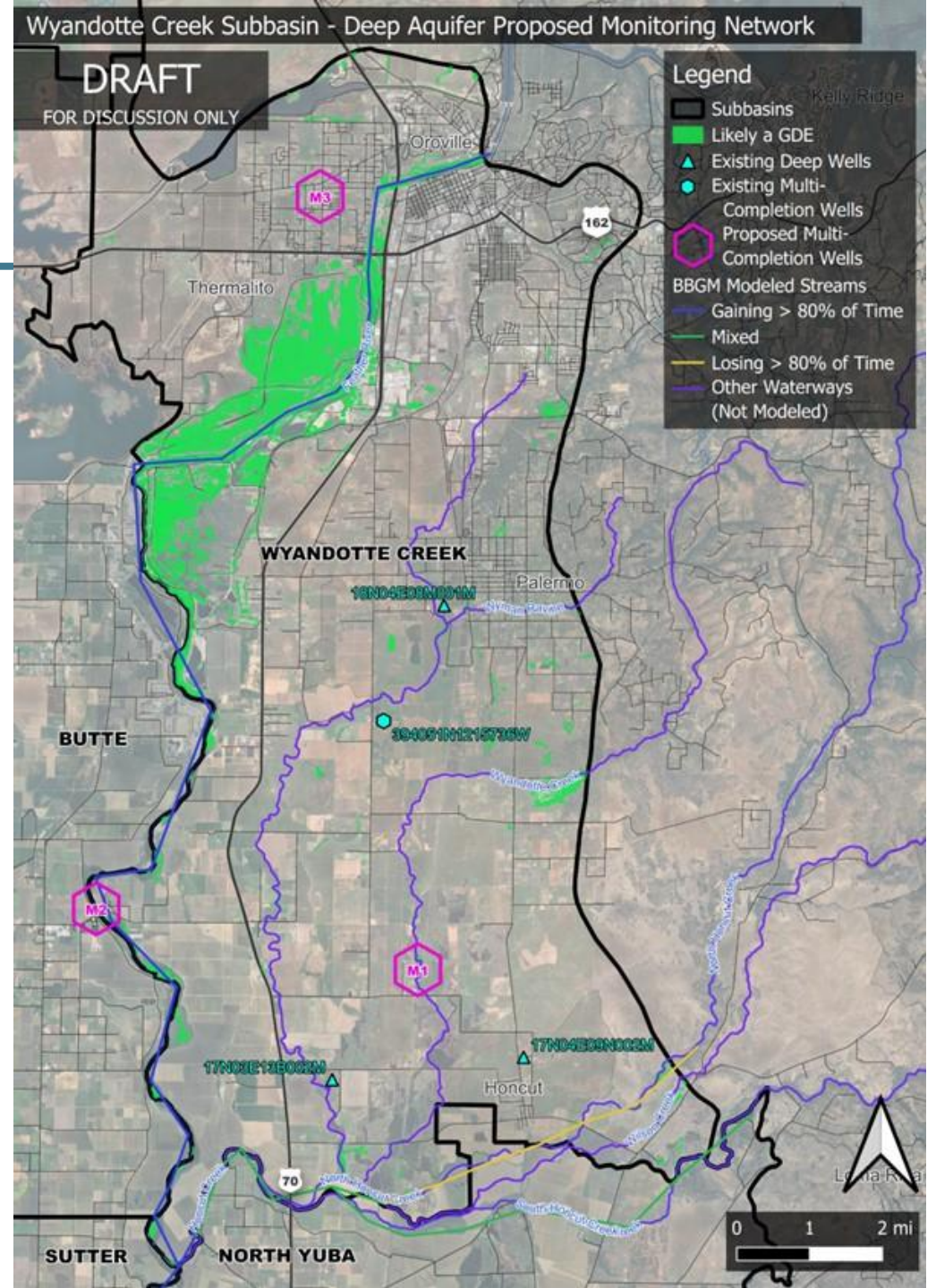
Proposed Shallow Monitoring Network

- Eight (8) existing shallow wells
- One (1) existing multi-completion well
- Enhancements include:
 - ✓ fifteen (15) shallow wells
 - ✓ three (3) multi-completion wells
 - ✓ five (5) stream gages



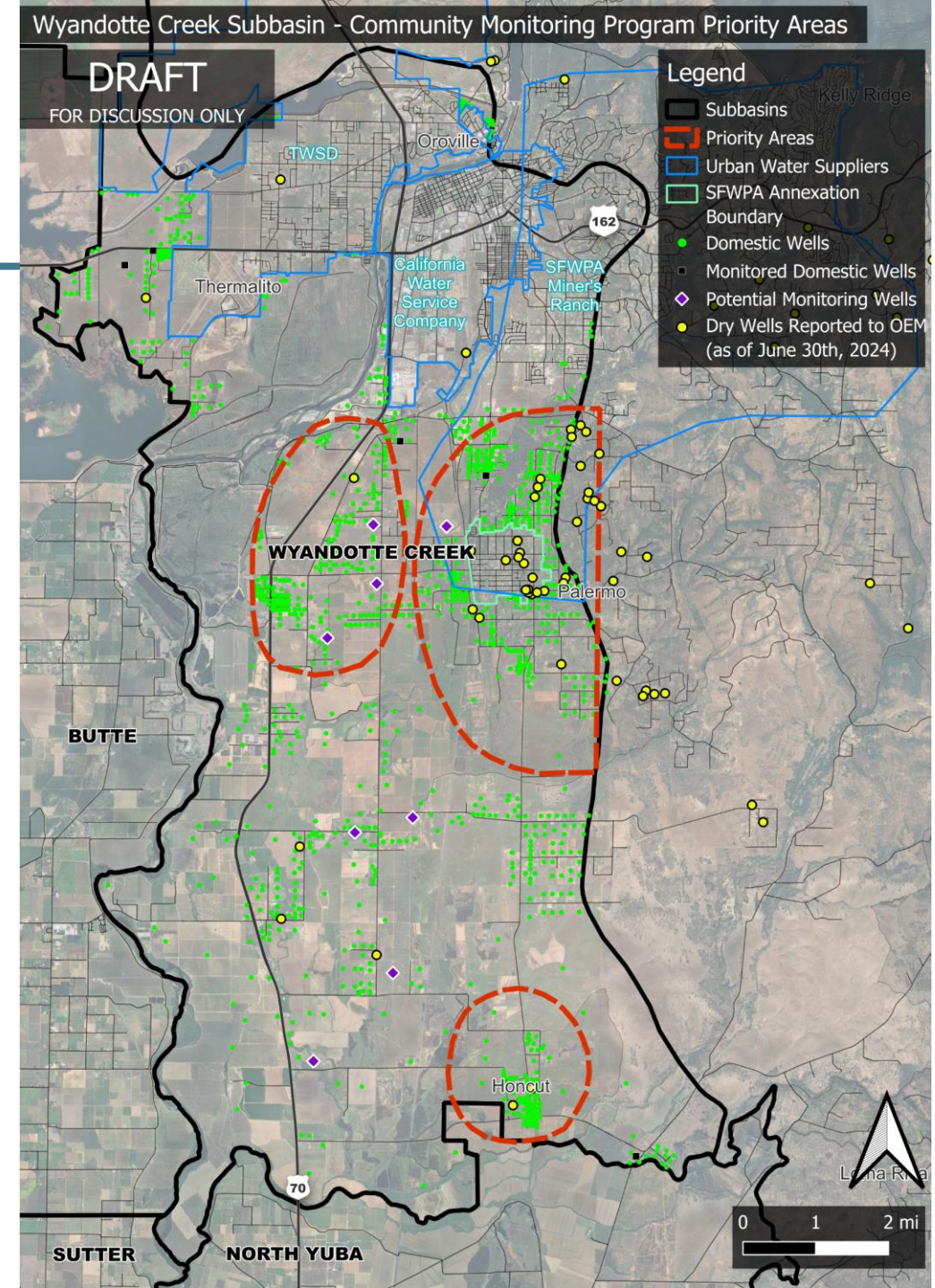
Proposed Deep Monitoring Network

- Three (3) existing deep wells
- One (1) existing multi-completion well
- Enhancements include:
 - ✓ three (3) multi-completion wells



Domestic Well Survey & Monitoring Plan

- Roughly 1,340 domestic wells in the subbasin
- Five (5) existing domestic wells monitored periodically by DWR
- Eight (8) additional domestic wells available for monitoring
- Budget to equip ten (10) domestic wells with continuous monitoring equipment



Real-Time Monitoring

- Groundwater Level Monitoring Sites
 - Installation Cost: \$6,500 - \$11,000 per site
 - Annual on-going O&M Cost: \$1,000 - \$2,500 per site
- Stream Flow Gages
 - Installation Cost: up to \$35,000 per site
 - Annual on-going O&M Cost: \$4,000 - \$8,000 per site



Figure 1. Groundwater level monitoring site with ENO Scientific sensor.



Figure 2. In-Situ pressure transducer for measuring groundwater levels and stream stage.

Real-Time Monitoring (continued)

Table 1. Installation and Annual O&M Cost for Real-Time Monitoring.

Locations	Number of Sites	Installation Cost	Average Annual O&M Cost
Domestic Wells	10	\$70,000	\$15,000
Shallow Wells	15	\$105,000	\$22,500
Multi-Completion	3	\$33,000	\$6,000
Stream Gages	5	\$175,000	\$30,000
Total:	33	\$383,000	\$73,500

Assumptions:

- 1.) Domestic and Shallow Well Installation Cost = \$7,000 per site; O&M Cost = \$1,500 per site.
- 2.) Multi-Completion Well Installation Cost = \$11,000 per site; O&M Cost = \$2,000 per site.
- 3.) Stream Gage Installation Cost = \$35,000 per site; O&M Cost = \$6,000 per site.
- 4.) Sites will be maintained indefinitely (e.g., replace sensors, dataloggers, etc. as needed). Routine site maintenance (e.g., clean solar panel, replace desiccant, etc.) completed by lower cost employee (e.g., intern).
- 5.) Stream gages calibrated annually to ensure accuracy of stage-discharge relationship.
- 6.) Real-time monitoring planned only at new monitoring locations; additional installations on existing monitoring sites may be considered as grant funding allows.
- 7.) SGM grant pays for installation costs; GSA is responsible for ongoing site maintenance.

Next Steps

- Access agreements, final designs, & bid documents complete January 2025
- Well contractors notice to proceed by February 2025
- New wells installed by June 2025
- Stream gage installations start December 2024

Questions?

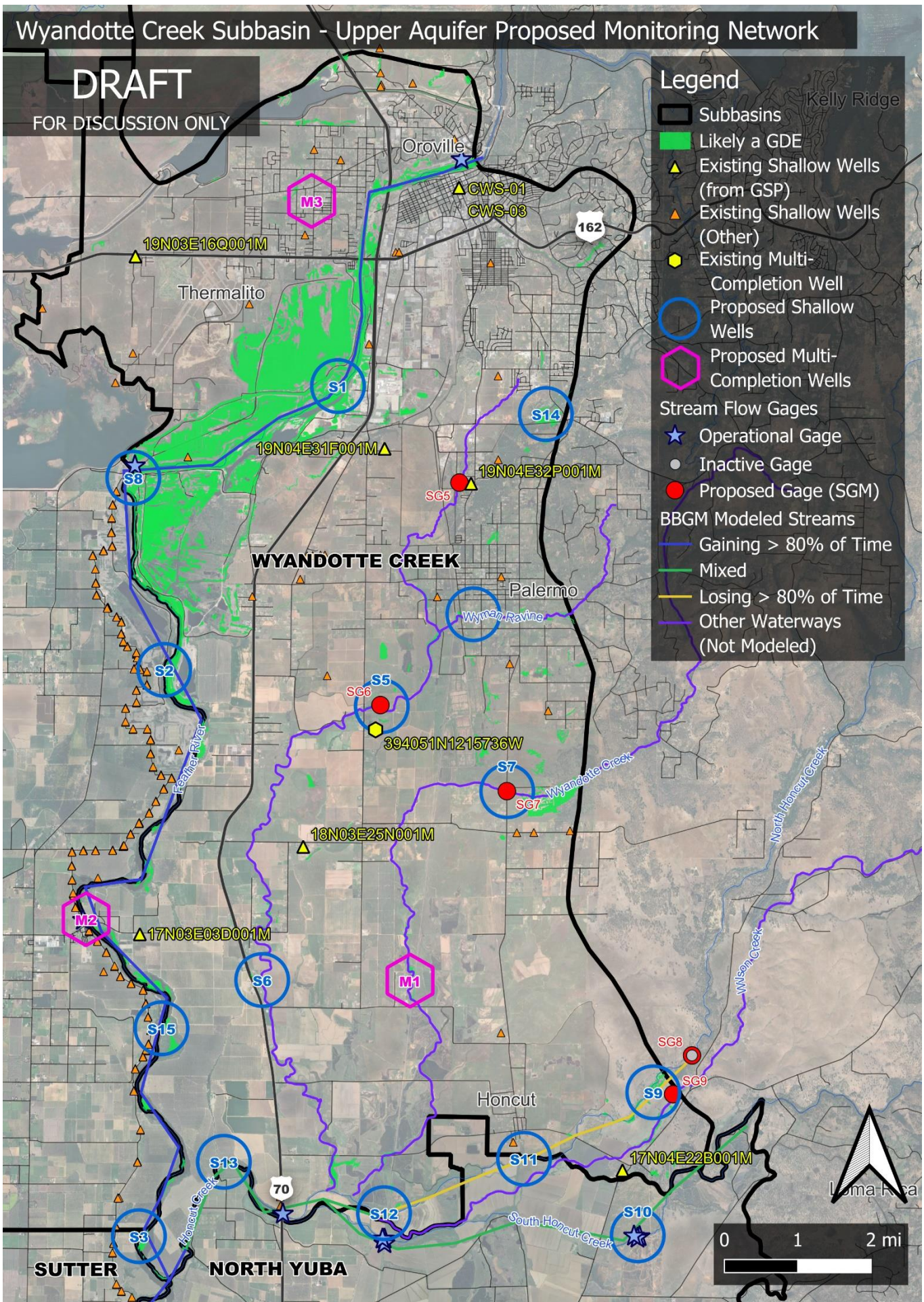
Wyandotte Creek Subbasin - Upper Aquifer Proposed Monitoring Network

DRAFT

FOR DISCUSSION ONLY

Legend

- Subbasins
- Likely a GDE
- Existing Shallow Wells (from GSP)
- Existing Shallow Wells (Other)
- Existing Multi-Completion Well
- Proposed Shallow Wells
- Proposed Multi-Completion Wells
- Stream Flow Gages
 - Operational Gage
 - Inactive Gage
 - Proposed Gage (SGM)
- BBGM Modeled Streams
 - Gaining > 80% of Time
 - Mixed
 - Losing > 80% of Time
 - Other Waterways (Not Modeled)



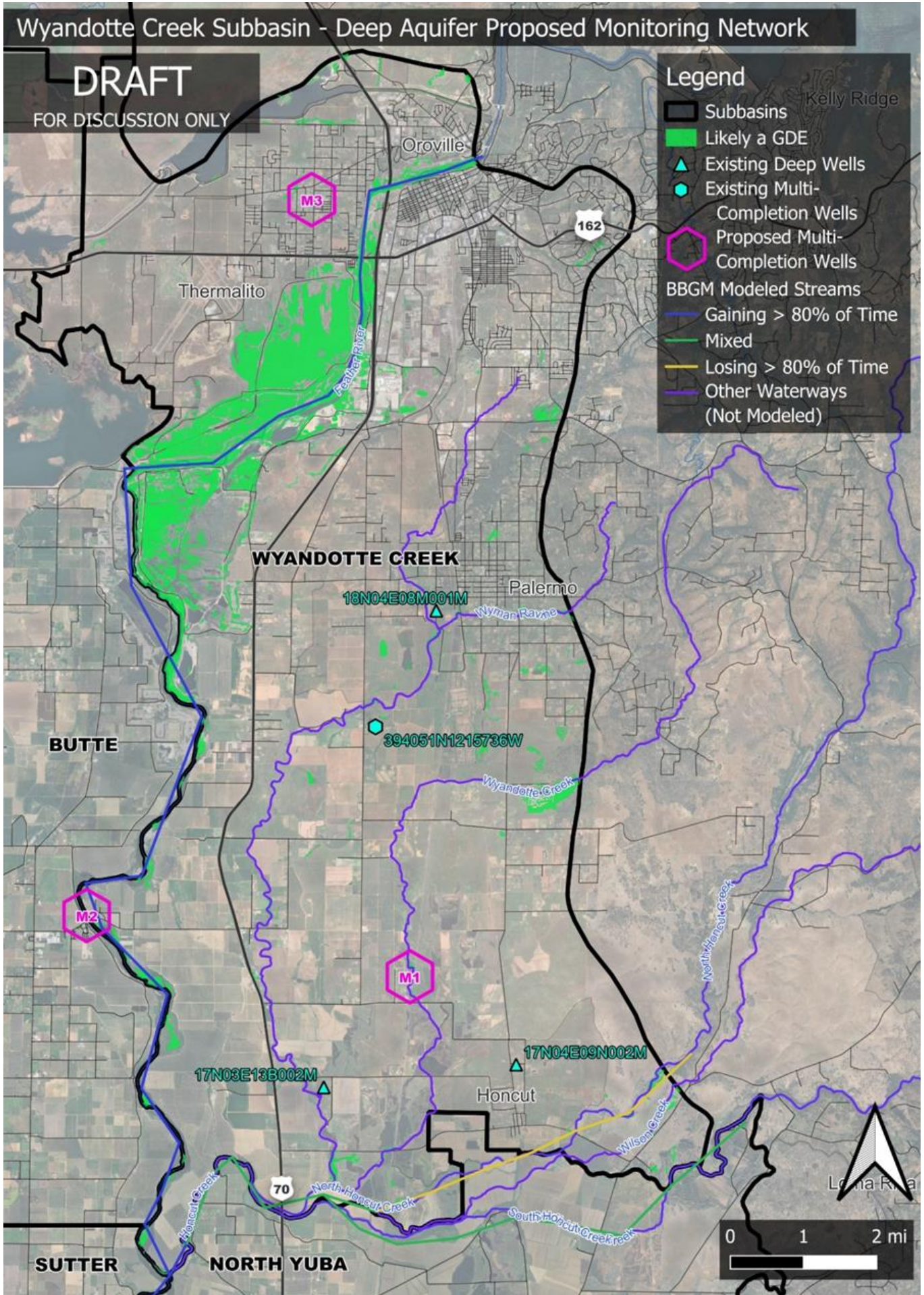
Wyandotte Creek Subbasin - Deep Aquifer Proposed Monitoring Network

DRAFT

FOR DISCUSSION ONLY

Legend

- Subbasins
- Likely a GDE
- Existing Deep Wells
- Existing Multi-Completion Wells
- Proposed Multi-Completion Wells
- BBGM Modeled Streams
 - Gaining > 80% of Time
 - Mixed
 - Losing > 80% of Time
 - Other Waterways (Not Modeled)



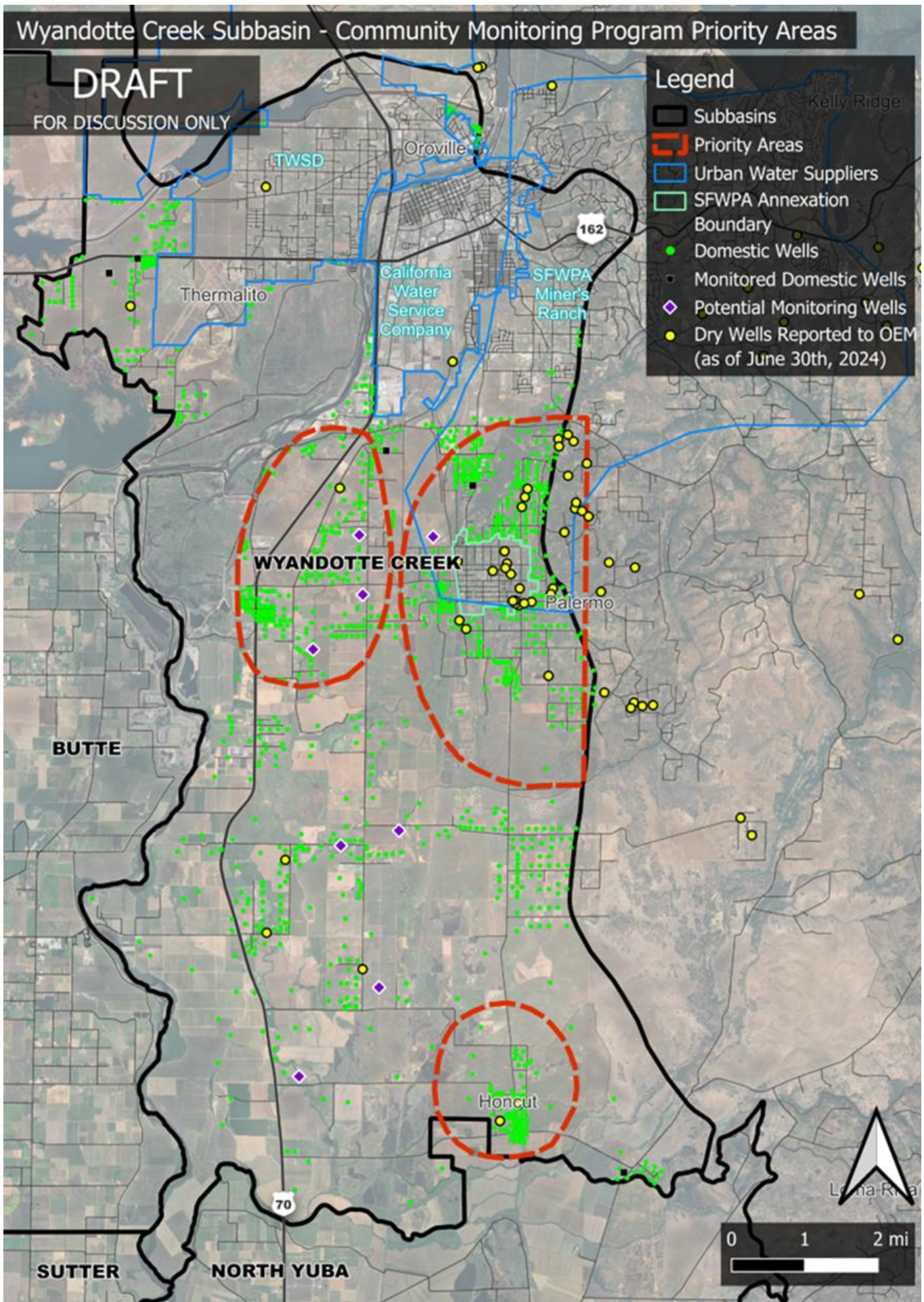
Wyandotte Creek Subbasin - Community Monitoring Program Priority Areas

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FOR DISCUSSION ONLY

Legend

- Subbasins
- Priority Areas
- Urban Water Suppliers
- SFWPA Annexation Boundary
- Domestic Wells
- Monitored Domestic Wells
- Potential Monitoring Wells
- Dry Wells Reported to OEM (as of June 30th, 2024)



TECHNICAL MEMORANDUM

Date: November 7, 2024
To: Wyandotte Creek Groundwater Sustainability Agency (GSA)
From: Larry Walker Associates
Subject: Groundwater Monitoring Network Enhancements



1. BACKGROUND

The Wyandotte Creek Groundwater Sustainability Agency (GSA) groundwater level monitoring network is critical for understanding conditions for all beneficial users and uses of groundwater including interconnected surface waters (ISWs), groundwater dependent ecosystems (GDEs), domestic well users, and agricultural users. The GSA was awarded funding through DWR's Sustainable Groundwater Management (SGM) Grant Program to fund monitoring network enhancements as identified in the Wyandotte Creek Groundwater Sustainability Plan (GSP) and DWR's Determination Letter.¹ The scope of this grant includes (1) a thorough review of the existing monitoring network; (2) the design and installation of a minimum of fifteen new shallow wells, three new multi-completion wells, and five new stream gages; and (3) continuous monitoring of ten domestic wells.

2. METHODS AND PROCEDURES

The Wyandotte Creek GSP, Section 4.2, identifies thirteen (13) existing wells within the Wyandotte Creek Subbasin groundwater level monitoring network (Figure 1). This network of monitoring wells was used for observing groundwater levels and calculating flow directions and hydraulic gradients in the principal aquifer during GSP development and annual reporting. The actual aquifer layers these wells represented based on screen intervals / well depths were not identified in the GSP. After meeting with the Butte County Technical Advisory Committee and neighboring subbasins, it was recommended to develop a separate monitoring network for the upper groundwater aquifer layer, to monitor ISWs and GDEs, and the lower aquifer layer, to monitor impacts from pumping. The two-layer approach allows for assessing the vertical connectivity between aquifer zones.

The GSA partnered with Dr. Todd Greene with CSU Chico to provide stratigraphic context for the screened intervals in the Wyandotte Creek Subbasin monitoring wells. This information was then used to help guide the location and screen intervals for future monitoring well sites for the upper and lower aquifer layers. A thorough breakdown of the data, methodology, and results of this investigation are detailed in a technical memorandum developed by Sub-Terra Heritage Resource Investigations (Greene, 2024).

¹ GSP and Determination Letter available here: <https://sgma.water.ca.gov/portal/gsp/preview/99>

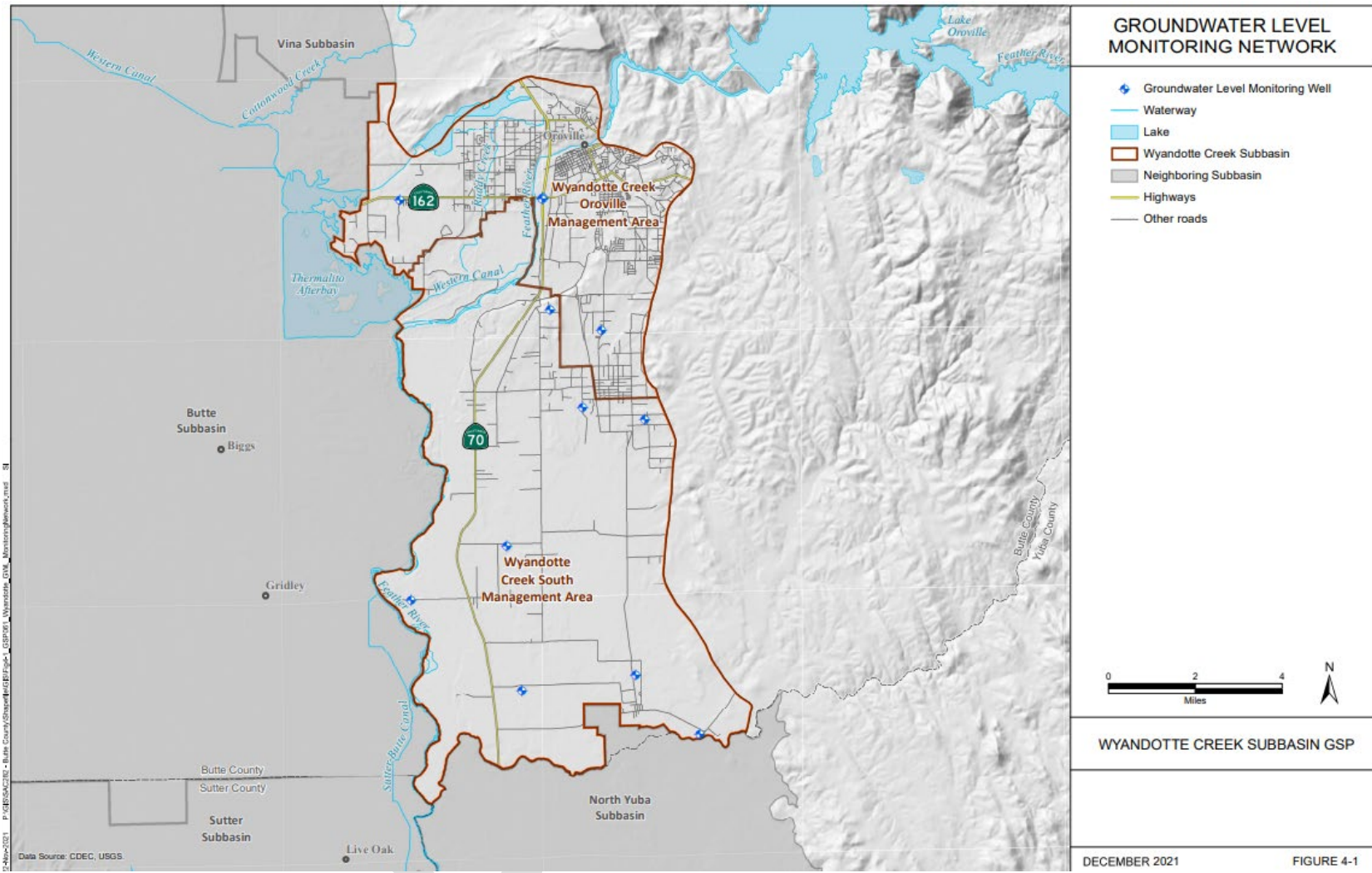


Figure 1. Map of existing groundwater level monitoring network (Wyandotte Creek Groundwater Subbasin GSP, Figure 4-1, page 138).

2.1. Monitoring Network Enhancements

To refine the site selection process for new wells and stream gages in the groundwater monitoring network, LWA in coordination with GSA staff have established the following site selection criteria:

1. **Data Gaps** – Prioritize locations that will help address data gaps identified in the GSP and DWR’s Determination Letter which includes ISWs and GDEs. The Butte Basin Groundwater Model was used to identify potential ISWs. Potential GDEs were identified using the Natural Communities Commonly Associated with Groundwater dataset developed by DWR, the California Department of Fish and Wildlife (CDFW), and The Nature Conservancy (TNC).
2. **Land Access** – The GSA will locate new sites along County and City easements when feasible or establish landowner agreements as needed.
3. **Existing Infrastructure** – Prioritize utilizing existing infrastructure to avoid unnecessary drilling and well construction expenses, when possible. For stream gages, locating and reactivating inactive sites will generally be more cost-effective than establishing new gaging sites.
4. **SGMA Projects** – Prioritize sites that could benefit other SGMA projects. For example, the dedicated recharge basin opportunities spurred on by the Regional Conjunctive Use Project will require shallow wells to help quantify recharge. Installing shallow wells in the vicinity of possible basin locations could help analyze benefits provided by such a project in the short term, while also serving as long-term monitoring sites for ISWs/GDEs.
5. **Water Quality** – To the extent possible, new wells will support Subbasin groundwater quality monitoring efforts and fill gaps in the water quality monitoring network.

2.2. Domestic Well Survey

A desktop survey was performed to locate parcels with domestic wells using the County Assessor’s Office parcel use codes. The goal of this survey was to refine the GSA’s existing domestic well dataset and to identify areas with a high density of domestic wells at risk of going dry (deemed “Priority Areas”). In the desktop survey, parcels within Cal Water, Thermalito Water and Sewer District (TWSD), and South Feather Water and Power Agency (SFWPA) service areas were excluded from the analysis due to being served by a public water supply system. Parcels zoned for agriculture were only included if they had a building with a known address.

The GSA will hold outreach events to solicit interest from community members in Priority Areas in preparation for the launch of the Community Monitoring Program to monitor domestic wells throughout the Subbasin.

3. RESULTS

3.1. Monitoring Network Enhancements

Of the Thirteen (13) existing wells included in the groundwater level monitoring network (see GSP Section 4.2), Dr. Todd Greene’s analysis identified eight (8) as shallow and three (3) as

deep. Maps of the proposed shallow and deep monitoring networks are shown in Figures 2 and 3, respectively. These sites are summarized in Table 1 with hydrographs provided in Appendix A.

Table 1. Existing representative monitoring wells measuring groundwater levels in the shallow and deep aquifer layers. All wells are monitored on a quarterly basis. Shallow wells can effectively observe the upper aquifer, deep wells can effectively observe the lower aquifer, and multi-completion wells can observe both.

Map Label	Well Depth	Well Type	Management Area
17N04E22B001M	Shallow	Residential	Wyandotte Creek - South
17N03E13B002M	Deep	Irrigation	Wyandotte Creek - South
17N04E09N002M	Deep	Irrigation	Wyandotte Creek - South
17N03E03D001M	Shallow	Irrigation	Wyandotte Creek - South
18N03E25N001M	Shallow	Irrigation	Wyandotte Creek - South
18N04E19D001M	Multi-completion	Observation	Wyandotte Creek - South
18N04E08M001M	Deep	Irrigation	Wyandotte Creek - South
19N04E32P001M	Shallow	Residential	Wyandotte Creek - Oroville
19N04E31F001M	Shallow	Residential	Wyandotte Creek - South
19N03E16Q001M	Shallow	Residential	Wyandotte Creek - Oroville
CWS-01	Shallow	Municipal	Wyandotte Creek - Oroville
CWS-03	Shallow	Municipal	Wyandotte Creek - Oroville

As illustrated in Figure 2, the long-term goal for the shallow monitoring network is to install wells near streams and potential GDEs in areas delineated with blue circles. Monitoring sites are located along the Feather River, Wyman Ravine, Wyandotte Creek, and Honcut Creek. Shallow wells will be installed at these fifteen (15) locations under the SGM Grant pending review of other existing shallow monitoring wells in the area (e.g., observation wells along the Feather River levee) that may be used instead of drilling a new well.

Multi-completion wells are proposed at the sites labeled M1, M2, and M3 as shown on Figures 2 and 3. The multi-completion wells will fill data gaps in both the upper and lower aquifer monitoring networks. M1 is located along Wyandotte Creek near agricultural fields in the southern, central portion of the Subbasin. M2 is located along the Feather River and will be used to characterize vertical and horizontal movement of groundwater on the Subbasin boundary. M3 is located in the Oroville Management Area, where there are currently no other deep wells to characterize the lower aquifer.

It is recommended to install five stream gages across the Subbasin: two along Wyman Ravine (SG5 and SG6), one along Wyandotte Creek near Palermo Honcut Highway (SG7), and two near the eastern boundary of the Subbasin on North Honcut Creek (SG8) and Wilson Creek (SG9). The stream gages will be used to estimate stream depletions due to groundwater pumping and to support the planning and implementation of groundwater recharge projects.

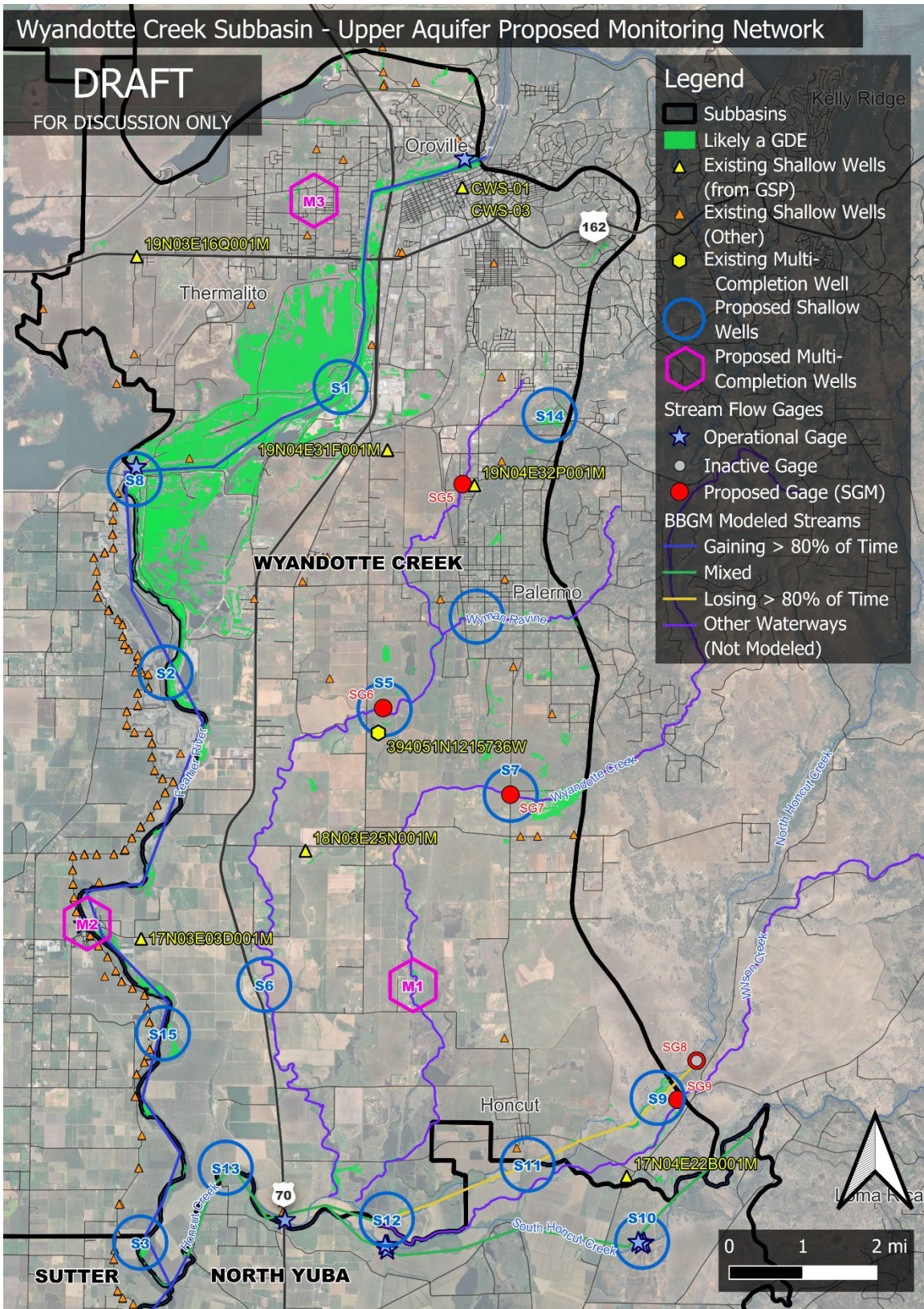


Figure 2. Map depicting all shallow and multi-completion wells, both existing and proposed, to be included in the Upper Aquifer monitoring network.

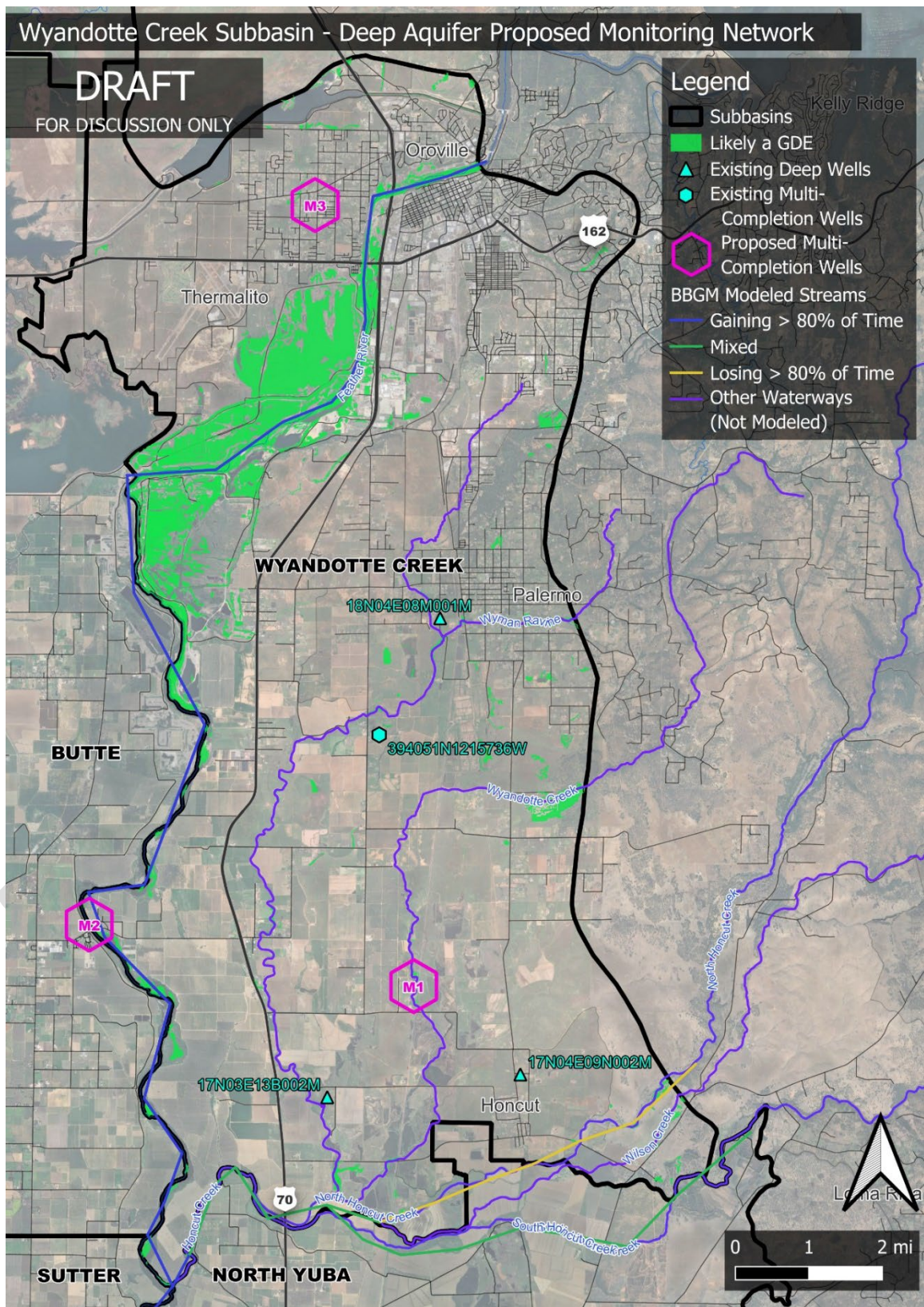


Figure 3. Map depicting all deep and multi-completion wells, both existing and proposed, to be included in the Lower Aquifer monitoring network.

3.3. Domestic Well Survey Preliminary Results

The domestic well survey based on parcel information identified 1,342 domestic wells within the Wyandotte Creek Subbasin. A map of the domestic well survey results with delineated Priority Areas are shown in Figure 3. For comparison, DWR estimates approximately 627 domestic wells within the Subbasin based on the number of well completion reports (WCRs) received since 1977.² The parcel-based approach may be over-estimating the number of domestic wells due to data gaps in the parcel coverage. It is recommended to coordinate further with Cal Water, TWSD, and SFWPA to identify parcels with potable water service.

Eight well owners have volunteered their domestic wells to be monitored under the Community Monitoring Program (see purple points on Figure 3). These wells will be further evaluated to assess the suitability to participate and be monitored through the Program. The GSA has funding to install monitoring equipment on ten domestic wells.

² California's Groundwater Live website link: <https://sgma.water.ca.gov/CalGWLive/#wells>

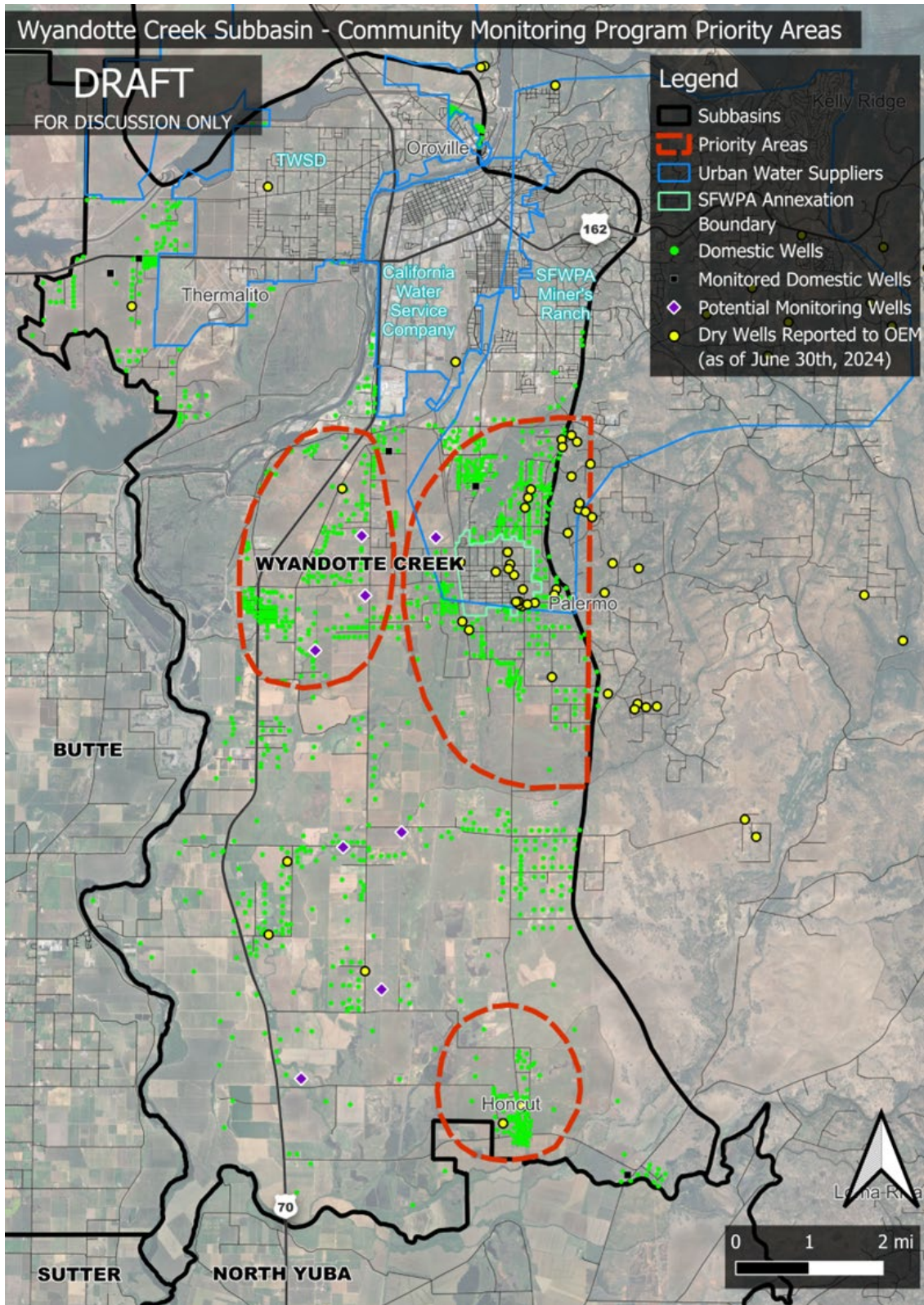


Figure 4. Map depicting results of the domestic well survey. Priority areas were delineated from the domestic well survey results and the dry wells reported to Butte County OEM through June 30, 2024.

4. NEXT STEPS

The LWA Team in coordination with GSA staff are actively soliciting input on the proposed enhanced monitoring network from local stakeholders. To date, we have engaged the following groups for input:

- Members of Butte County Technical Advisory Committee,
- Agricultural Groundwater Users of Butte County,
- Water Well Advisory Group,
- Yuba Water Agency, and
- Other GSA/County technical consultants.

The schedule to request input from the Wyandotte Creek GSA Advisory Committee (WAC) and the Board of Directors is summarized in Table 2. Final recommendation and approval from the WAC and Board of Directors is tentatively scheduled for November 7, 2024, and November 21, 2024; respectively.

Table 2. Proposed WAC and Board of Directors input process schedule.

Group	Meeting Date	Purpose
WAC	November 7, 2024	Recommendation to Board
Board of Directors	November 21, 2024	Final Board Approval

The LWA Team in coordination with GSA staff will continue to advance activities to ensure installation of the monitoring network remains on schedule. Landowner access agreements (as applicable), final monitoring well designs and specifications, and bid documents will be completed by January 2025. Well contractors will be given notice to proceed by February 2025 with all new wells installed by June 2025. Stream gage and domestic well installations will start in December 2024 once final approval is granted by the Wyandotte Creek GSA Board of Directors.

Table 3 summarizes installation and annual operating and maintenance (O&M) costs for groundwater level monitoring sites and stream gages. Installation costs will be covered by the grant. The GSA will be responsible for funding ongoing O & M of monitoring sites. Costs assume sites will be equipped with telemetry to automatically view data online in near real-time via an online stakeholder portal. Monitoring equipment will be installed once wells are drilled, and domestic wells and stream gage locations are selected for monitoring.

Table 3. Installation and O&M costs for groundwater level monitoring sites and stream gages.

Site Type	Installation Costs (\$/site)	Annual O&M Cost (\$/site)
Groundwater Level ¹	\$6,500 - \$11,000	\$1,000 - \$2,500
Stream Gage ²	Up to \$35,000	\$4,000 to \$8,000

Notes:

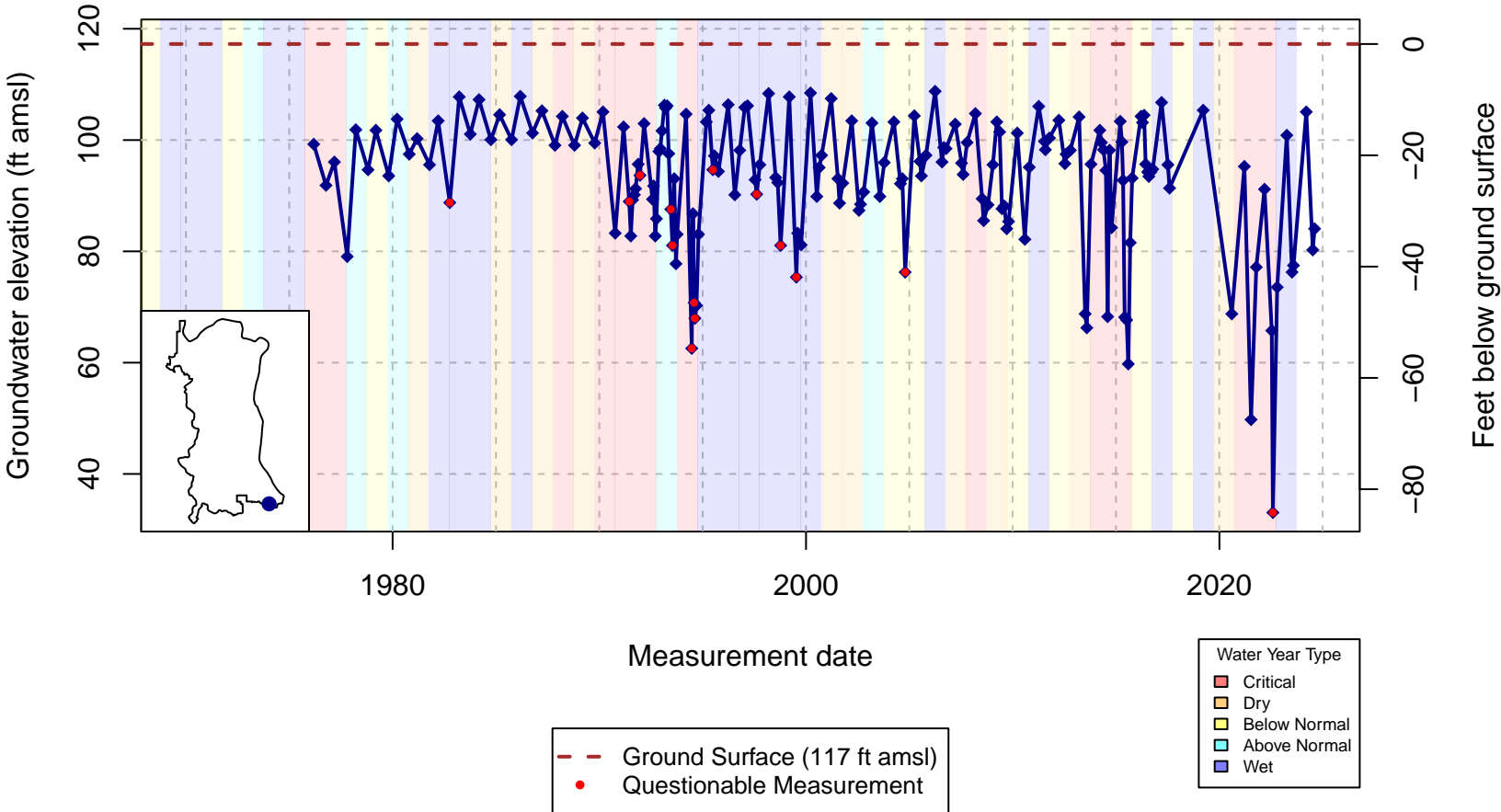
- 1.) Costs vary based on the following factors: type of sensor (e.g., sonar vs submersible), number of well completions, well casing diameter, and depth to groundwater.
- 2.) Costs vary based on site flow conditions and ease of access. Assumes a minimum of three stream measurements at low, medium, and high flow are conducted to develop stage – discharge curve and at least one measurement is taken every year to validate stage-discharge curve.

APPENDIX A

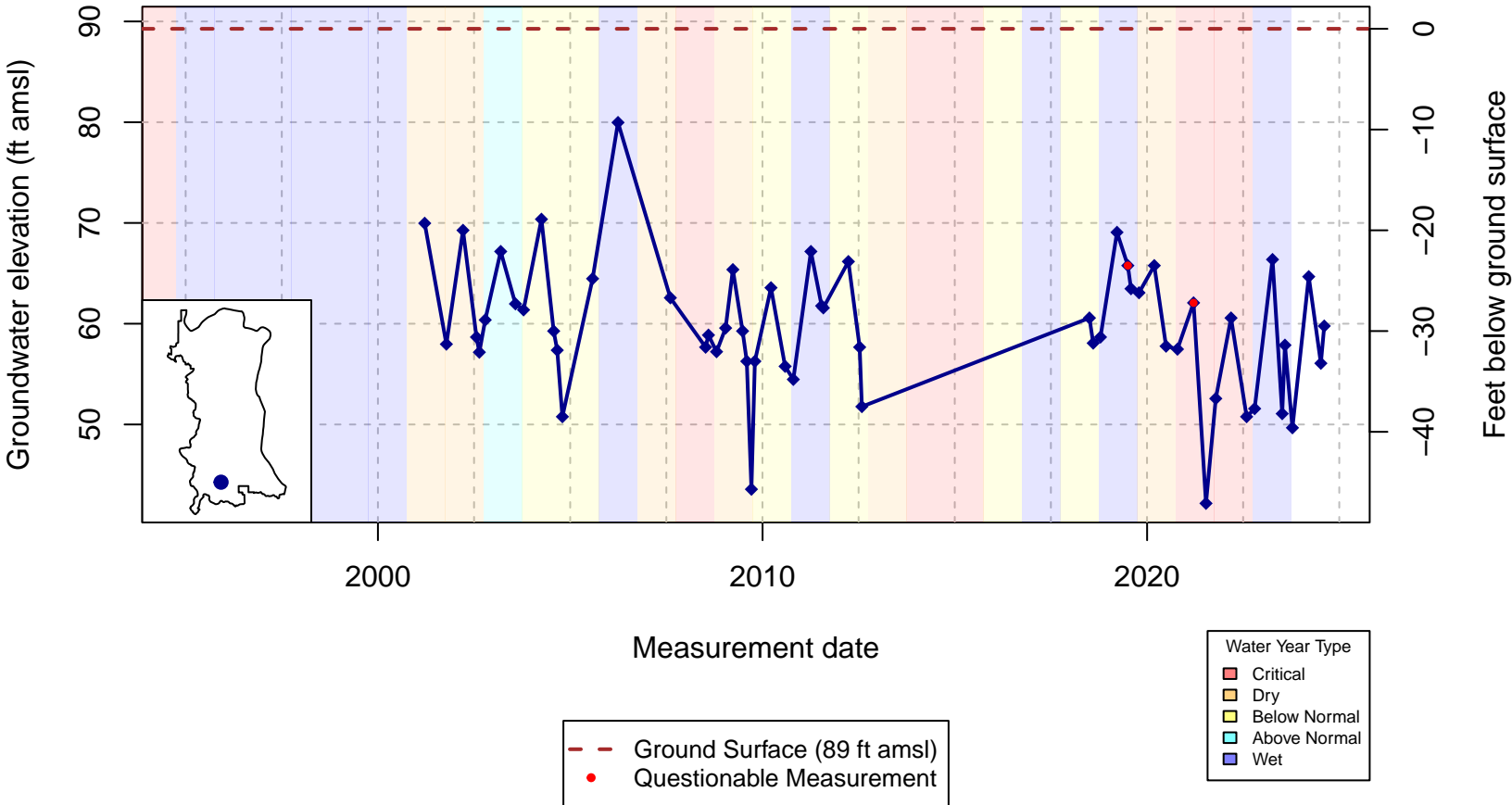
Wyandotte Creek Subbasin Groundwater Hydrographs for Existing Shallow and Deep Wells

(Identified Through Dr. Todd Greene's Analysis)

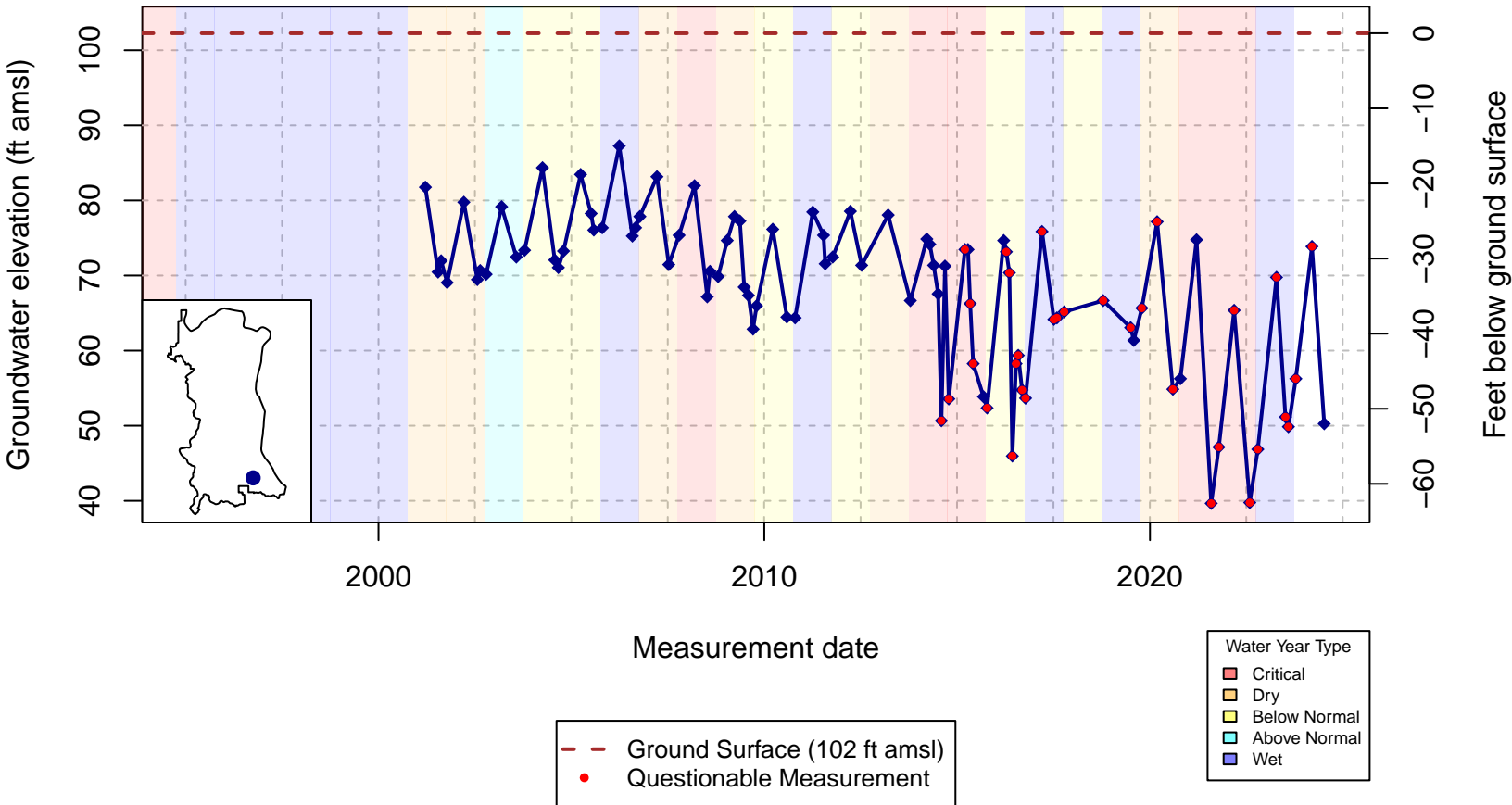
Wyandotte Creek Subbasin – State Well Number (SWN): 17N04E22B001M (Shallow Aquifer)



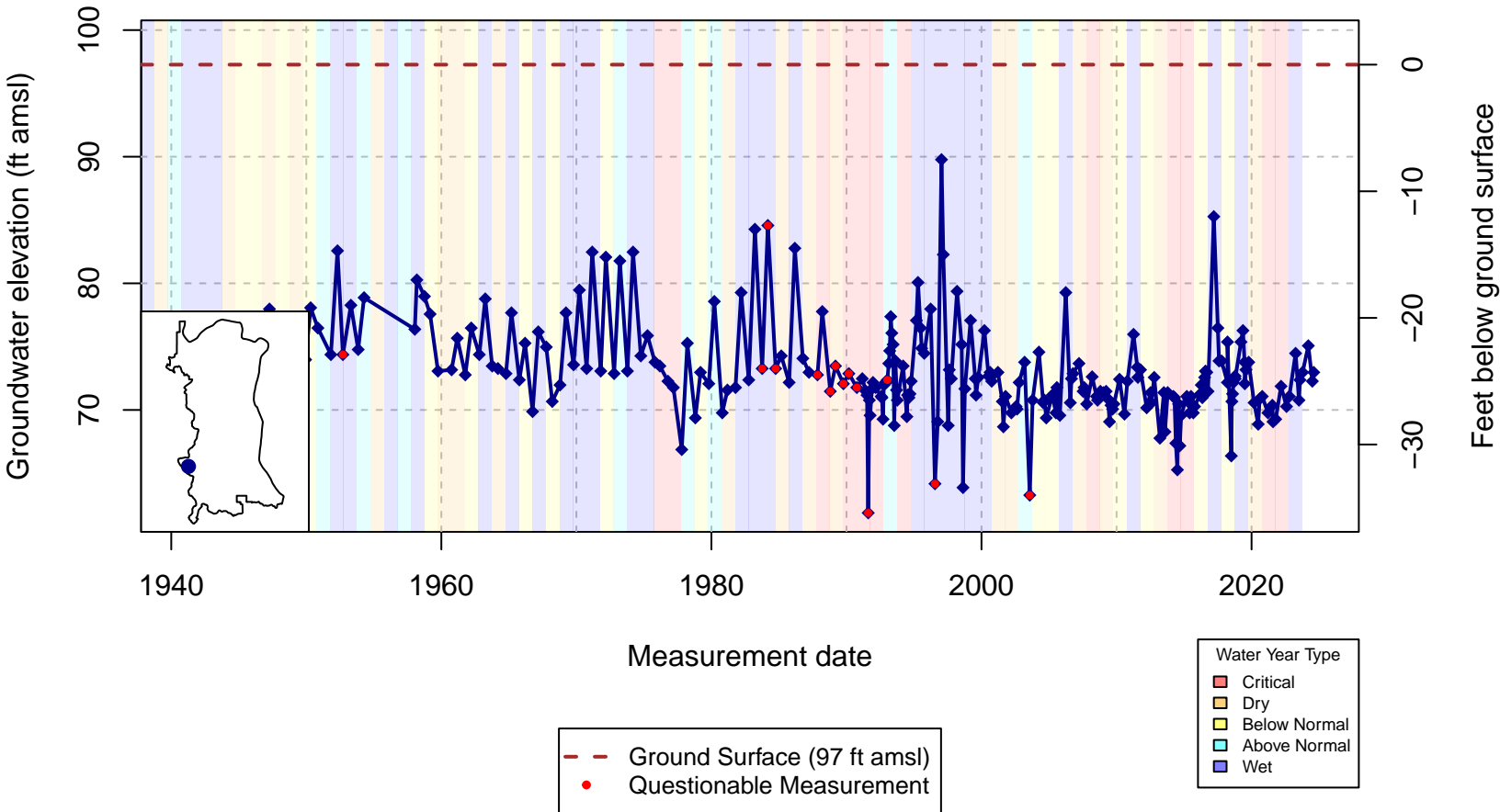
Wyandotte Creek Subbasin – State Well Number (SWN): 17N03E13B002M (Deep Aquifer)



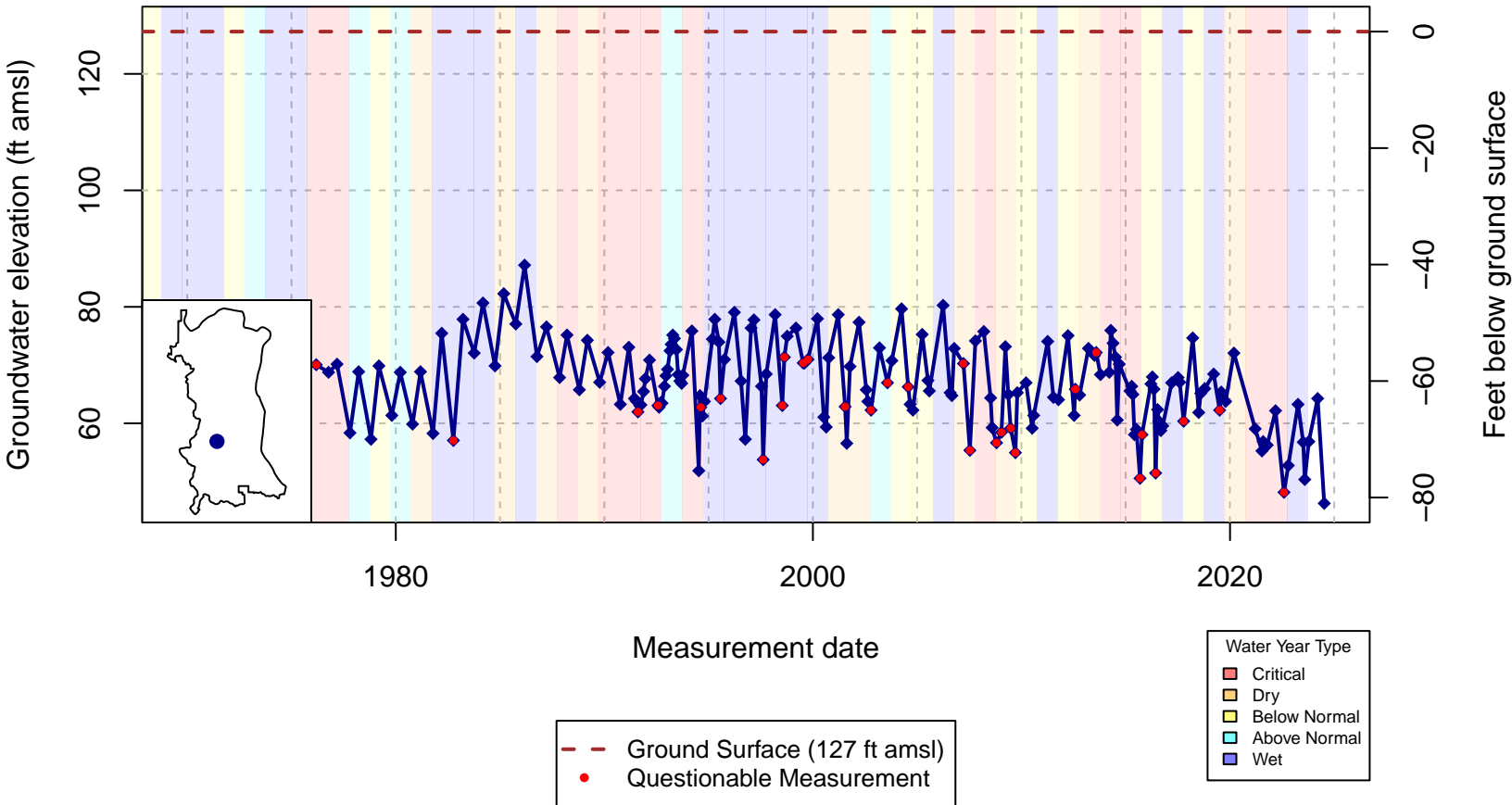
Wyandotte Creek Subbasin – State Well Number (SWN): 17N04E09N002M (Deep Aquifer)



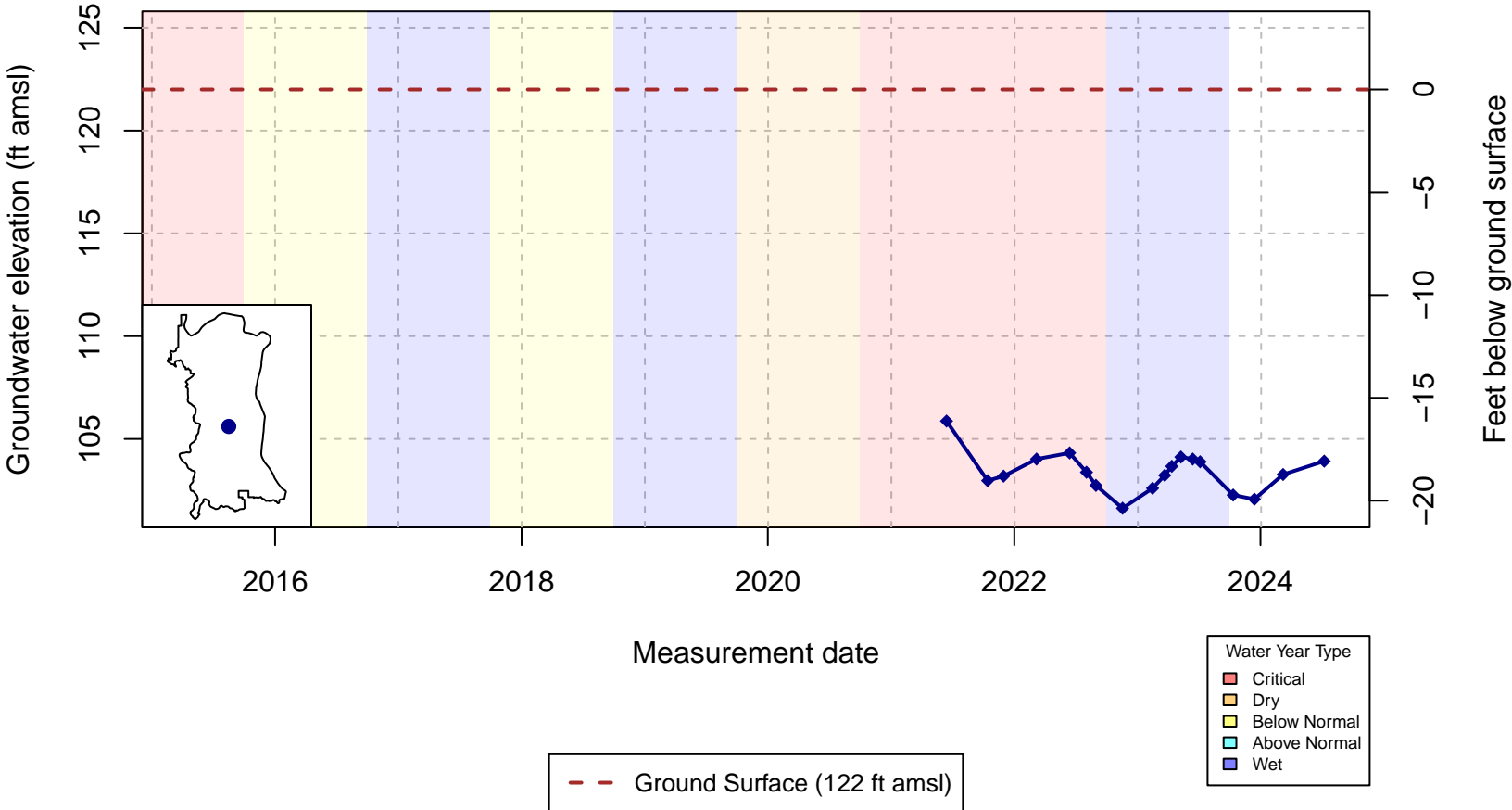
Wyandotte Creek Subbasin – State Well Number (SWN): 17N03E03D001M (Shallow Aquifer)



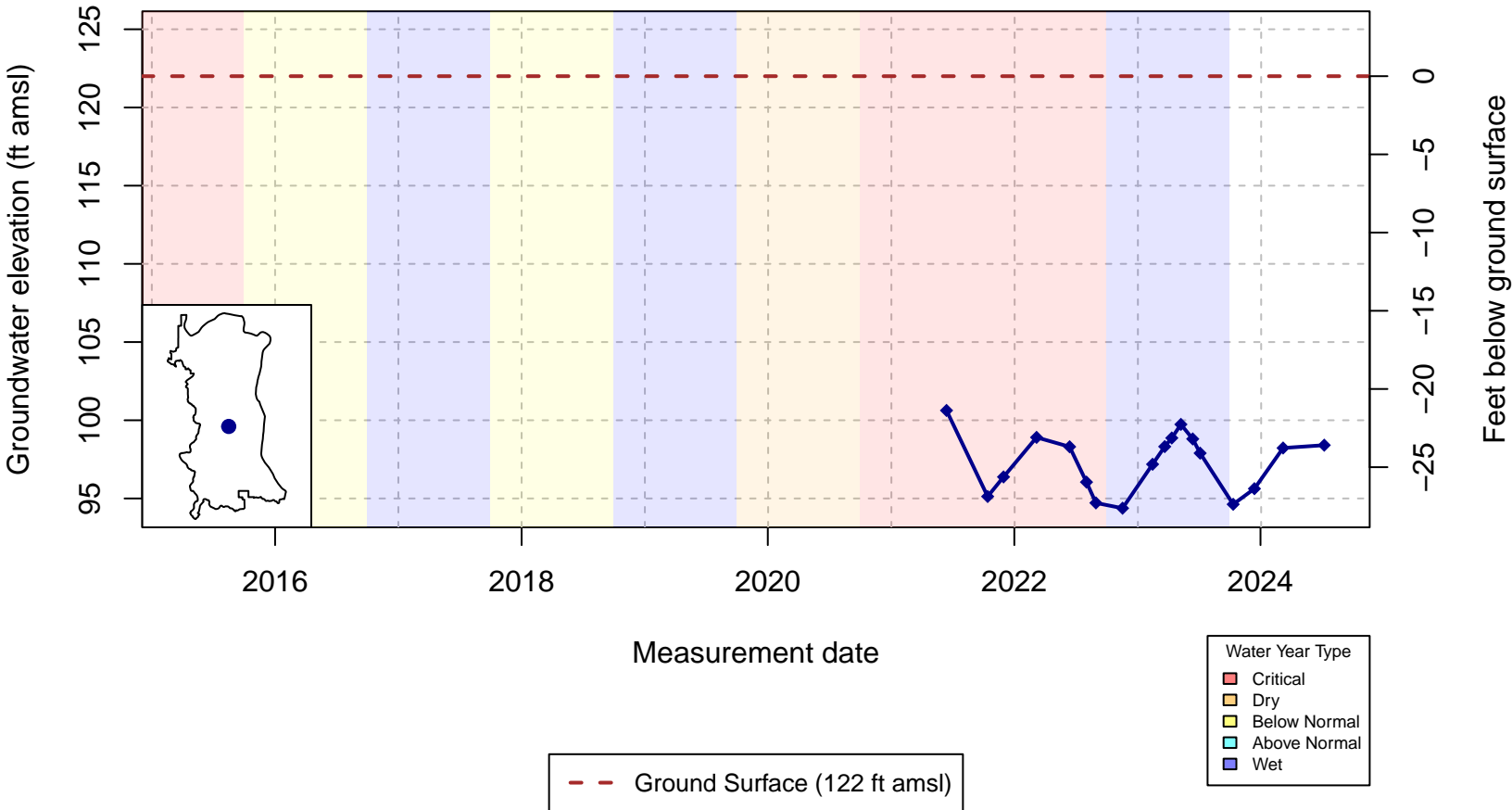
Wyandotte Creek Subbasin – State Well Number (SWN): 18N03E25N001M (Shallow Aquifer)



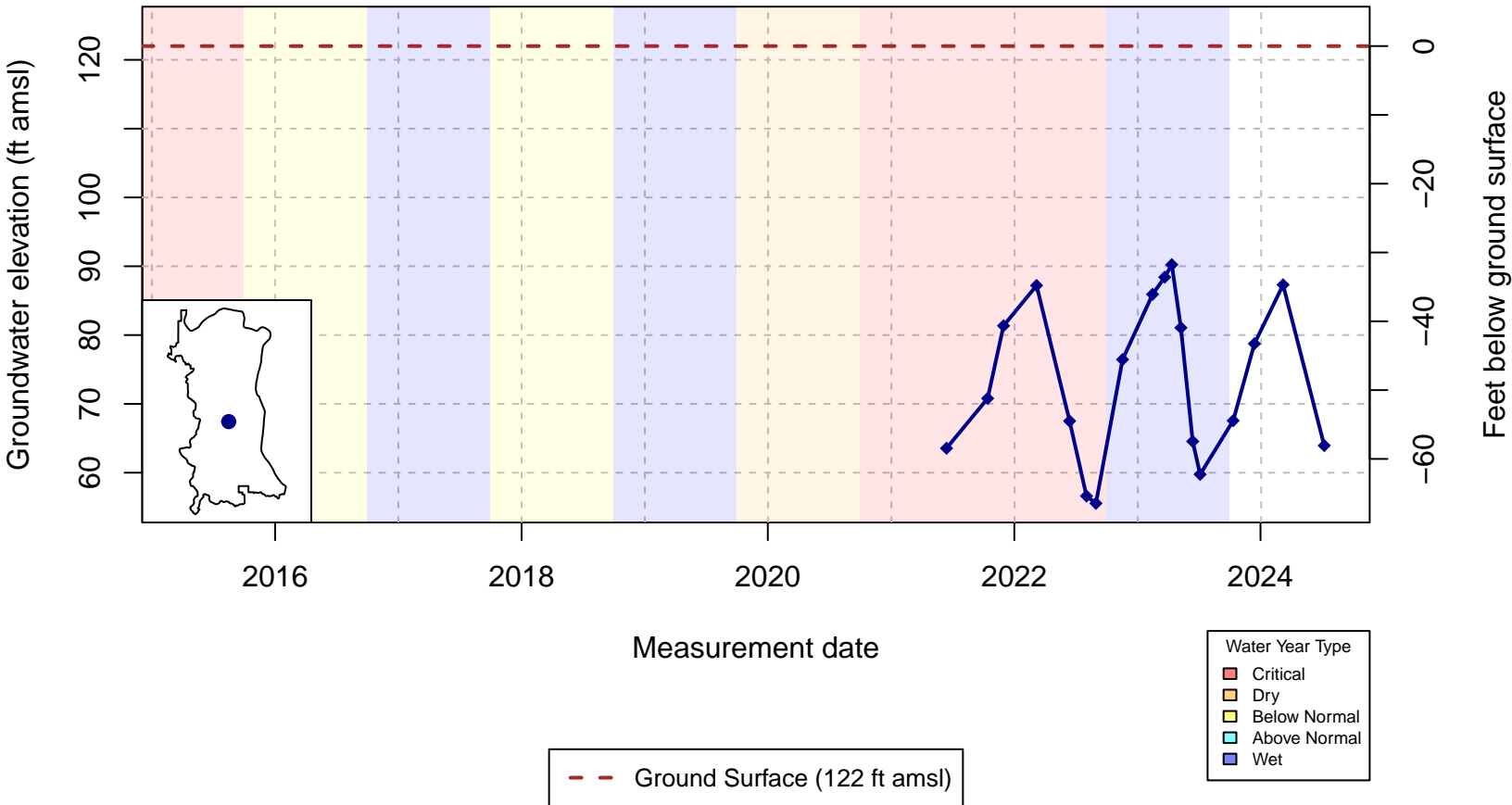
Wyandotte Creek Subbasin – State Well Number (SWN): 18N04E19D001M (Deep Aquifer)



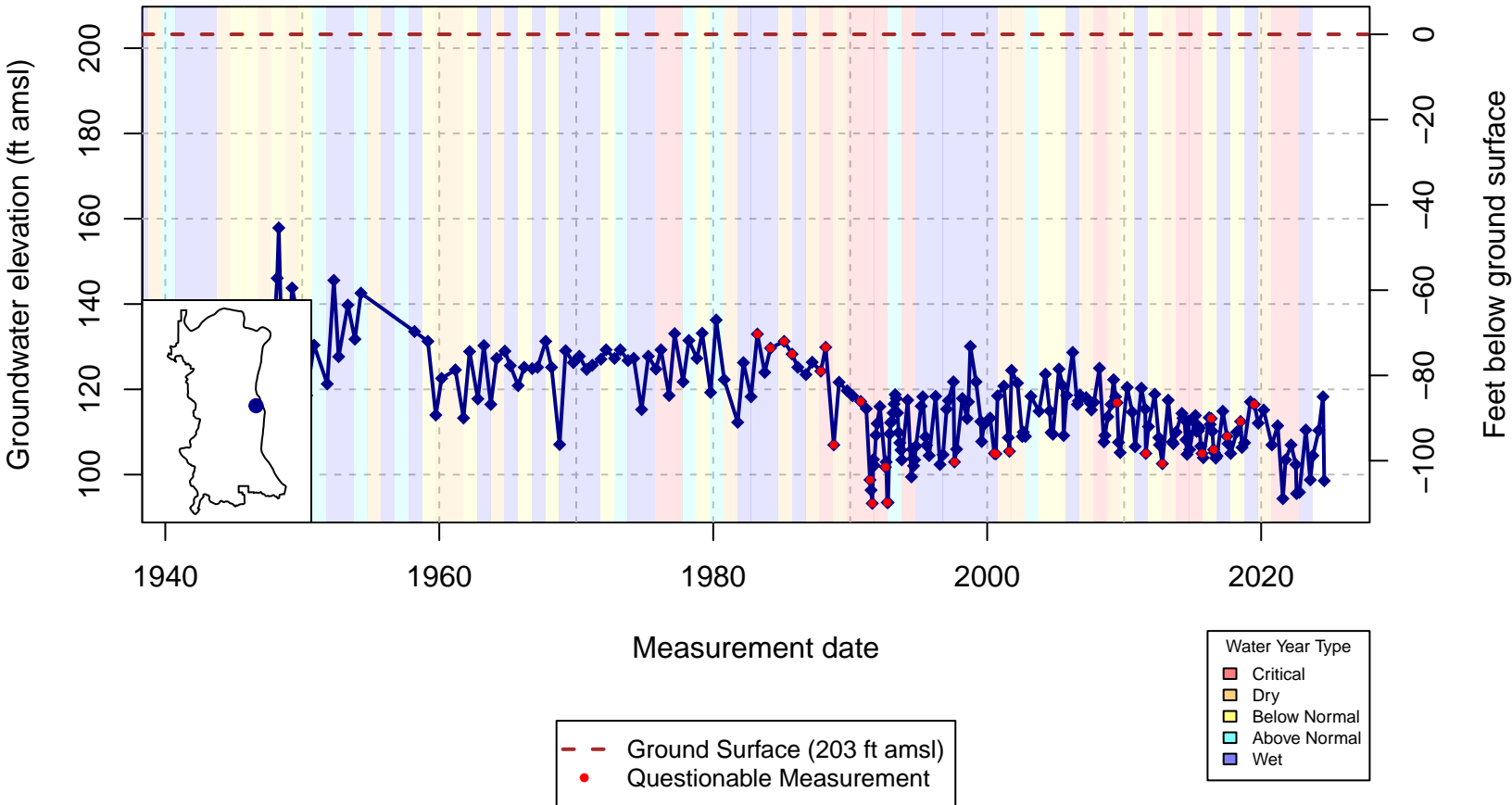
Wyandotte Creek Subbasin – State Well Number (SWN): 18N04E19D002M (Deep Aquifer)



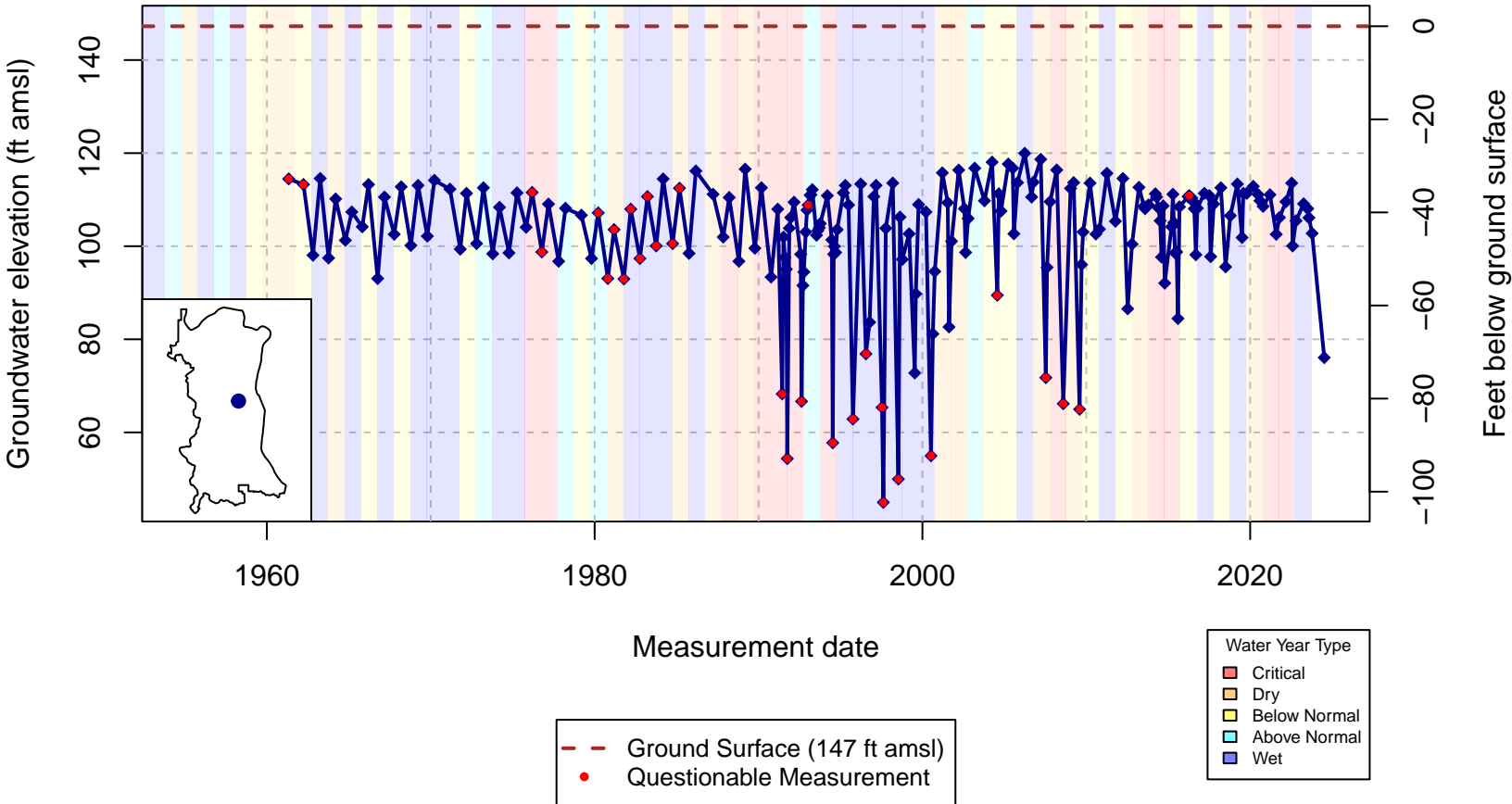
Wyandotte Creek Subbasin – State Well Number (SWN): 18N04E19D003M (Shallow Aquifer)



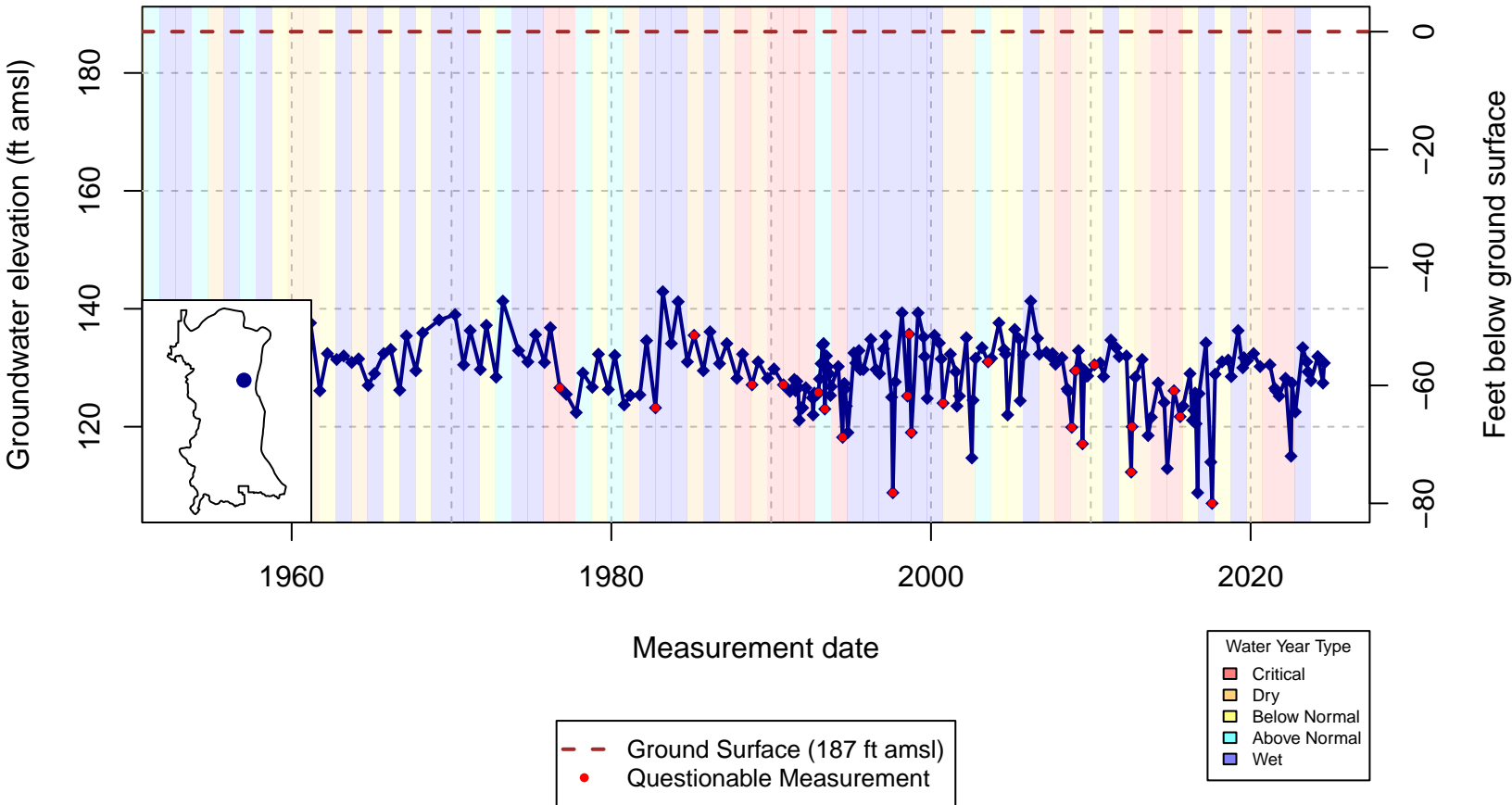
Wyandotte Creek Subbasin – State Well Number (SWN): 18N04E16C001M (Both Layers)



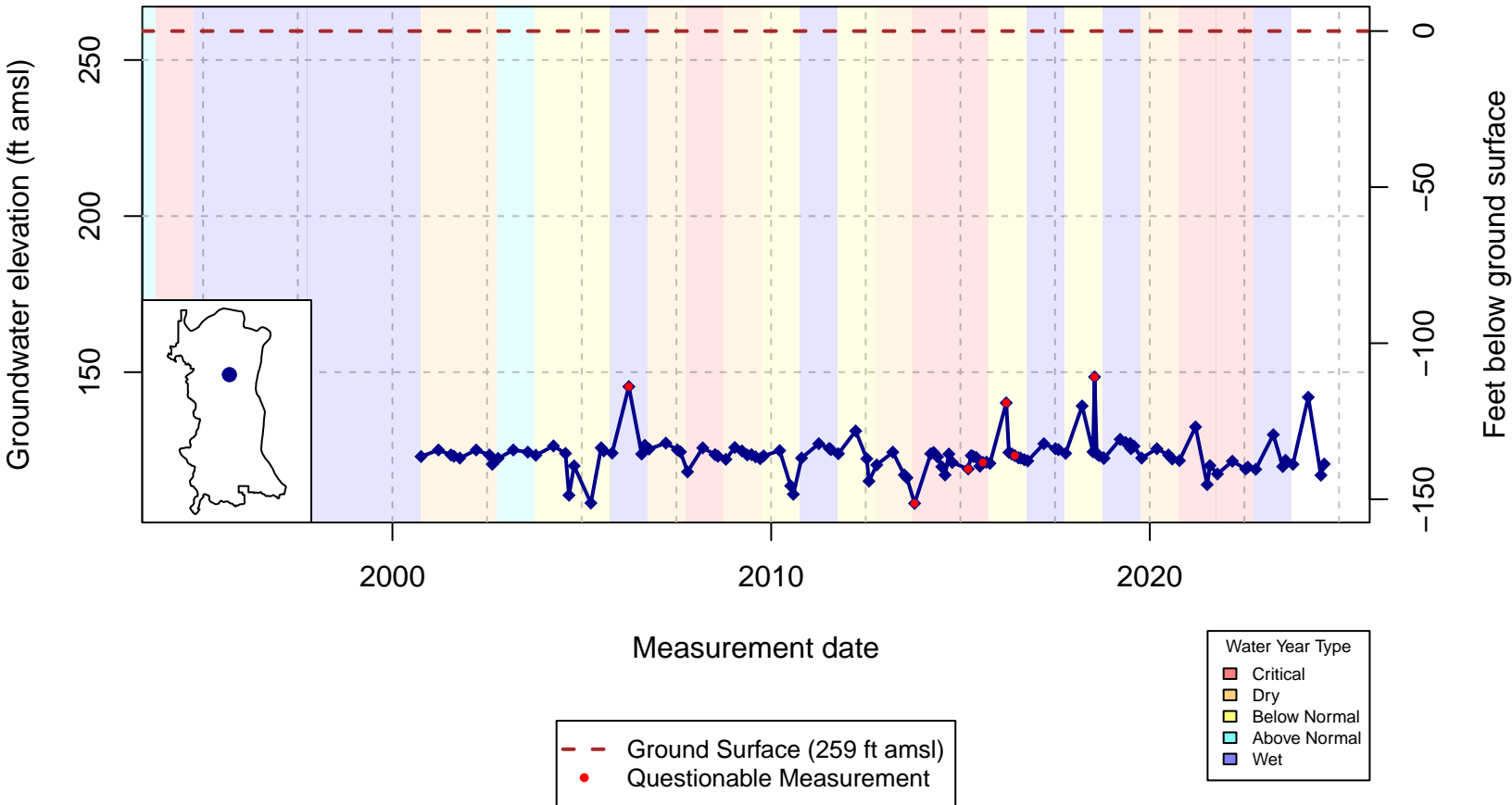
Wyandotte Creek Subbasin – State Well Number (SWN): 18N04E08M001M (Deep Aquifer)



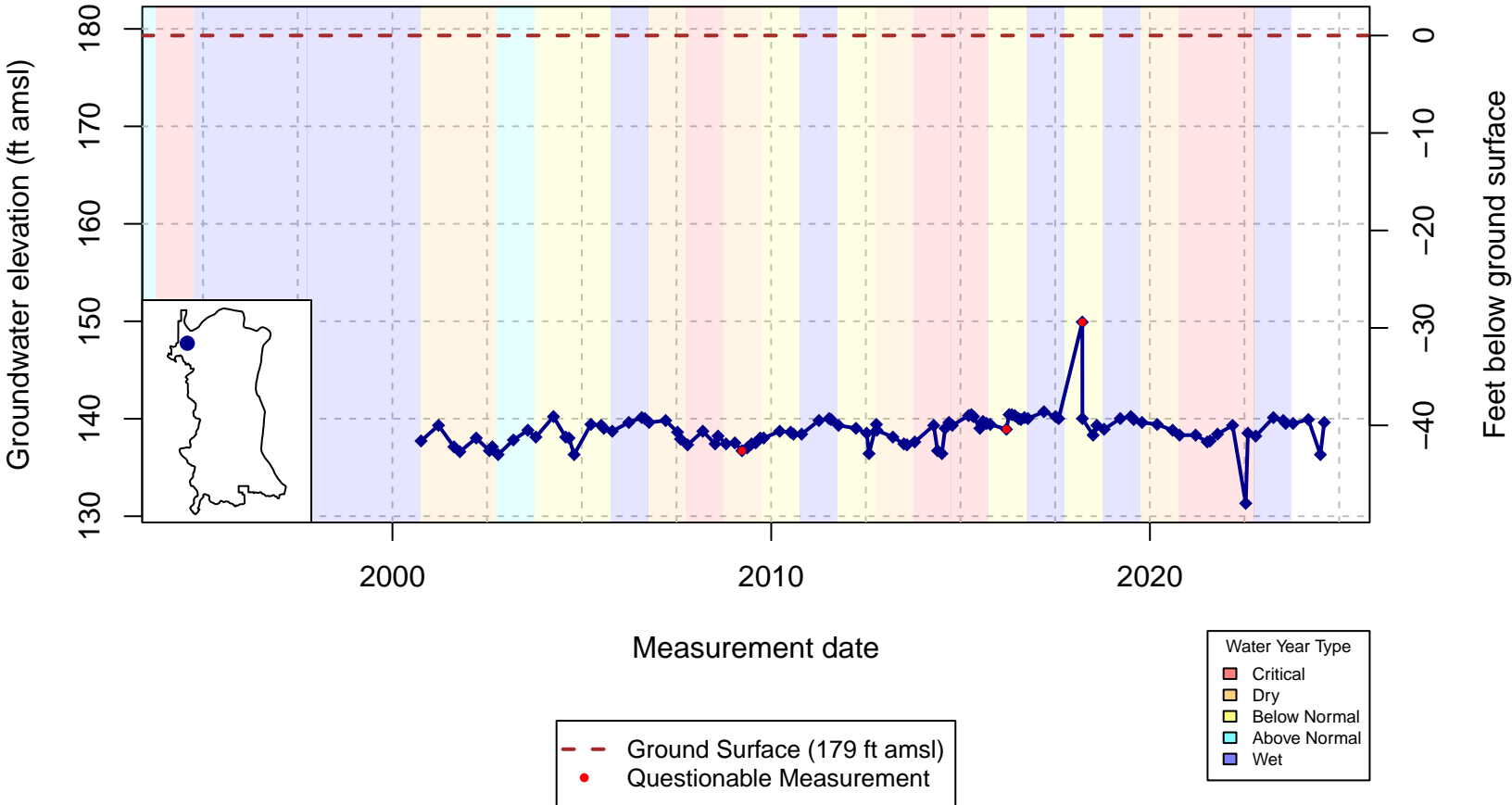
Wyandotte Creek Subbasin – State Well Number (SWN): 19N04E32P001M (Shallow Aquifer)



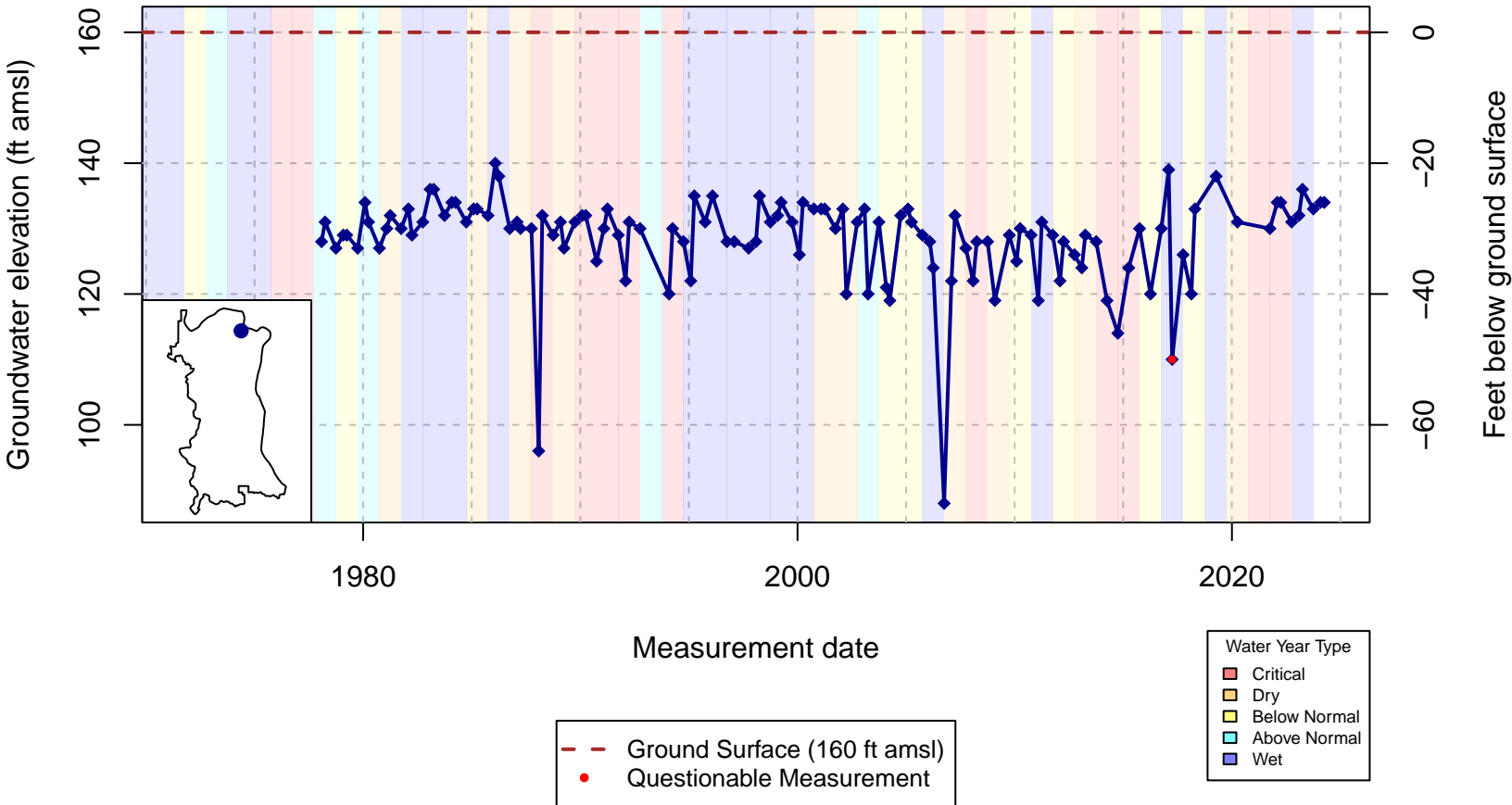
Wyandotte Creek Subbasin – State Well Number (SWN): 19N04E31F001M (Shallow Aquifer)



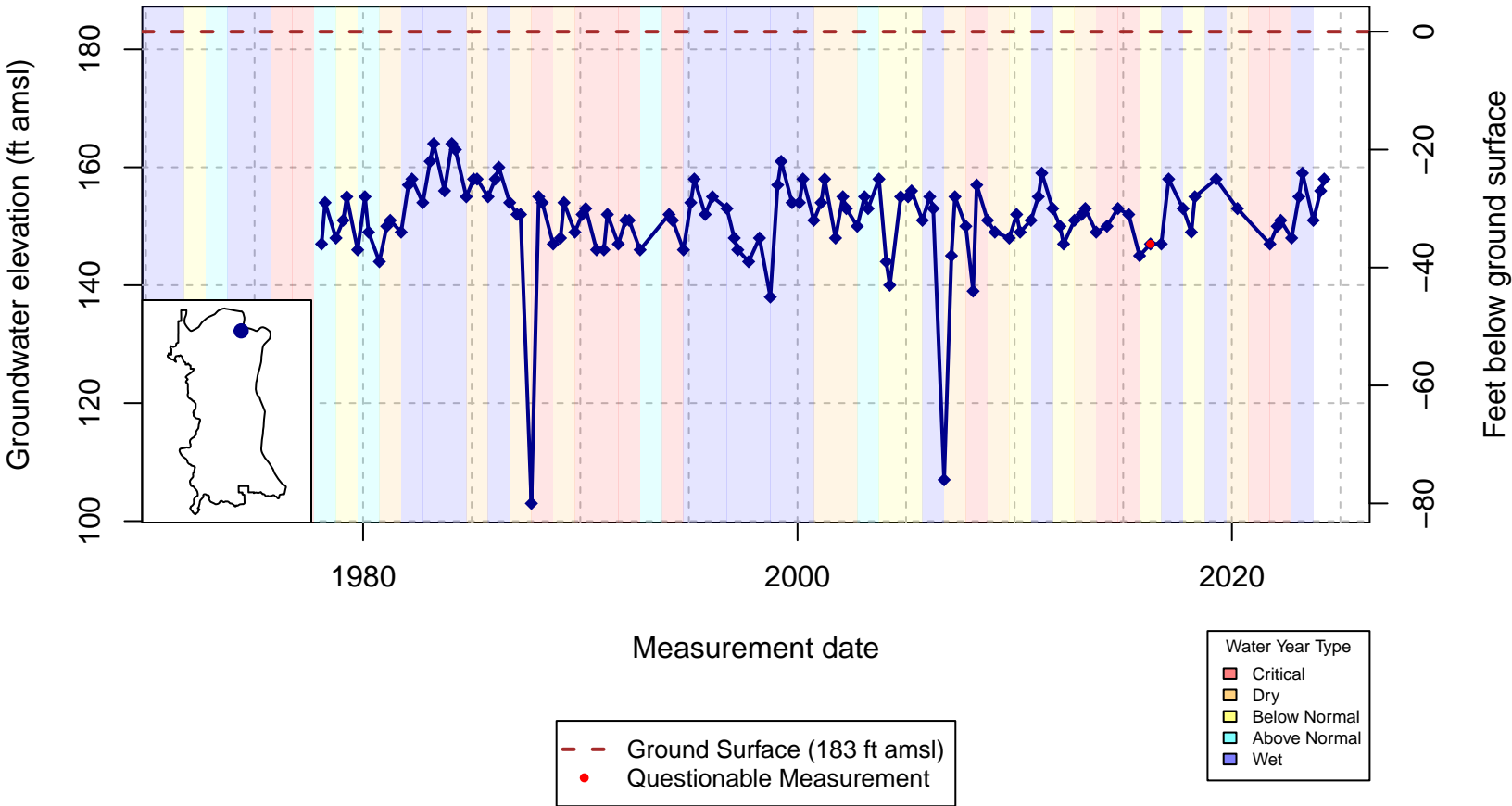
Wyandotte Creek Subbasin – State Well Number (SWN): 19N03E16Q001M (Shallow Aquifer)



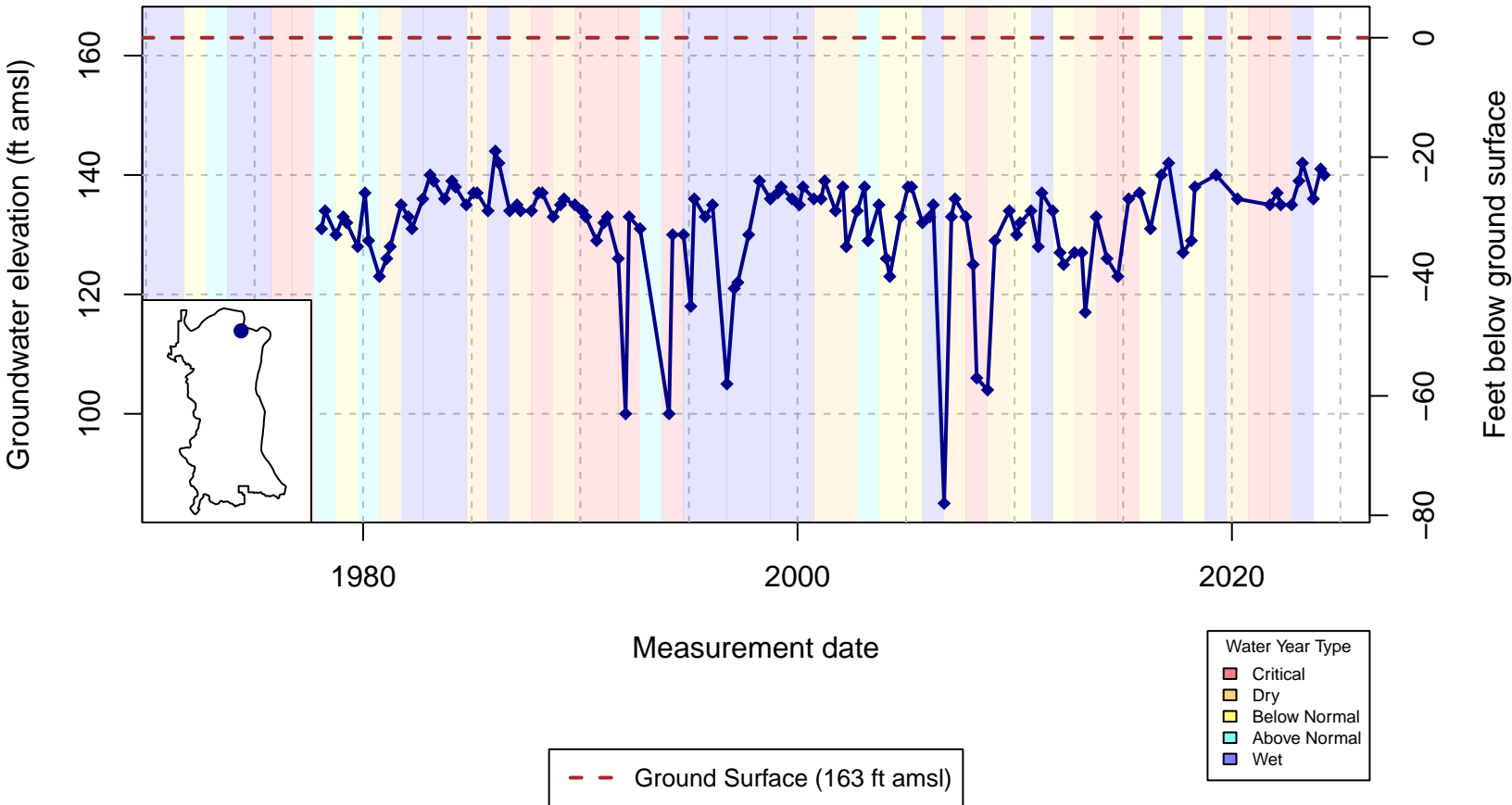
Wyandotte Creek Subbasin – State Well Number (SWN): CWS-03 (Shallow Aquifer)



Wyandotte Creek Subbasin – State Well Number (SWN): CWS-02 (Both Layers)



Wyandotte Creek Subbasin – State Well Number (SWN): CWS-01 (Shallow Aquifer)





SGM Grant Budget Amendment Discussion

Becky Fairbanks
Wyandotte Creek Advisory Committee
November 7, 2024

Background

- ▶ Wyandotte Creek GSA was awarded \$5.5M for their proposed projects through the SGM grant.
 - ▶ One of the projects, Thermalito Water Treatment Plant Capacity Upgrade was awarded \$2.3M.
 - ▶ The project began in May 2022 and ended in April 2024.
- ▶ The SGM grant guidelines stipulates projects can be reimbursed back to October 2022.
 - ▶ The Treatment Plant project can be reimbursed for \$1.5M.
 - ▶ This leaves a balance of \$788,982.

Recommended Proposal

- ▶ Reallocate \$14,482 to Data Gaps and Outreach project
 - ▶ Expand on outreach efforts
- ▶ Reallocate \$32,500 to Inter-basin Coordination project
 - ▶ Expand on the data management enhancements (task 3)
- ▶ Reallocate \$742,000 to Regional Conjunctive Use project
 - ▶ Expand on intra-basin water exchange feasibility, surface water supplies feasibility, and outreach for this project (tasks 2 & 3)

Benefits of Reallocating 700K+ to the Regional Conjunctive Use Project

- Allows for a more detailed approach
- Currently, contractor shall prepare preliminary, conceptual (10%) design plans and specifications for infrastructure updates needed for implementation
- Amending will allow us to prepare up to 60% design plans and specifications for infrastructure updates needed for implementation
 - Advance conceptual designs developed for the Palermo Master Drainage Plan

Current Budget

Budget Category	Grant Admin	Data Gaps	Inter-basin Coordination & Modeling	Regional Conjunctive Use	TWSD Treatment Plant
a. Administration	a. \$200,000	a.	a.	a.	a.
b. Planning / Design	b.	b. \$70,000	b. \$100,000	b. \$280,000	b.
c. Construction	c.	c. \$1,200,000	c.	c. \$80,000	c. \$2,318,534
d. Monitoring	d.	d. \$593,750	d. \$520,000	d. \$20,000	d.
e. Outreach	e.	e. \$115,000	e. \$10,000	e. \$20,000	e.
Total:	\$200,000	\$1,978,750	\$630,000	\$400,000	\$2,318,534

Proposed Amended Budget

Budget Category	Grant Admin	Data Gaps	Inter-basin Coordination & Modeling	Regional Conjunctive Use	TWSD Treatment Plant
a. Administration	a. \$200,000	a.	a.	a.	a.
b. Planning / Design	b.	b. \$70,000	b. \$100,000	b. \$980,000	b.
c. Construction	c.	c. \$1,200,000	c.	c. \$80,000	c. \$1,529,552
d. Monitoring	d.	d. \$593,750	d. \$552,500	d. \$40,000	d.
e. Outreach	e.	e. \$129,482	e. \$10,000	e. \$42,000	e.
Total:	\$200,000	\$1,993,232	\$662,500	\$1,142,000	\$1,529,552

WAC Recommendation for Wyandotte Creek GSA Board

- Potential Action: Wyandotte Creek Advisory Committee approve proposed grant amendment.





Sustainable Groundwater Management Projects Update

Becky Fairbanks

Wyandotte Creek Advisory Committee

November 7, 2024

Background

- ▶ California Department of Water Resources Sustainable Groundwater Management Implementation Grant
 - ▶ Wyandotte Creek Groundwater Sustainability Agency (GSA) awarded \$5.5M
 - ▶ Wyandotte Creek GSA Board approved the approach to partner with Butte County Department of Water and Resource Conservation to lead portions of the grant funded work.
-

Projects Implemented through March 2026

- ▶ Data Gap Identification and Data Improvement
- ▶ Outreach Program
- ▶ Regional Conjunctive Use Program
- ▶ Project Management and Grant Administration
- ▶ Data Management System Enhancements
- ▶ Inter-basin Coordination Analysis and Modeling



Wyandotte Creek
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Data Gap Identification and Data Improvement

Why it matters:

- **Accurate data** is essential for making informed decisions about water resources.

Our plan:

- Invest in **new monitoring sites** and **equipment** for more precise data on surface and groundwater conditions.
- **Better understand the system** and amend the Wyandotte Creek GSA GSP over time to respond to new data and feedback from DWR.



Data Gap Identification & Data Improvement

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is on track and within budget.

Consultant Progress on Tasks Includes:

- Began identifying areas within the subbasin for potential new monitoring network sites. Coordination with Butte County to understand existing network.
- Developed approach to classify shallow and deep monitoring wells to support monitoring network enhancements. Analysis underway.
- In process of reviewing the GSP and DWR determination letter to identify data gaps and areas of refinement.

Data Gap Identification & Data Improvement

Next Steps:

- Finalize draft map of proposed locations for new monitoring sites.
- Present the map of proposed locations to the Wyandotte Creek Advisory Committee (WAC) on November 7th for discussion and review.
- Present recommendations for proposed new monitoring sites to the Wyandotte Creek GSA Board for approval.

Outreach

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is on track and within budget.

Consultant Progress on Tasks Includes:

- Created a style guide to promote consistency in outreach materials.
- Began creating project-specific outreach plans.

Upcoming:

- Finalize project-specific outreach plans.
- Develop and design outreach materials for projects.

Regional Conjunctive Use Project

Focuses on reducing the dependency of the subbasin on groundwater through:

- Intra-basin water exchange study
- Agricultural Surface Water Supplies Study
- Precision Irrigation Efficiency Pilot Program



Regional Conjunctive Use Project

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is on track and within budget.

Consultant Progress on Tasks Includes:

- Intra-basin water exchange feasibility –
 - Met with Thermalito Water and Sewer District (TWSD) and South Feather Water and Power Agency (SFWPA)
 - Toured SFWPA facilities and service area
- Surface water in lieu of groundwater –
 - Combining efforts with West Yost on the Palermo drainage plan
- Precision Irrigation Program –
 - Formed an Ad Hoc Committee
 - Mobile Irrigation Lab

Regional Conjunctive Use Project

Next steps:

- 11/7/24 – Surface Water Supplies - Public Engagement meeting
- Schedule Precision Irrigation Ad Hoc Committee meeting
- Schedule site visits



Project Management & Grant Administration

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is on track and within budget

Progress on Tasks Includes:

- Hosted a big team kickoff meeting with all consultants
- Conduct regular check-in meetings with each consulting team
- Filed environmental forms
- Submitted two quarterly invoices and progress reports to the Department of Water Resources



- ▶ **Data Management System Enhancements (Butte County)**
- ▶ **Inter-basin Coordination Analysis and Modeling (Butte County)**

Project Manager:
Christina Buck, Asst. Director
Dept. of Water and Resource Conservation
Butte County



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Data Management System Enhancements

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is on track and within budget.

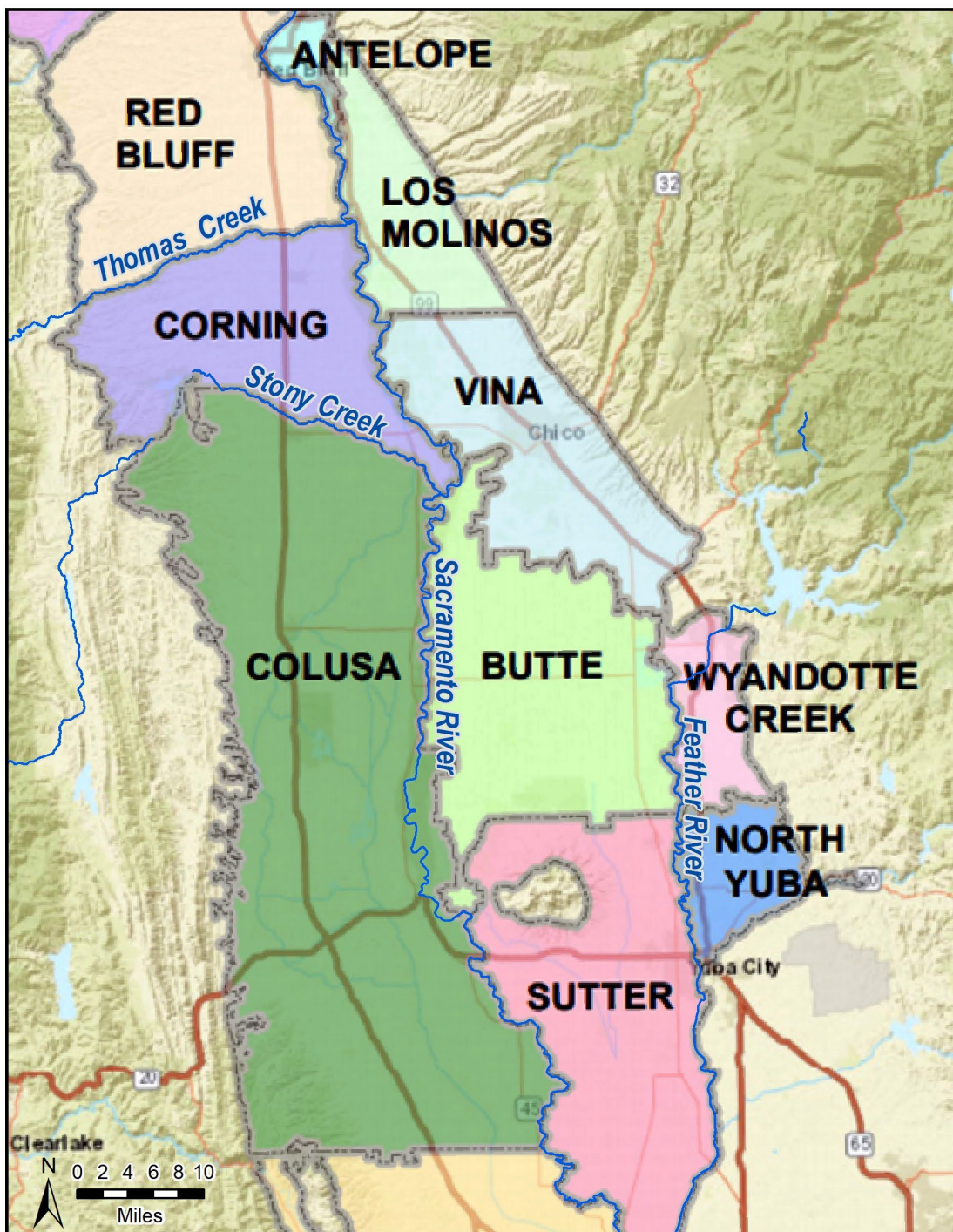
Consultant Progress on Tasks Includes:

- Staff working with consultant team to communicate data management and reporting needs
- Consultants have created initial examples of data reports with ESRI and PowerBI software

Next steps:

- Consultant continue to refine data report formats and functionality
- Additional data types considered (ex. water quality, model outputs)





Inter-basin Coordination Analysis and Modeling

- Better understand the system at the boundaries
 - Rivers/streams connected to groundwater system
 - Water Budgets
 - Monitoring wells
- Refine modeling tools: Butte Basin Groundwater Model
- Will support coordination efforts with information and data



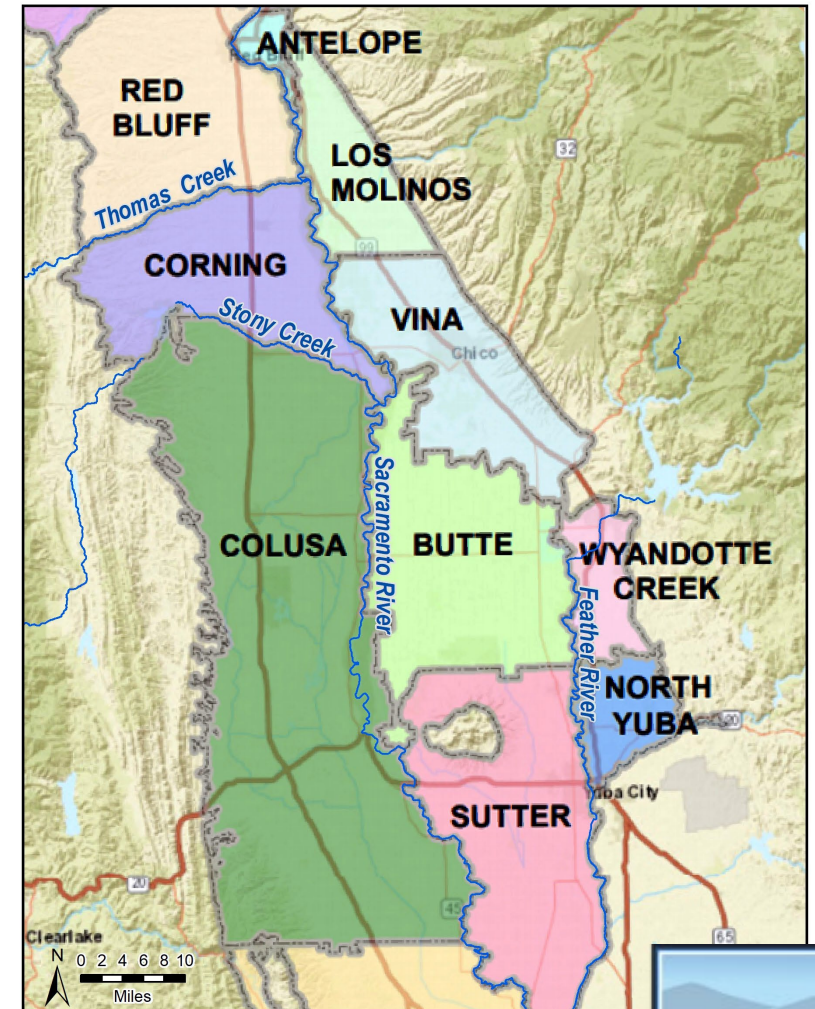
Inter-basin Coordination Analysis and Modeling

Updates on Tasks during 4/1/24 - 9/30/24:

- Project is within budget and on schedule

Consultant Progress on Tasks Includes:

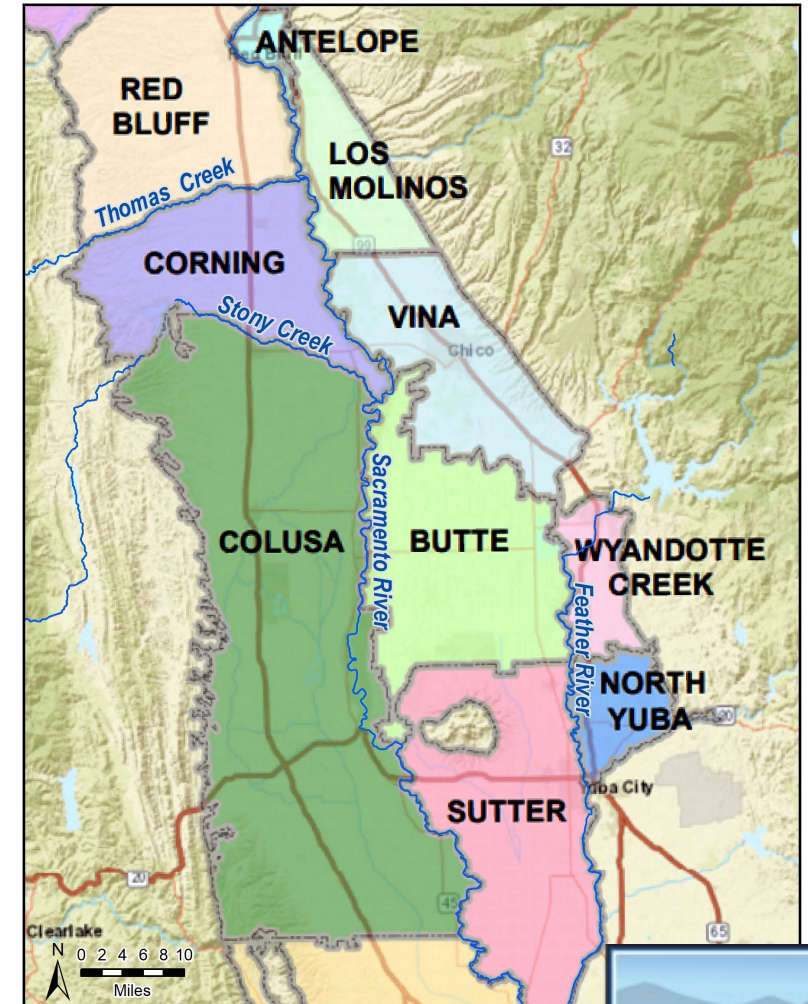
- Gathering relevant data, model files, and reports for review
- Compiling contents of GSPs along Feather River Corridor and review existing available information
- Initial meetings with North Yuba to understand available data
- Evaluating possible model refinements to be made to the Butte Basin Groundwater Model



Inter-basin Coordination Analysis and Modeling

Next Steps

- Meet with Sutter subbasin staff to gather data and understand their current efforts
- Discussion and update to Butte County Technical Advisory Committee on November 19.
- Working on BBGM revisions and evaluating model outputs at boundaries
- Continue pulling together information from GSPs along both North Sacramento River and Feather River Corridors



Questions?

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