



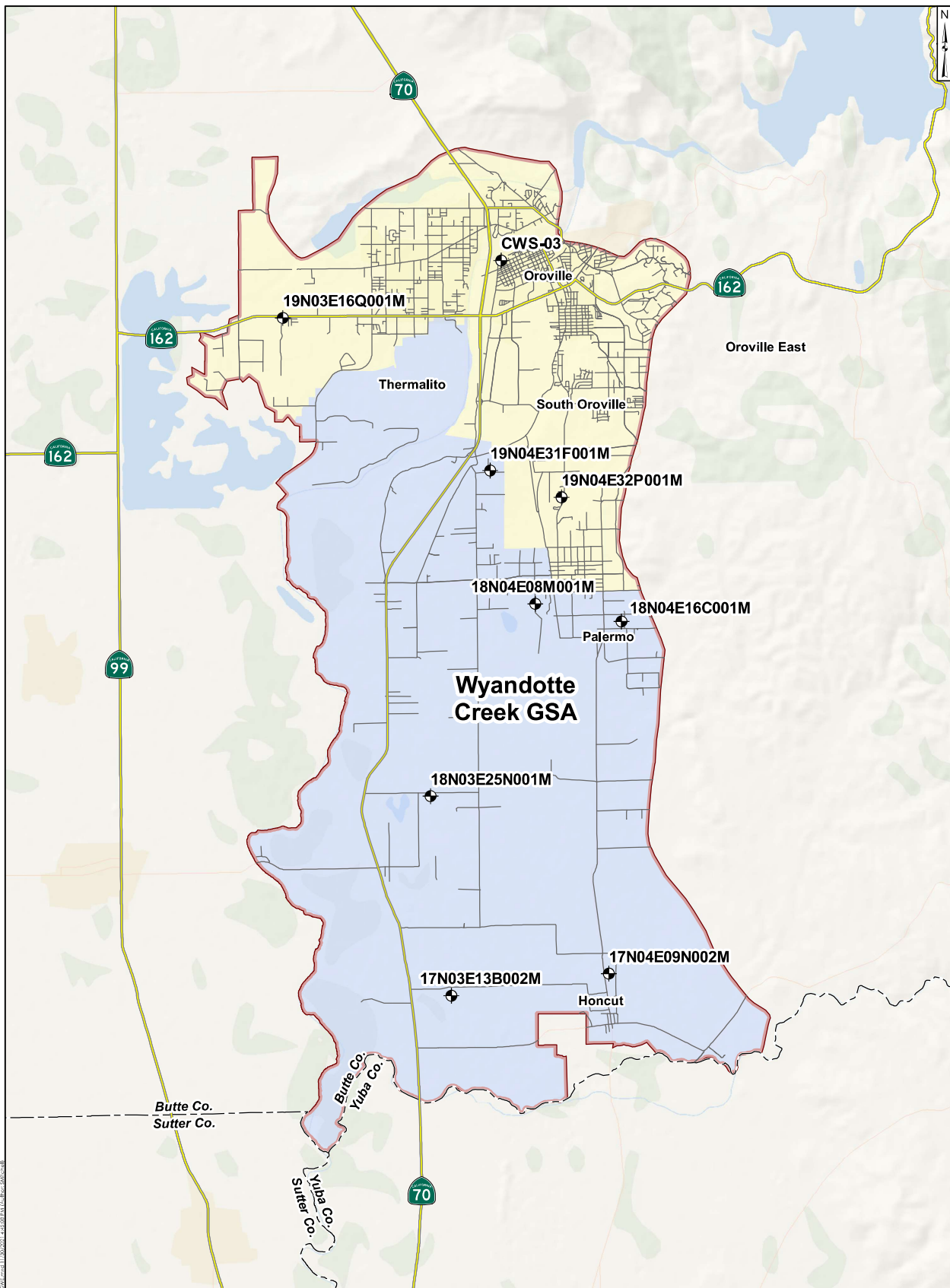
# Appendices

2021 Water Year Annual Report

2021 Water Year Annual Report

# Appendix A

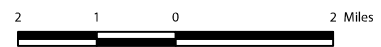
Characteristics and Hydrographs of Representative  
Monitoring Site (RMS) Wells



**Legend**

- |                               |                          |             |
|-------------------------------|--------------------------|-------------|
| Wyandotte Creek GSA           | Wyandotte Creek Oroville | Highways    |
| RMS GWE Monitoring Wells      | Wyandotte Creek South    | Other roads |
| Well                          |                          |             |
| <b>Boundaries<sup>2</sup></b> |                          |             |
| County boundaries             |                          |             |

Notes:  
1) California Department of Water Resources (CA DWR).  
2) TIGER/Line, U.S. Census Bureau.



**Groundwater Level RMS Wells**  
Wyandotte Creek Subbasin GSP



Figure

**4-5**

Project No.: SAC282

December 2021

S:\GIS\2021-2022\Butte\_County\Subbasin\4-5\Map\_Series\4-5\_GSP\_S4\_11/20/21.dwg

**Table 4-5: Groundwater Levels Representative Monitoring Site Well Construction Details**

<b>RMS Well ID</b>	<b>State Well Number (Site Name)</b>	<b>Total Depth (feet bgs)</b>	<b>Screened Interval (feet bgs)</b>	<b>Reference Point Elevation<sup>1</sup> (feet)</b>	<b>Reference Point Description</b>	<b>Ground Surface Elevation<sup>1</sup> (feet)</b>
<b>Wyandotte Creek Subbasin – Oroville Management Area</b>						
16Q001M	19N03E16Q001M	120	100-120	180.32	Top of casing	179.32
32P001M	19N04E32P001M	N/A	N/A	188	Between plate and casing on west side	187
CWS-03	CWS-03	<200	---	195	---	---
<b>Wyandotte Creek Subbasin – South Management Area</b>						
13B002M	17N03E13B002M	320	N/A	89.57	Top of casing	89.27
09N002M	17N04E09N002M	325	N/A	103.26	N/A	102.26
25N001M	18N03E25N001M	164	N/A	128.26	Top of casing	127.26
08M001M	18N04E08M001M	656	168-244	147.56	Between metal plate and top of casing	147.26
16C001M	18N04E16C001M	165	N/A	204.46	Top of casing	203.26
31F001M	19N04E31F001M	200	160-200	260.97	Top of casing	259.27

**Note:**

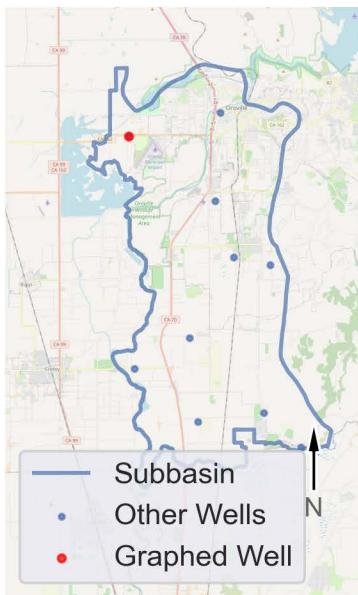
1 – North American Vertical Datum 1988.

N/A – Not available

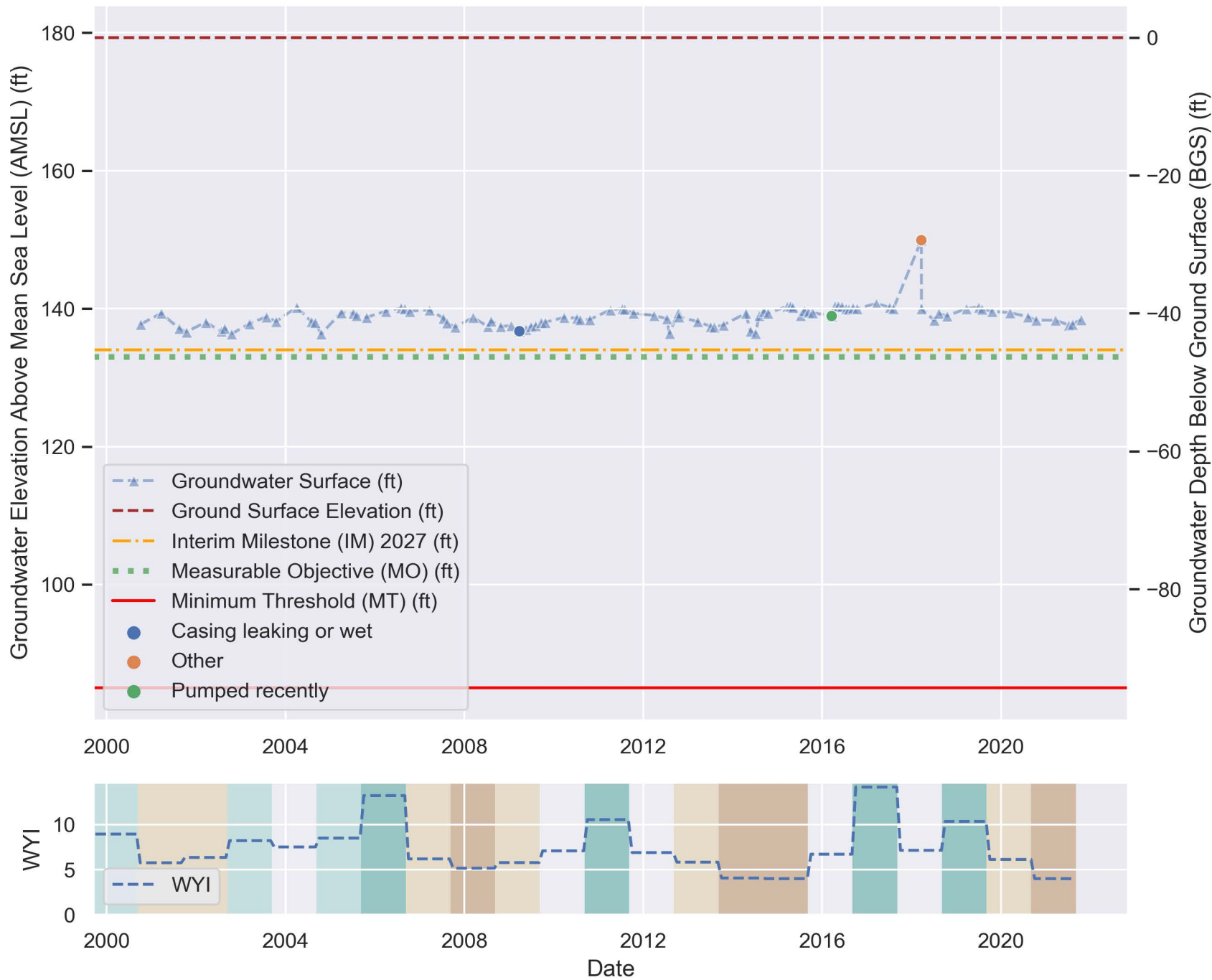
--- Details of public supply wells not disclosed

# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 19N03E16Q001M

Well Location Map



Perforation 1: 100.0 - 120.0 ft BGS



## Sustainable Management Criteria:

IM (2027) = 134.0 ft AMSL

MO = 133.0 ft AMSL

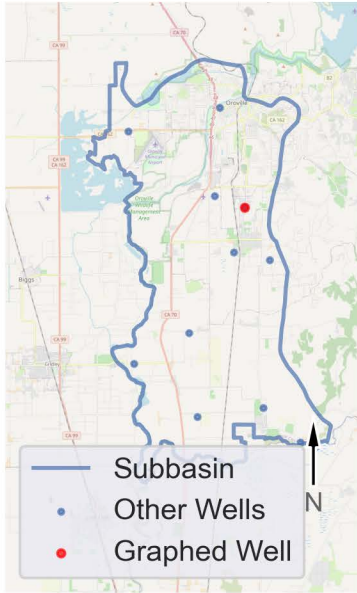
MT = 85.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

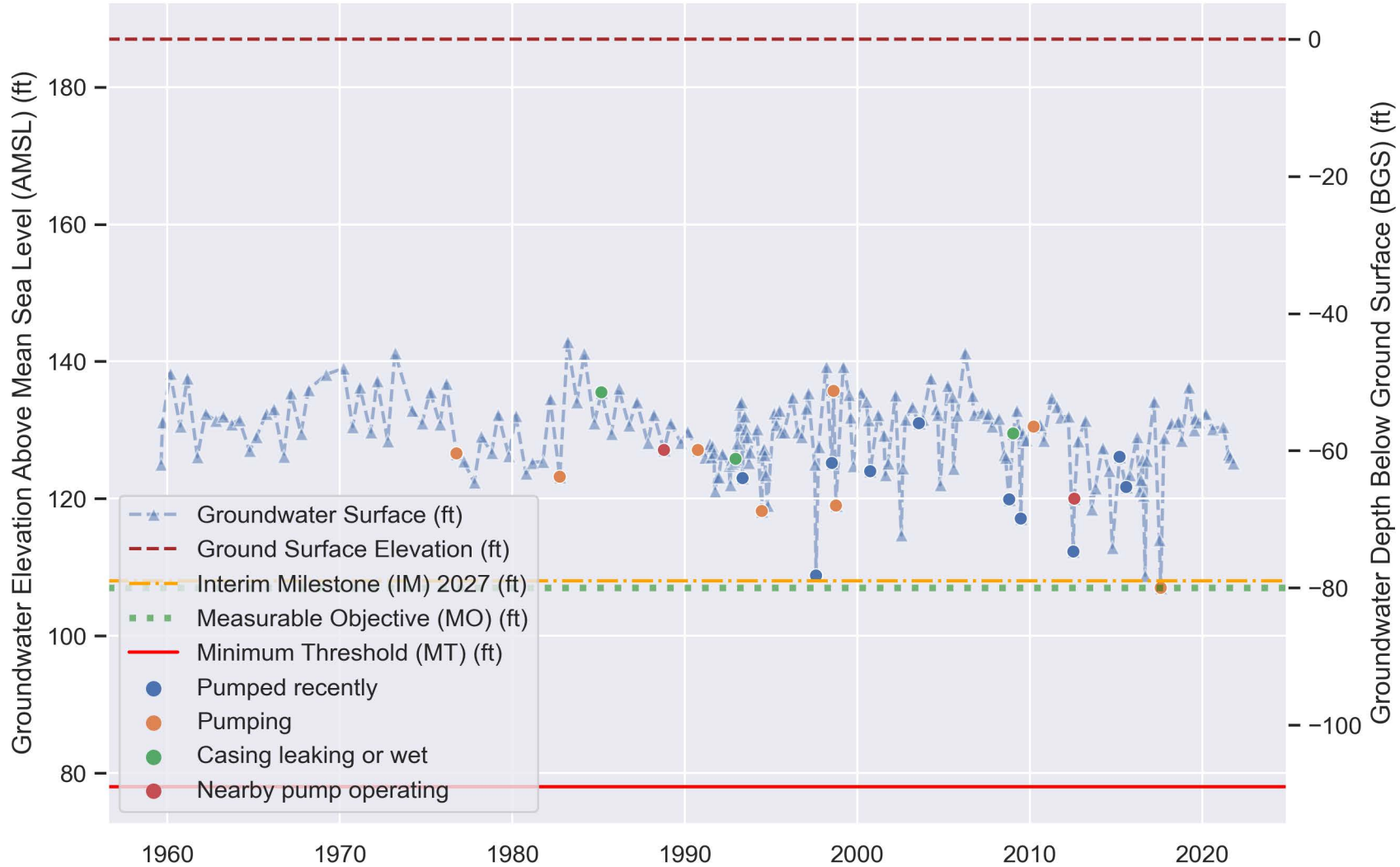


# WYANDOTTE Subbasin - State Well Number (SWN): 19N04E32P001M

Well Location Map



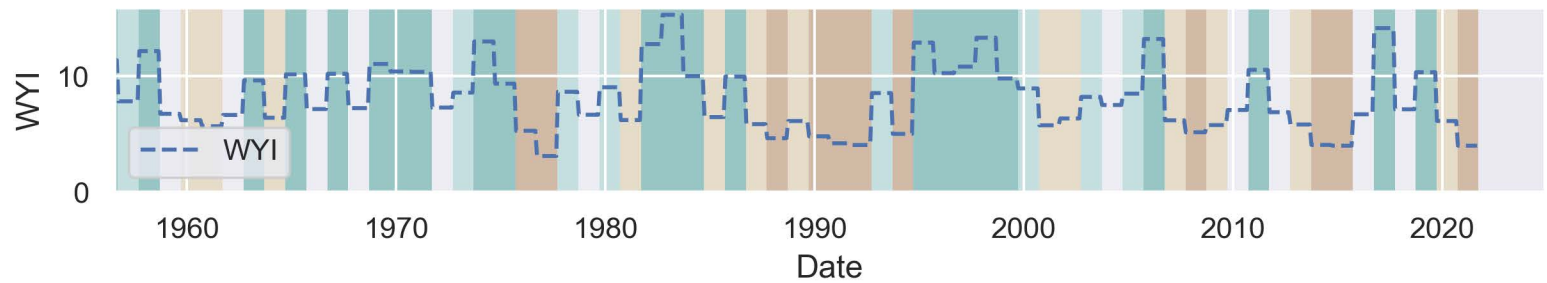
Perforation 1: Perforation data not available.



Sustainable Management Criteria:

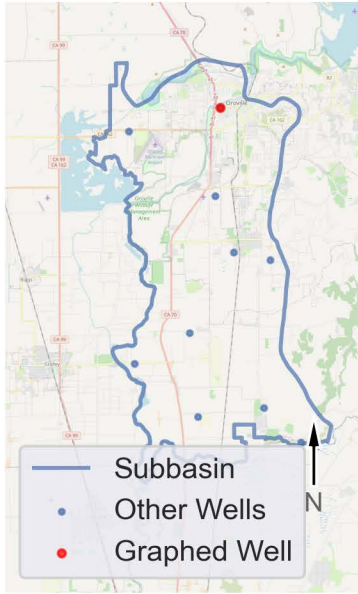
IM (2027) = 108.0 ft AMSL  
 MO = 107.0 ft AMSL  
 MT = 78.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# WYANDOTTE CREEK Subbasin - State Well Number (SWN): CWS-03

Well Location Map



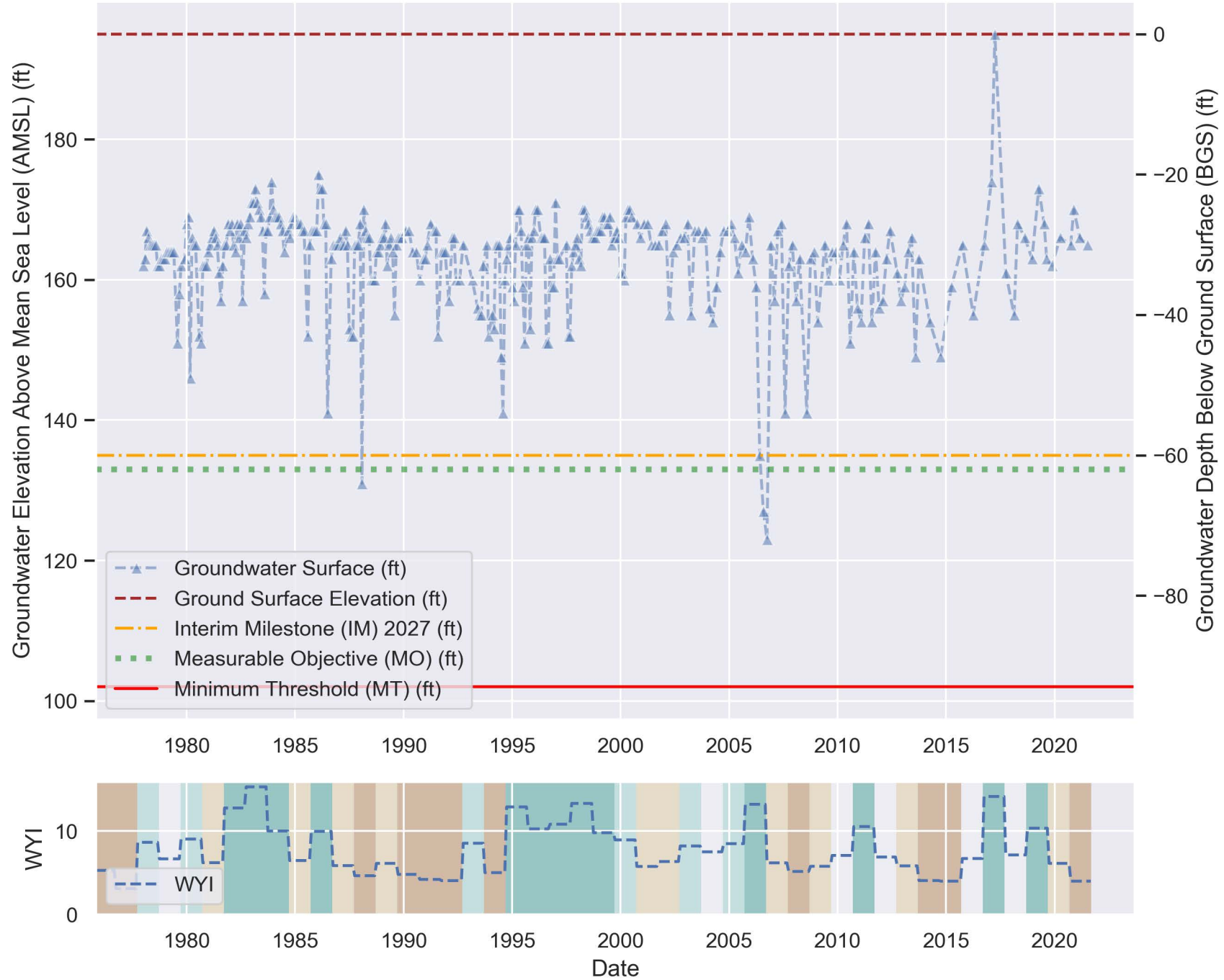
## Sustainable Management Criteria:

IM (2027) = 135.0 ft AMSL  
 MO = 133.0 ft AMSL  
 MT = 102.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

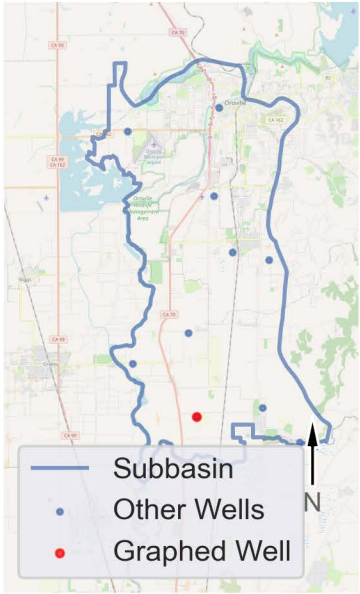


Perforation 1: Perforation data not available.

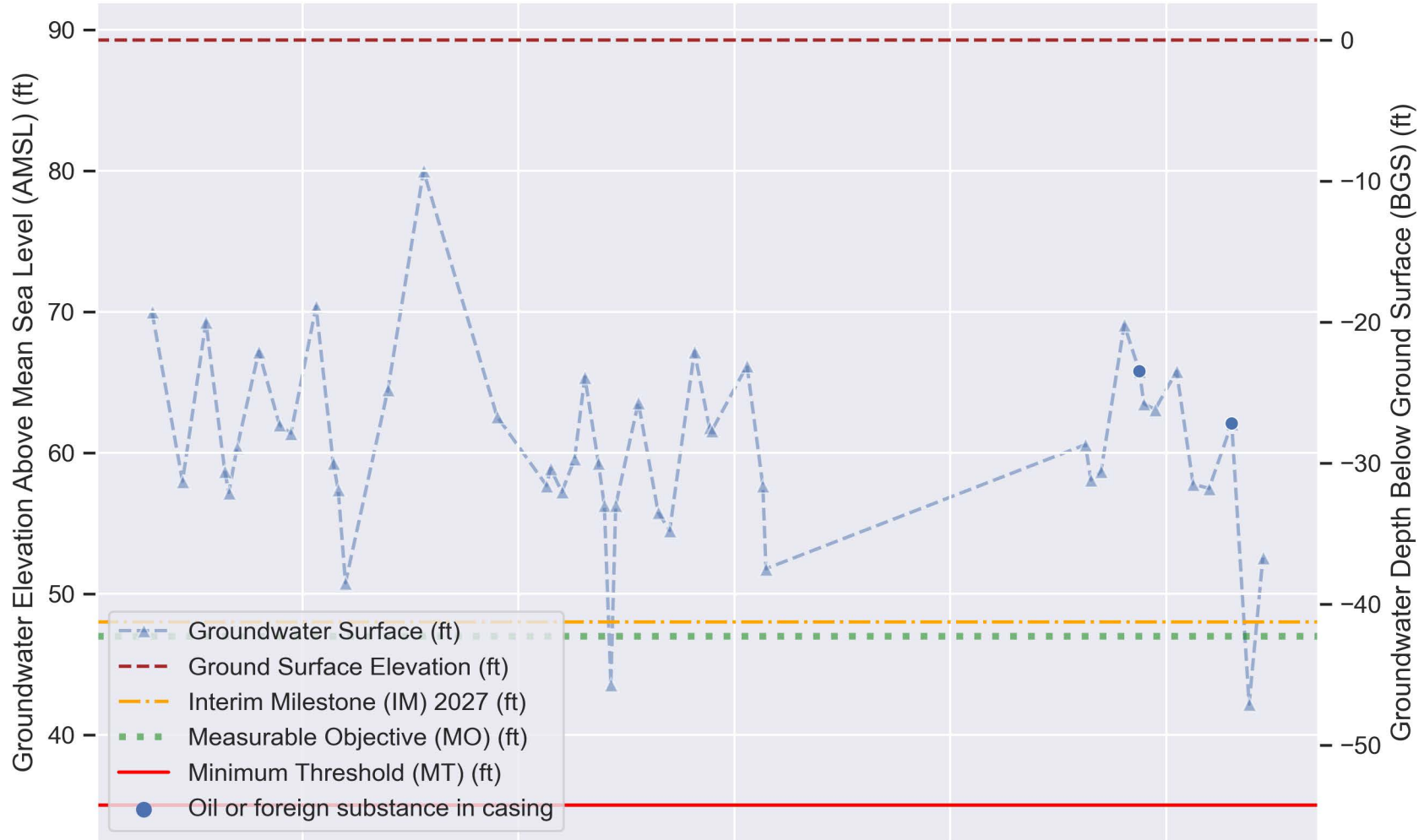


# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 17N03E13B002M

Well Location Map



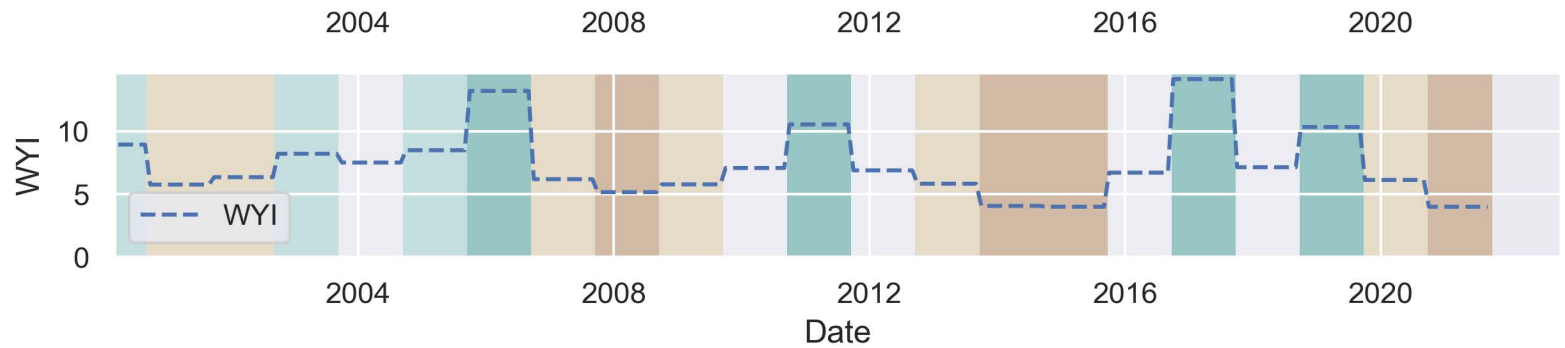
Perforation 1: Perforation data not available.



Sustainable Management Criteria:

IM (2027) = 48.0 ft AMSL  
 MO = 47.0 ft AMSL  
 MT = 35.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

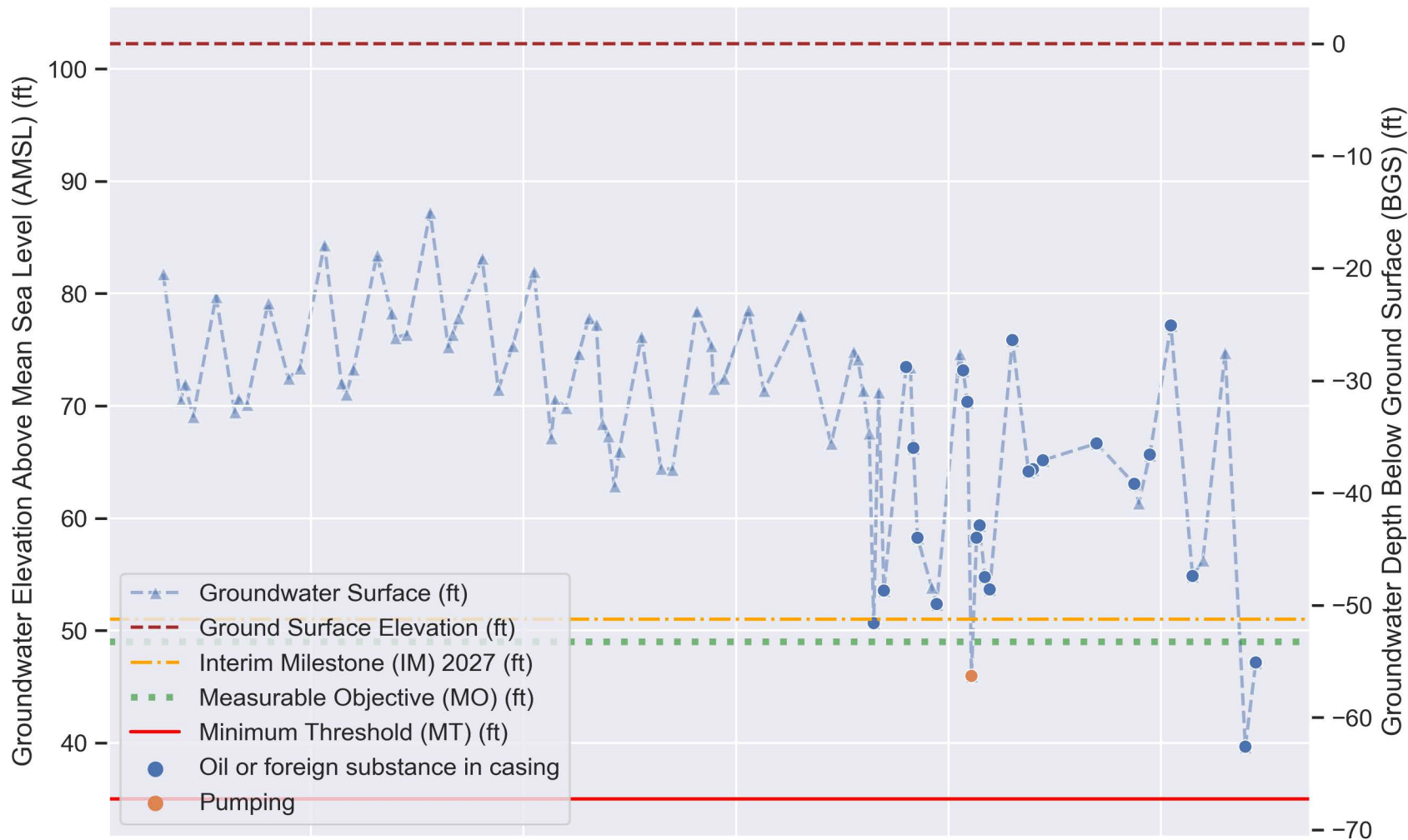
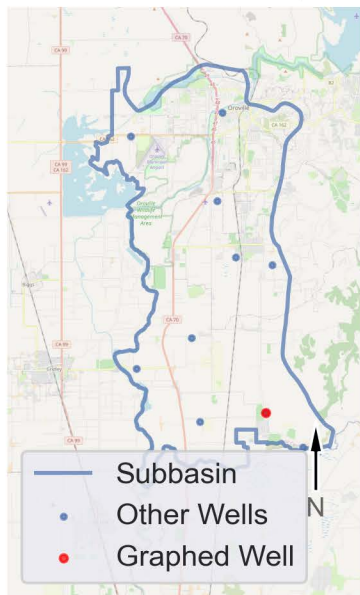




# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 17N04E09N002M

Perforation 1: 100.0 - 112.0 ft BGS

Well Location Map



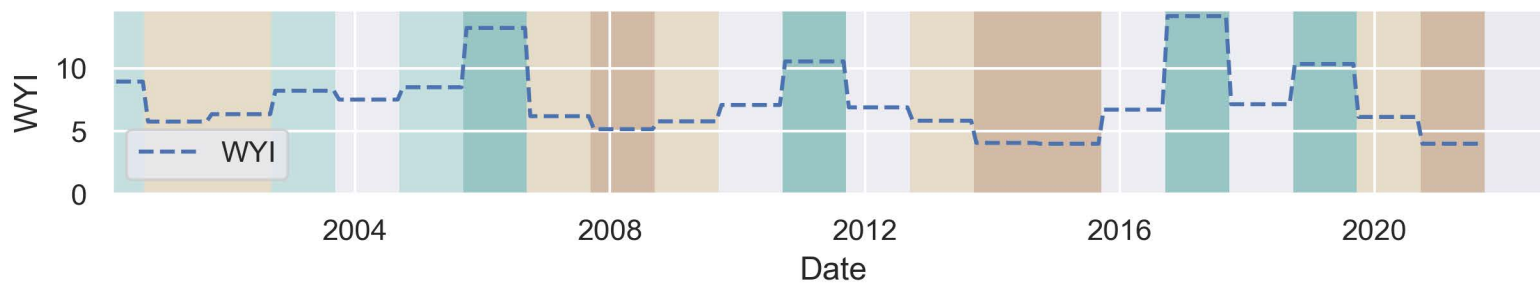
## Sustainable Management Criteria:

IM (2027) = 51.0 ft AMSL

MO = 49.0 ft AMSL

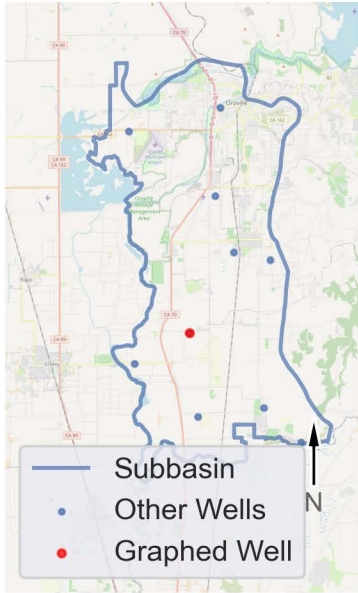
MT = 35.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

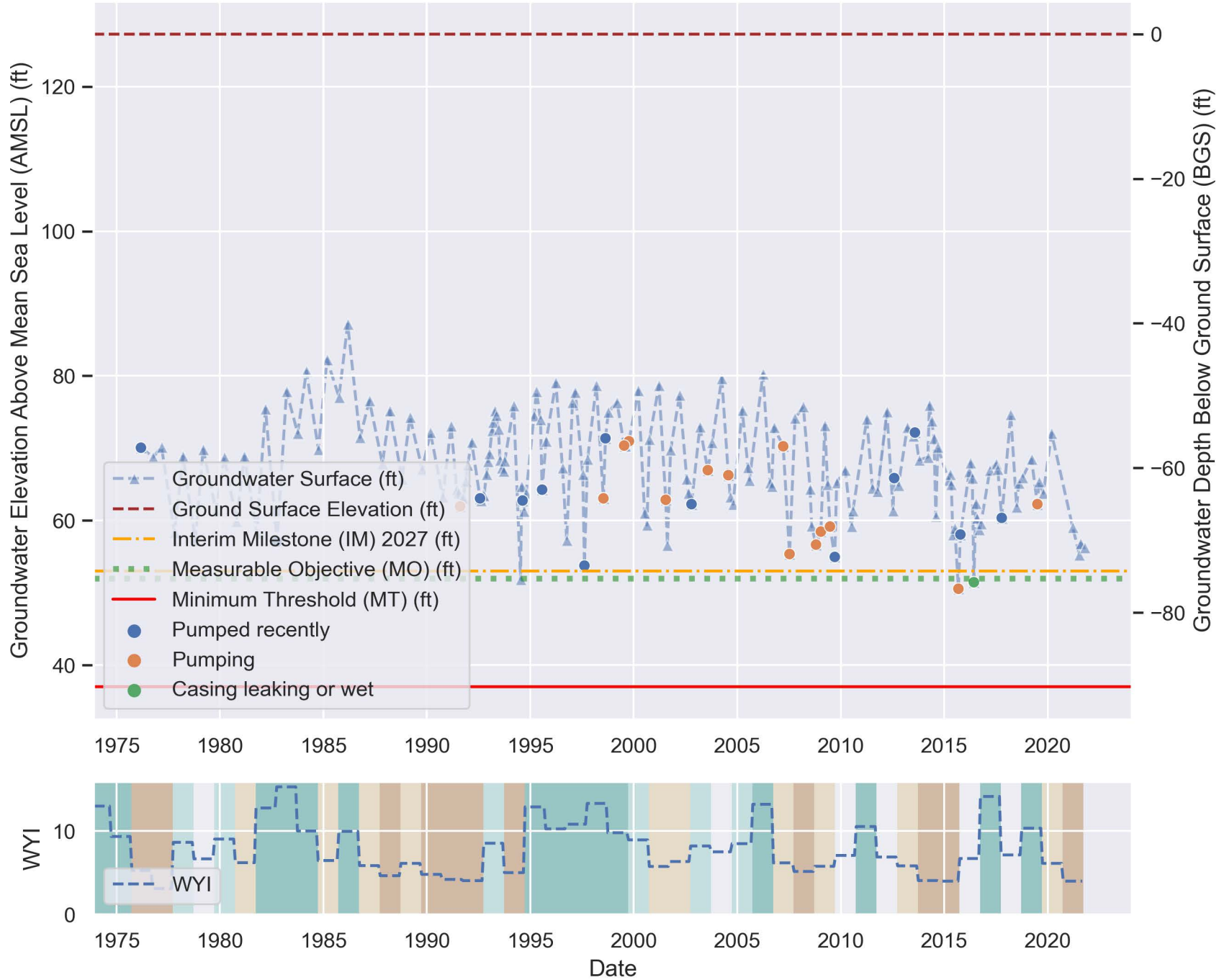


# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 18N03E25N001M

Well Location Map



Perforation 1: 100.0 - 120.0 ft BGS



## Sustainable Management Criteria:

IM (2027) = 53.0 ft AMSL

MO = 52.0 ft AMSL

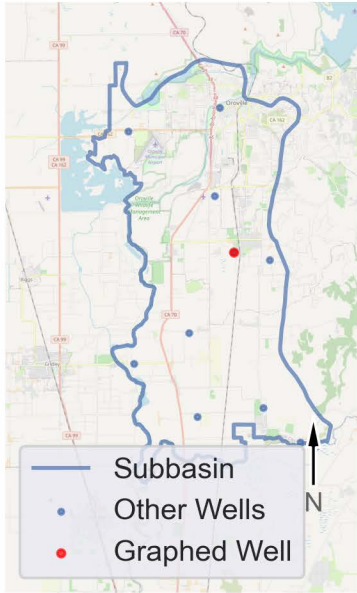
MT = 37.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

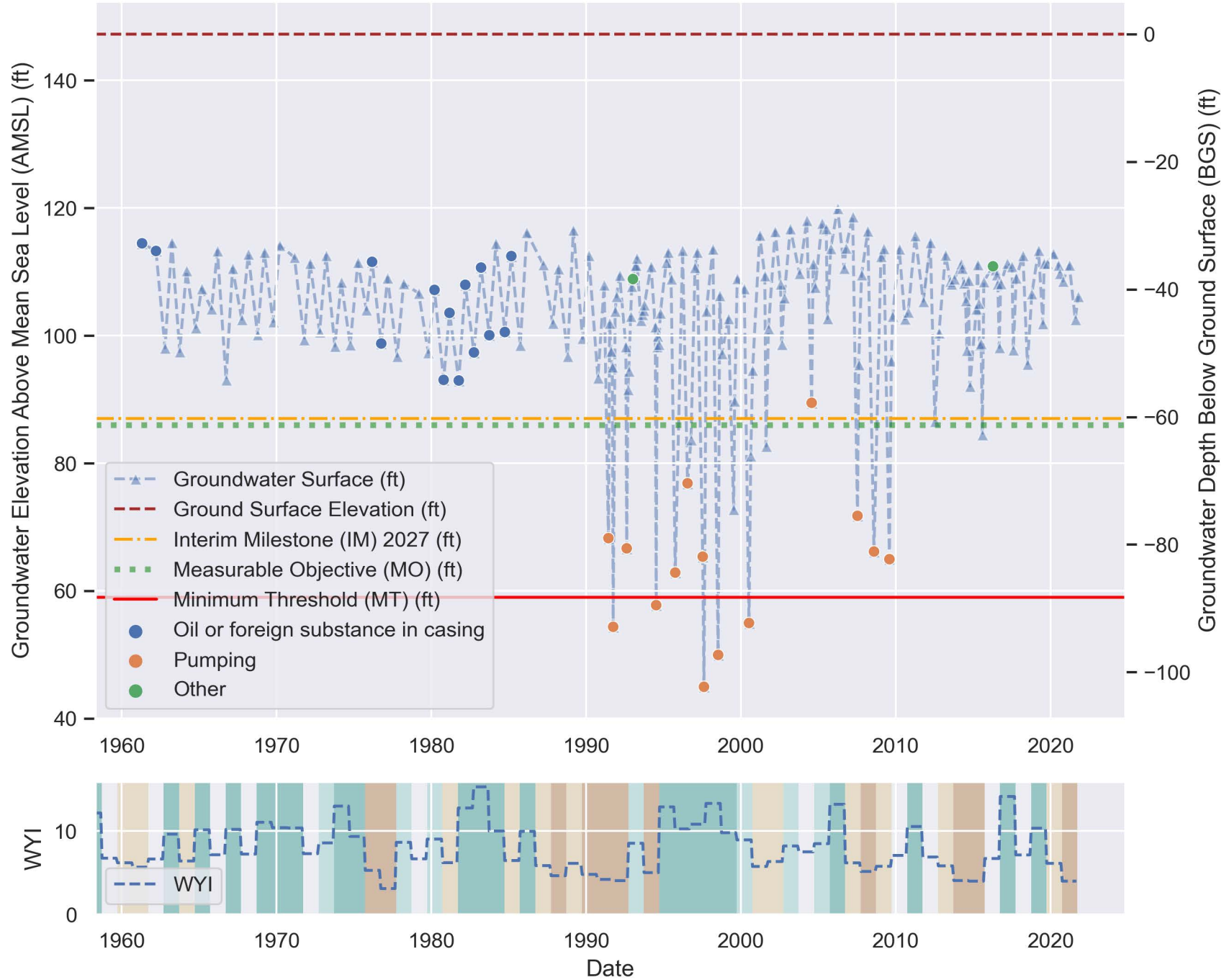


# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 18N04E08M001M

Well Location Map



Perforation 1: 168.0 - 204.0 ft BGS; Perforation 2: 208.0 - 244.0 ft BGS



## Sustainable Management Criteria:

IM (2027) = 87.0 ft AMSL

MO = 86.0 ft AMSL

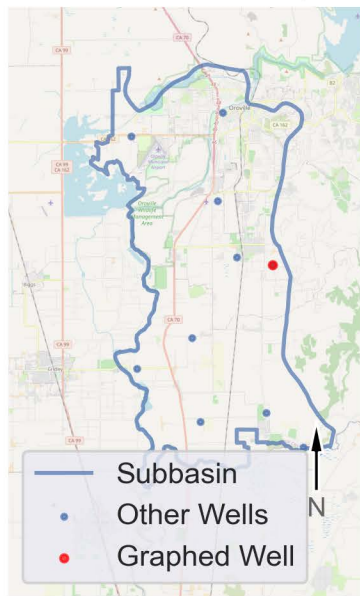
MT = 59.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

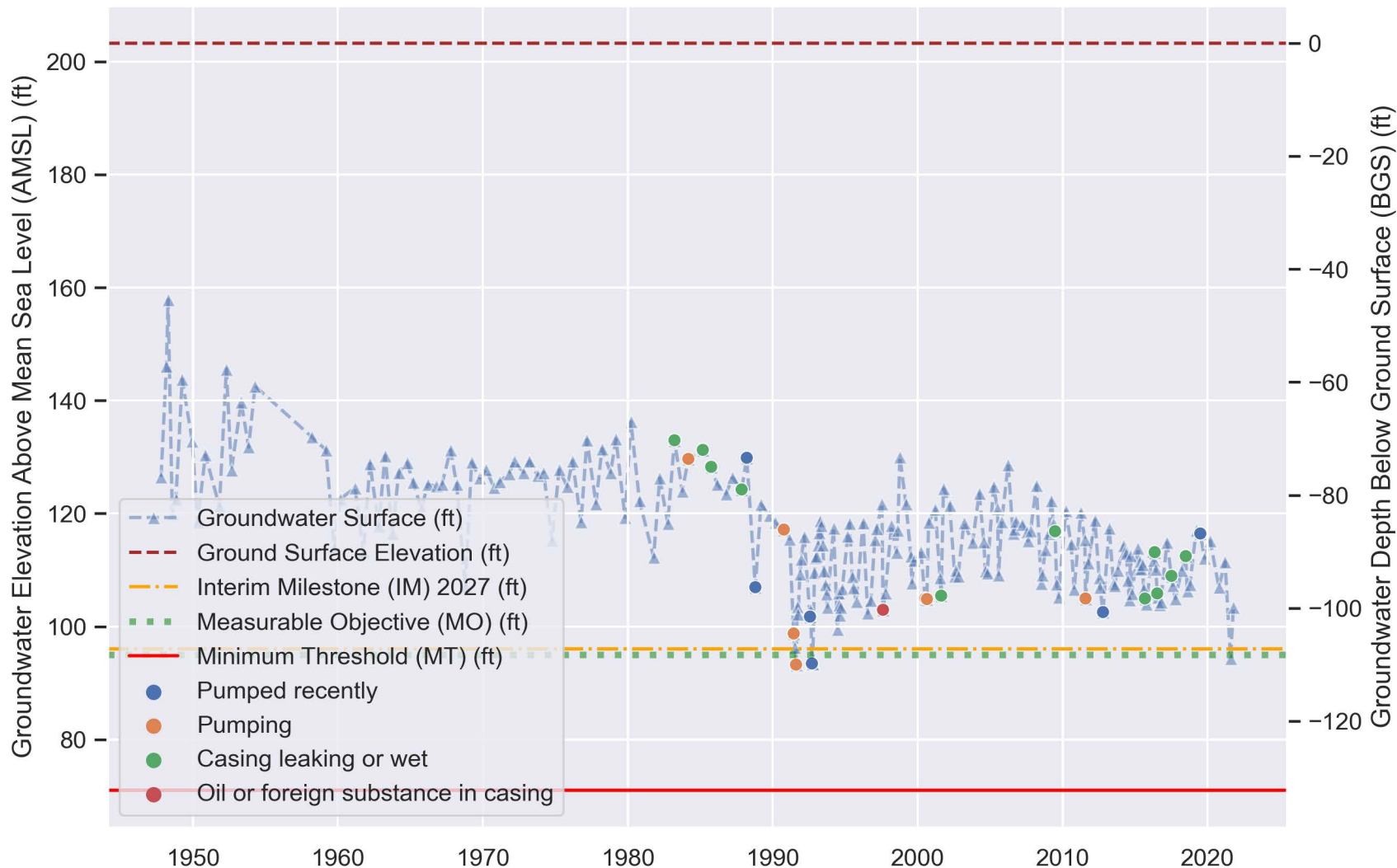


# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 18N04E16C001M

Well Location Map



Perforation 1: 160.0 - 200.0 ft BGS



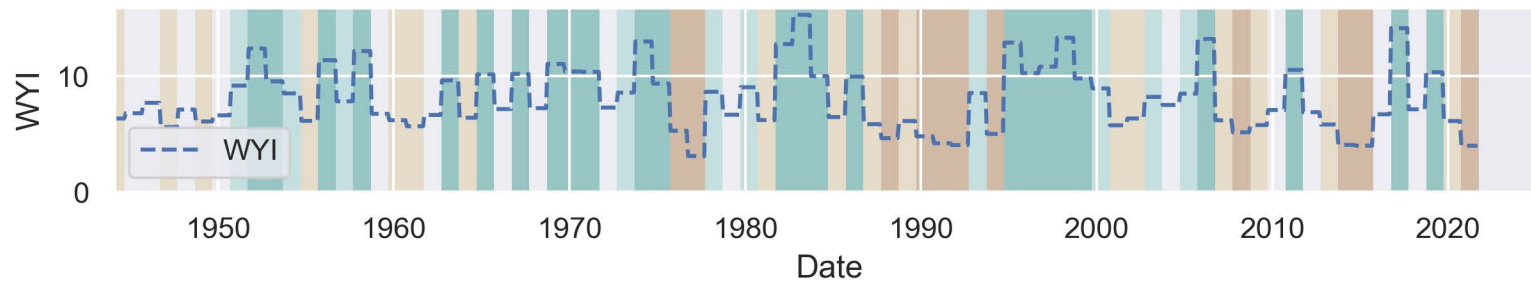
## Sustainable Management Criteria:

IM (2027) = 96.0 ft AMSL

MO = 95.0 ft AMSL

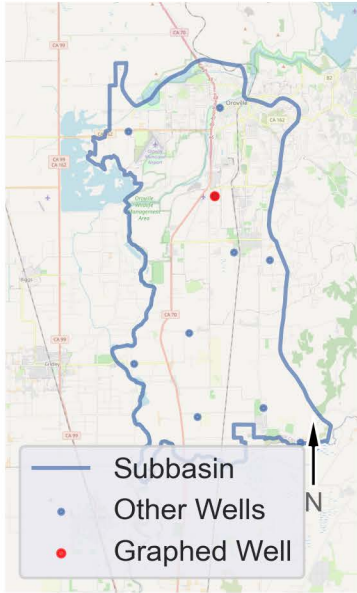
MT = 71.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

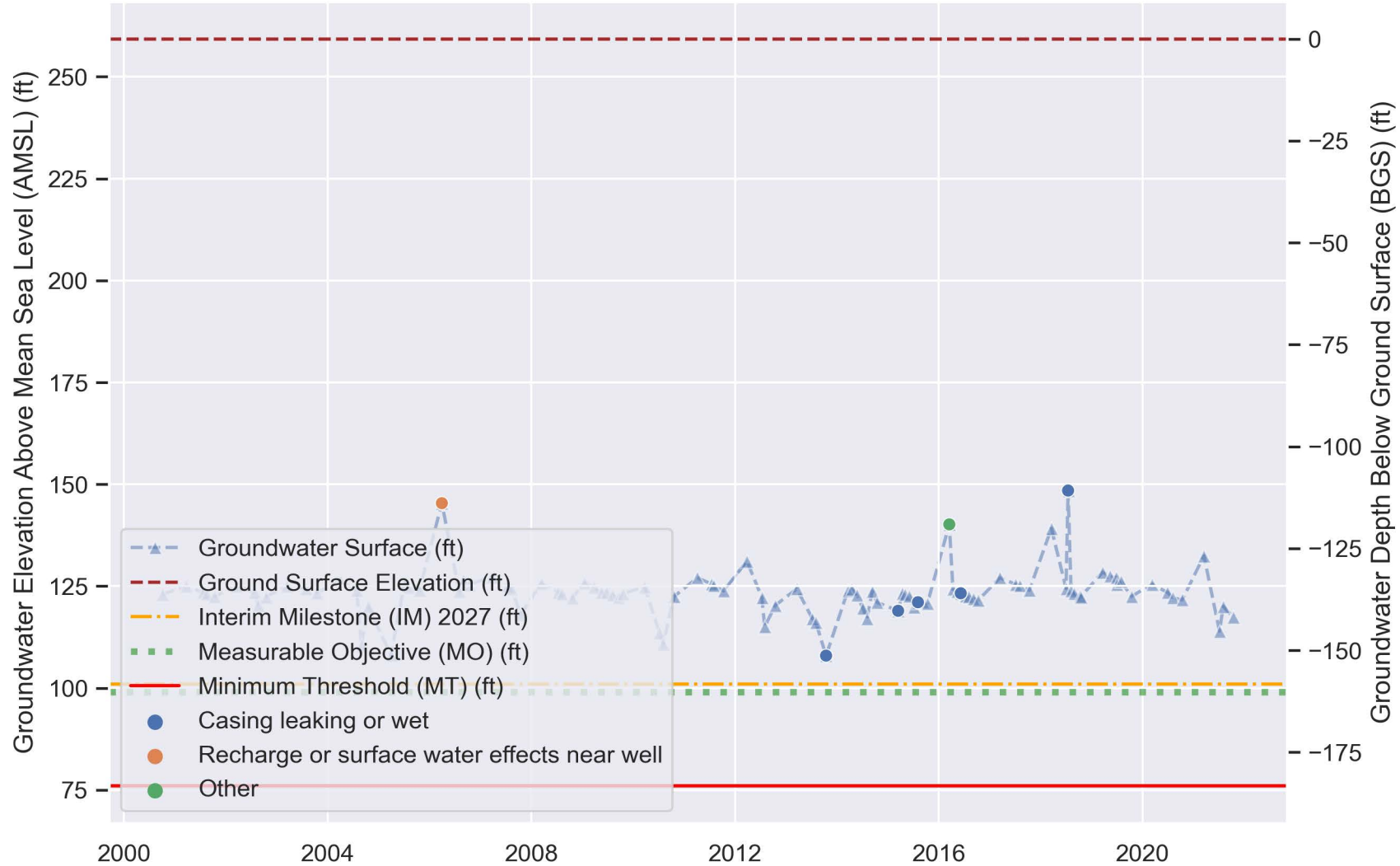


# WYANDOTTE CREEK Subbasin - State Well Number (SWN): 19N04E31F001M

Well Location Map



Perforation 1: 160.0 - 200.0 ft BGS



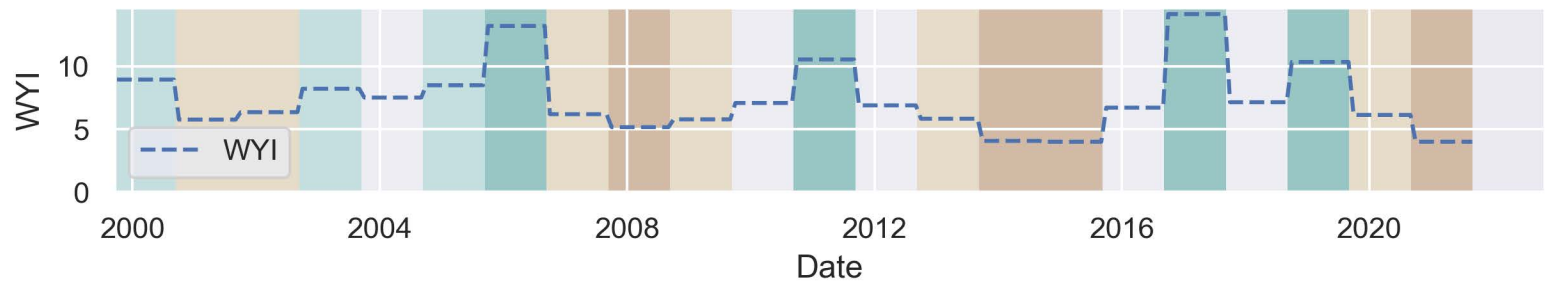
## Sustainable Management Criteria:

IM (2027) = 101.0 ft AMSL

MO = 99.0 ft AMSL

MT = 76.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



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# Appendix B

Explanation of Sustainable Management Criteria

## Appendix B: Explanation of Sustainable Management Criteria

The Sustainable Groundwater Management Act (SGMA) requires a Groundwater Sustainability Plan (GSP) to define Sustainable Management Criteria (SMC) for the groundwater subbasin. The SMC offer guideposts and guardrails for groundwater managers seeking to achieve sustainable groundwater management. SGMA defines sustainable groundwater management as “the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results,” where the planning and implementation horizon is 50 years with the first 20 years spent working toward achieving sustainable groundwater management and the following 30 years (and beyond) spent maintaining it (California Water Code §10721).

“Undesirable Results” are associated with up to six Sustainability Indicators (SI), including groundwater levels, groundwater storage, water quality, seawater intrusion, land subsidence, and interconnected surface water. SGMA defines undesirable results as those having significant and unreasonable negative impacts. Failure to avoid undesirable results on the part of the GSAs may lead to intervention by the State. Once the sustainability goal and undesirable results have been locally identified, projects and management actions are formulated to achieve the sustainability goal and avoid undesirable results.



### *SI and associated Undesirable Results, if significant and unreasonable*

The terminology for describing the SMC is defined as follows:

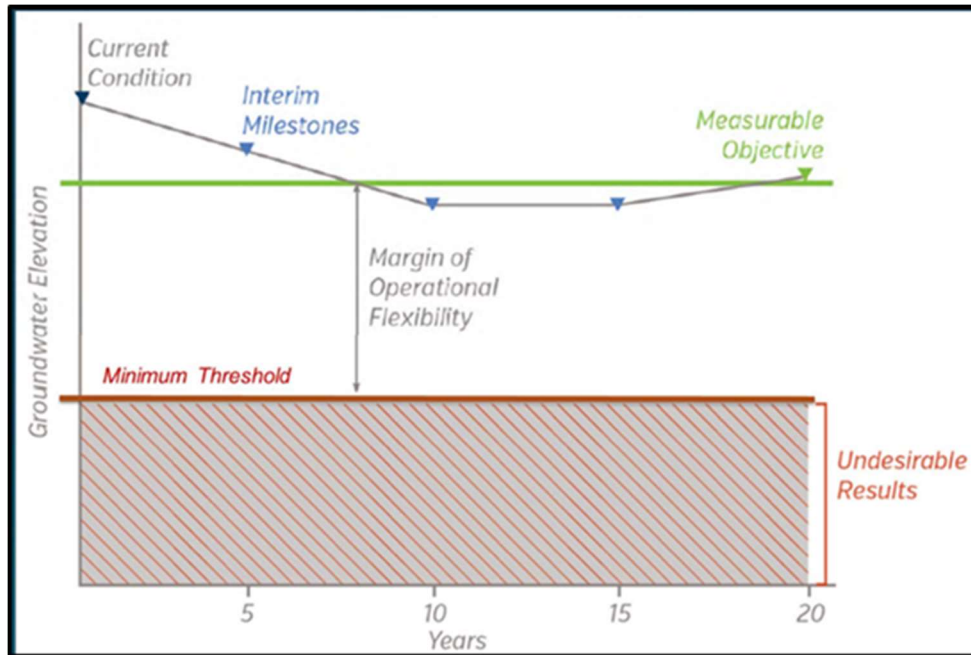
**Undesirable Results** – Significant and unreasonable negative impacts associated with each SI.

**Minimum Threshold (MT)** – Quantitative threshold for each SI used to define the point at which undesirable results may begin to occur.

**Measurable Objective (MO)** – Quantitative target that establishes a point above the MT that allows for a range of active management to prevent undesirable results.

**Margin of Operational Flexibility** – The range of active management between the MT and the MO.

**Interim Milestones (IMs)** – Targets set in increments of five years over the implementation period of the GSP offering a path to sustainability.



***Illustration of Terms Used for Describing Sustainable Management Criteria Using the Groundwater Level SI***

The figure above illustrates these terms for the groundwater level SI.

SI are intended to be measured and compared against quantifiable SMC throughout a monitoring framework of Representative Monitoring Site (RMS) wells. Ongoing monitoring of the SI can:

- Determine compliance with the adopted GSP
- Offer a means to evaluate the effectiveness of projects and management actions over time
- Allow for course correction and adaptation in five-year updates
- Facilitate understanding among diverse stakeholders
- Support decision-making on the part of the GSA into the future

The SMC for the Wyandotte Creek Subbasin is fully explained and defined in Section 3 of the GSP available here:

<https://sgma.water.ca.gov/portal/gsp/preview/99>



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# Appendix C

GSP Annual Reporting Elements Guide

## Groundwater Sustainability Plan Annual Report Elements Guide

Basin Name	Wyandotte Creek Subbasin		
GSP Local ID			
<b>California Code of Regulations - GSP Regulation Sections</b>	<b>Groundwater Sustainability Plan Elements</b>	<b>Document page number(s) that address the applicable GSP element.</b>	<b>Notes: Briefly describe the GSP element does not apply.</b>
<b>Article 5</b>	<b>Plan Contents</b>		
<b>Subarticle 4</b>	<b>Monitoring Networks</b>		
<b>§ 354.40</b>	<b>Reporting Monitoring Data to the Department</b>		
	Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.	14	Monitoring data submitted to the Monitoring Network Module.
	Note: Authority cited: Section 10733.2, Water Code. Reference: Sections 10728, 10728.2, 10733.2 and 10733.8, Water Code.		
<b>Article 7</b>	<b>Annual Reports and Periodic Evaluations by the Agency</b>		
<b>§ 356.2</b>	<b>Annual Reports</b>		
	Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:		
	(a) General information, including an executive summary and a location map depicting the basin covered by the report.	4:11	
	(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:		
	(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:		
	(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.	13, 15:16	
	(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.	12, 29:39	
	(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.	17:19	
	(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.	19:20	
	(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.	20	
	(5) Change in groundwater in storage shall include the following:		
	(A) Change in groundwater in storage maps for each principal aquifer in the basin.	20:22	
	(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.	23	
	(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.	23:27	