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Figures  
Section 2

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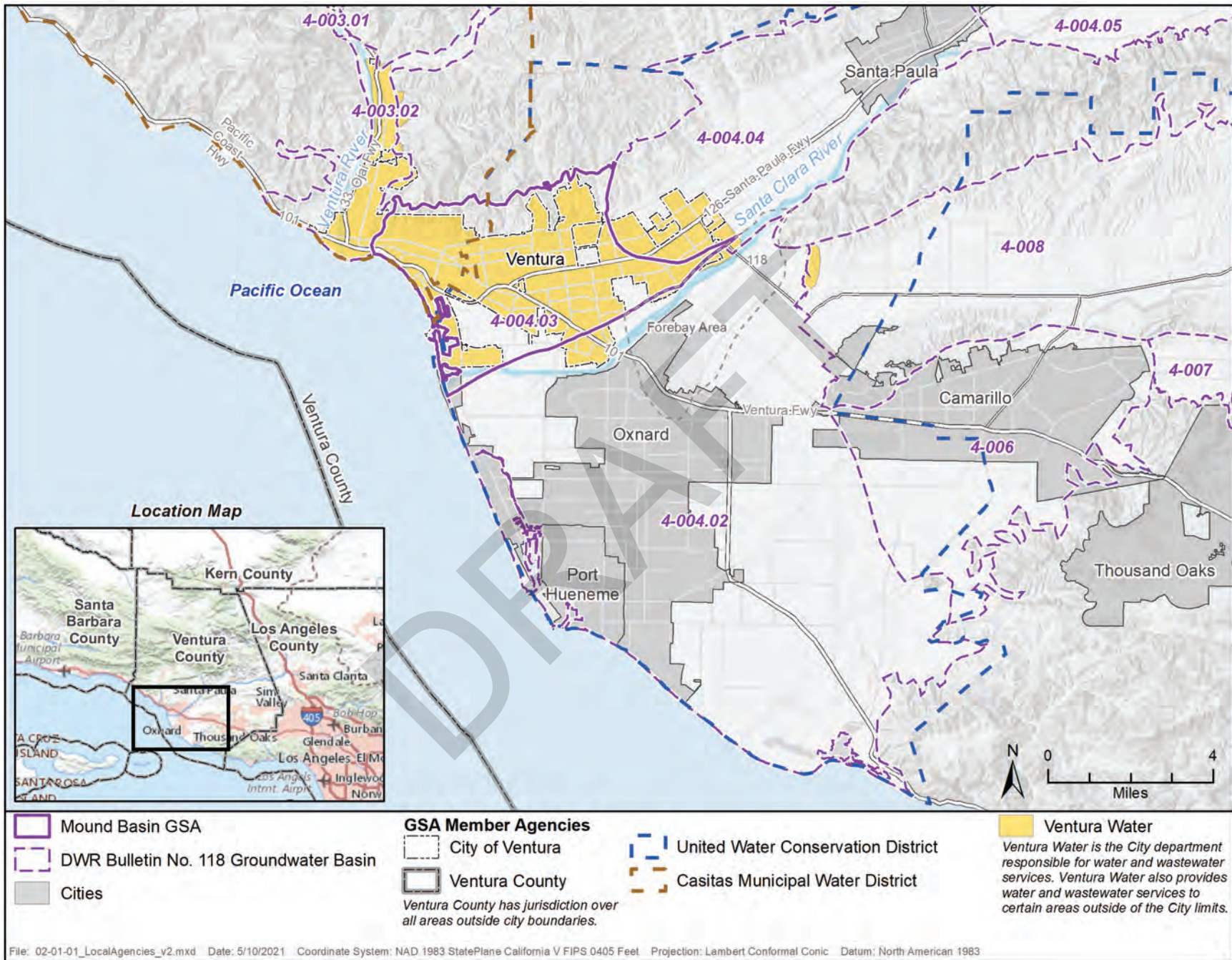


Figure 2.1-01 Local Agency Boundary Map.

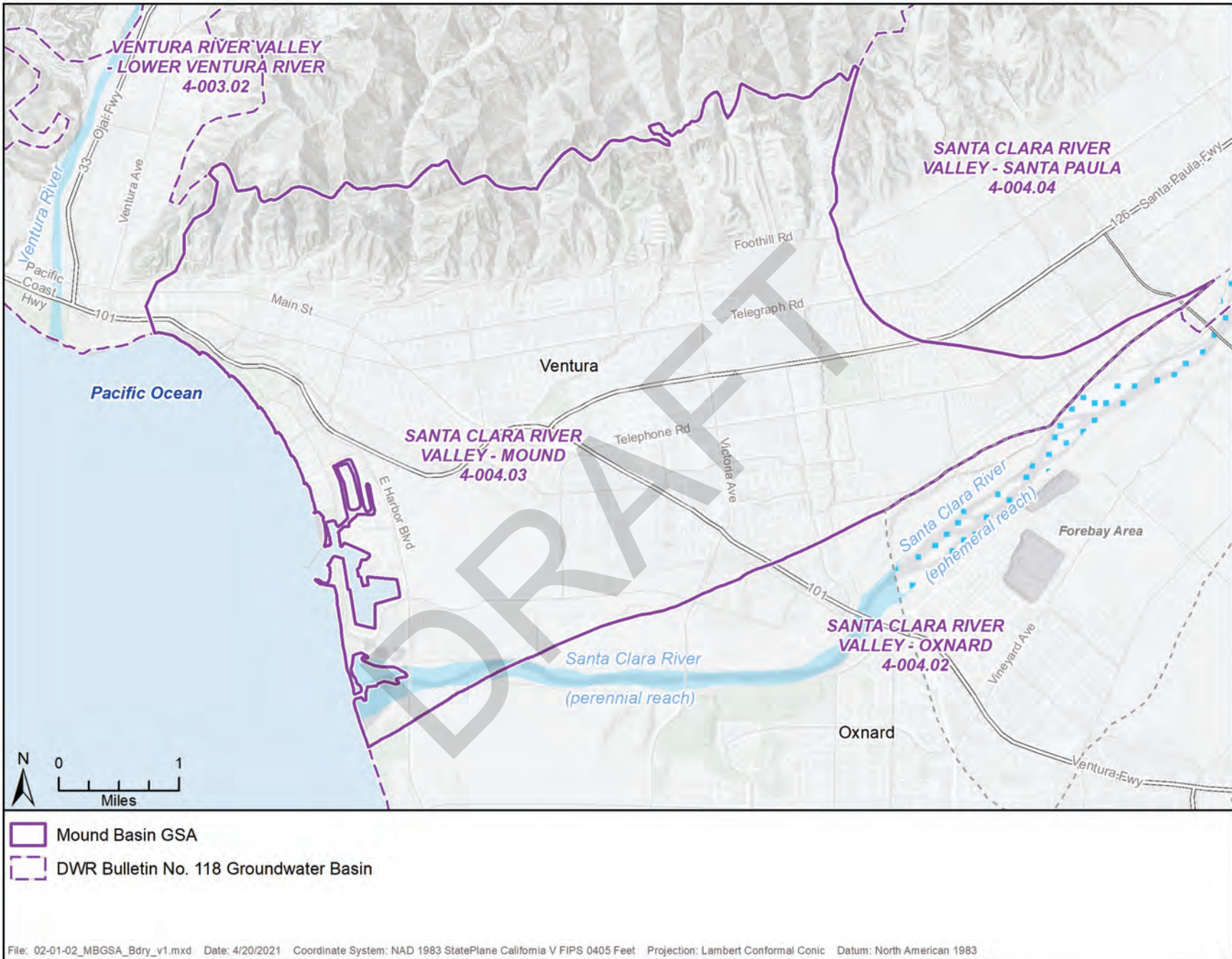


Figure 2.1-02 Mound Basin Groundwater Sustainability Agency Boundary Map.

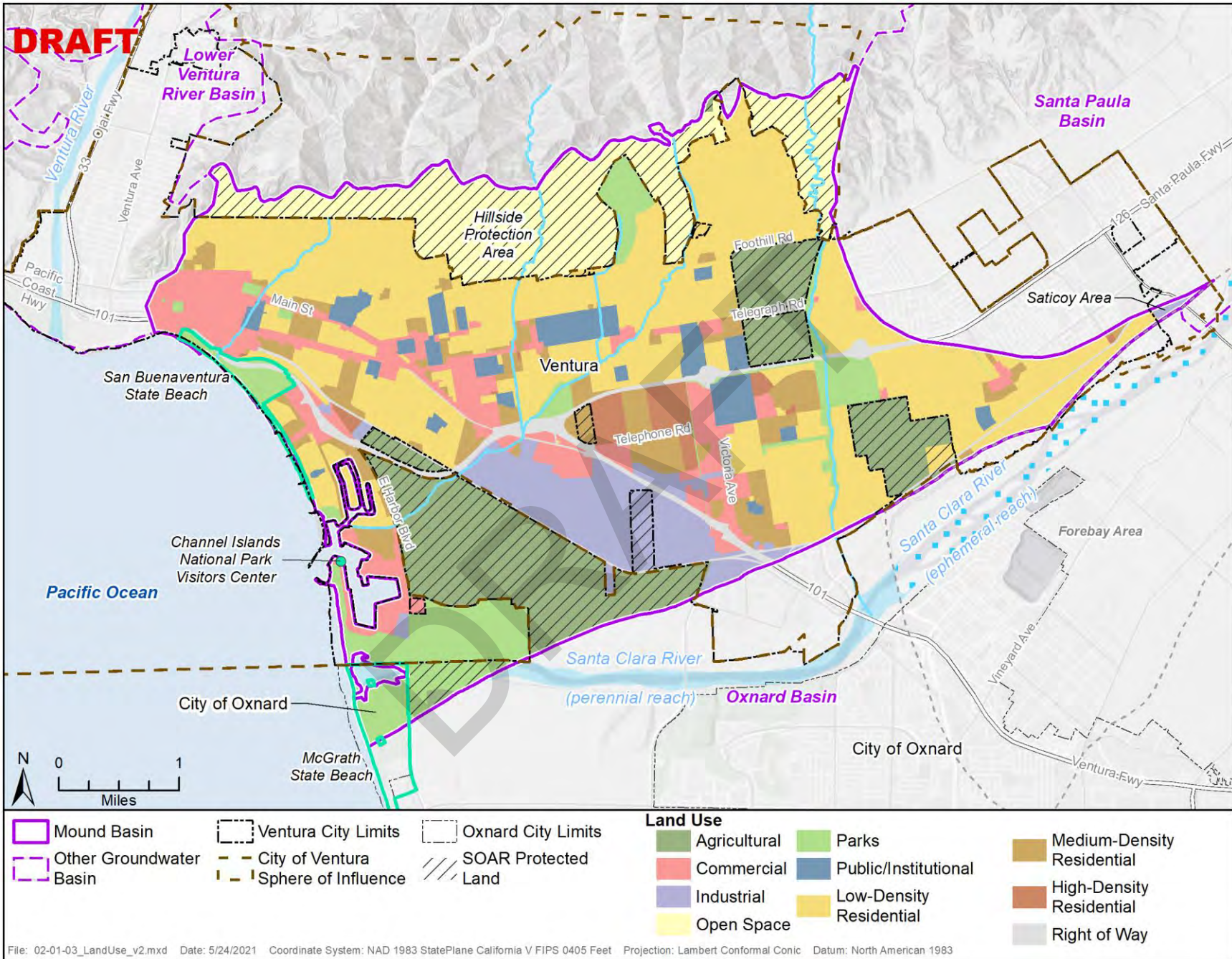


Figure 2.1-03 Mound Basin Land Use Map.

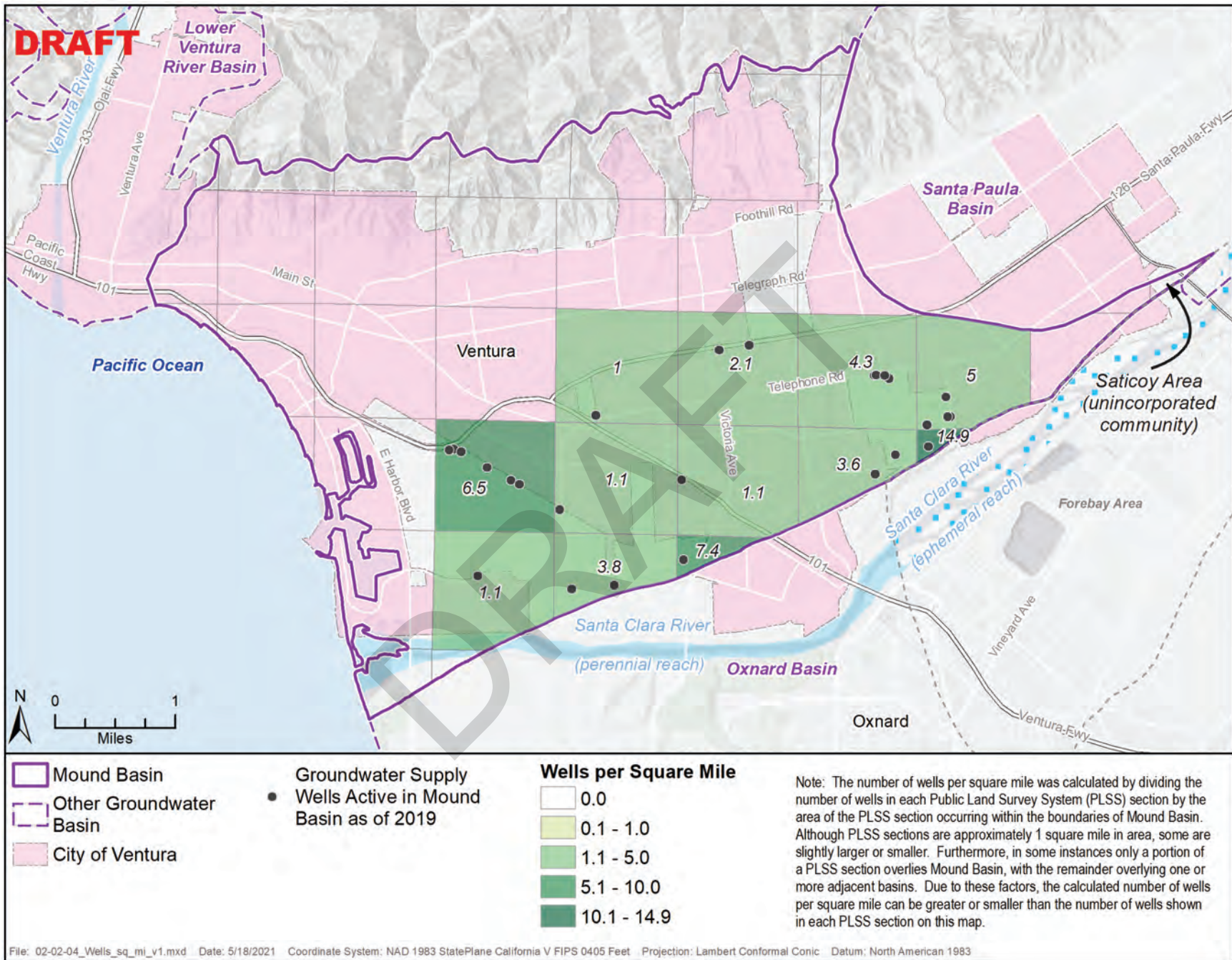


Figure 2.2-01 Groundwater Supply Wells Active in Mound Basin as of 2019 and Communities Dependent on Groundwater.

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## Figures

### Section 3

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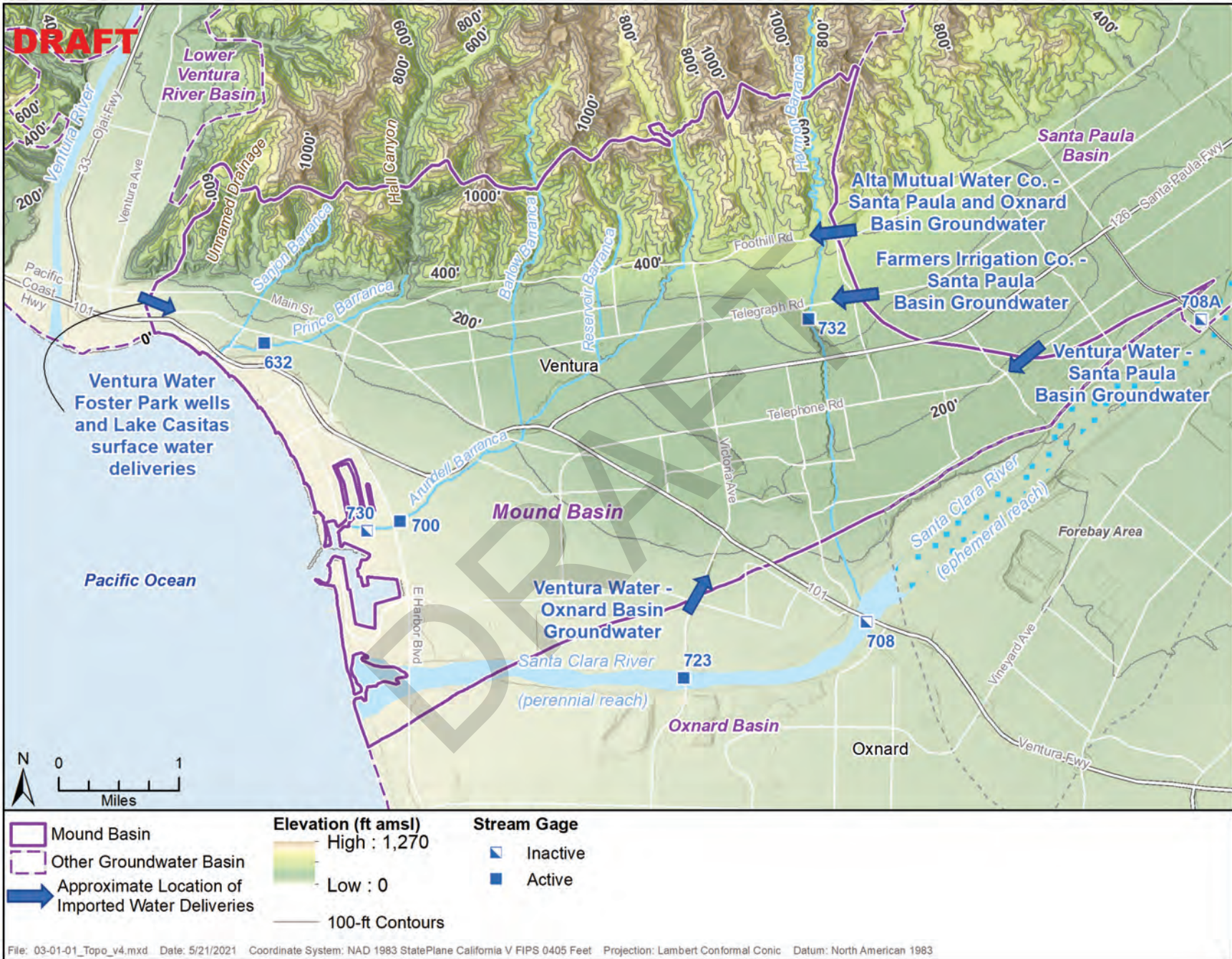


Figure 3.1-01 Topographic Map of Mound Basin.

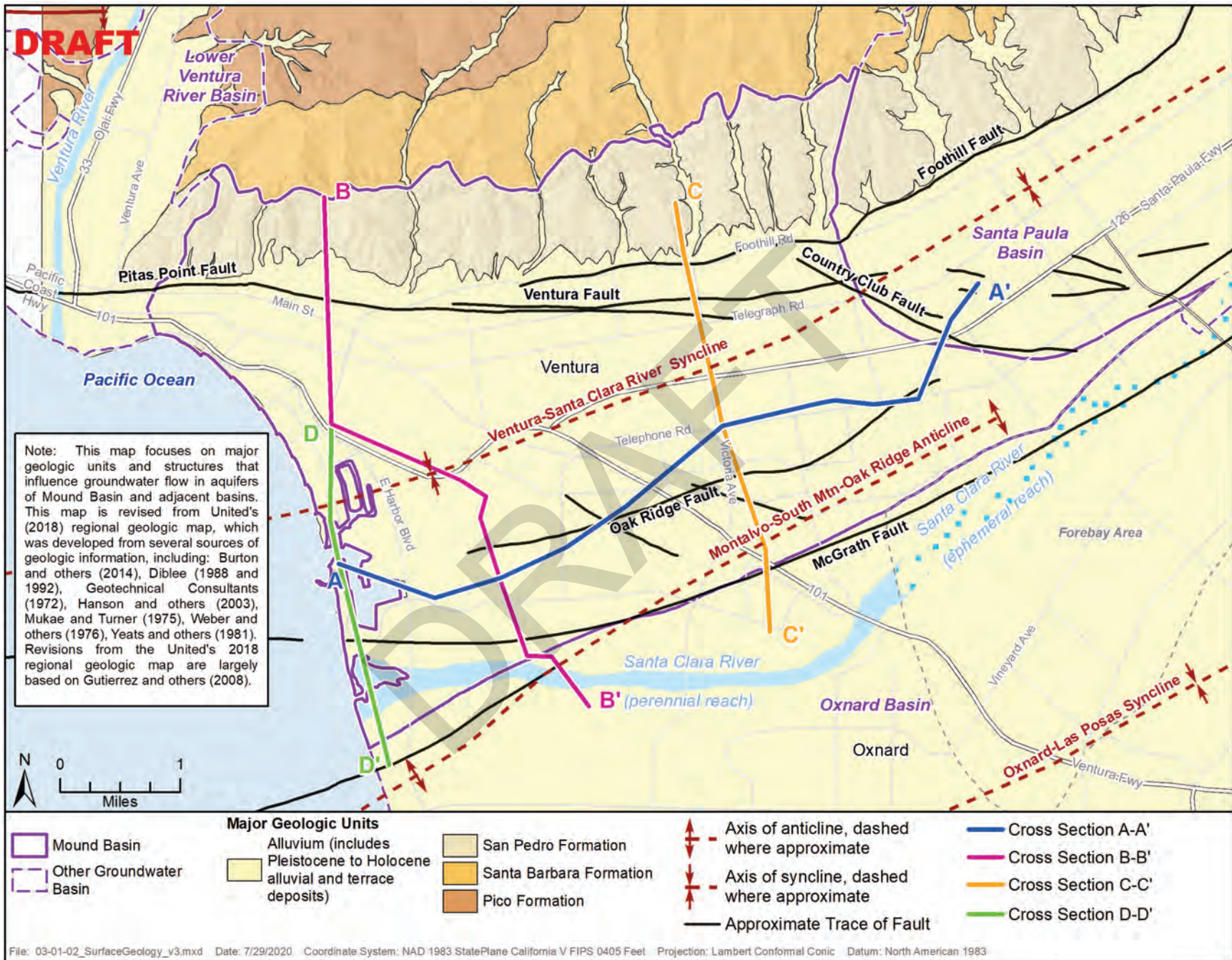


Figure 3.1-02 Simplified Surface Geologic Map of Mound Basin, showing Locations of Cross-Section Lines.



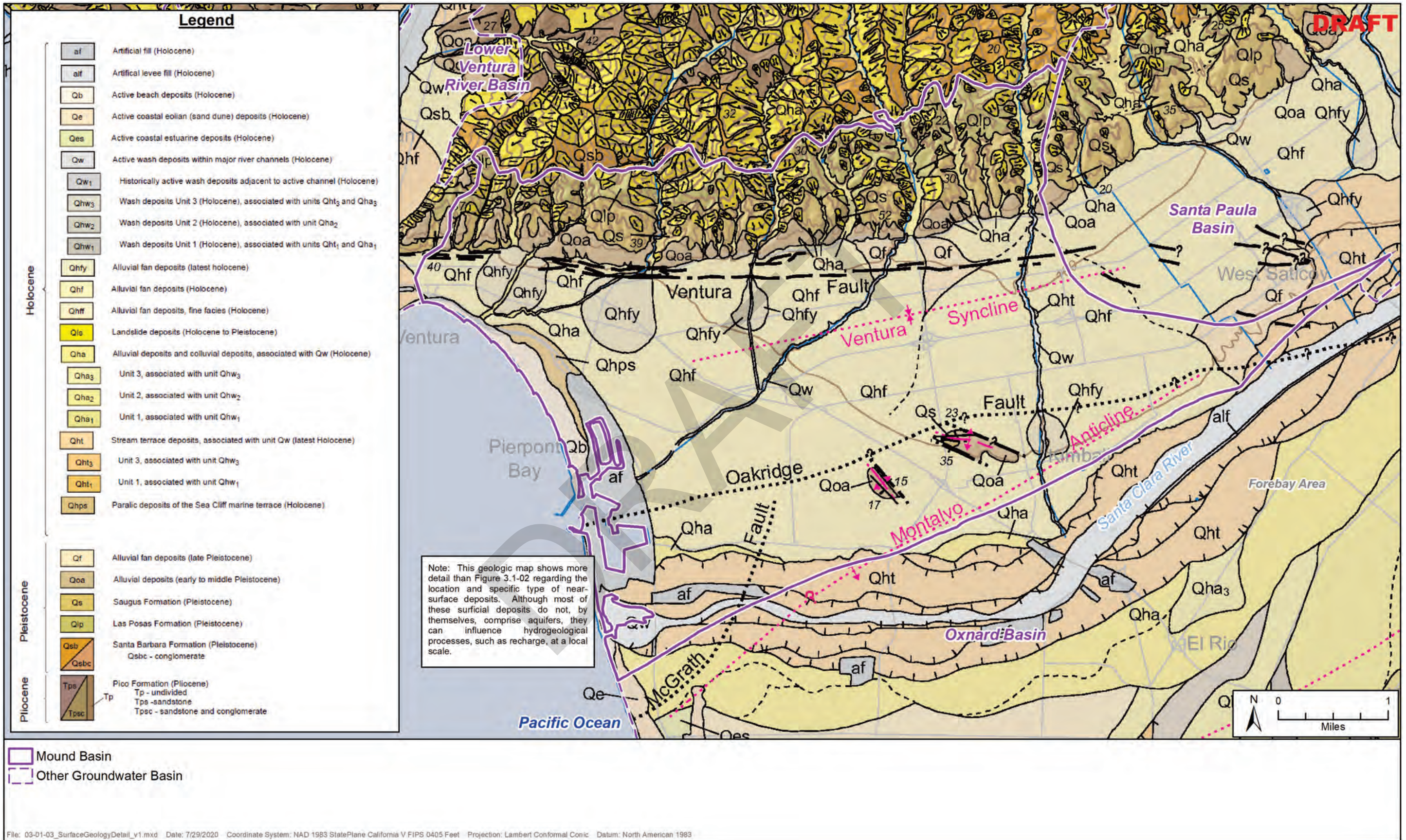
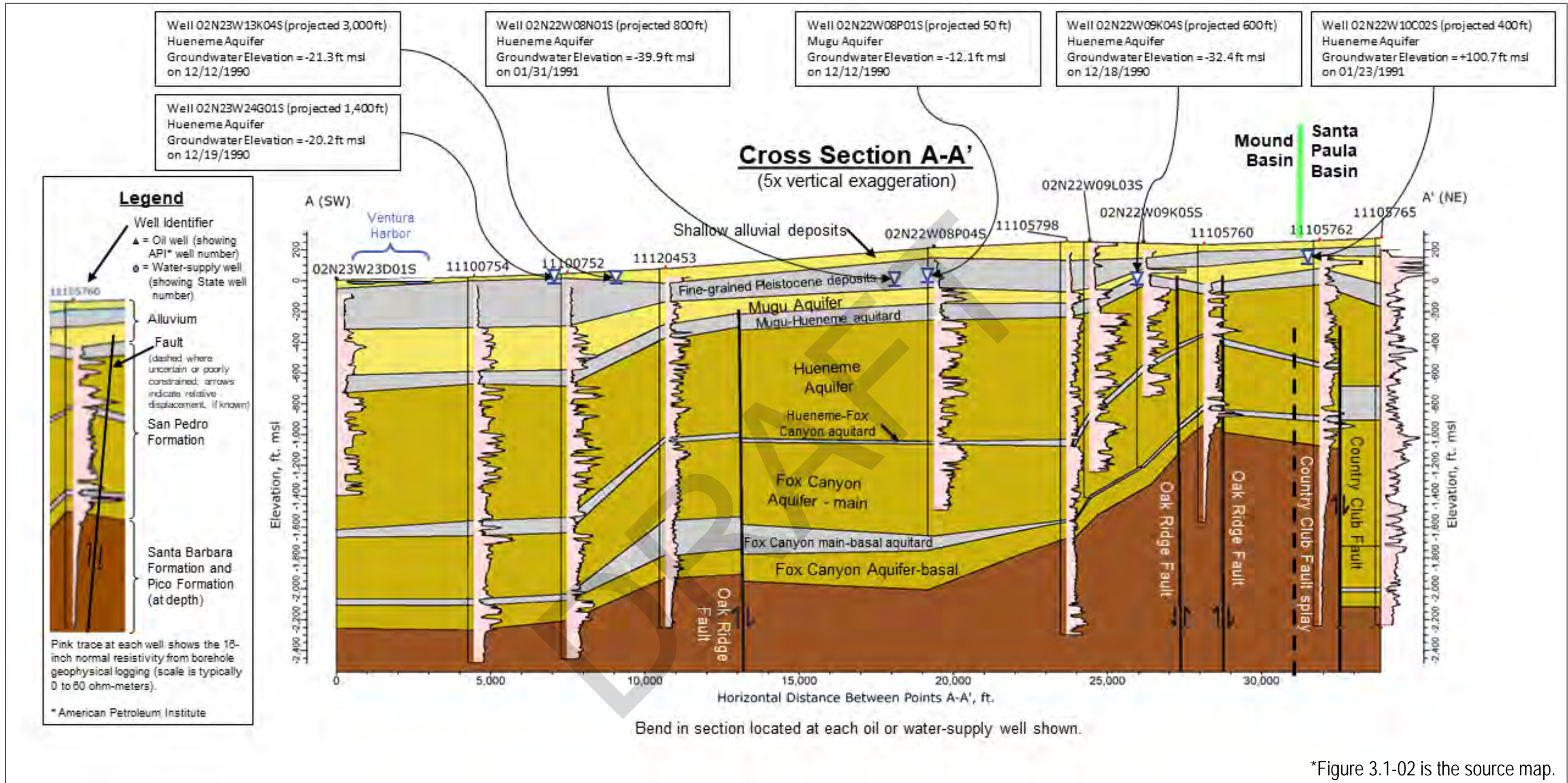


Figure 3.1-03 Detailed Surface Geologic Map of Mound Basin, from Gutierrez et al. (2008).

Hydrostratigraphic Unit	Formation	Age	Aquifer System	United Model Layer
Shallow Alluvial Deposits (rarely used for water supply)	Unnamed alluvium	Holocene to Recent	Shallow	1
Fine-grained Pleistocene deposits (behaves as an aquitard; abuts or interfingers with Oxnard Aquifer along southern boundary of Mound Basin)		Late Pleistocene	Upper Aquifer System	2
				3
				4
Mugu Aquifer				5
Mugu – Hueneme aquitard			6	
Hueneme Aquifer	San Pedro Formation	Pleistocene	Lower Aquifer System	7
Hueneme – Fox Canyon aquitard				8
Fox Canyon Aquifer – main				9
Fox Canyon upper-basal aquitard				10
Fox Canyon Aquifer – basal (low hydraulic conductivity in Mound Basin)				11

Figure 3.1-04 Schematic Illustration of HSUs, Aquifer Systems, Formations, Ages, and Model Layers.



\*Figure 3.1-02 is the source map.

Figure 3.1-05 Cross-Section A-A' (longitudinal).

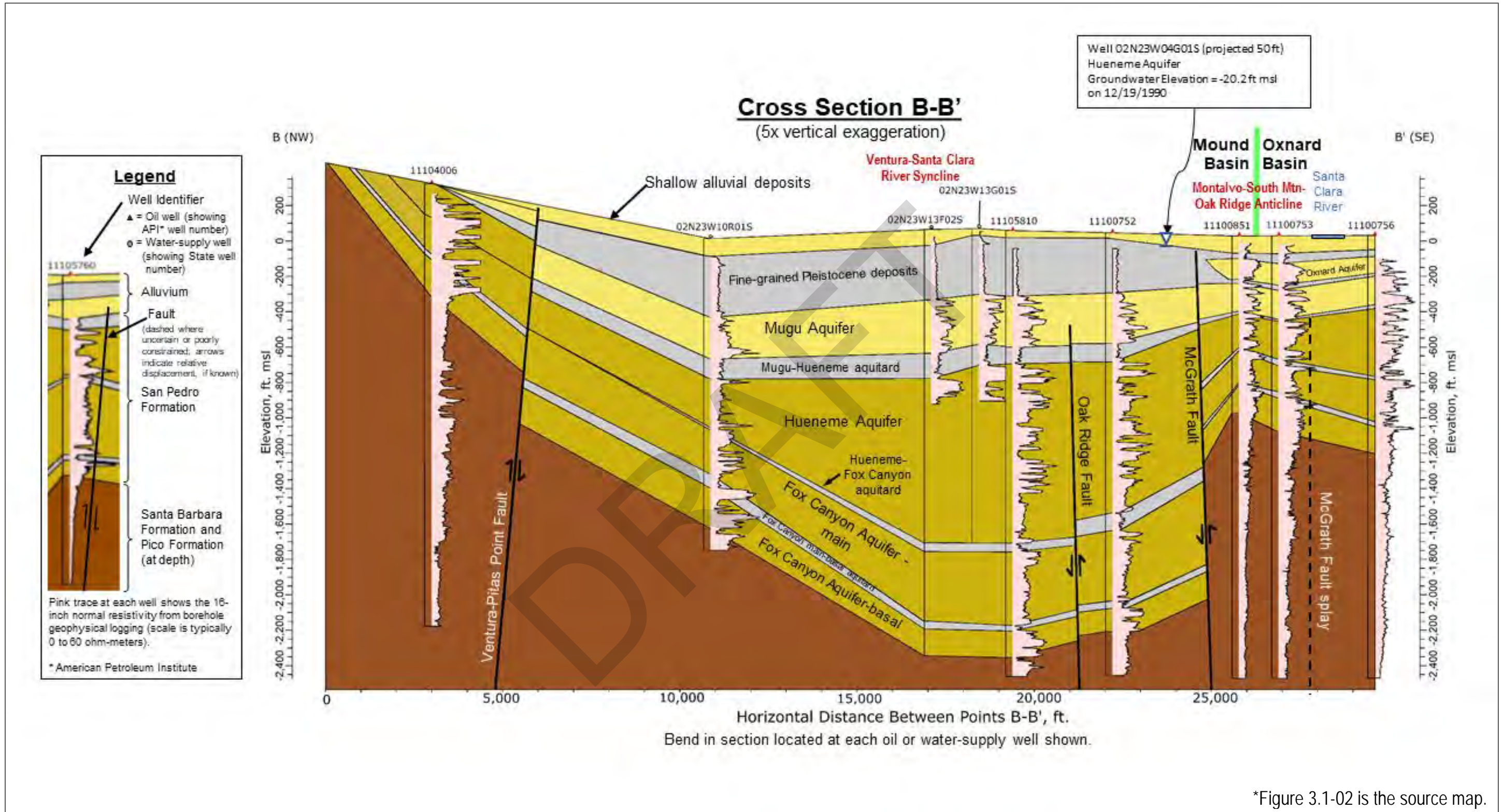
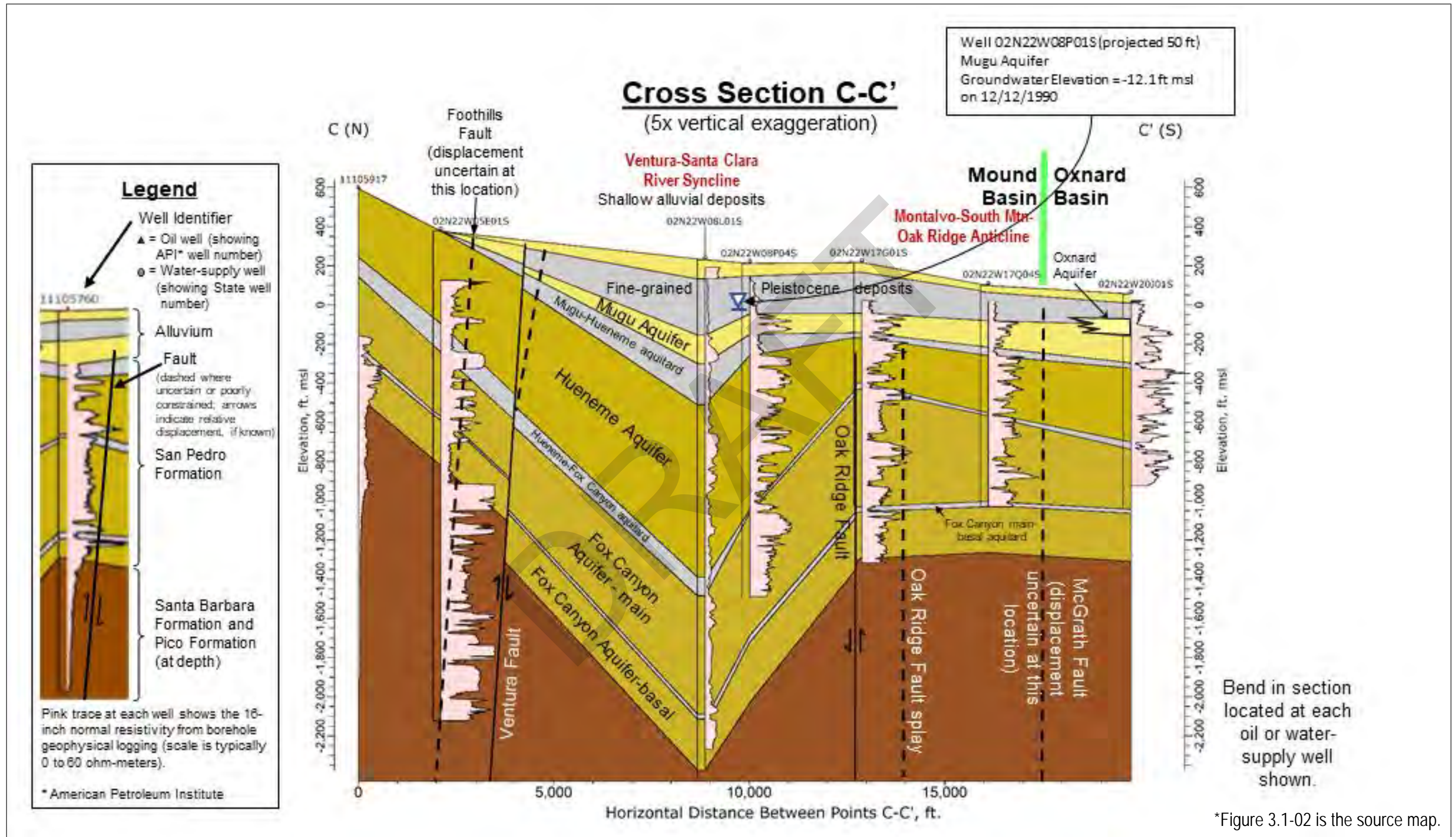
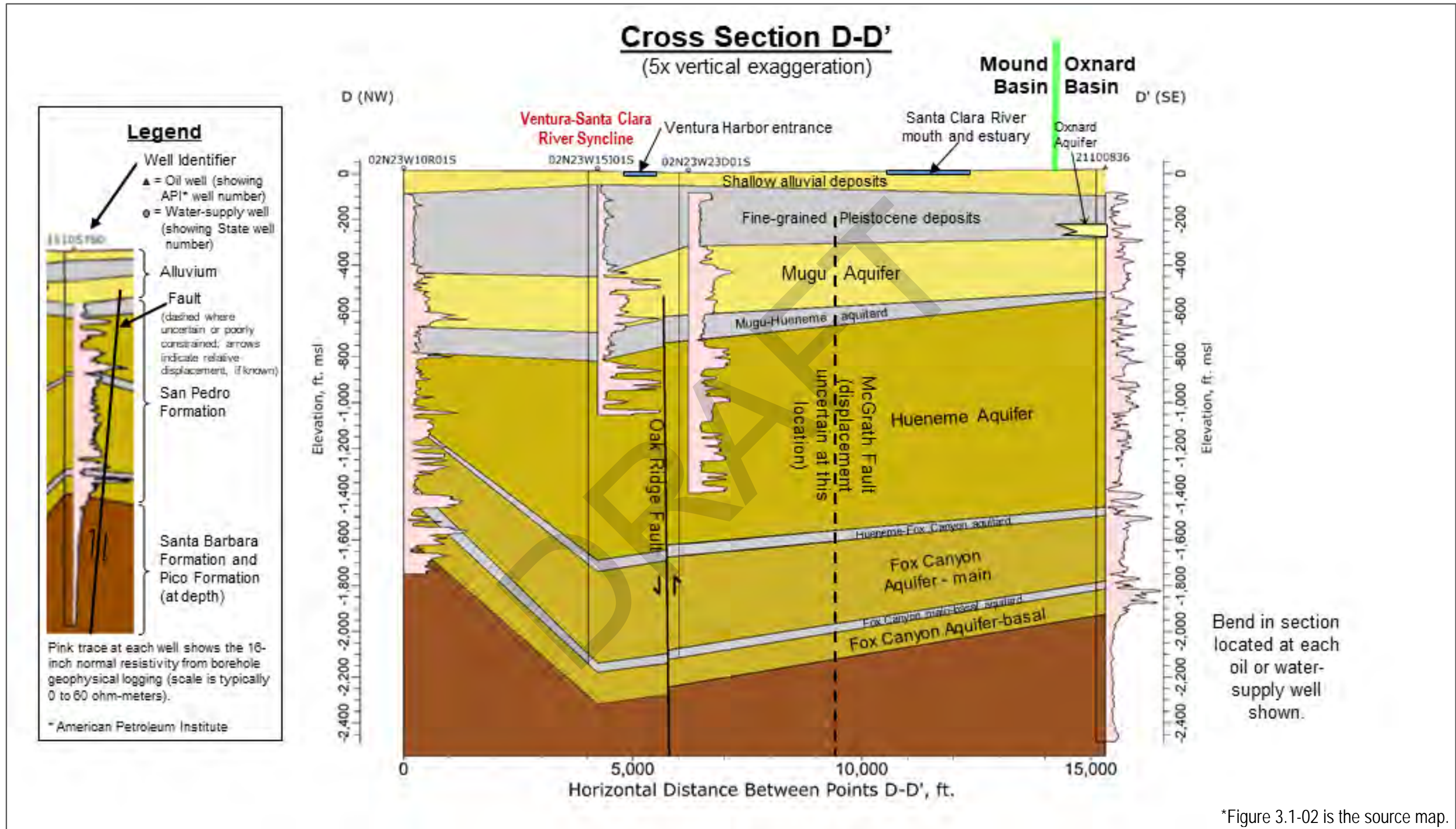


Figure 3.1-06 Cross-Section B-B' (transverse).



\*Figure 3.1-02 is the source map.

Figure 3.1-07 Cross Section C-C' (transverse).



\*Figure 3.1-02 is the source map.

Figure 3.1-08 Cross Section D-D' (transverse).

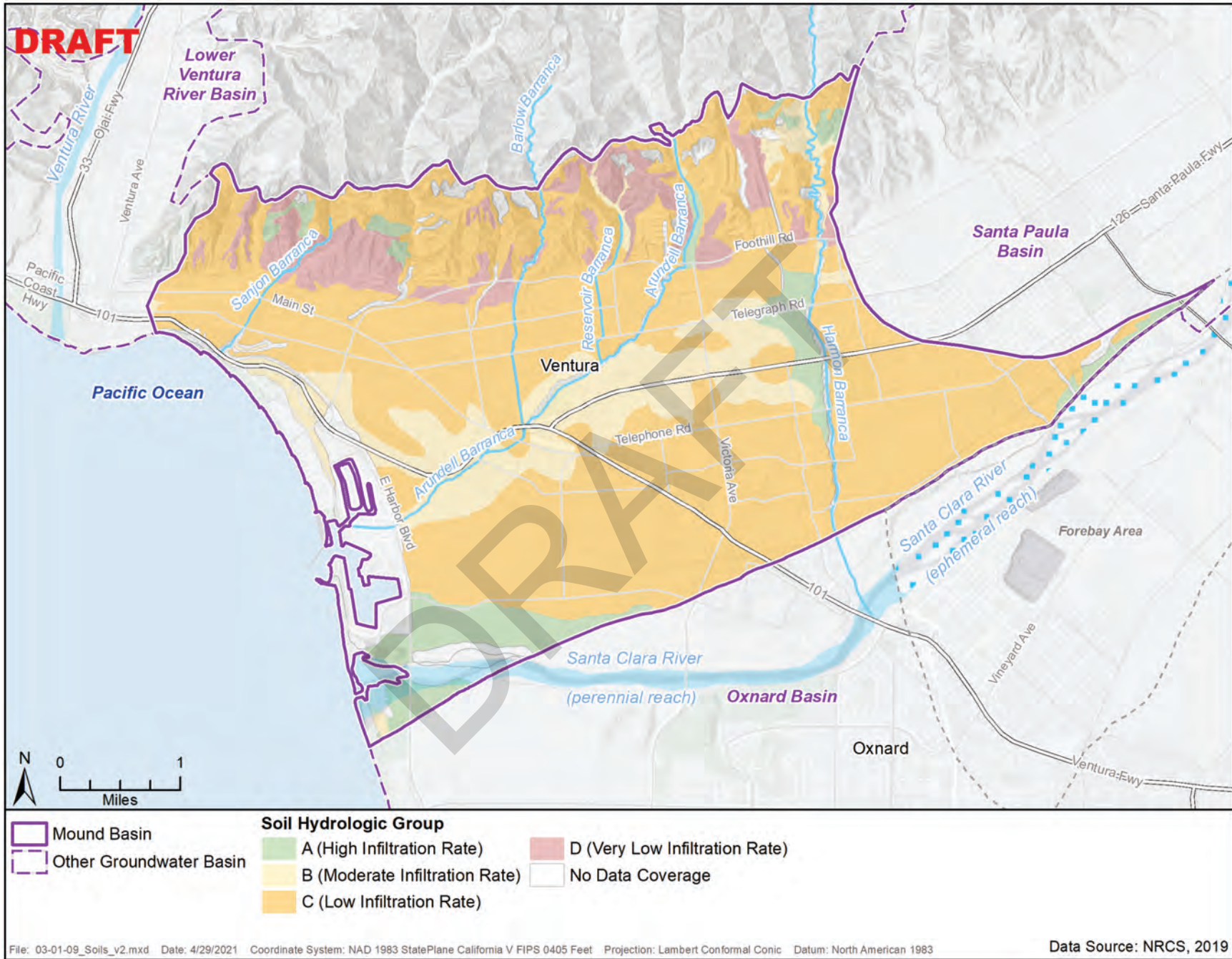


Figure 3.1-09 Soil Characteristics Map.

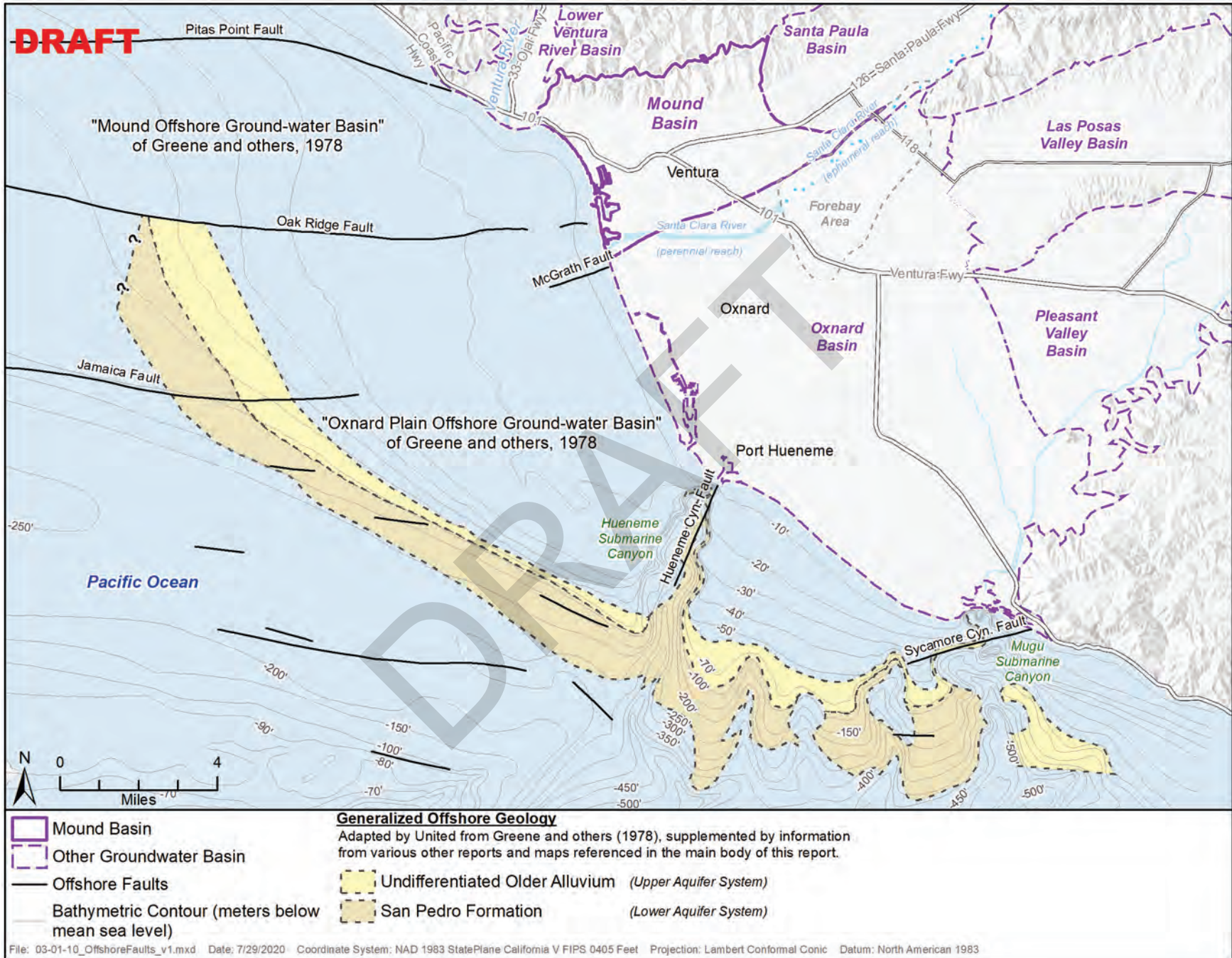


Figure 3.1-10 Offshore Geologic Conditions Influencing Potential for Seawater Intrusion.



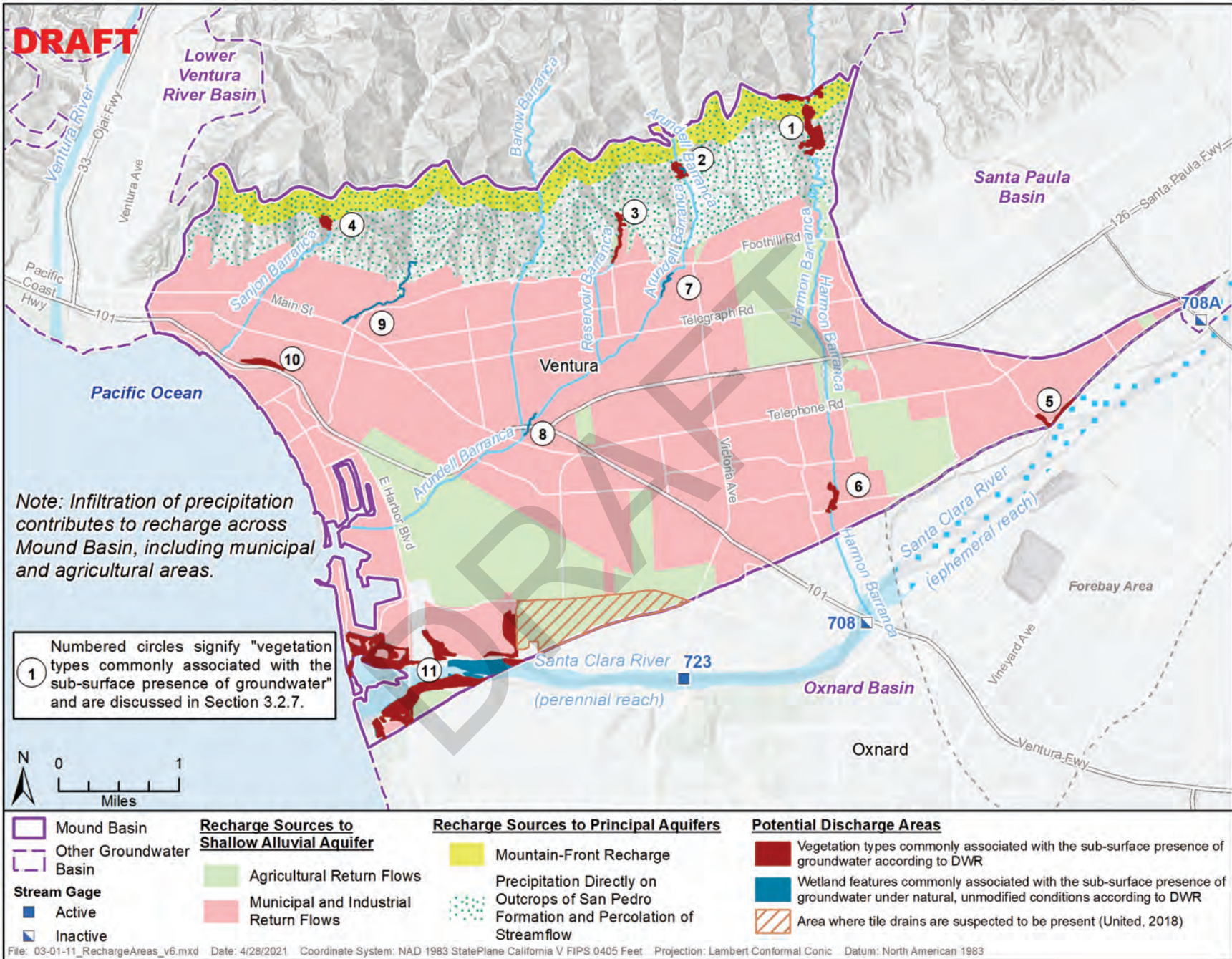


Figure 3.1-11 Map of Groundwater Recharge and Discharge Areas.

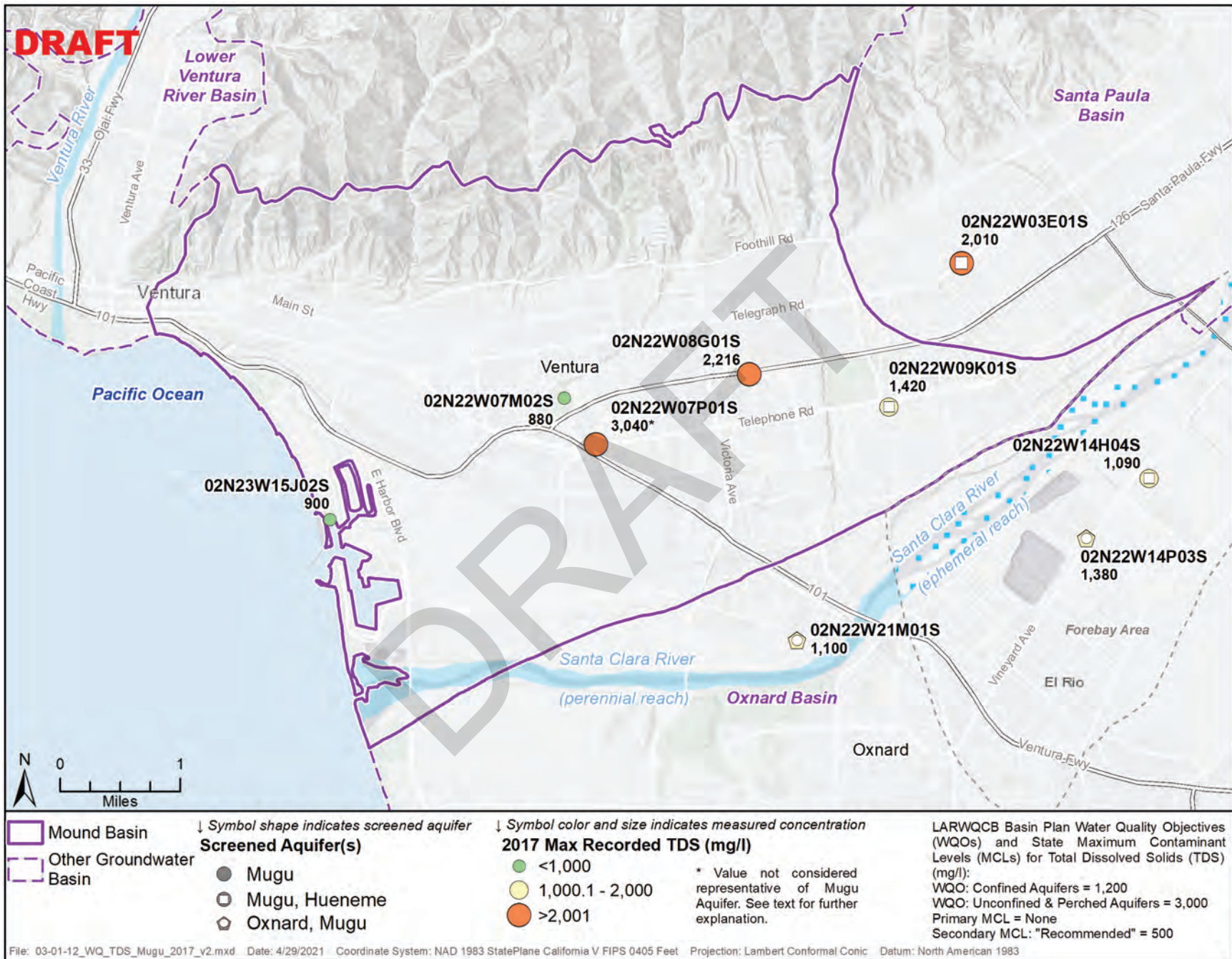


Figure 3.1-12 Maximum TDS Concentrations Detected in Mugu Aquifer during 2017.

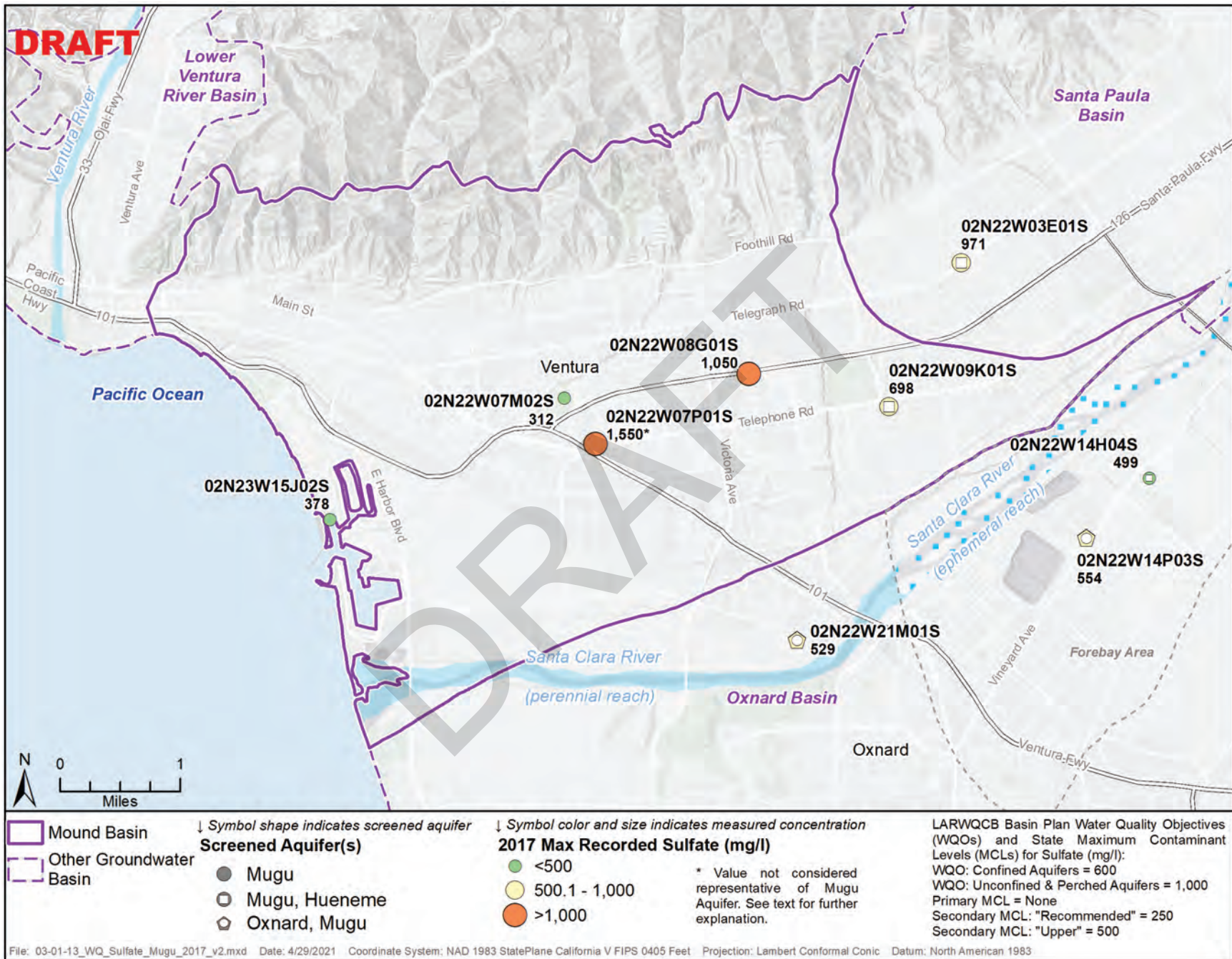


Figure 3.1-13 Maximum Sulfate Concentrations Detected in Mugu Aquifer during 2017.

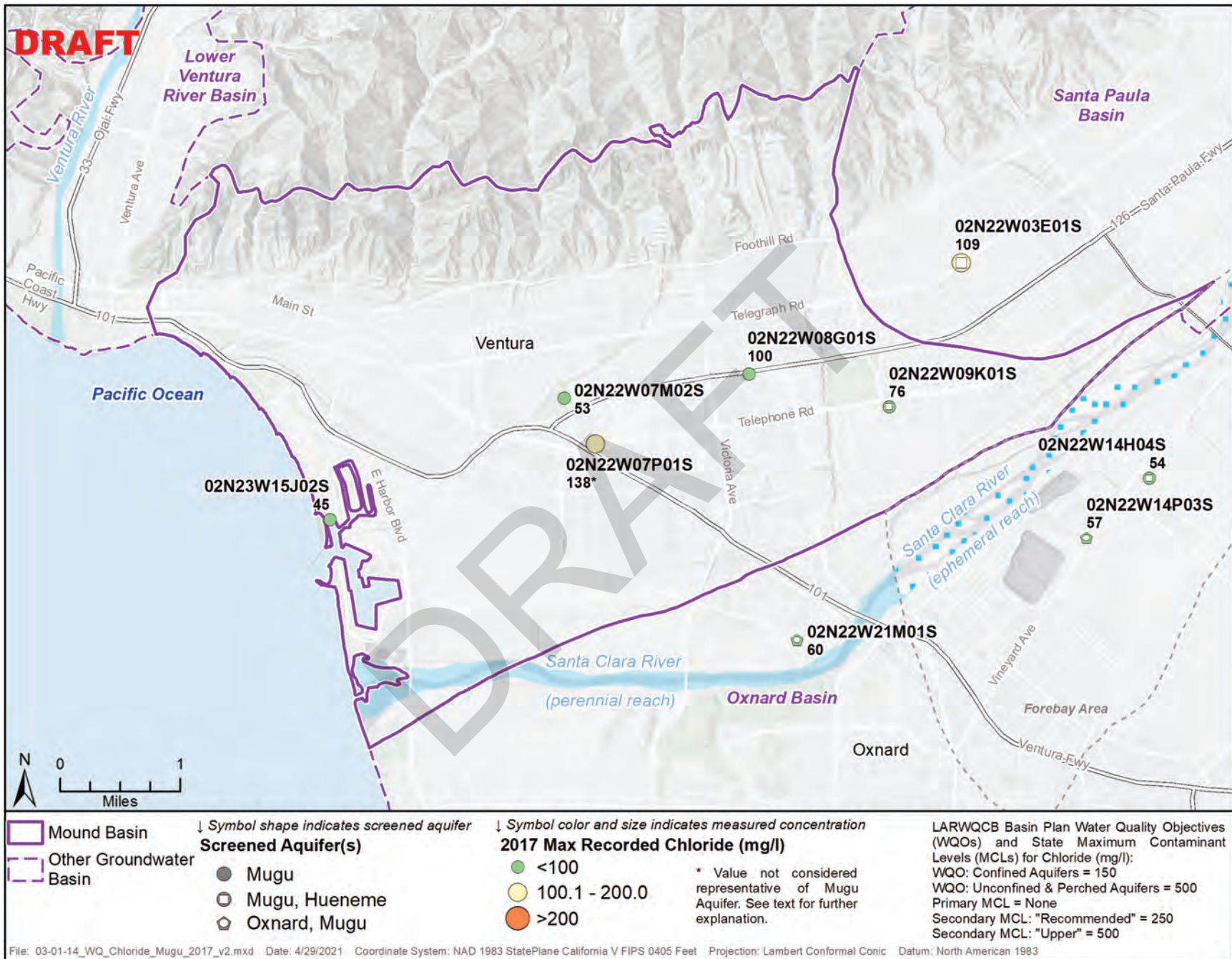


Figure 3.1-14 Maximum Chloride Concentrations Detected in Mugu Aquifer during 2017.

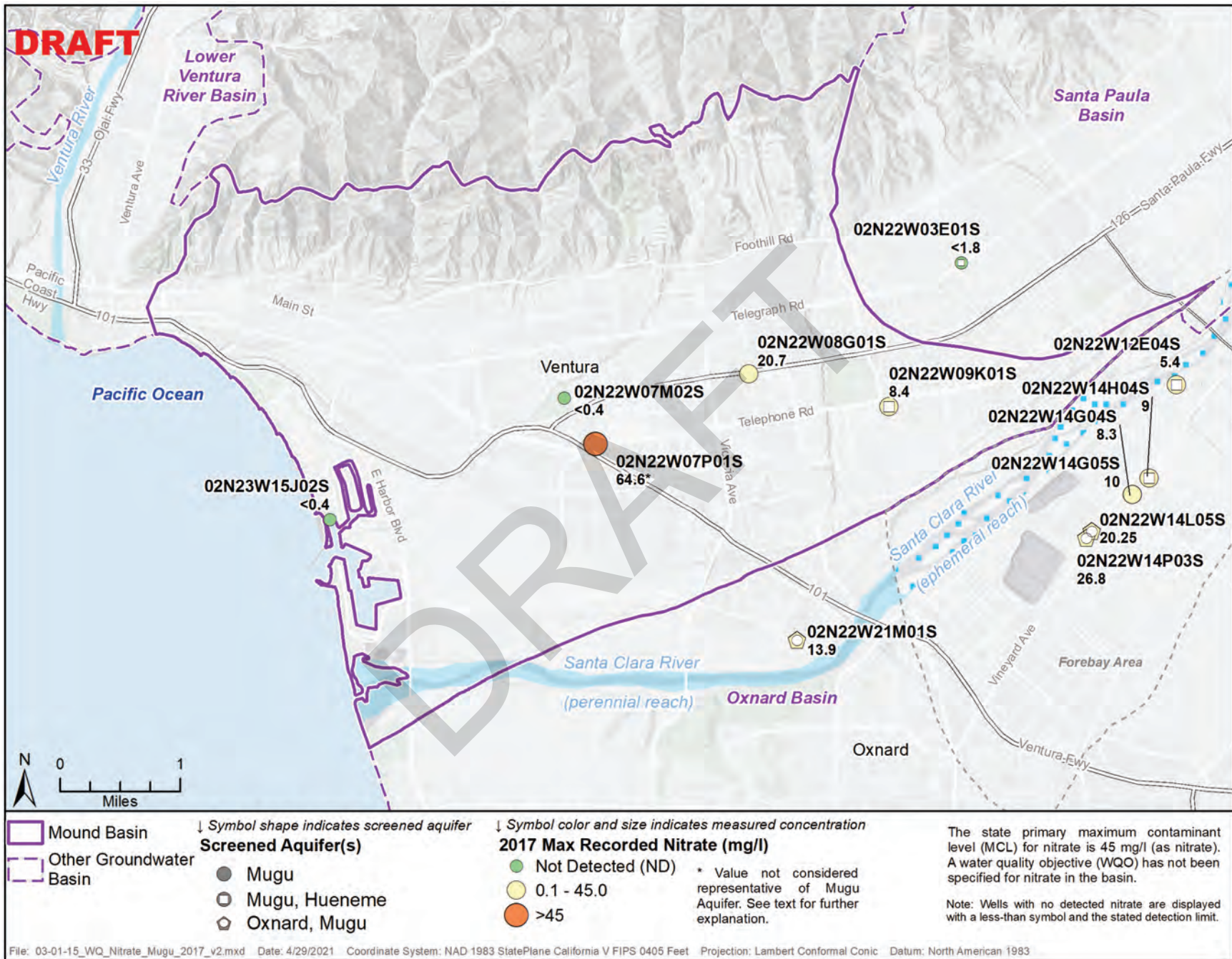


Figure 3.1-15 Maximum Nitrate Concentrations Detected in Mugu Aquifer during 2017.

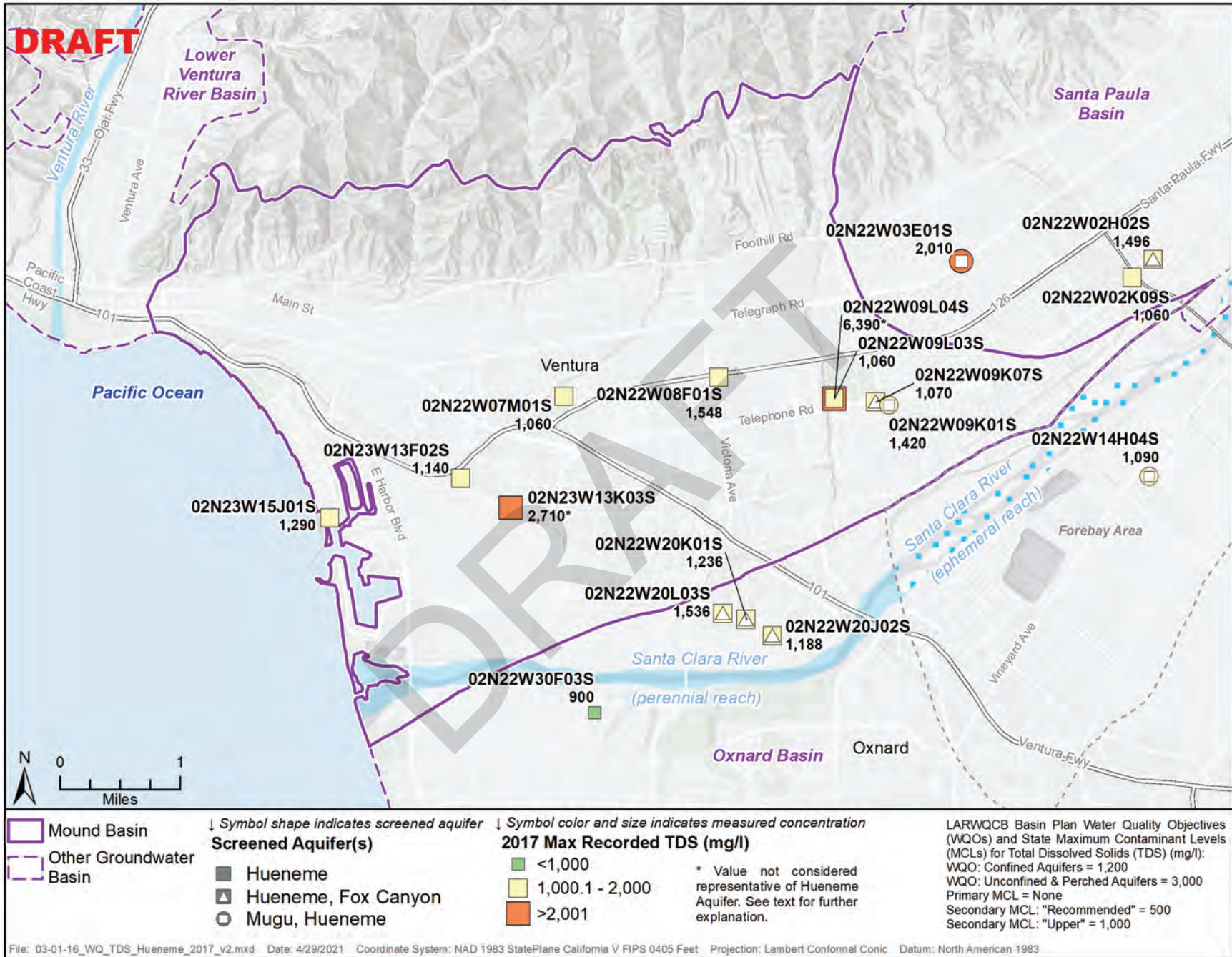


Figure 3.1-16 Maximum TDS Concentrations Detected in Hueneme Aquifer during 2017.

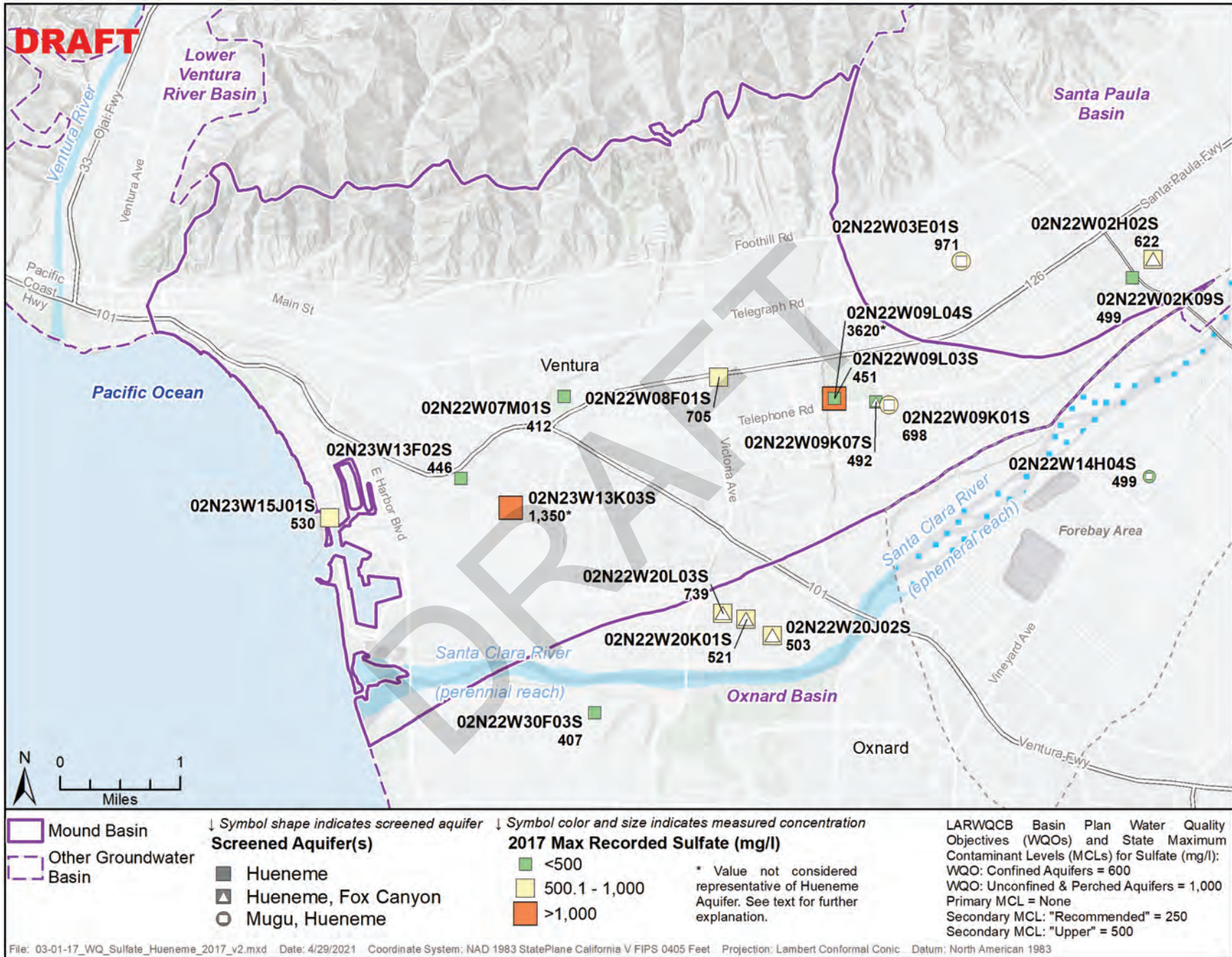


Figure 3.1-17 Maximum Sulfate Concentrations Detected in Hueneme Aquifer during 2017.

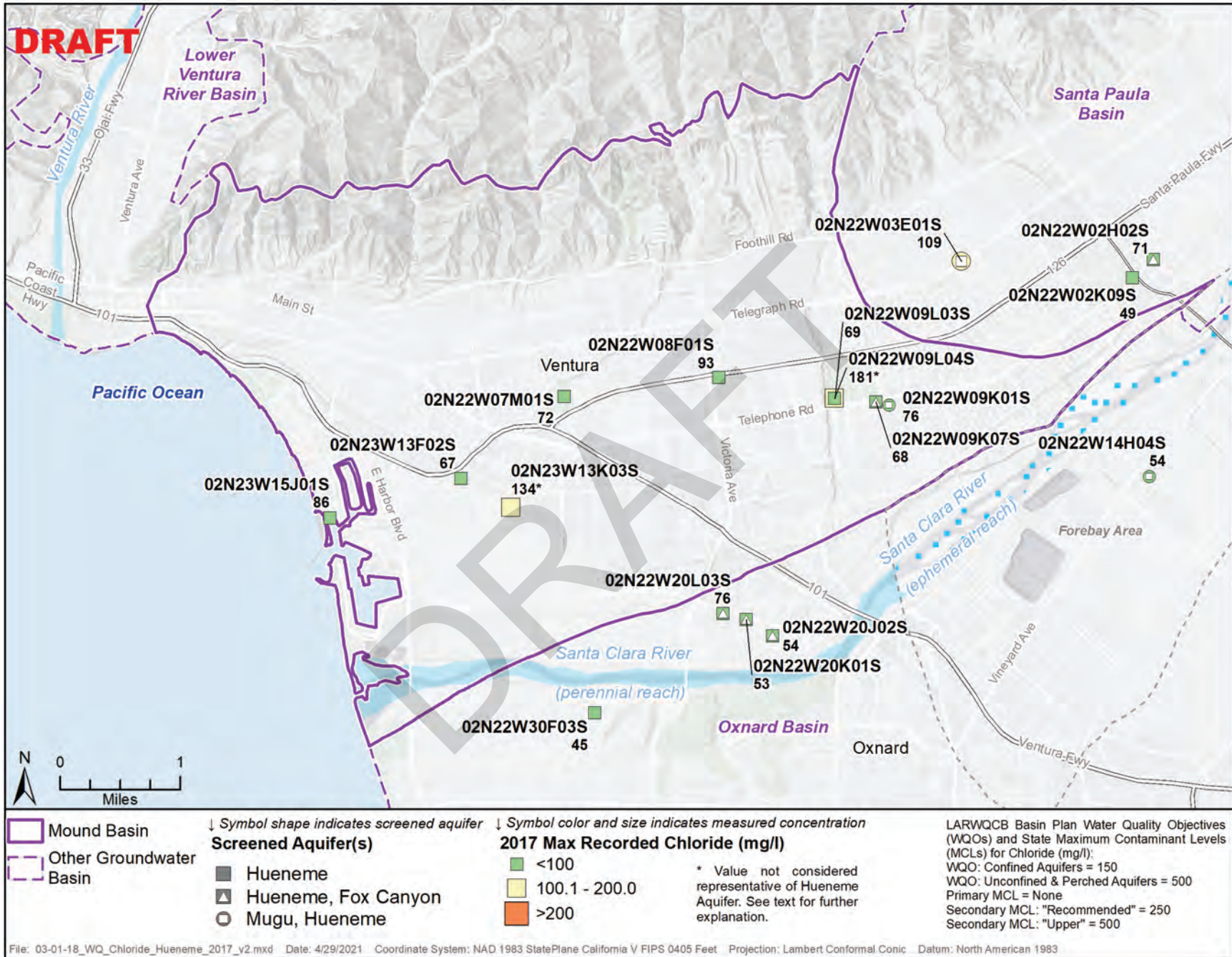


Figure 3.1-18 Maximum Chloride Concentrations Detected in Hueneme Aquifer during 2017.



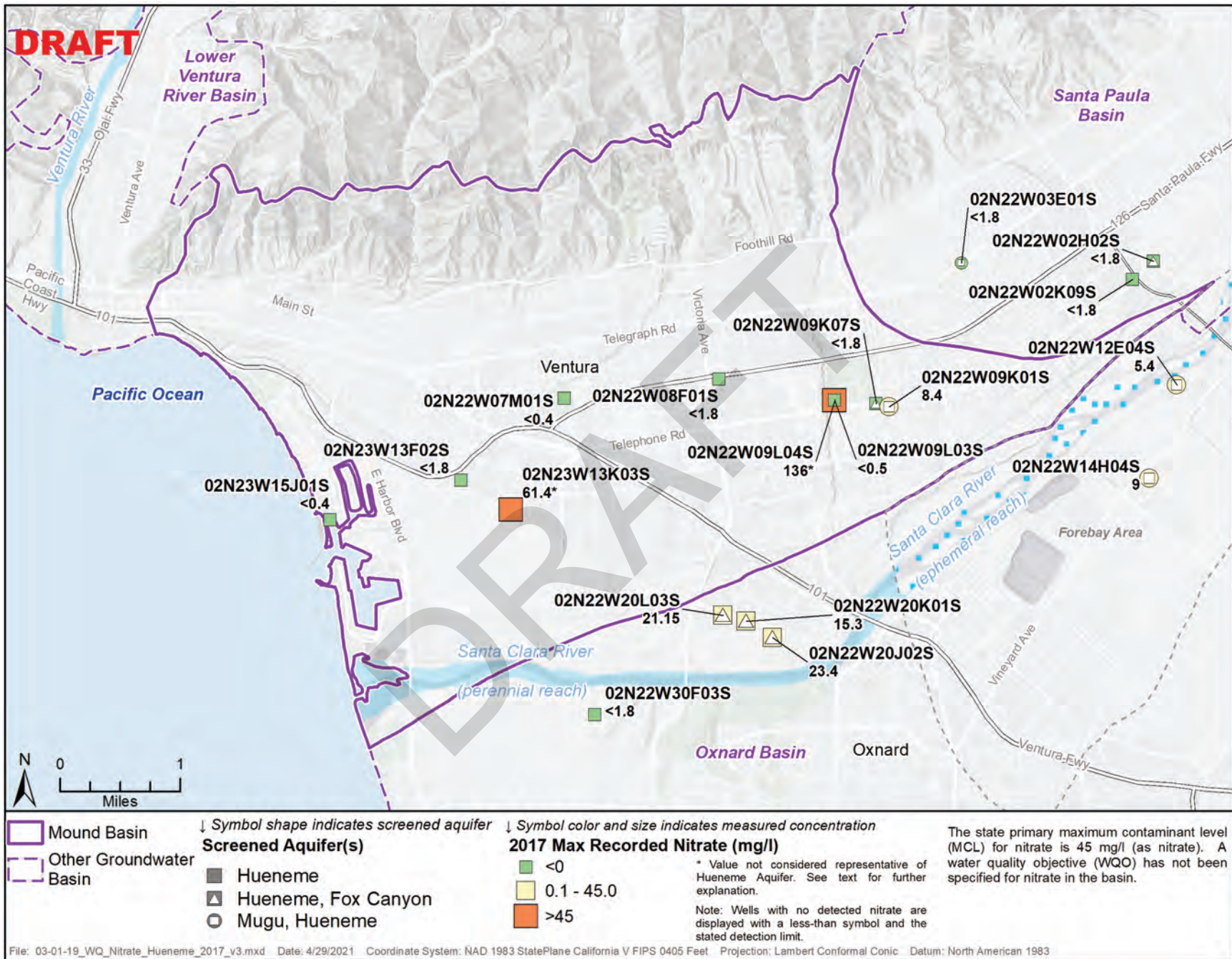


Figure 3.1-19 Maximum Nitrate Concentrations Detected in Hueneme Aquifer during 2017.

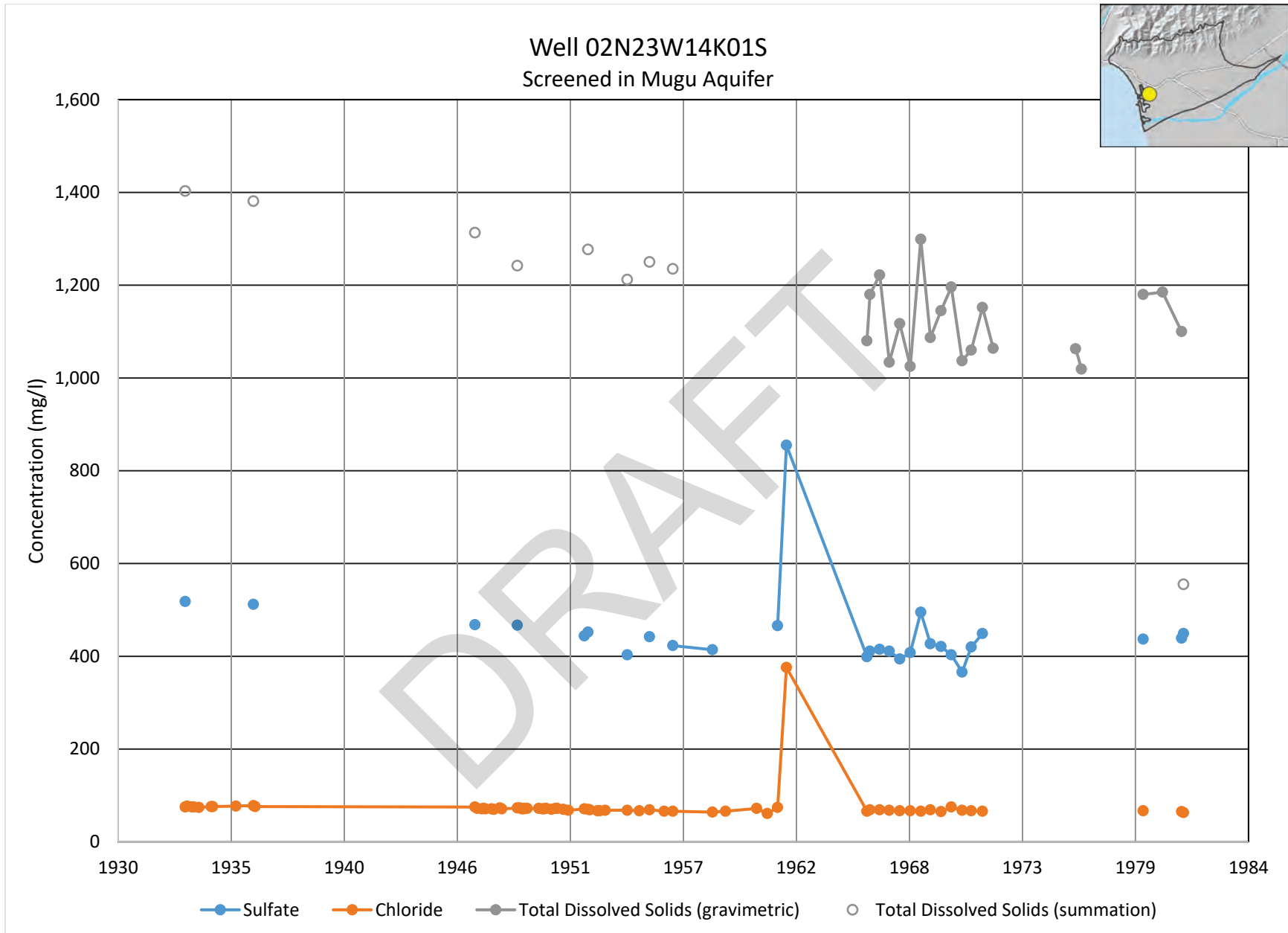
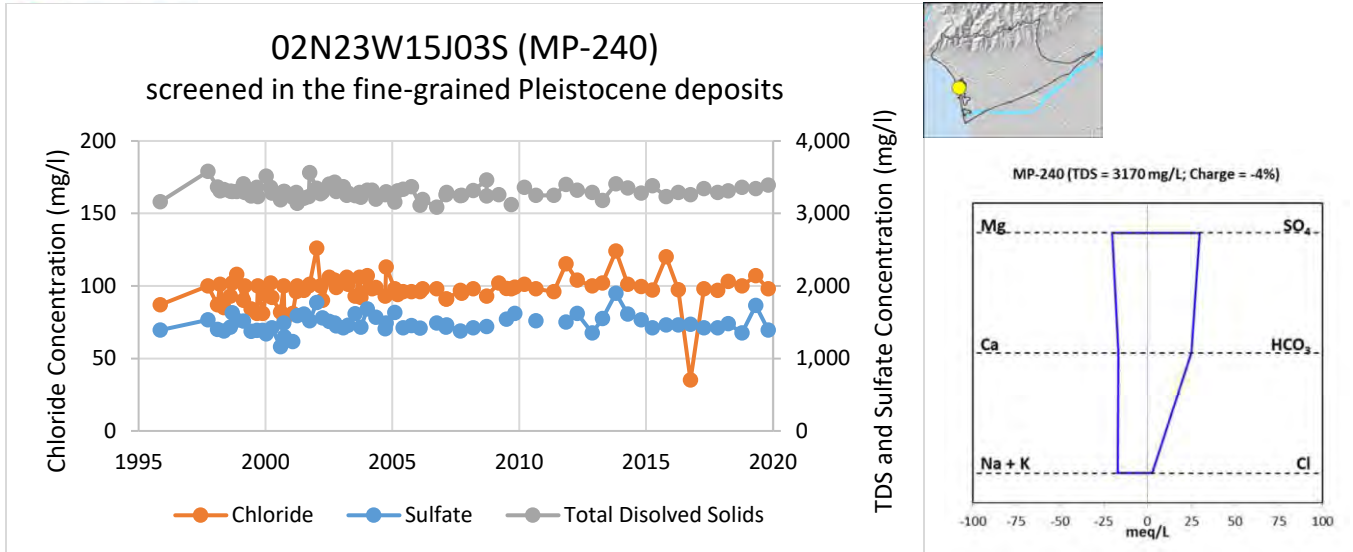


Figure 3.1-20 Well 02N23W14K01S Time Series Data: TDS, Sulfate, and Chloride Records.



Note: To more clearly depict concentration trends for TDS and sulfate, the vertical axis on the right side of the plot above has a different scale than the vertical axis on the right side of the plots below.

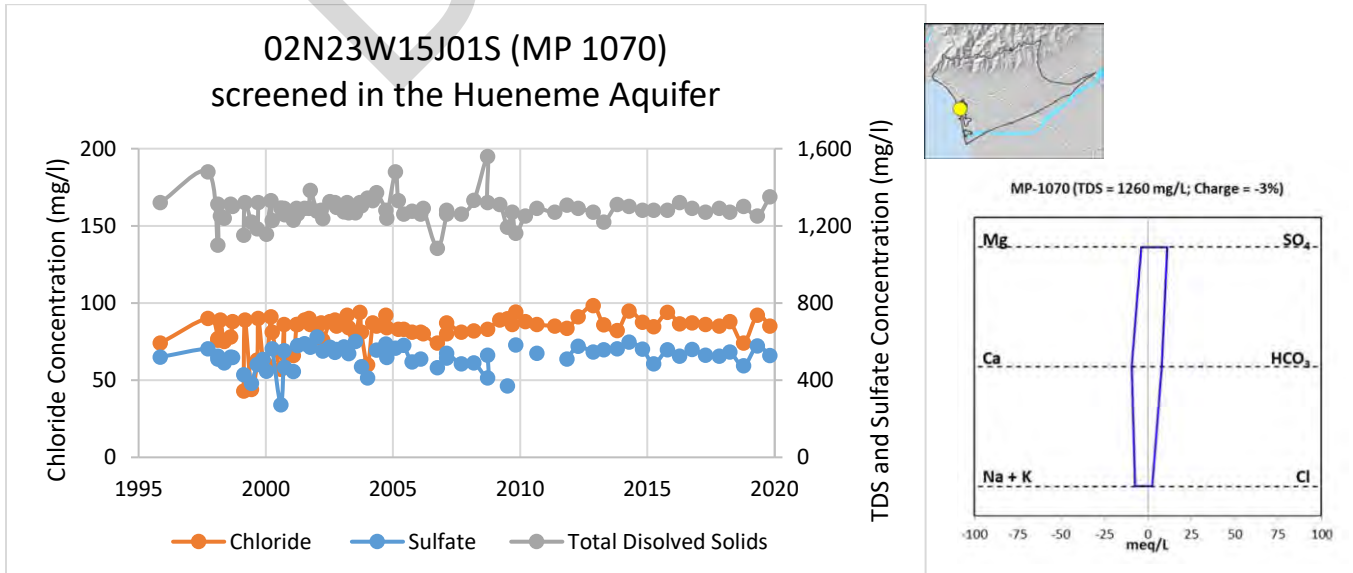
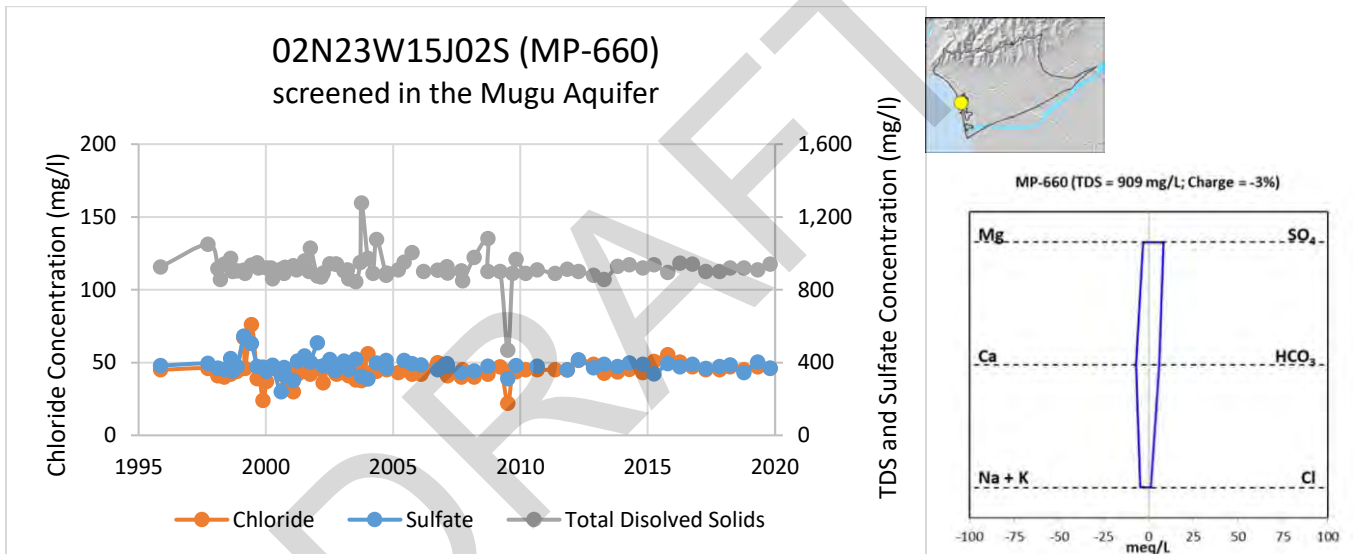
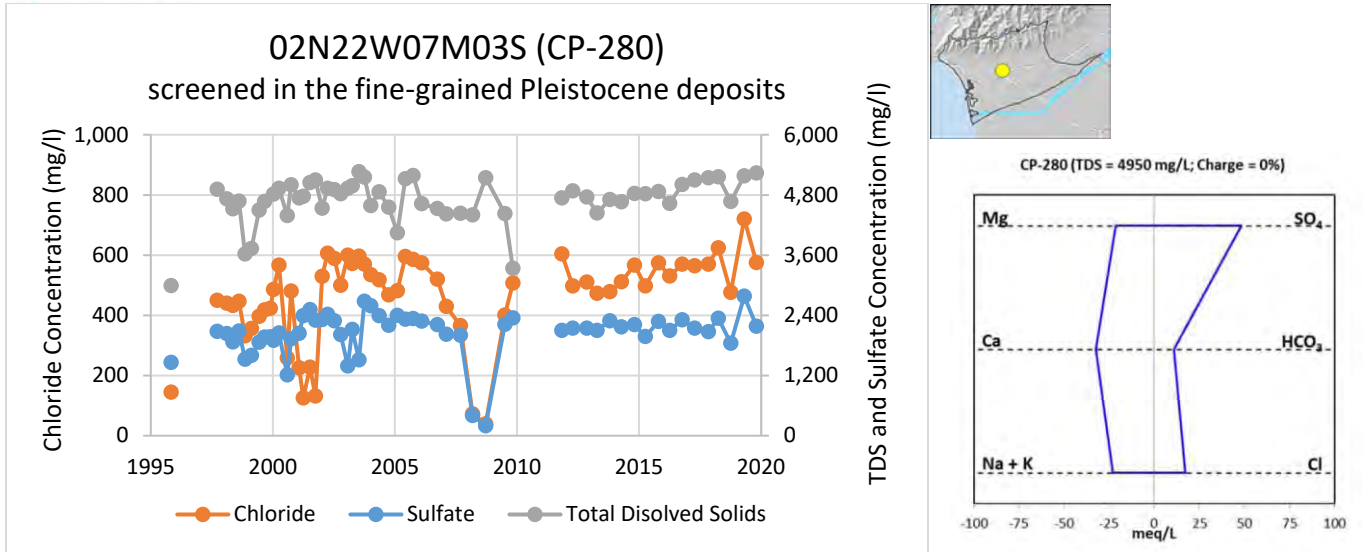


Figure 3.1-21 Monitoring Well Marina Park Time Series Data With Stiff Diagrams: TDS, Sulfate, and Chloride Records.



Note: To more clearly depict concentration trends for chloride, TDS and sulfate, the vertical axis on the left and right side of the plot above have different scales than the vertical axes on both sides of the plots below.

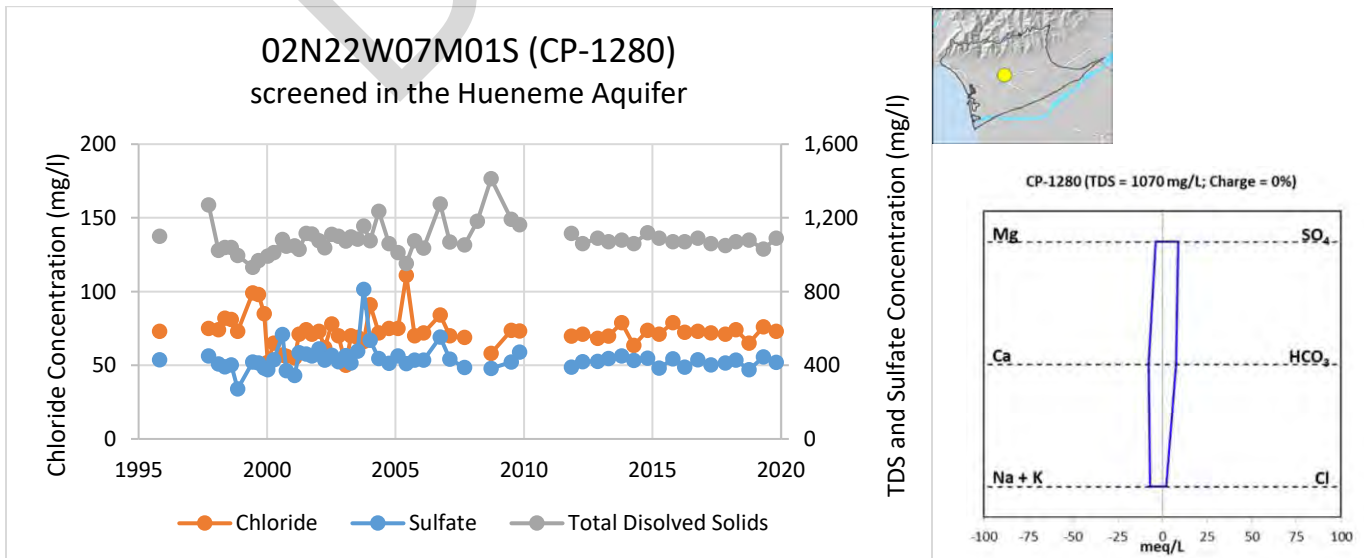
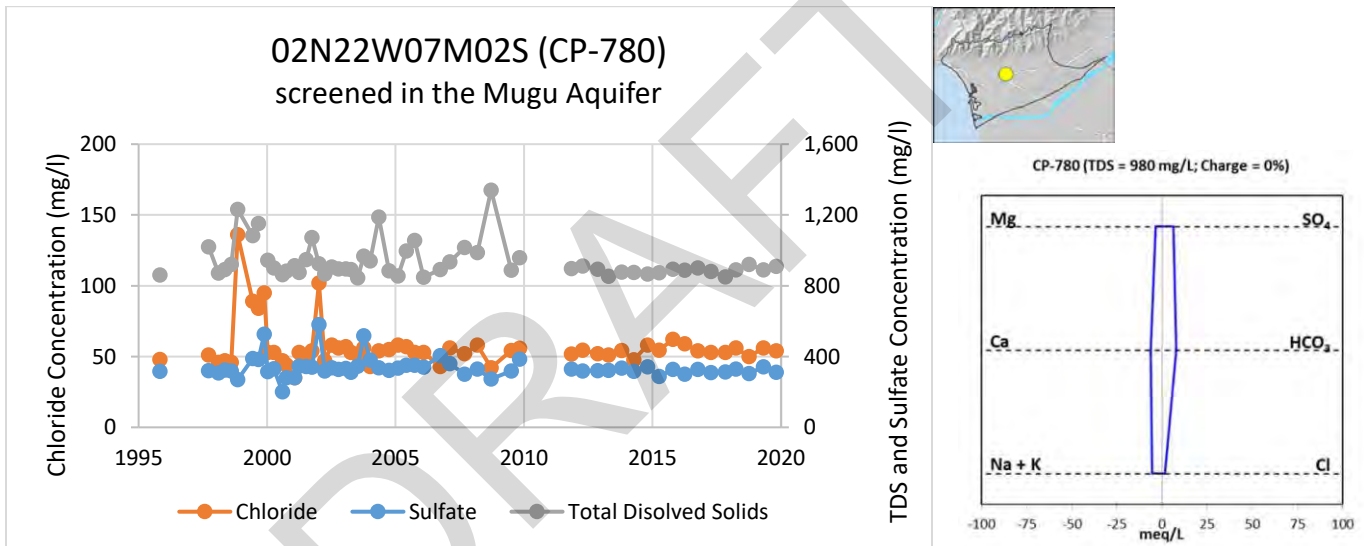
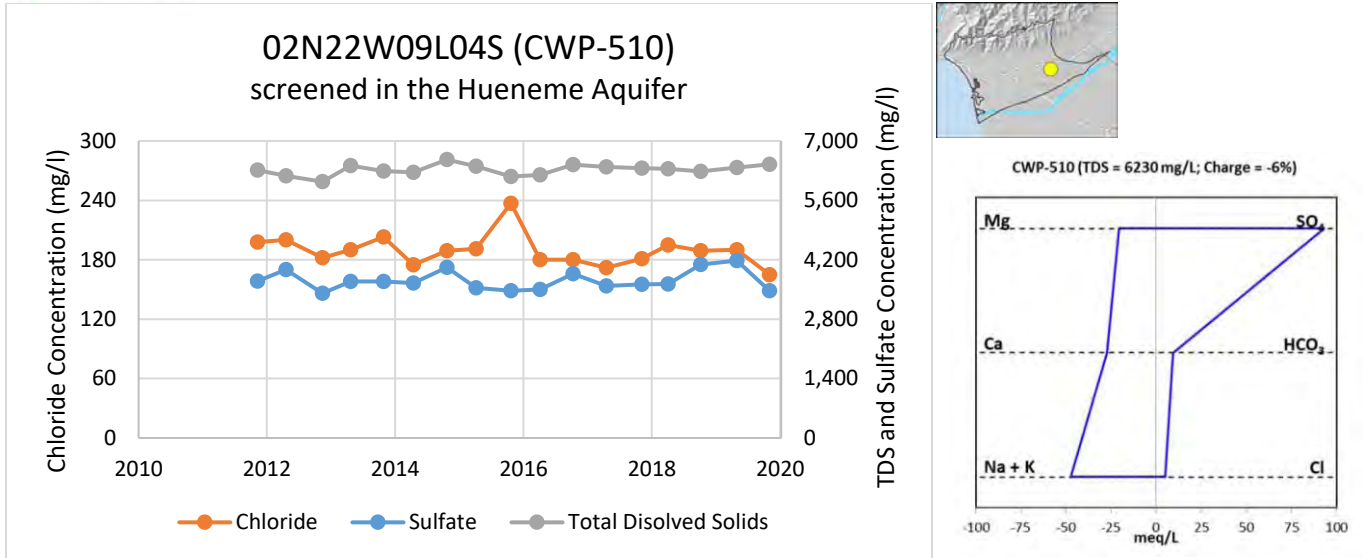


Figure 3.1-22 Monitoring Well Camino Real Park Time Series Data With Stiff Diagrams: TDS, Sulfate, and Chloride Records.



Note: To more clearly depict concentration trends for chloride, TDS and sulfate, the vertical axis on the left and right side of the plot above have different scales than the vertical axes on both sides of the plot below.

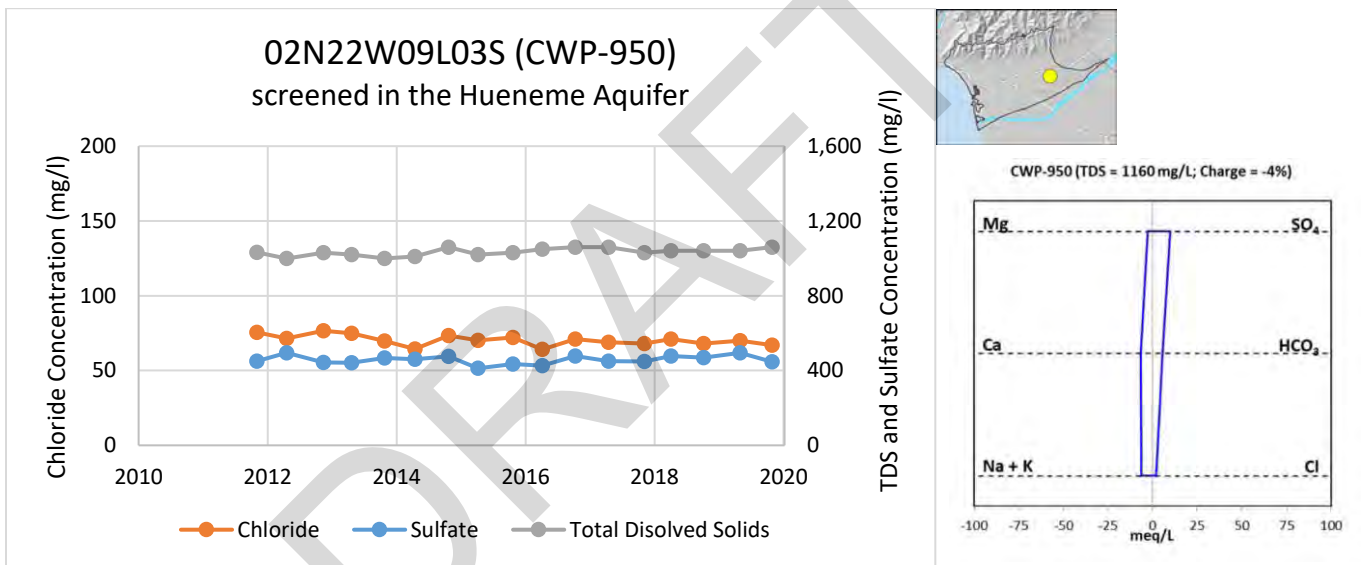


Figure 3.1-23 Monitoring Well Community Water Park Time Series Data With Stiff Diagrams: TDS, Sulfate, and Chloride Records.

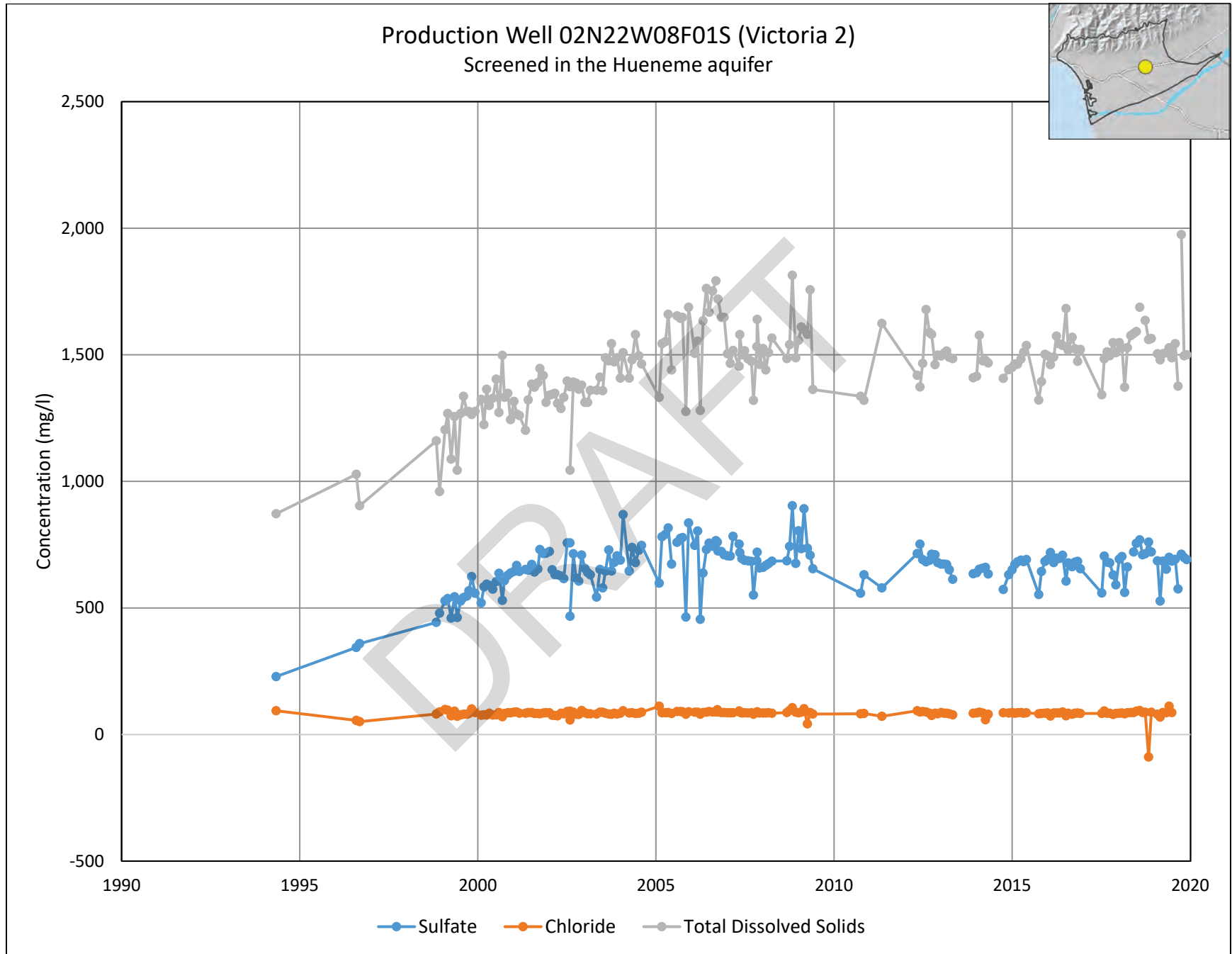


Figure 3.1-24 Well 02N22W08F01S Time Series Data: TDS, Sulfate, and Chloride Records.

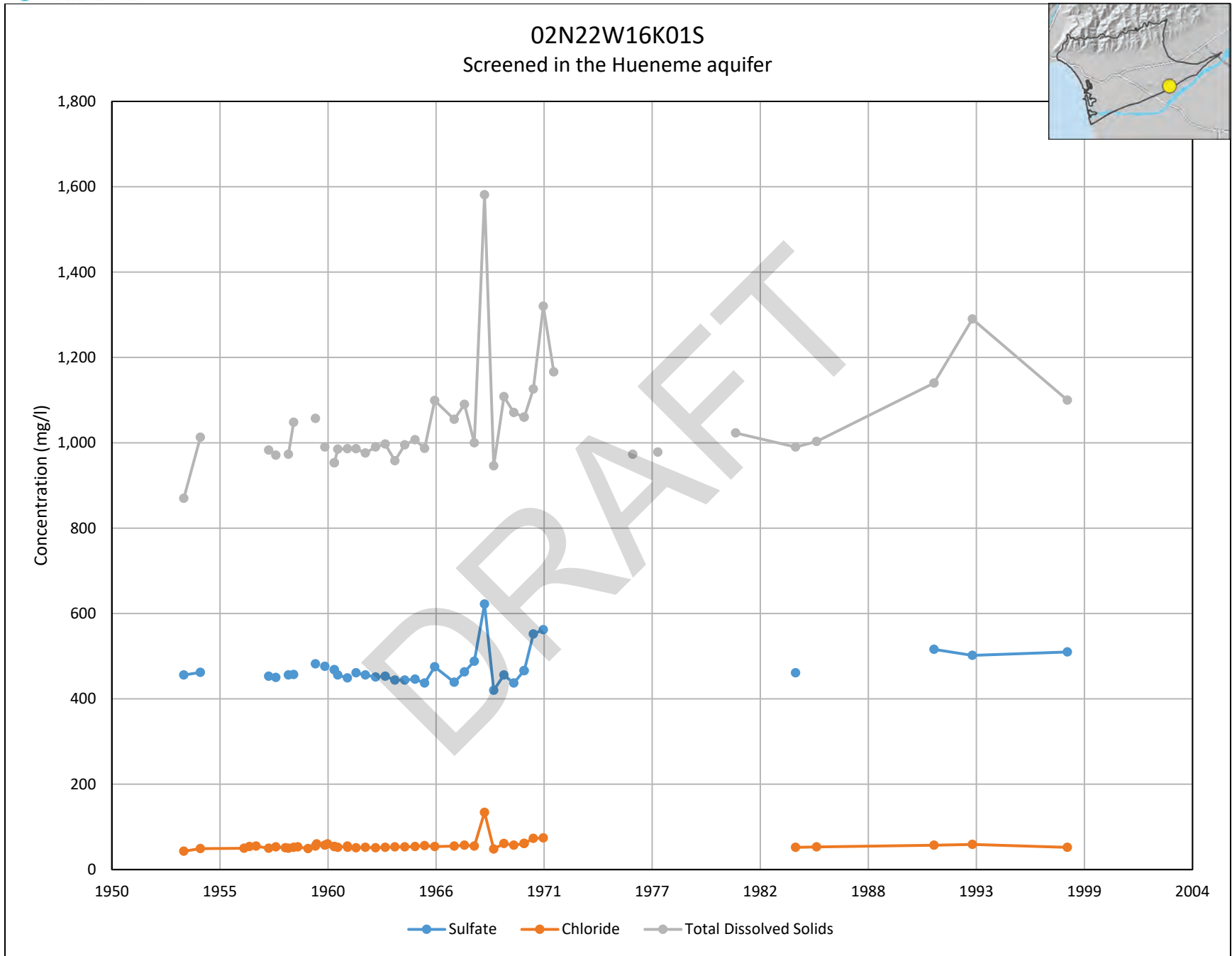


Figure 3.1-25 Well 02N23W16K01S Time Series Data: TDS, Sulfate, and Chloride Records.

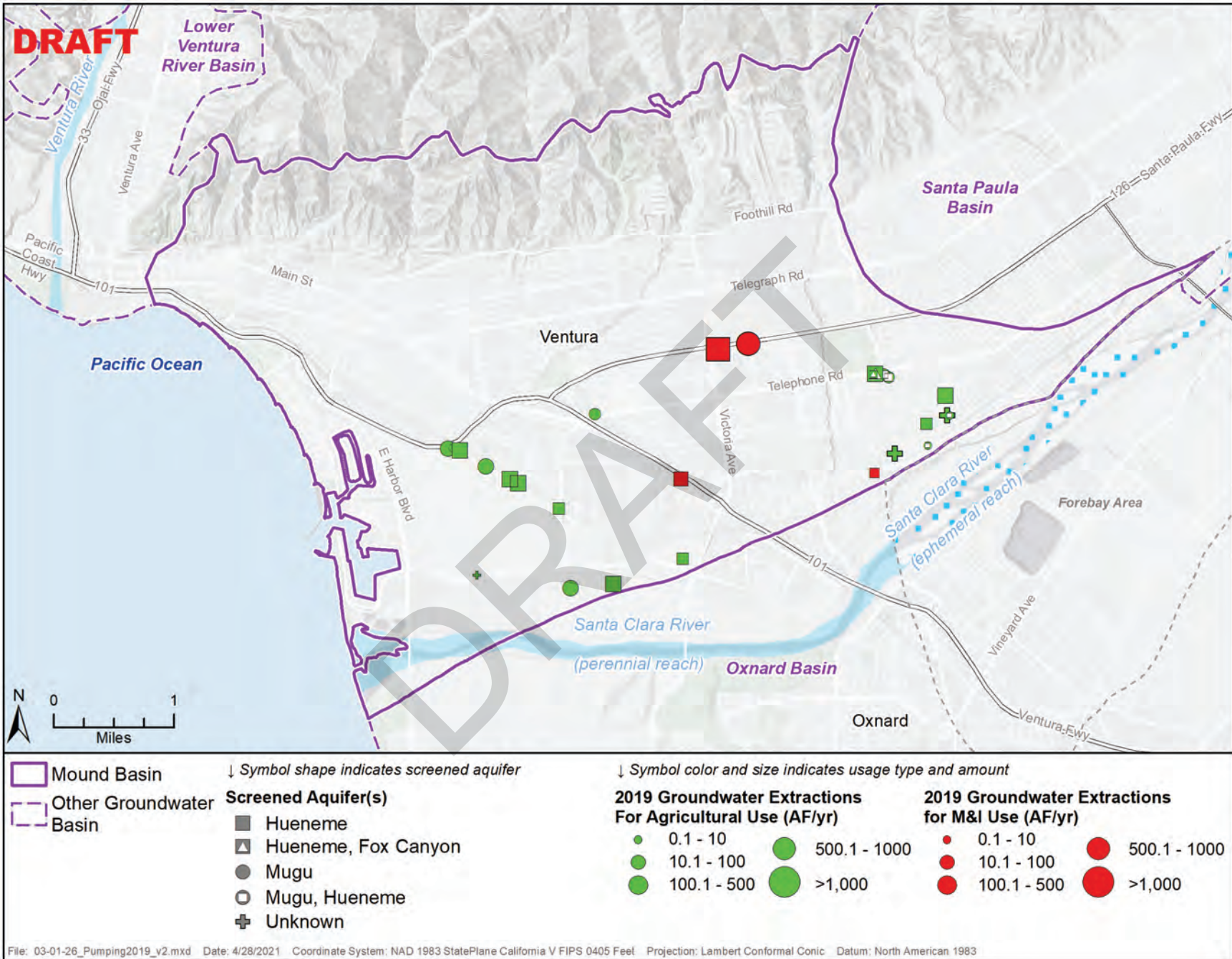


Figure 3.1-26 Map of Active Water Supply Wells in Mound Basin, Showing Groundwater Extraction in 2019.



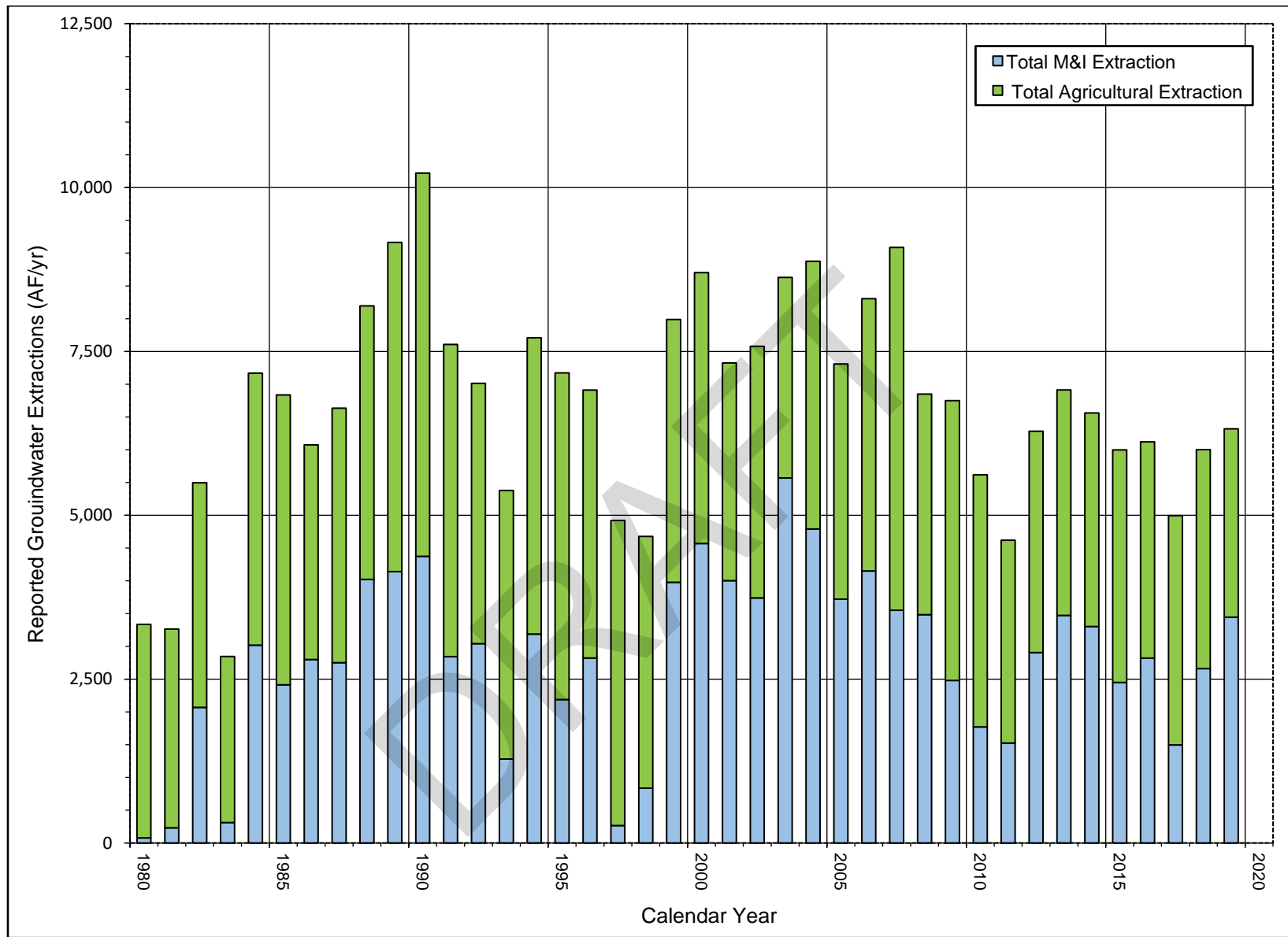


Figure 3.1-27 Graph of Historical (1980-2019) Groundwater Extraction from Mound Basin by Use Sector.

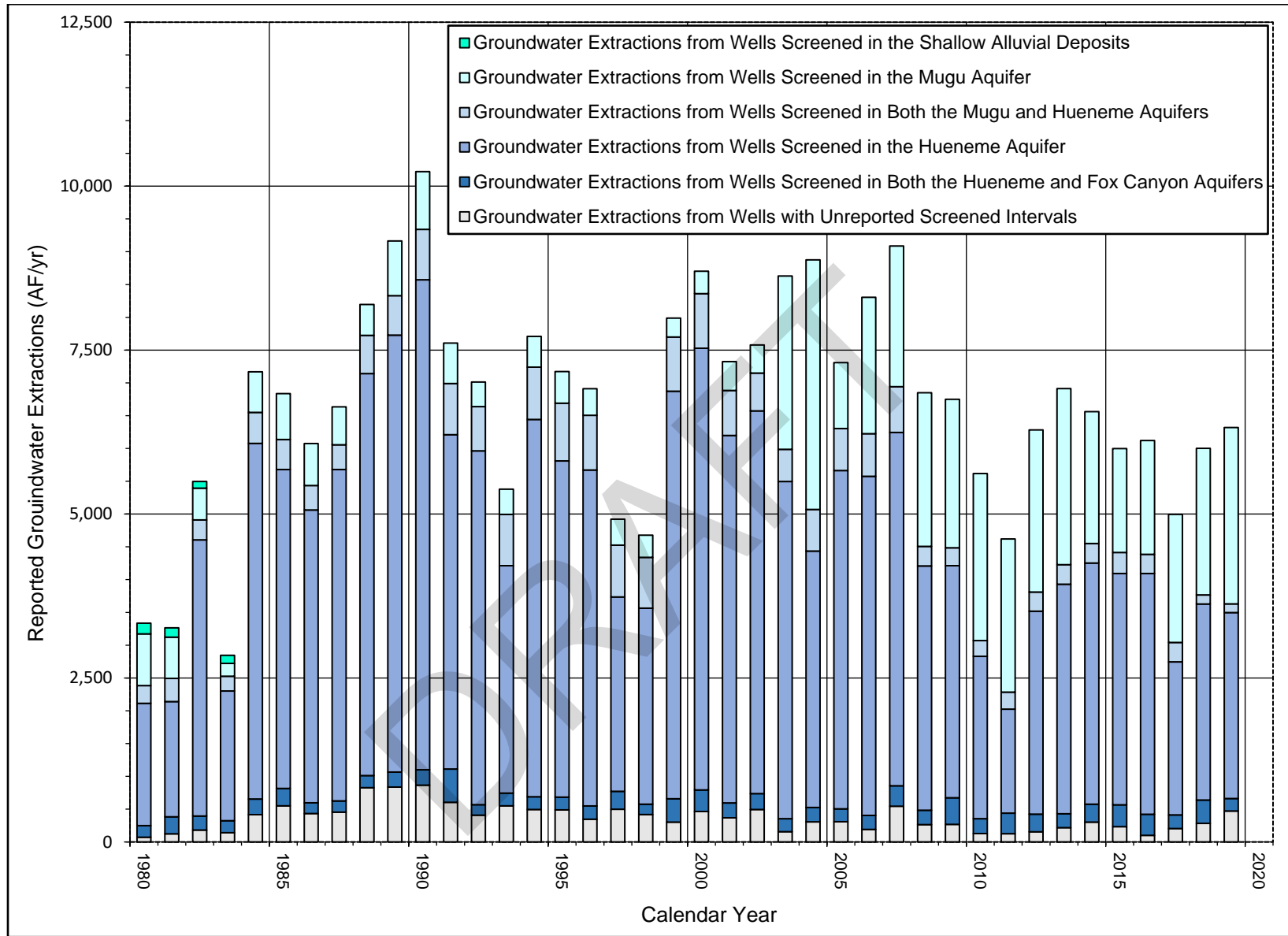


Figure 3.1-28 Graph of Historical (1980-2019) Groundwater Extractions from Mound Basin by Aquifer.

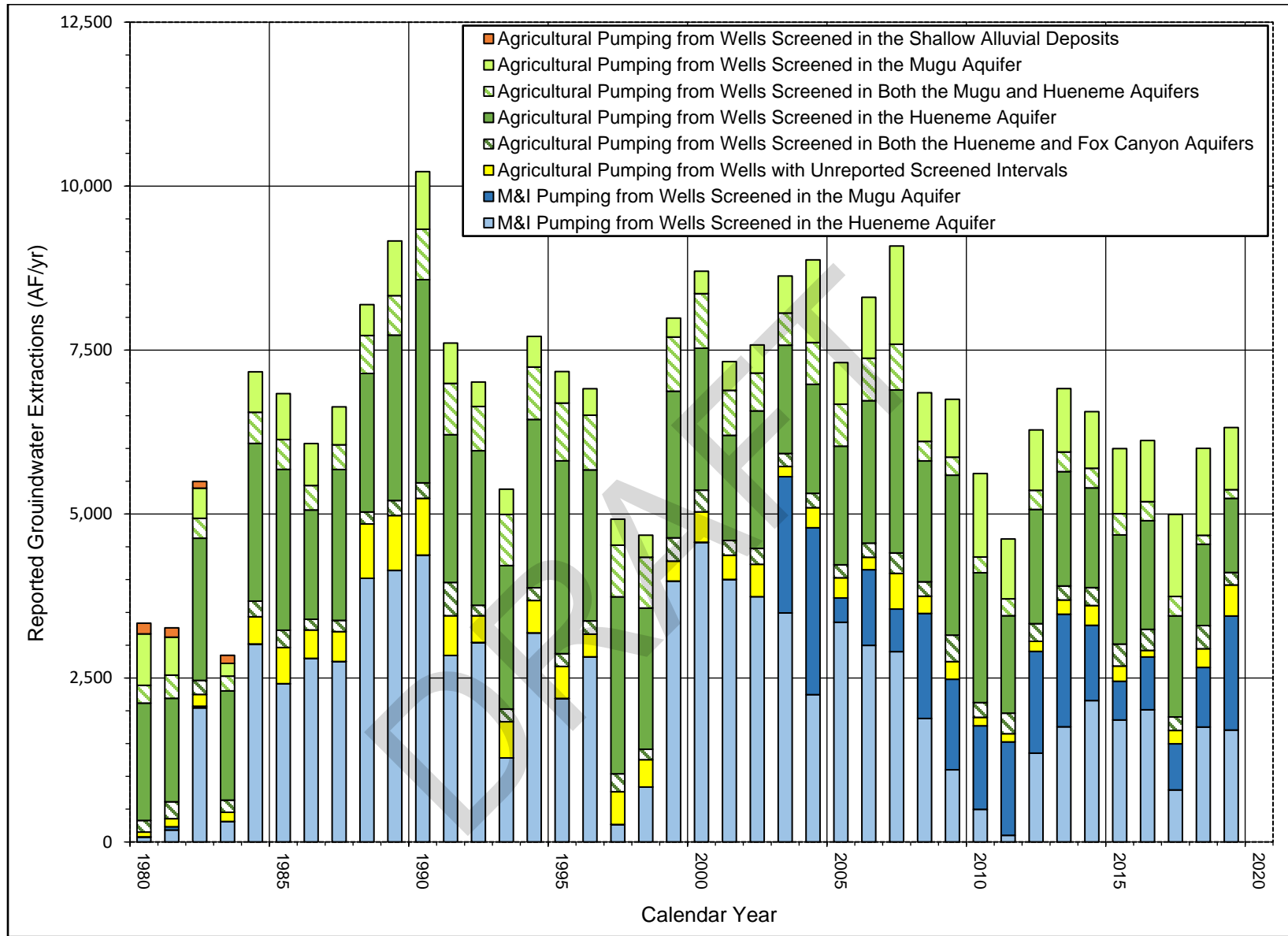


Figure 3.1-29 Graph of Historical (1980-2019) Groundwater Extractions from Mound Basin by Use Sector and Aquifer.

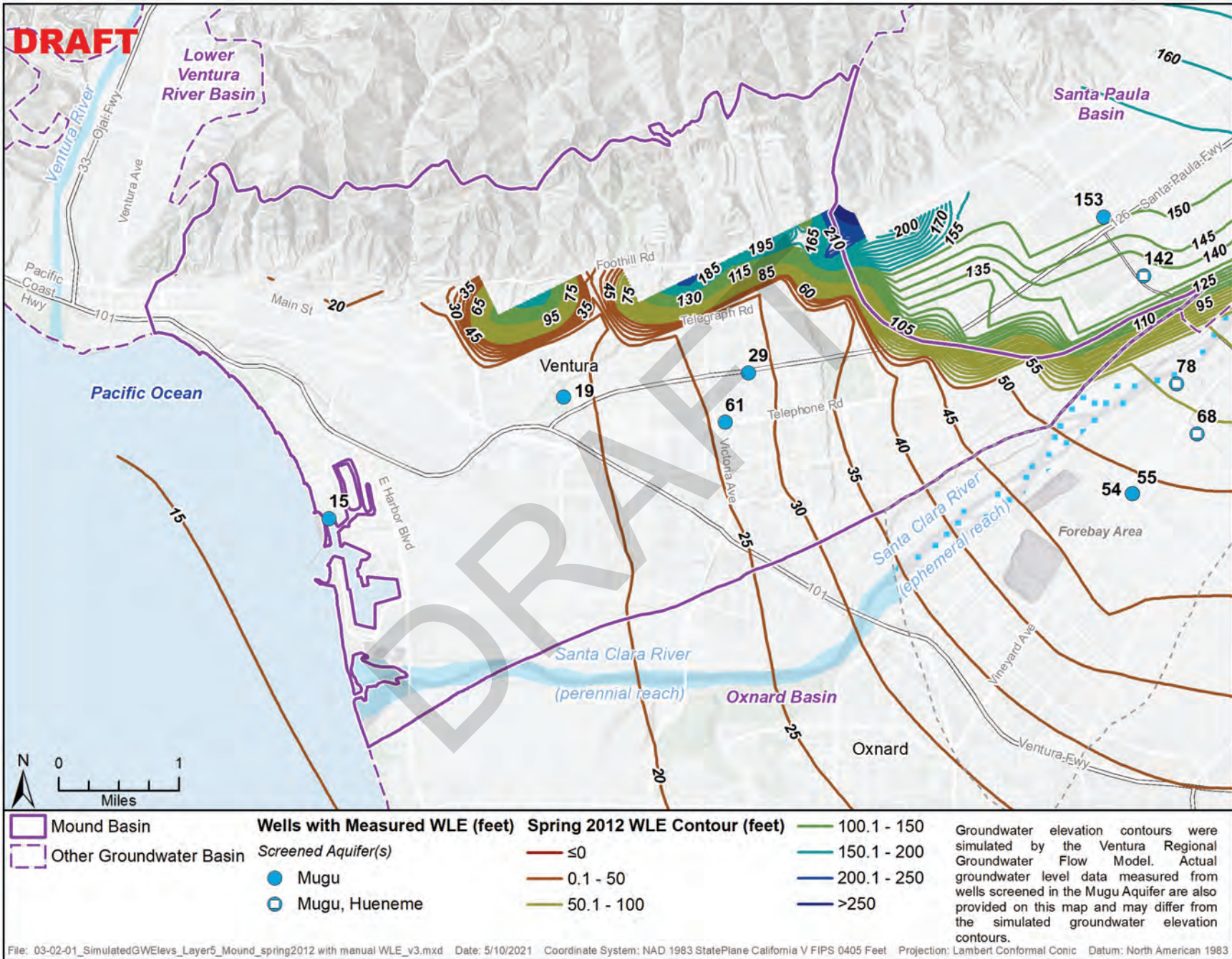


Figure 3.2-01 Water Level Elevation in Mugu Aquifer, Spring 2012.

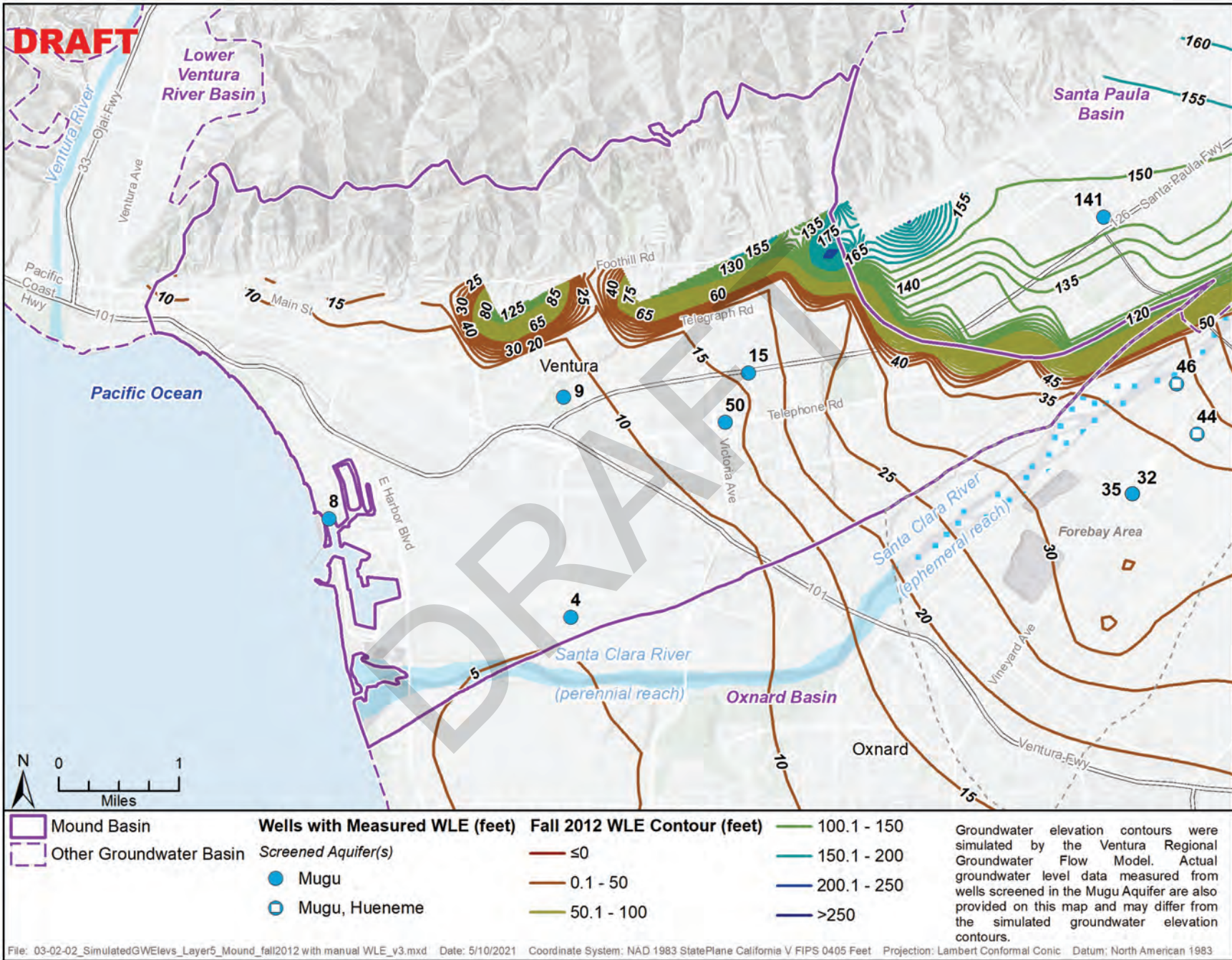


Figure 3.2-02 Water Level Elevation in Mugu Aquifer, Fall 2012.

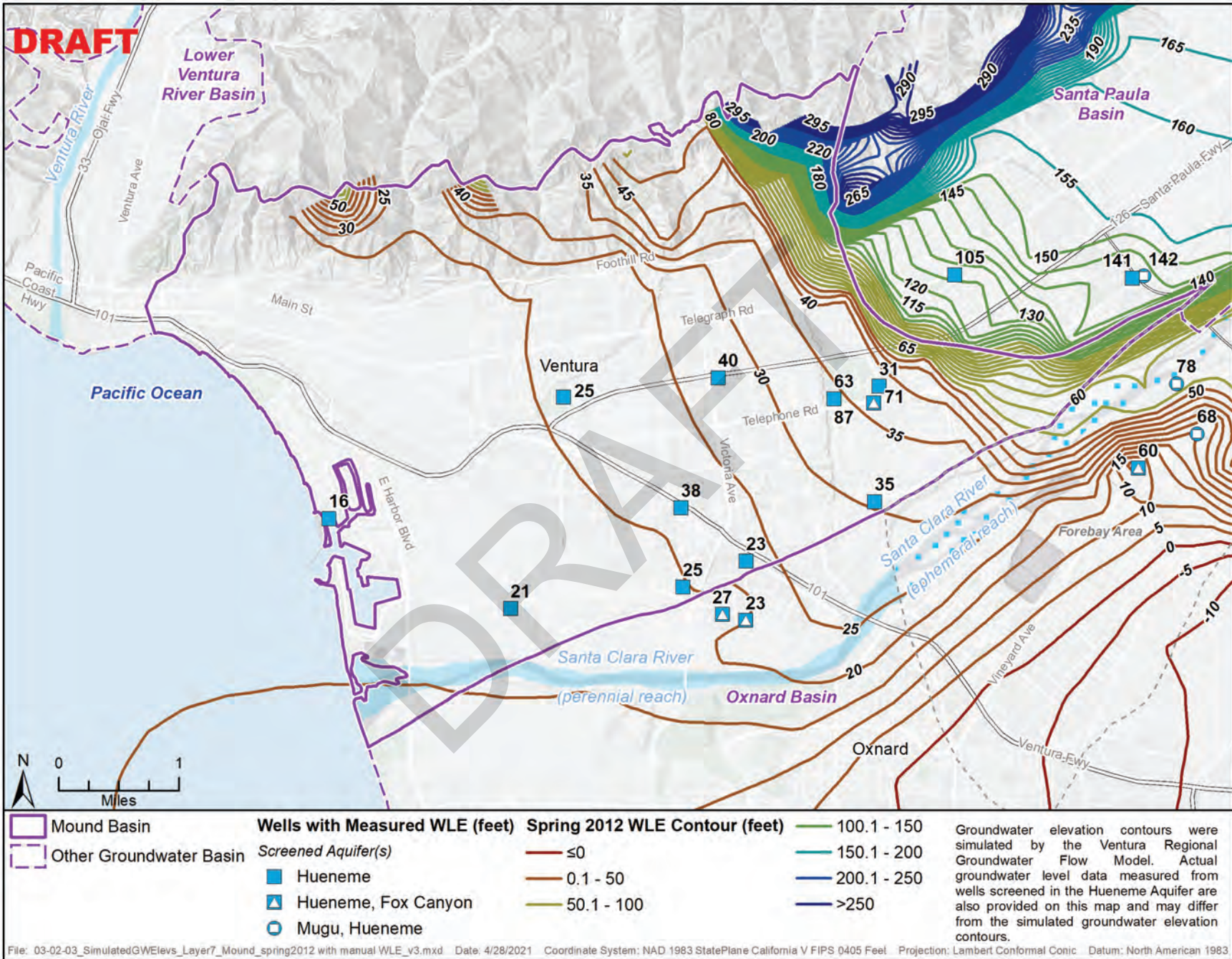


Figure 3.2-03 Water Level Elevation in Hueneme Aquifer, Spring 2012.

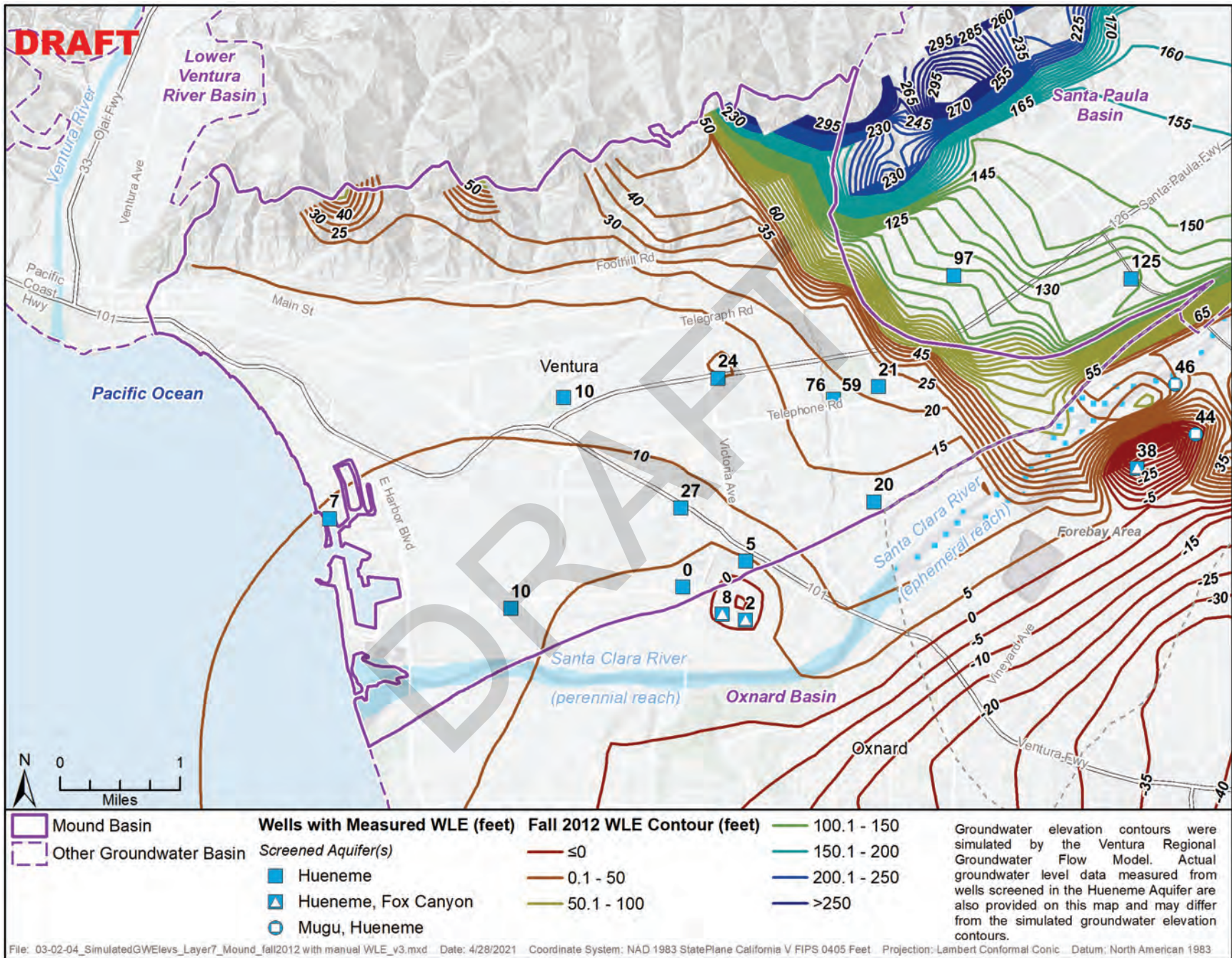


Figure 3.2-04 Water Level Elevation in Hueneme Aquifer, Fall 2012.

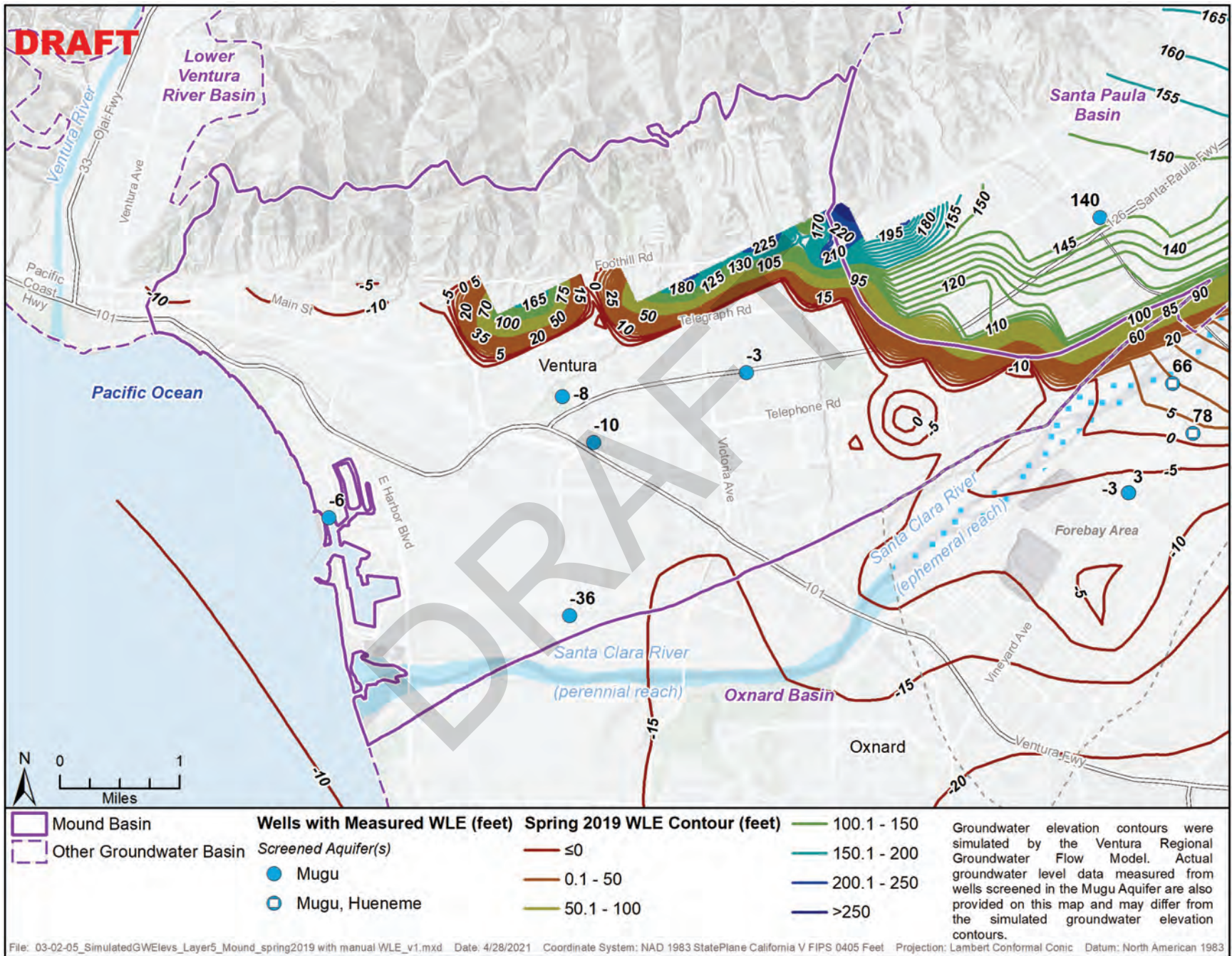


Figure 3.2-05 Water Level Elevation in Mugu Aquifer, Spring 2019.



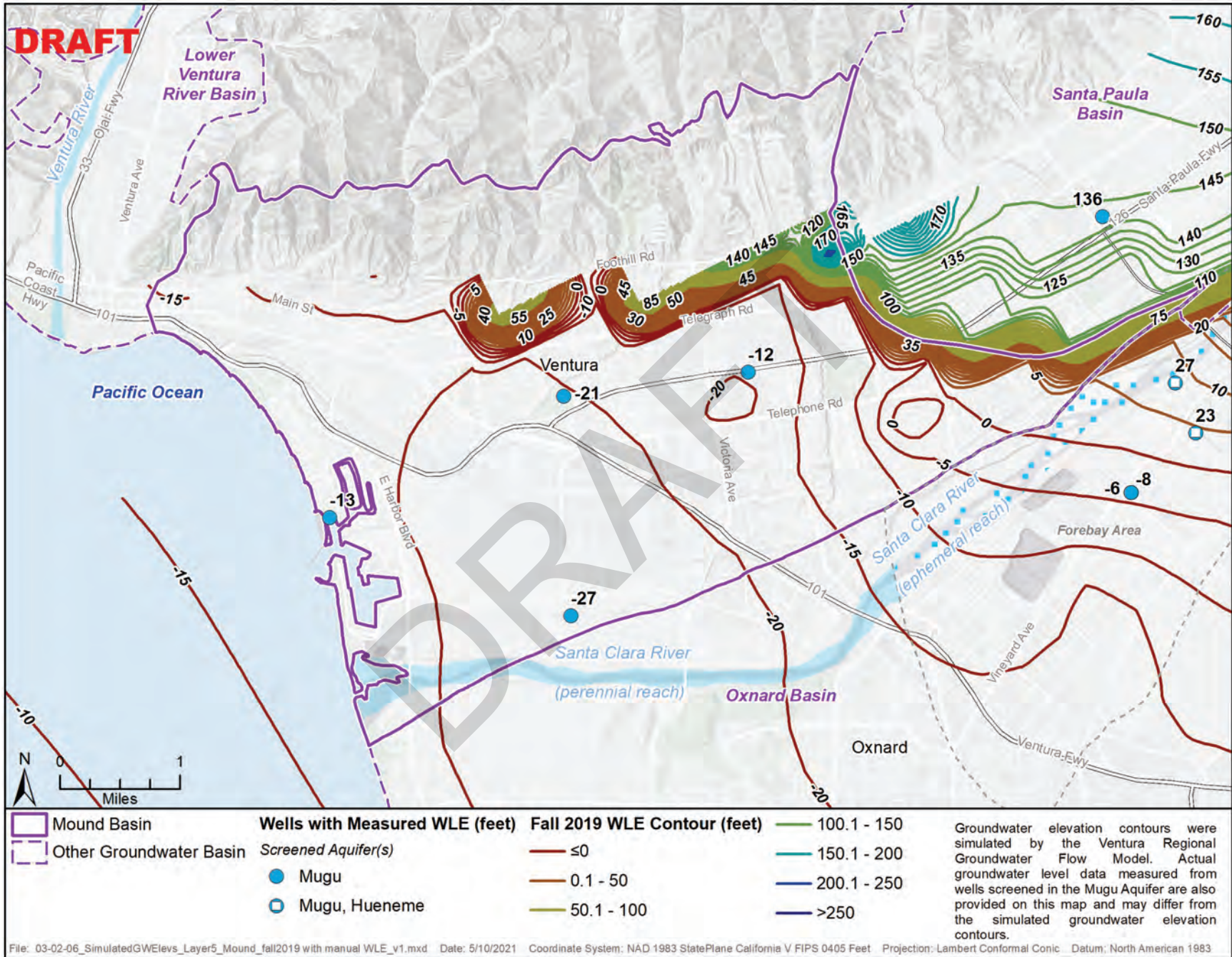


Figure 3.2-06 Water Level Elevation in Mugu Aquifer, Fall 2019.

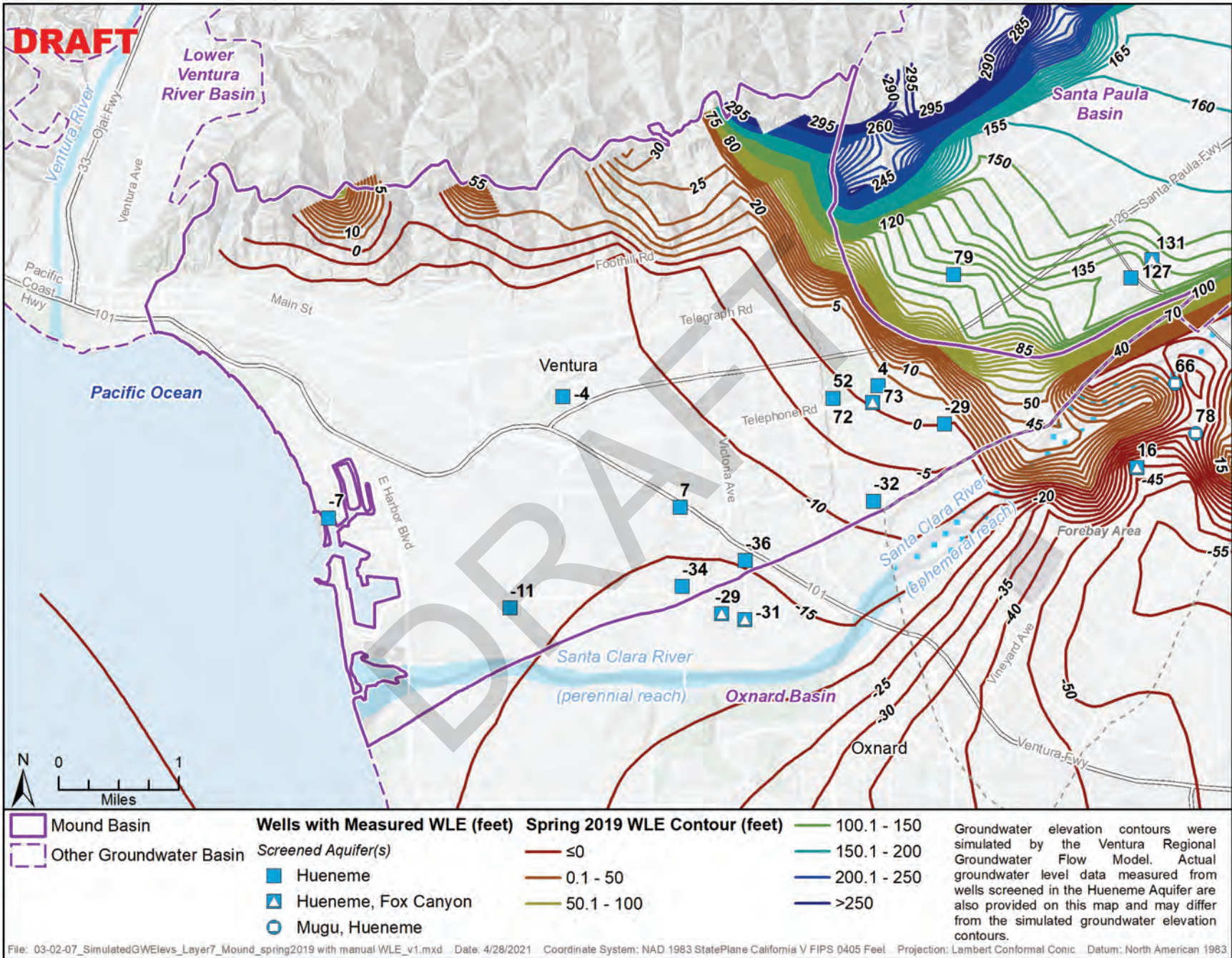


Figure 3.2-07 Water Level Elevation in Hueneme Aquifer, Spring 2019.

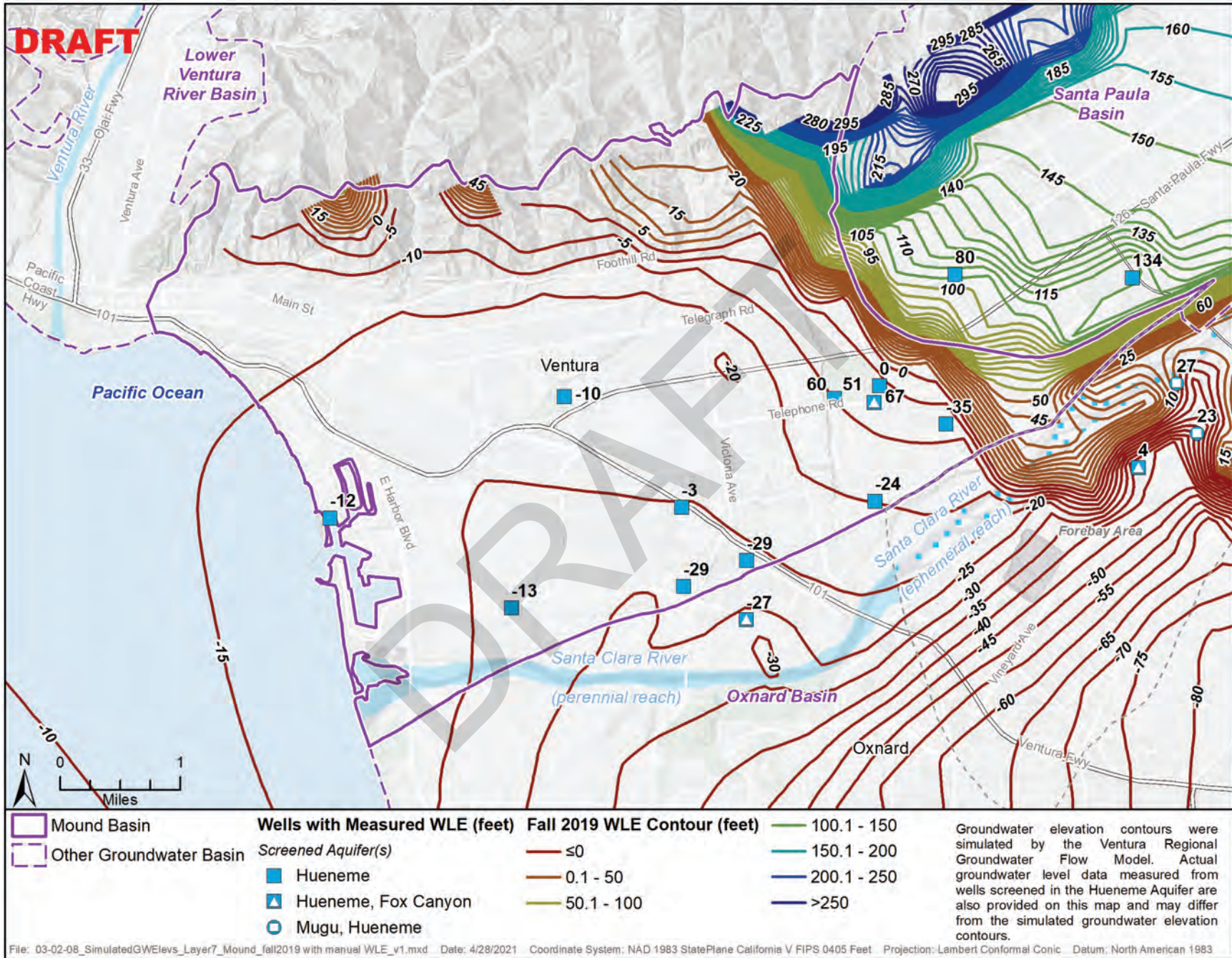


Figure 3.2-08 Water Level Elevation in Hueneme Aquifer, Fall 2019.

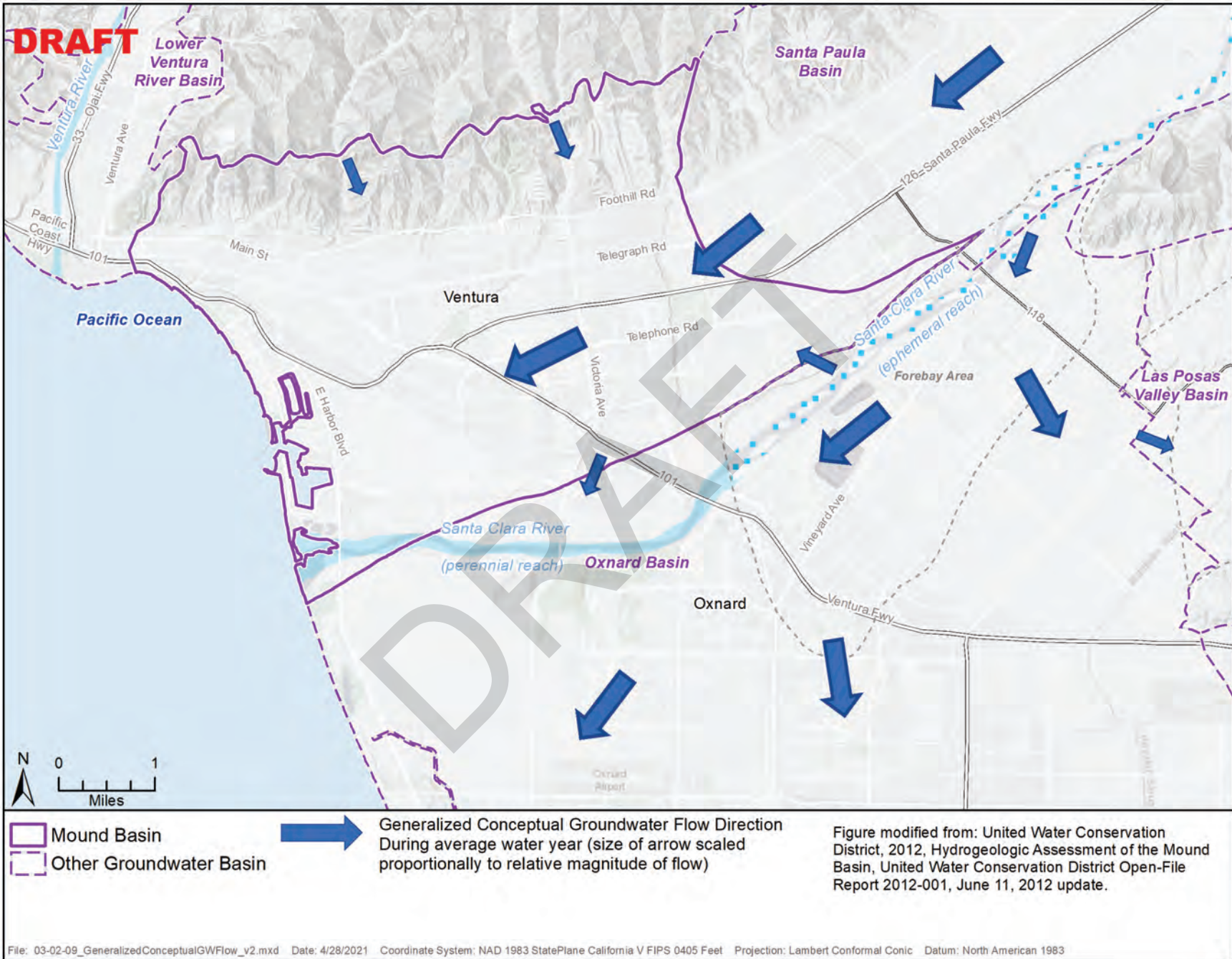


Figure 3.2-09 Generalized Conceptual Groundwater Flow Paths for the Principal Aquifers.

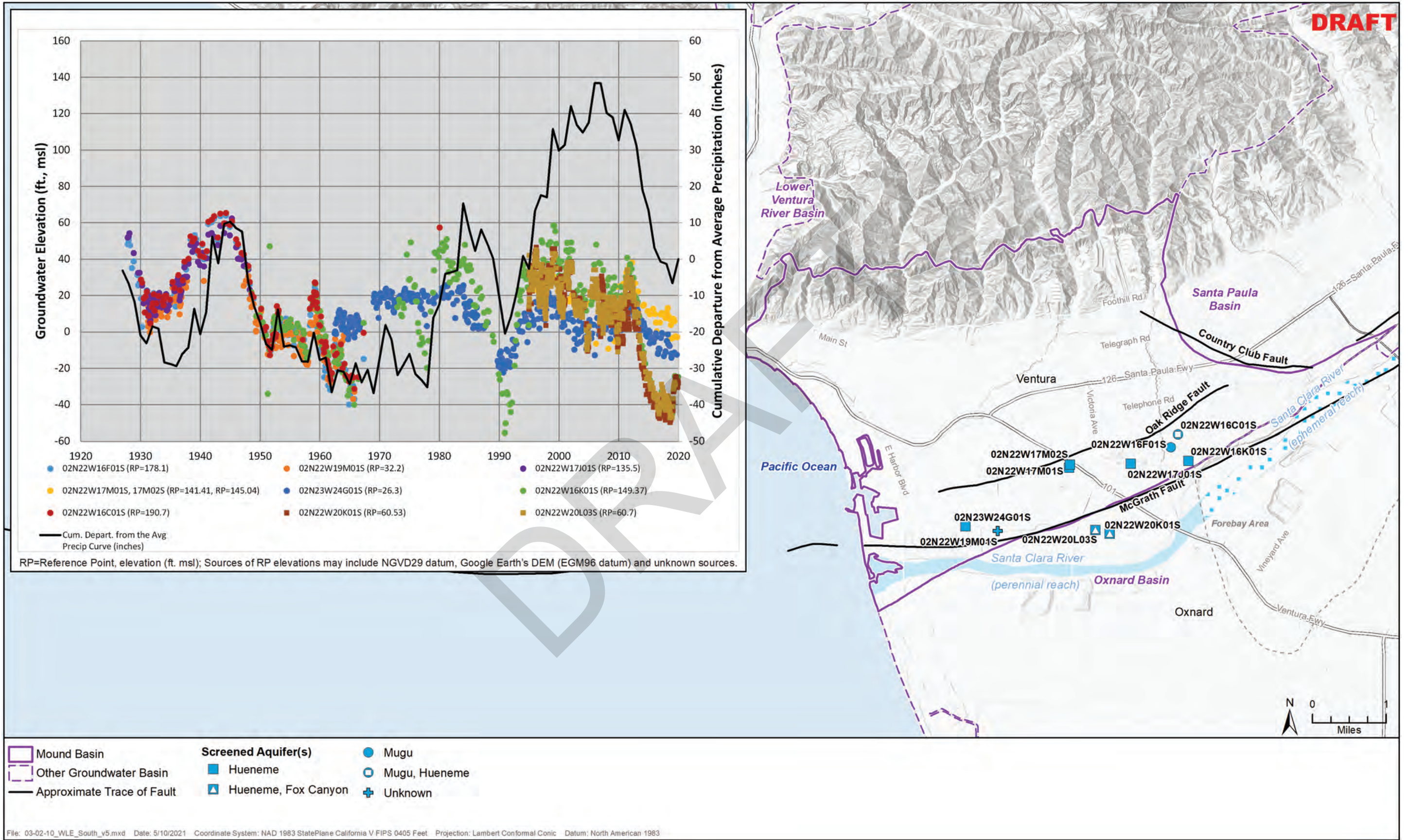


Figure 3.2-10 Location Map for Southern Mound Basin Wells with Recorded Groundwater Elevations.

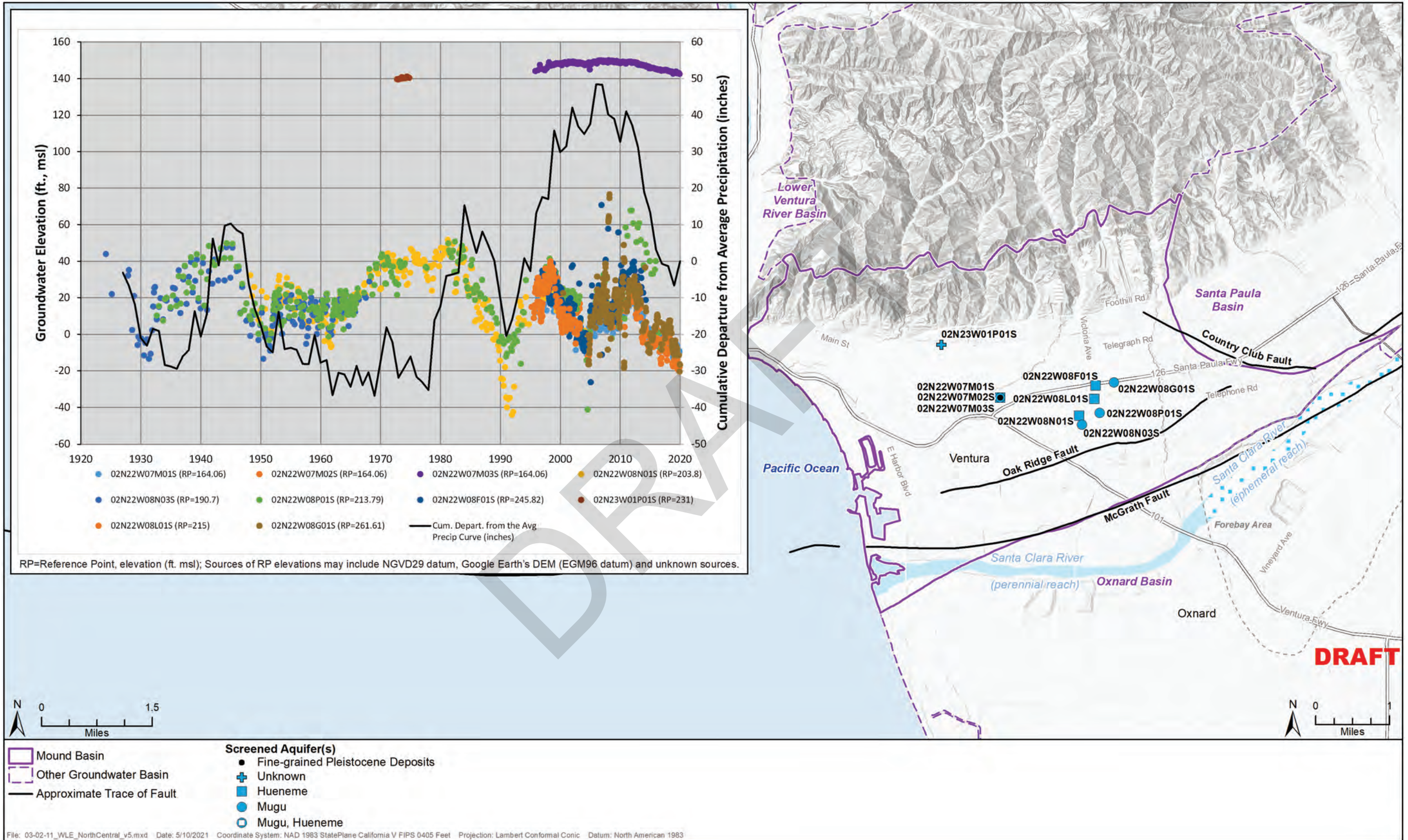


Figure 3.2-11 Location Map for North and Central Mound Basin Wells with Recorded Groundwater Elevations.

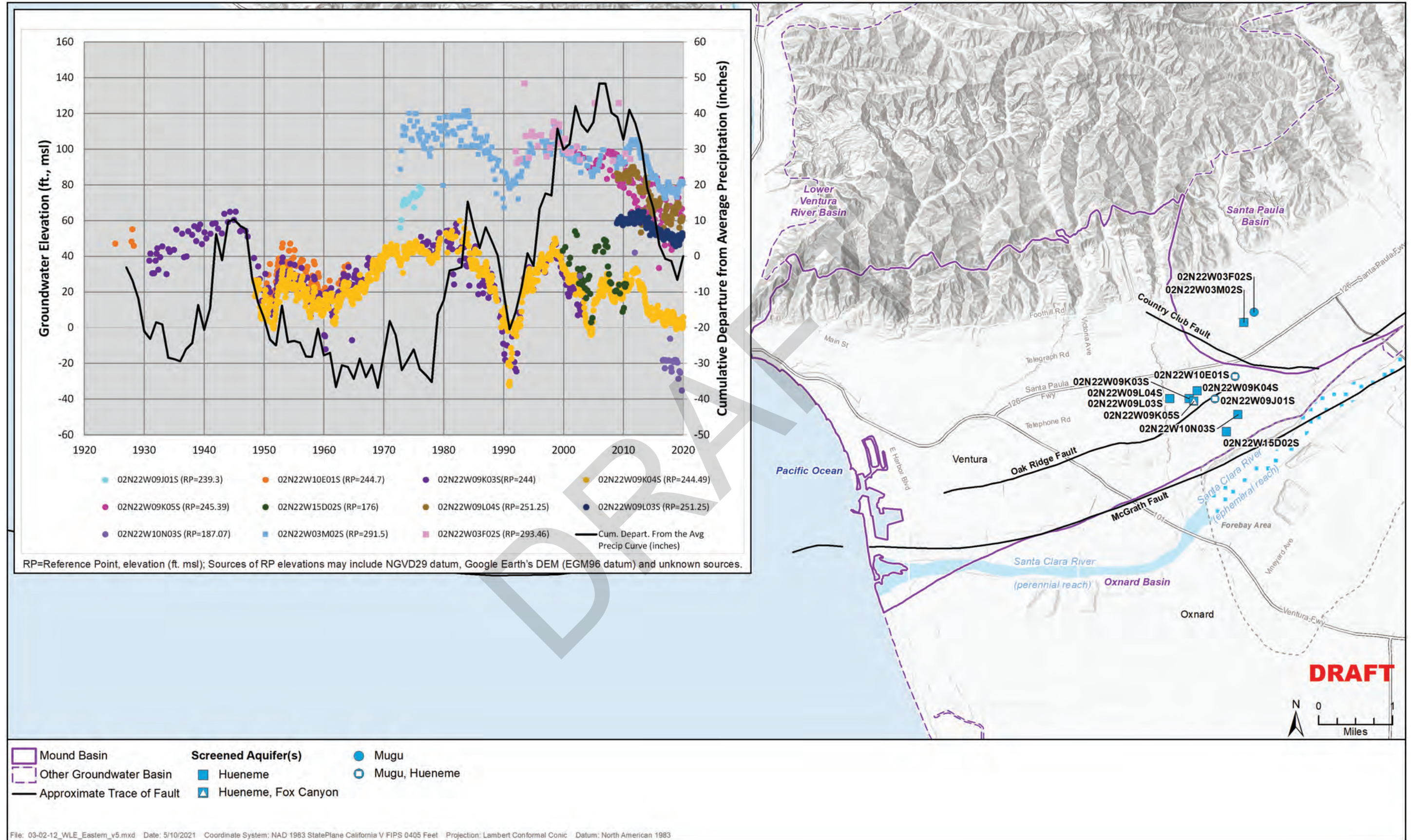


Figure 3.2-12 Location Map for Eastern Mound Basin Wells with Recorded Groundwater Elevations.

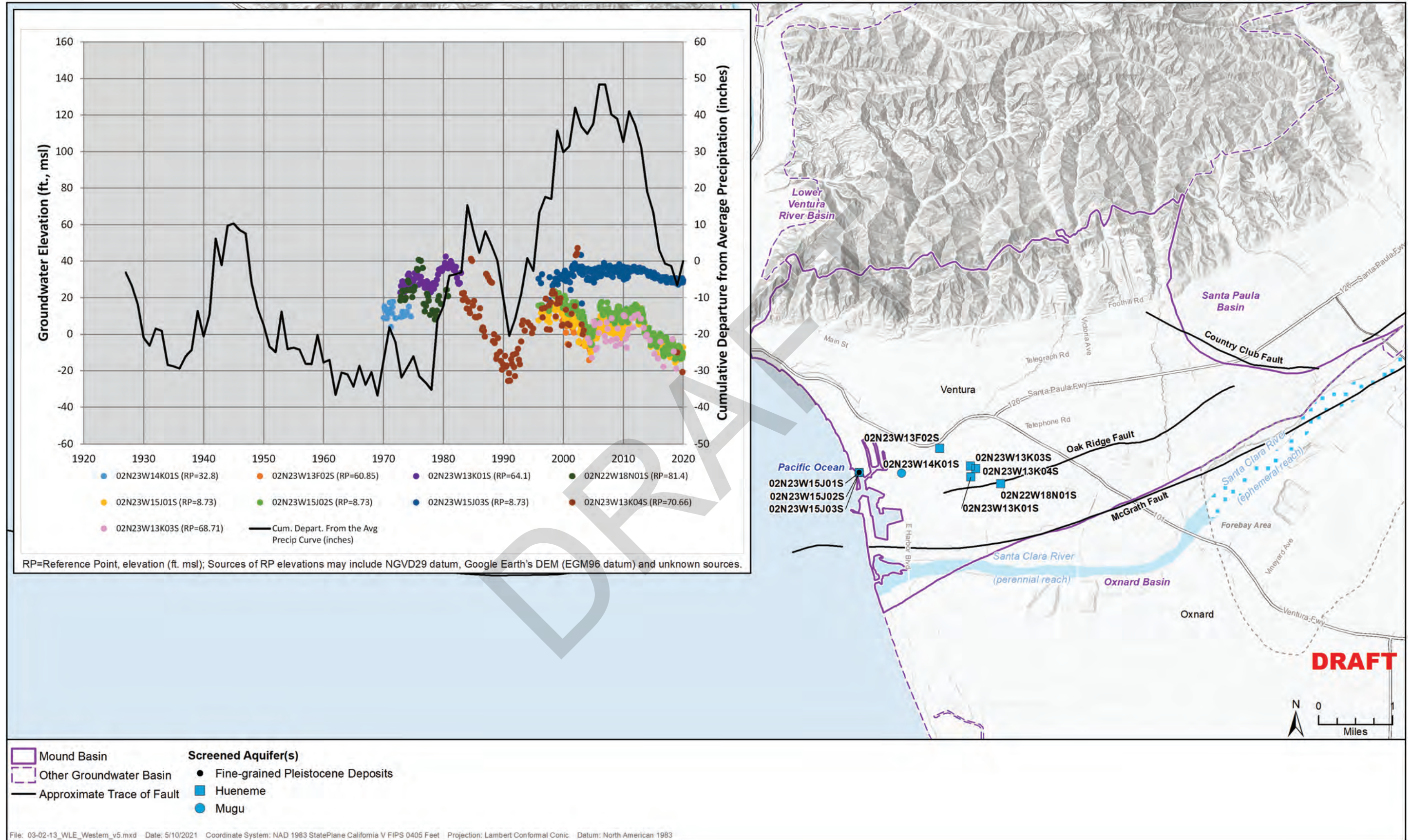


Figure 3.2-13 Location Map for Western Mound Basin Wells with Recorded Groundwater Elevations.



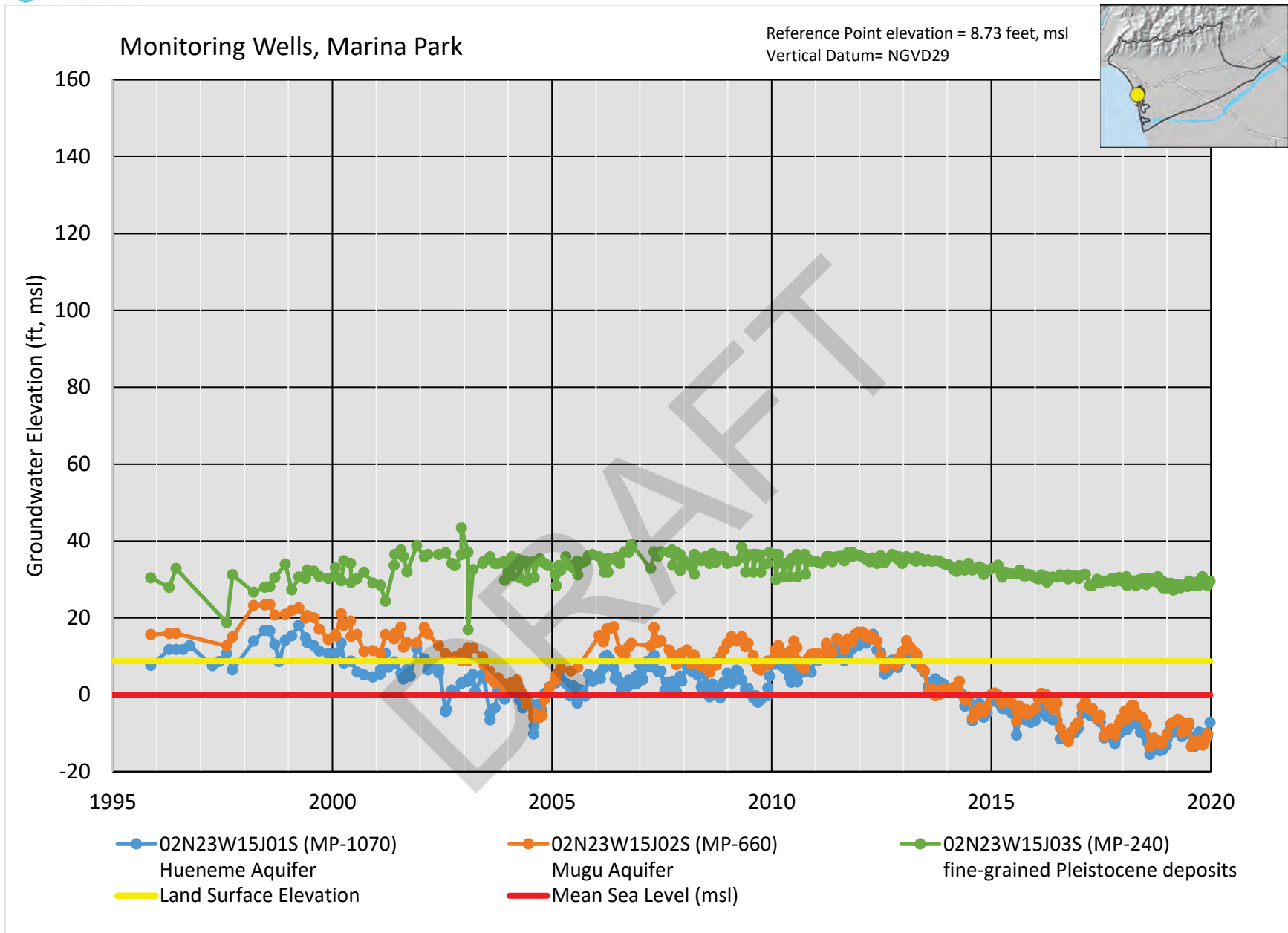


Figure 3.2-14 Groundwater Level Records for Marina Park Monitoring Wells.

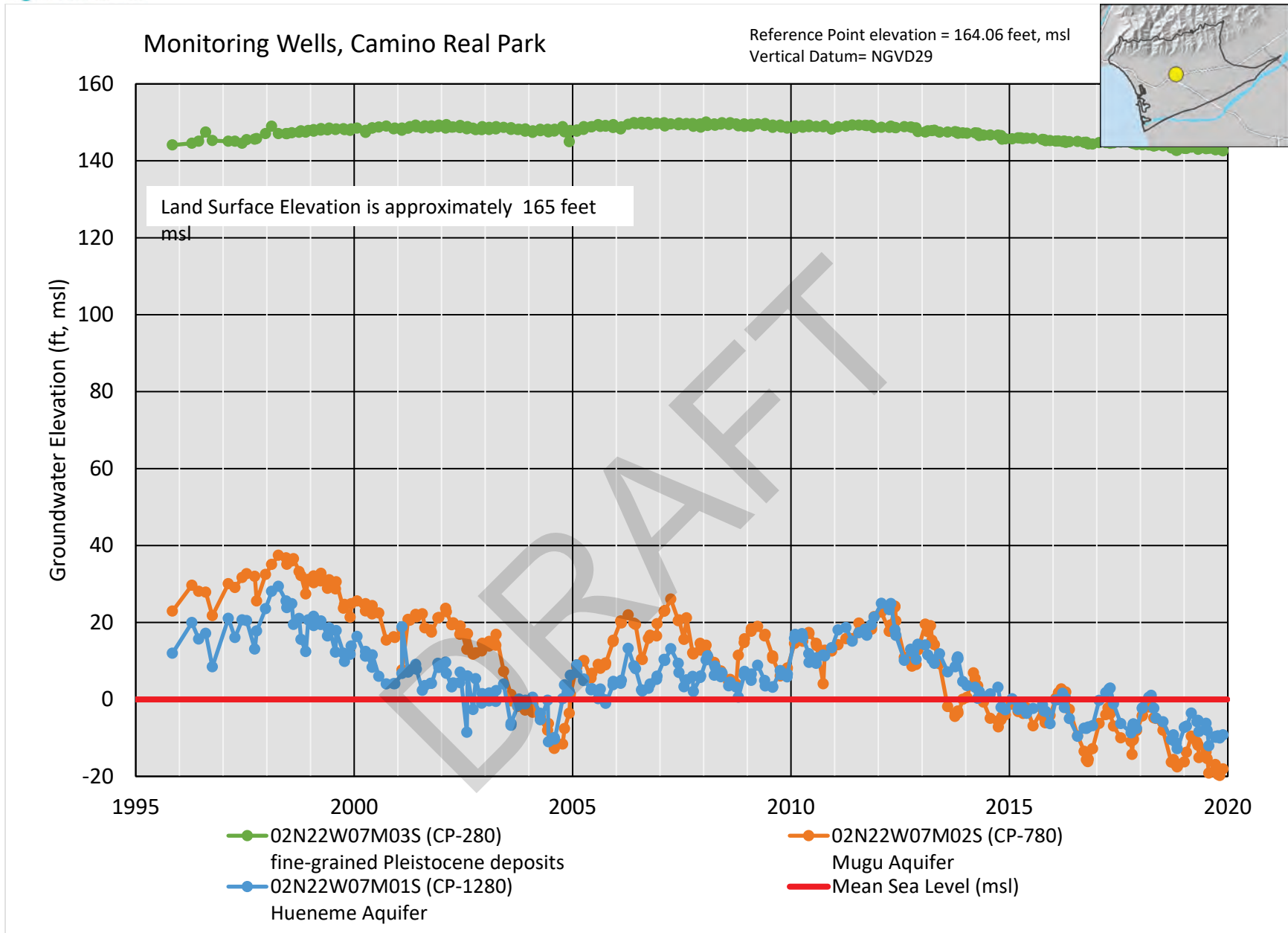


Figure 3.2-15 Groundwater Level Records for Camino Real Park Monitoring Wells.

### Monitoring Wells, Community Water Park at Kimball Rd.

Reference Point elevation = 251.25 feet, msl  
Vertical Datum = NGVD29

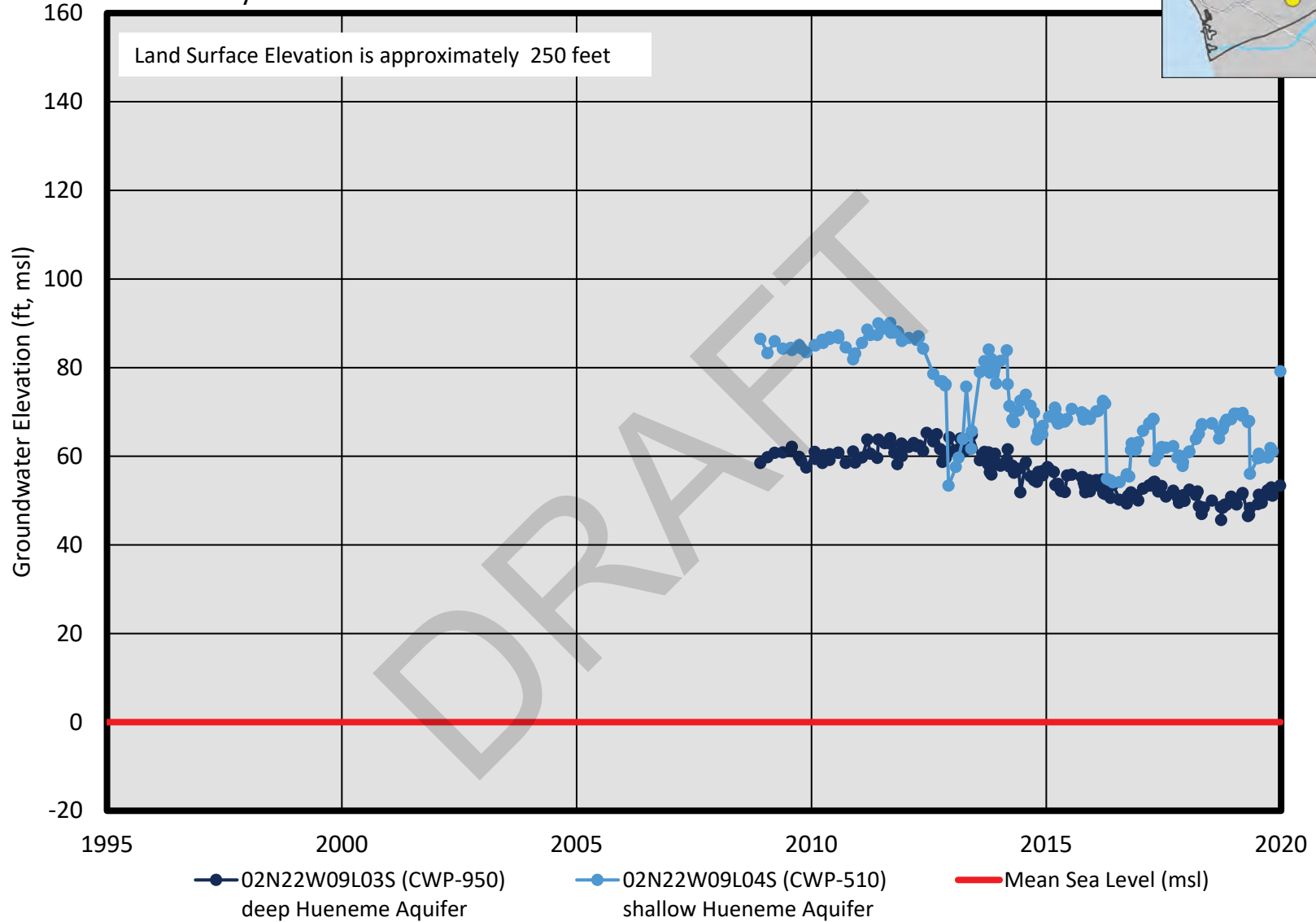


Figure 3.2-16 Groundwater Level Records for Community Water Park at Kimball Road Monitoring Wells.

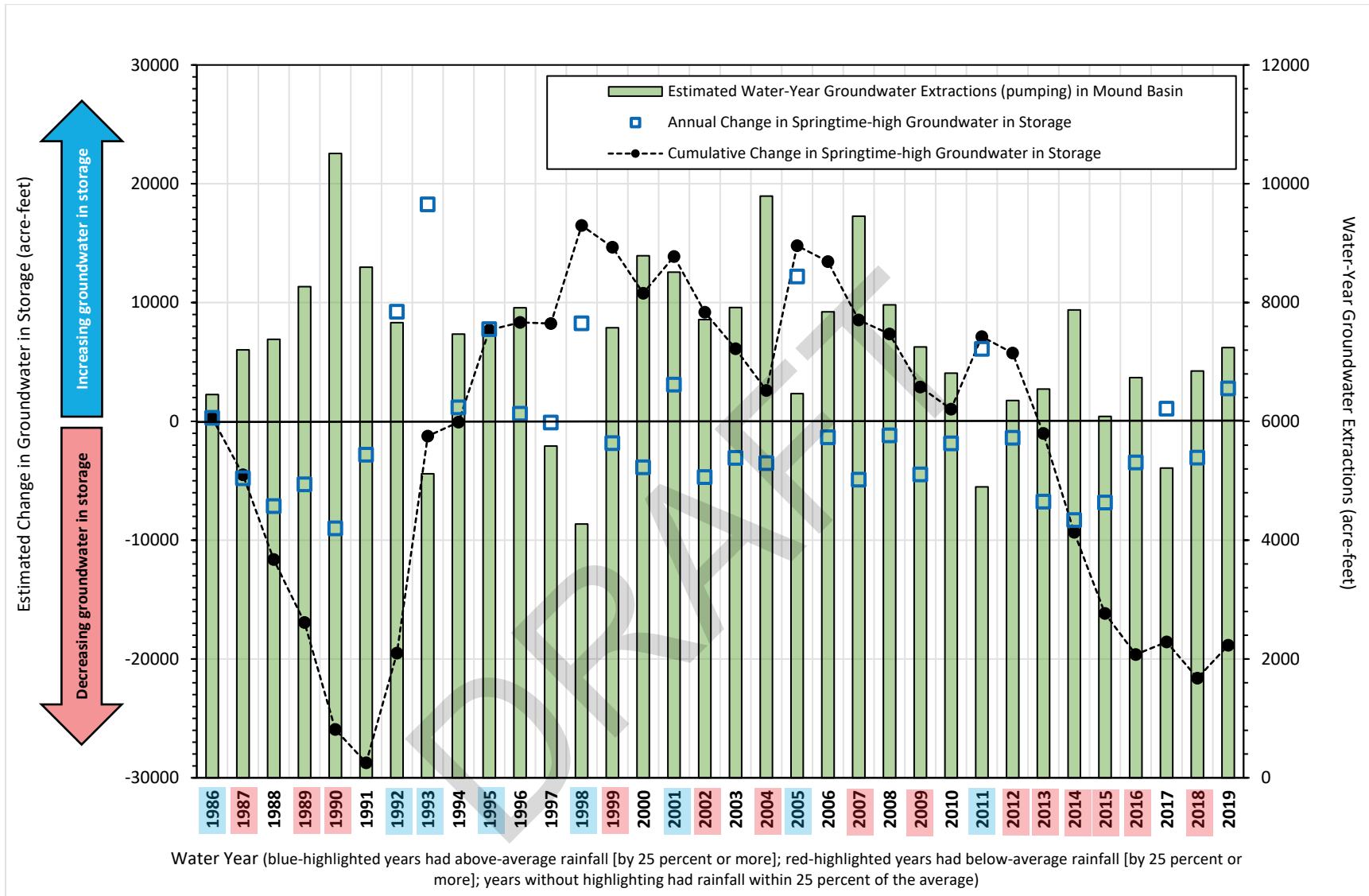


Figure 3.2-17 Change in Storage.

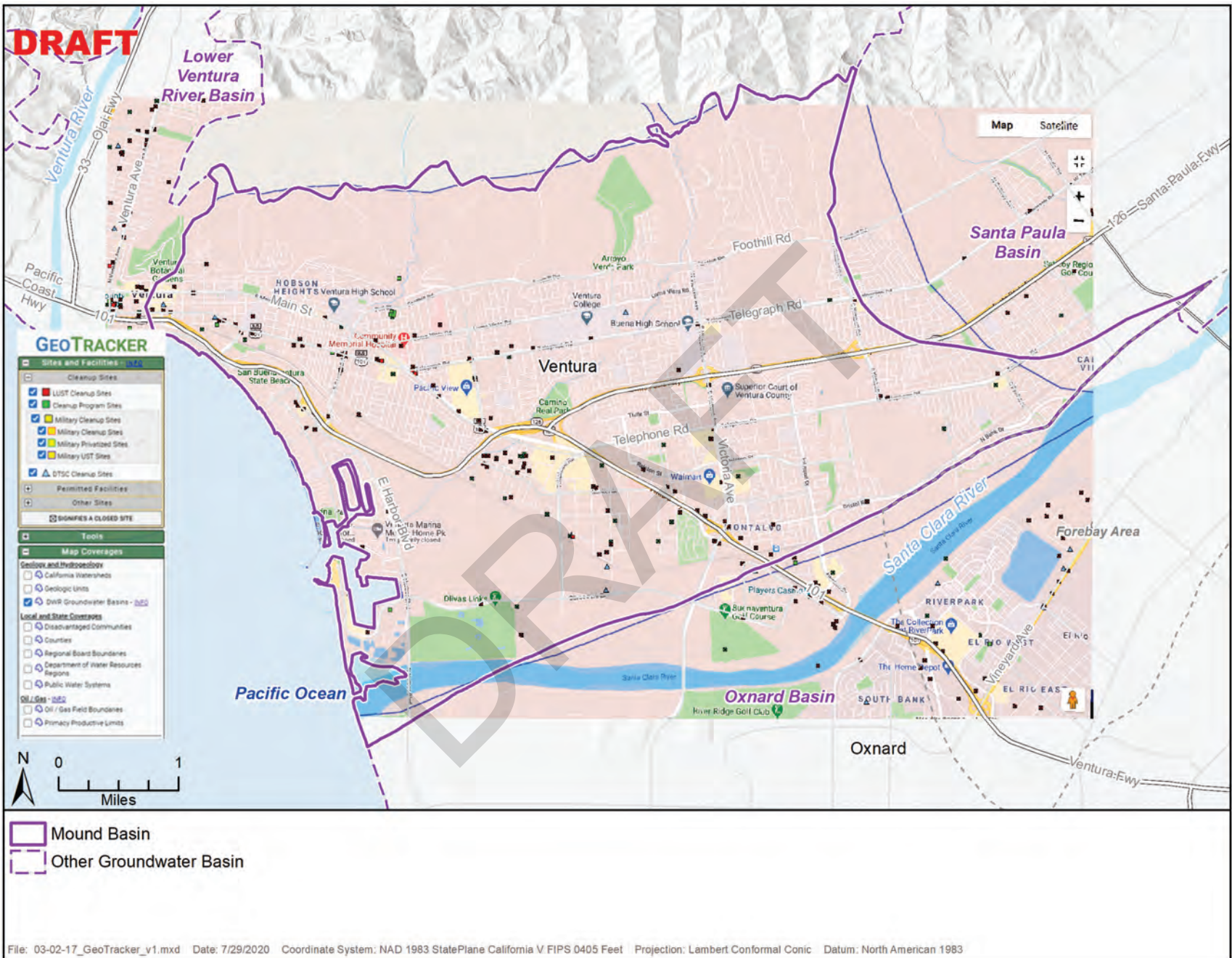


Figure 3.2-18 Map of Cleanup Sites and Facilities from Geotracker Database Mapping Website (<https://geotracker.waterboards.ca.gov/>, screenshot taken June 17, 2020).

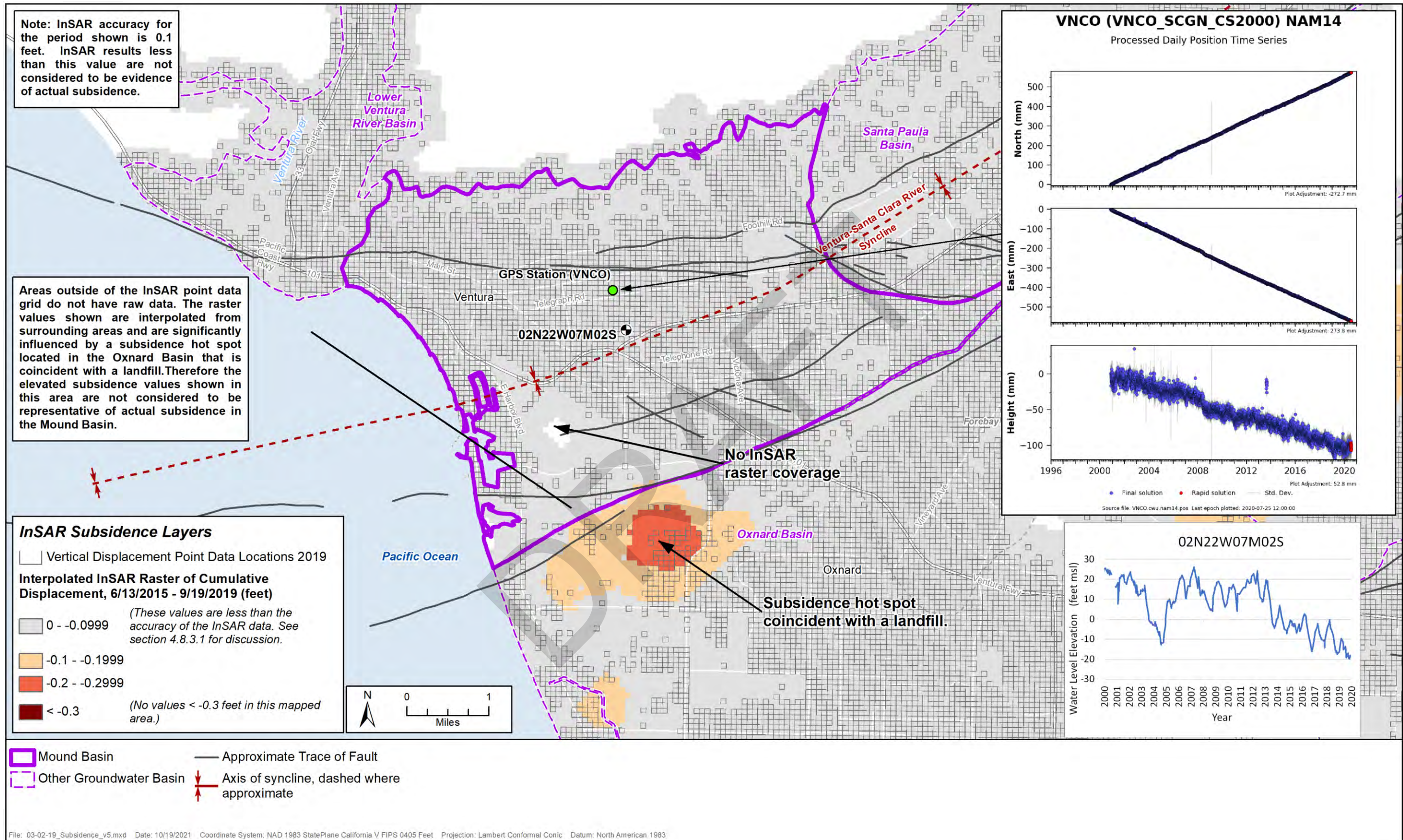


Figure 3.2-19 Cumulative Vertical Displacement from 2015 – 2019.

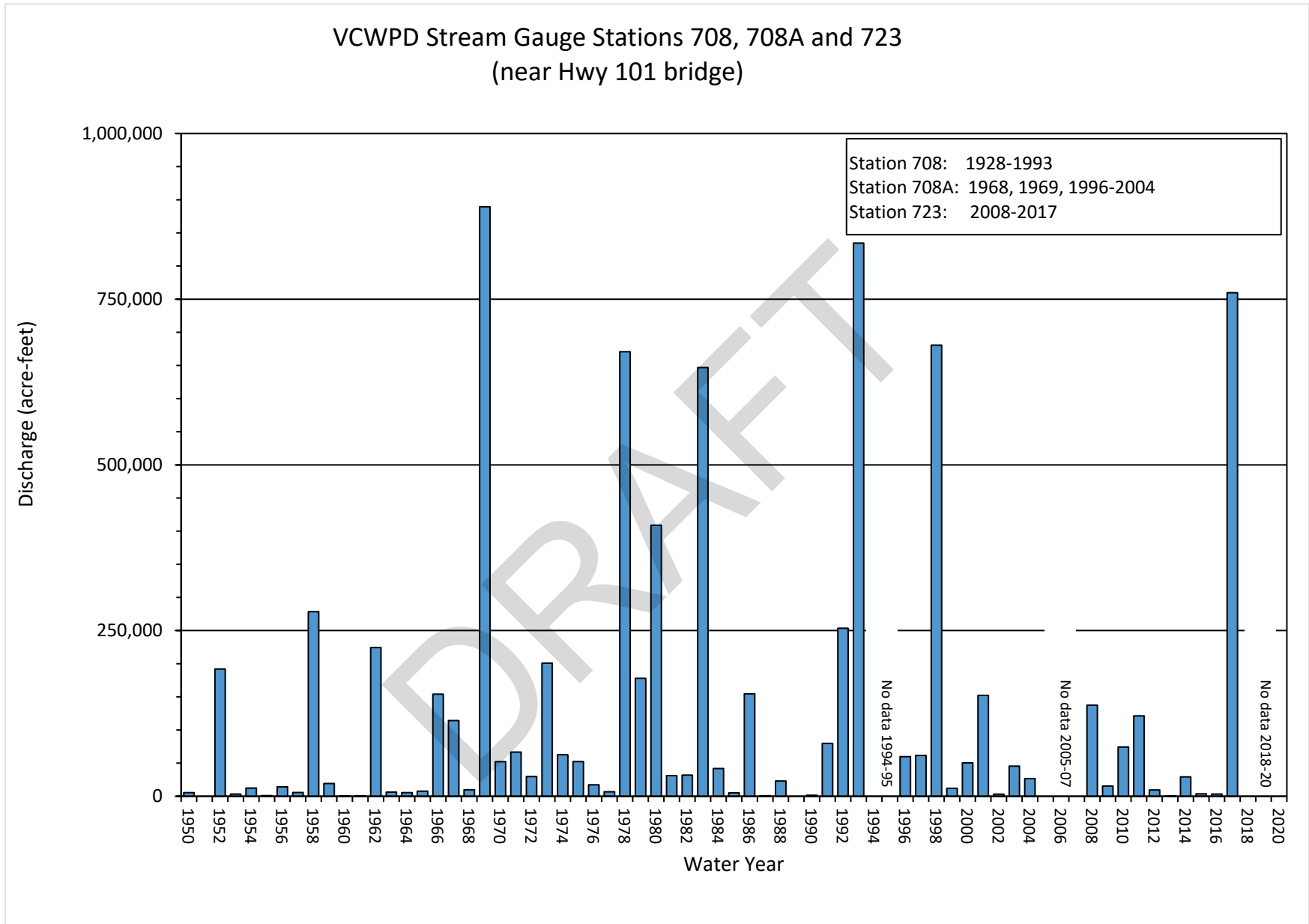


Figure 3.2-20 Annual Discharge of Santa Clara River near Mound Basin.

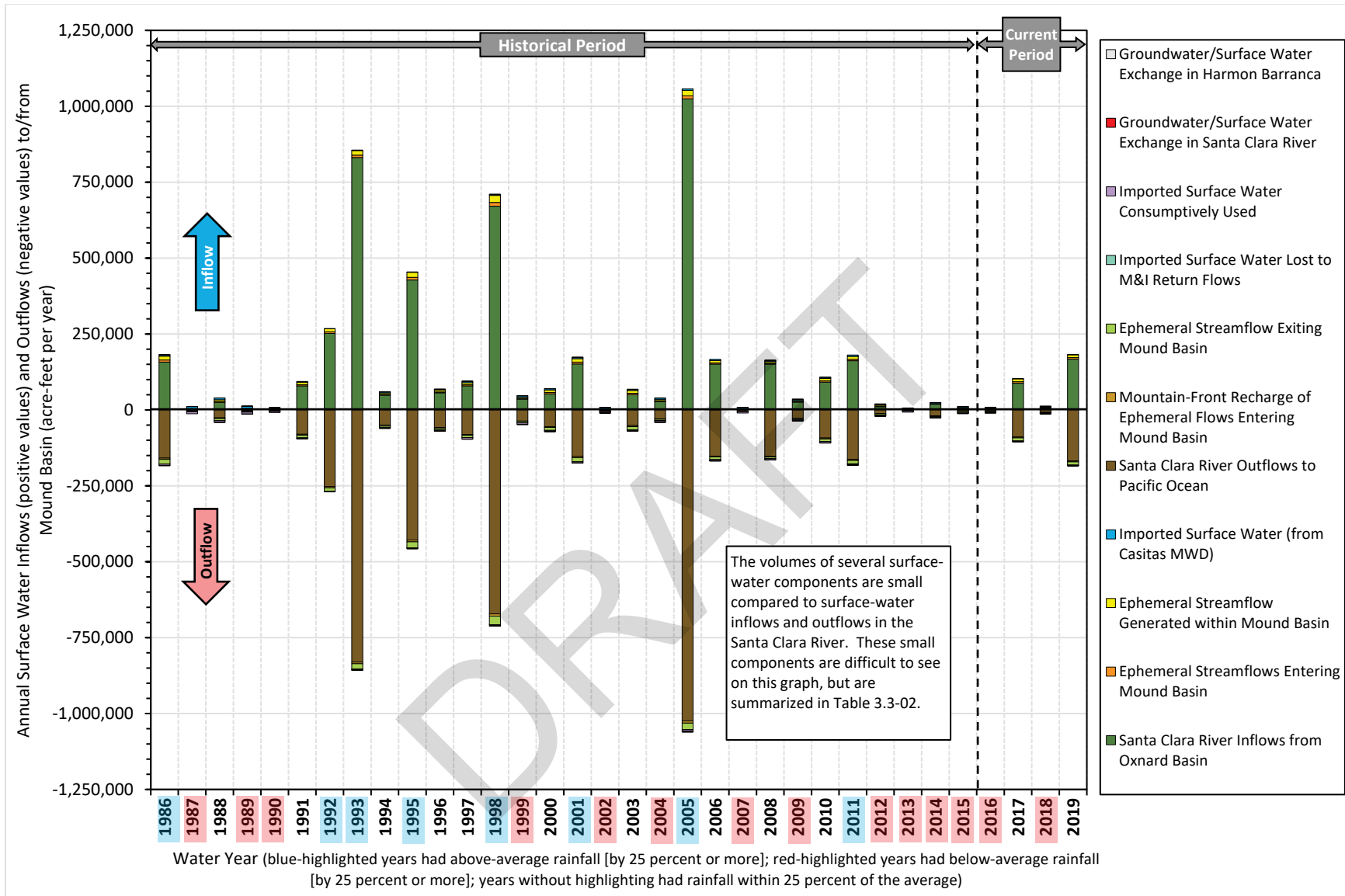


Figure 3.3-01 Annual Surface Water Inflows (positive values) and Outflows (negative values) to/from Mound Basin (acre-feet per year).



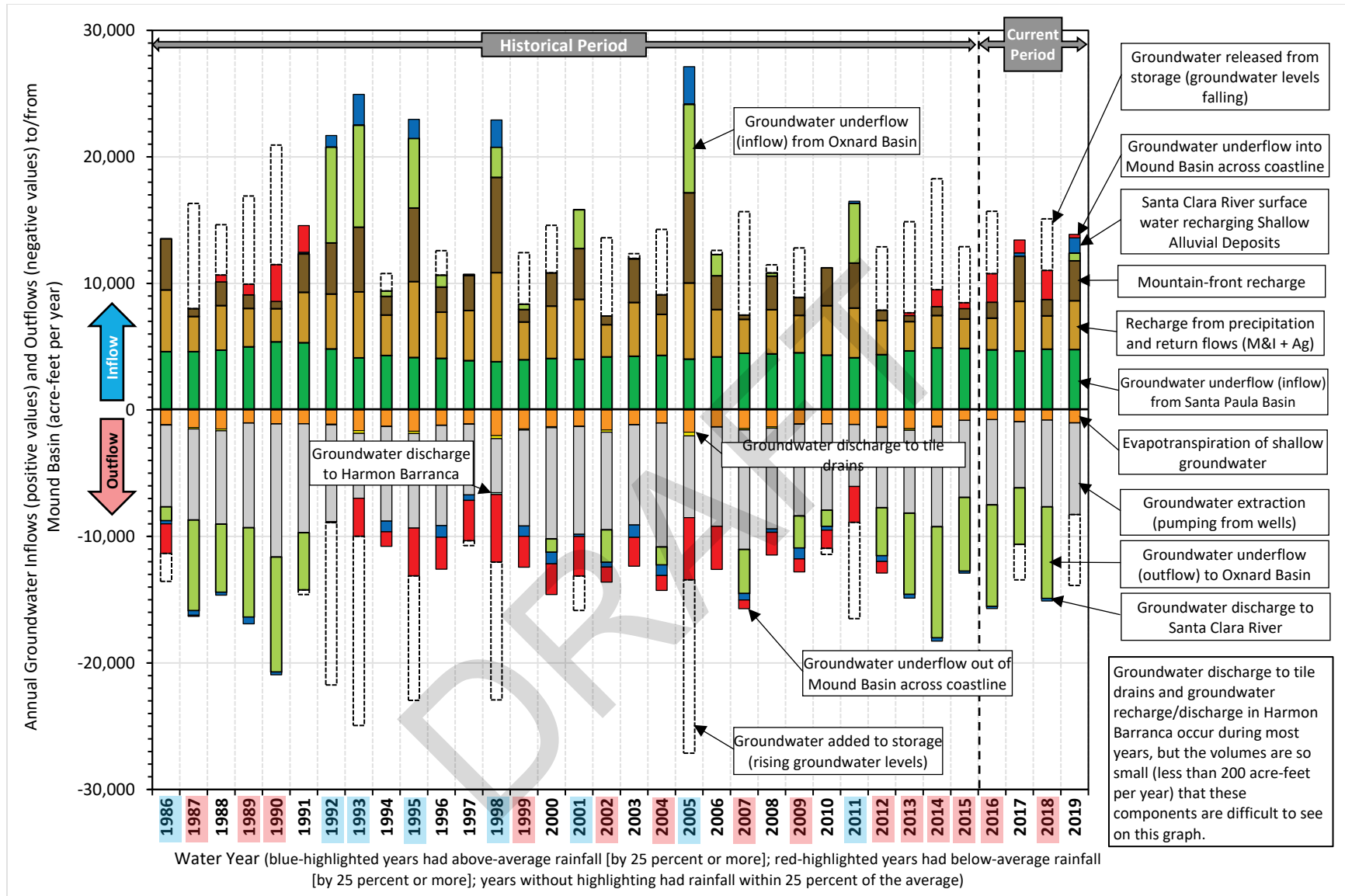


Figure 3.3-02 Annual Groundwater Inflows (positive values) and Outflows (negative values) to/from Mound Basin (acre-feet per year).

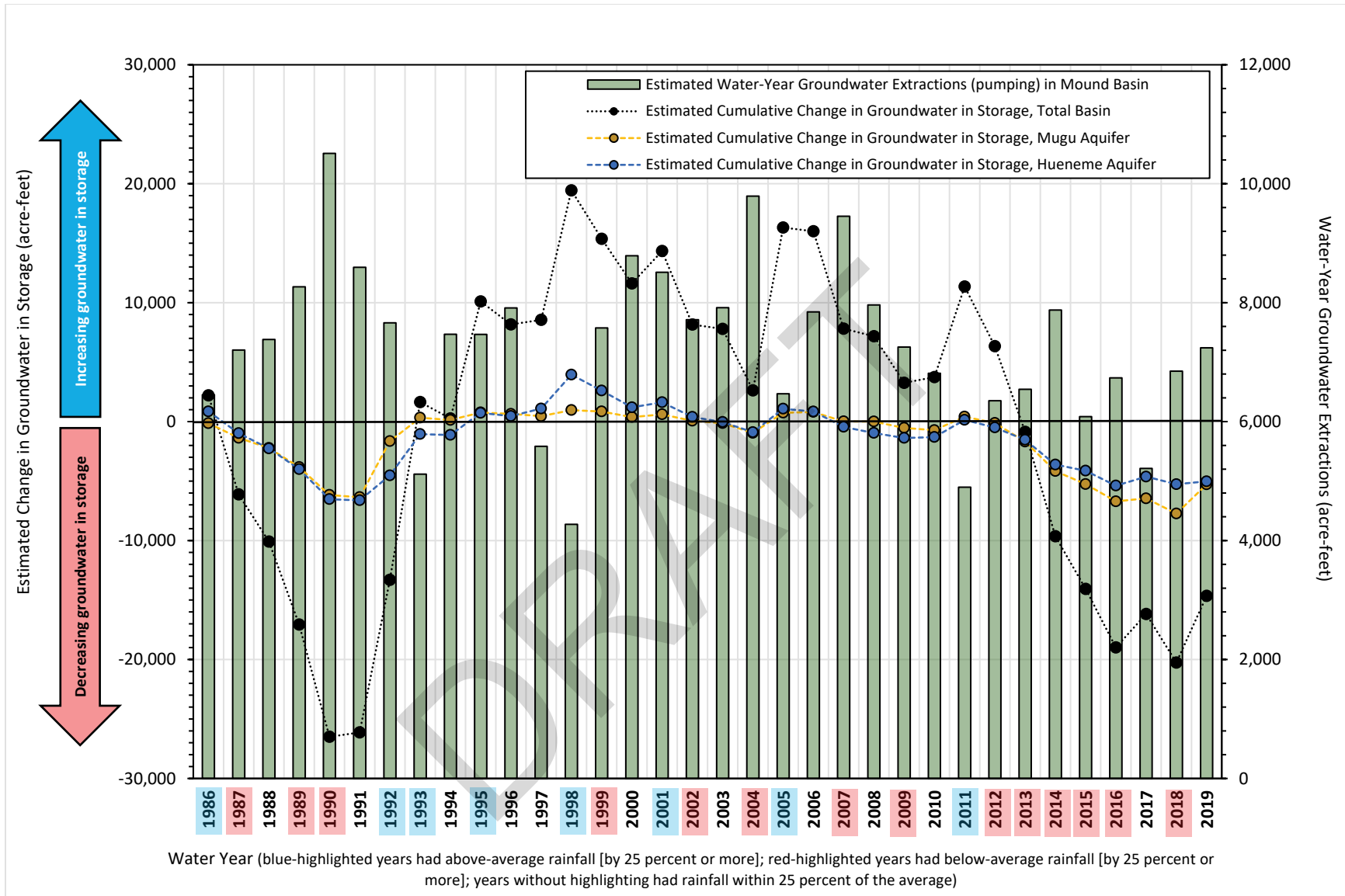


Figure 3.3-03 Estimated Change in Groundwater in Storage (acre-feet) and Water Year Extraction Volumes (acre-feet)

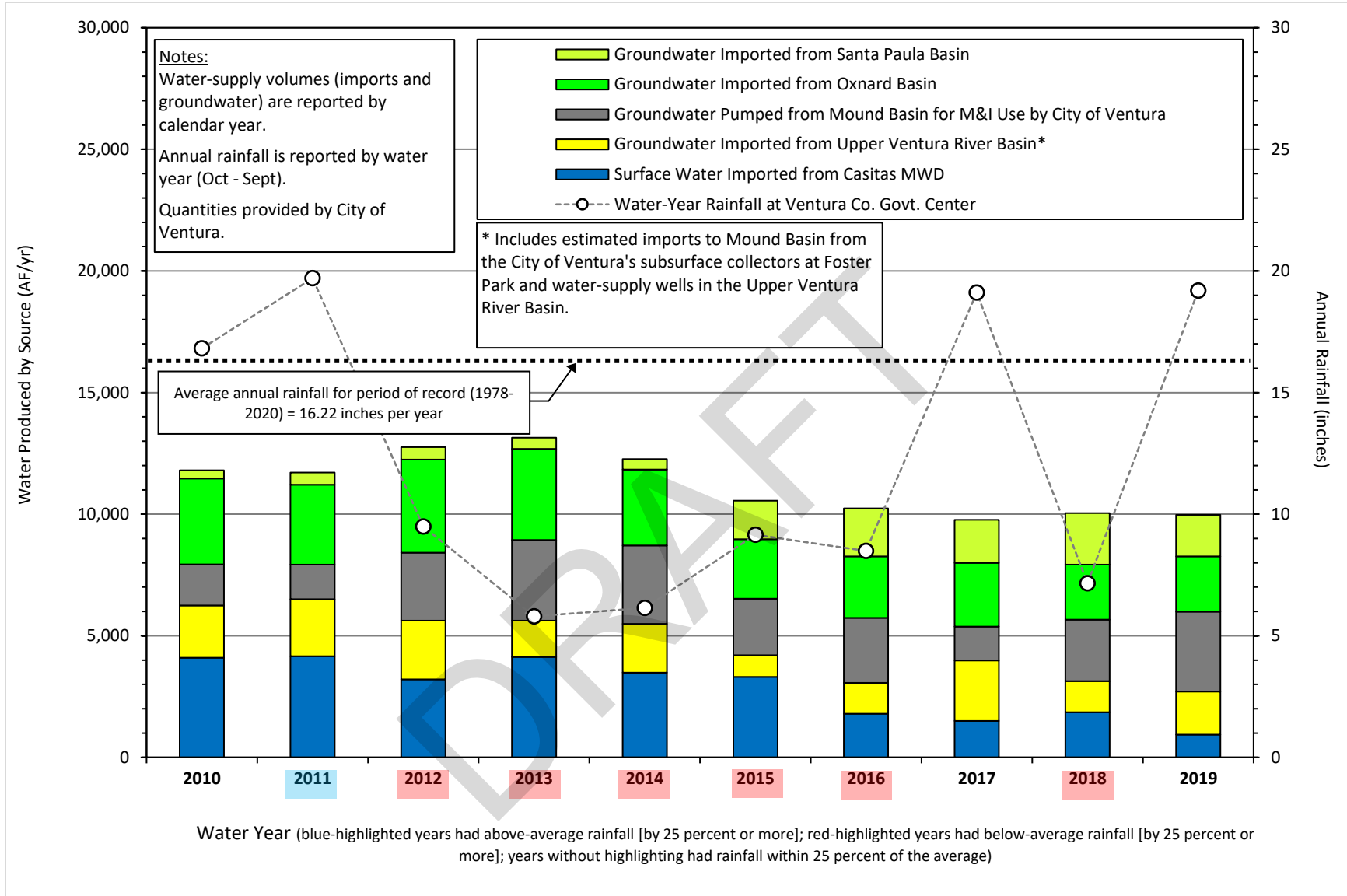


Figure 3.3-04 City of Ventura 10-Year Historical Surface Water Deliveries and Groundwater Production (acre-feet per year).

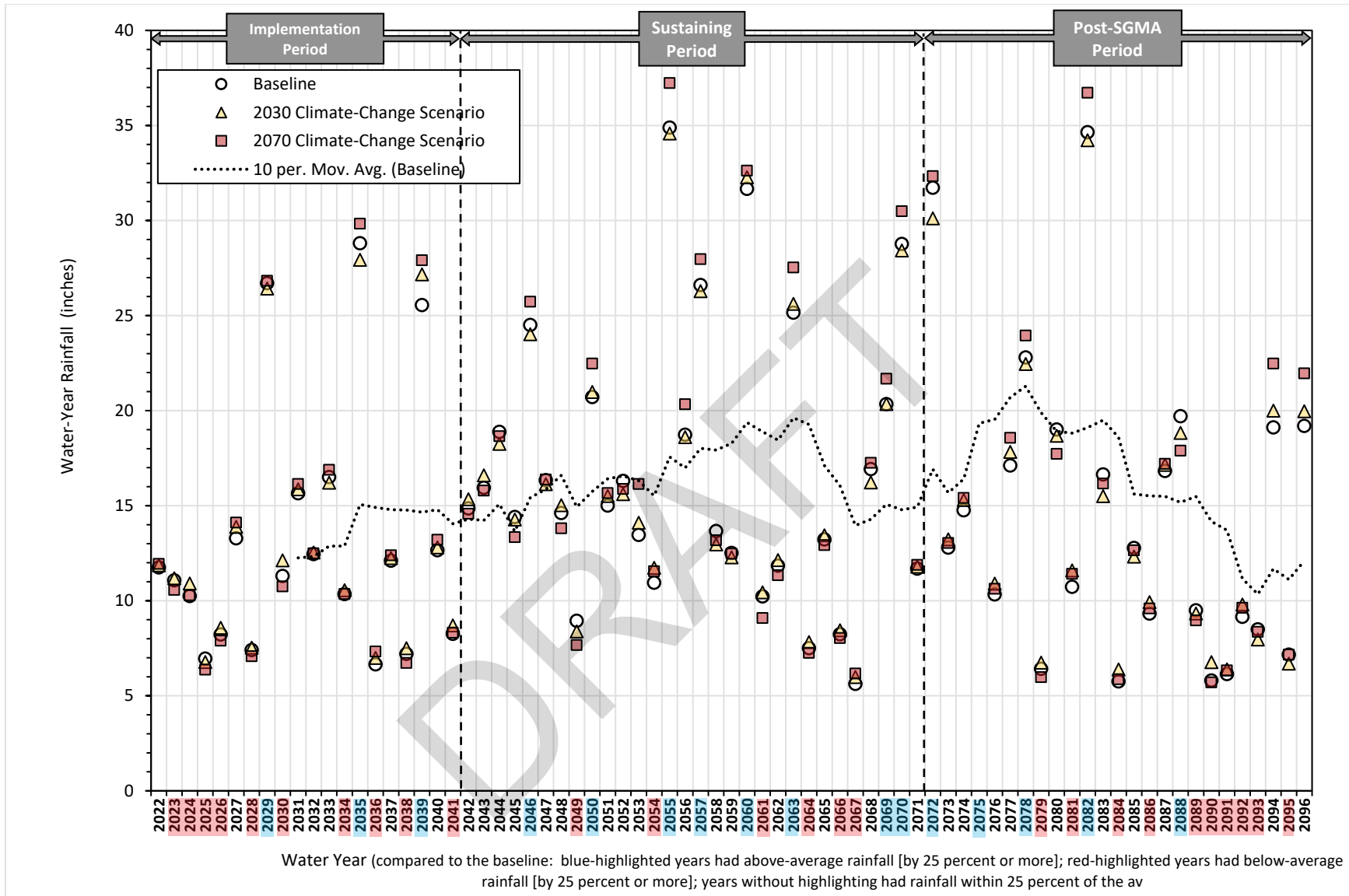


Figure 3.3-05 Projected Annual Rainfall Rates Assumed under Future Baseline, the 2030 Climate Change Scenario, and the 2070 Climate Change Scenario.

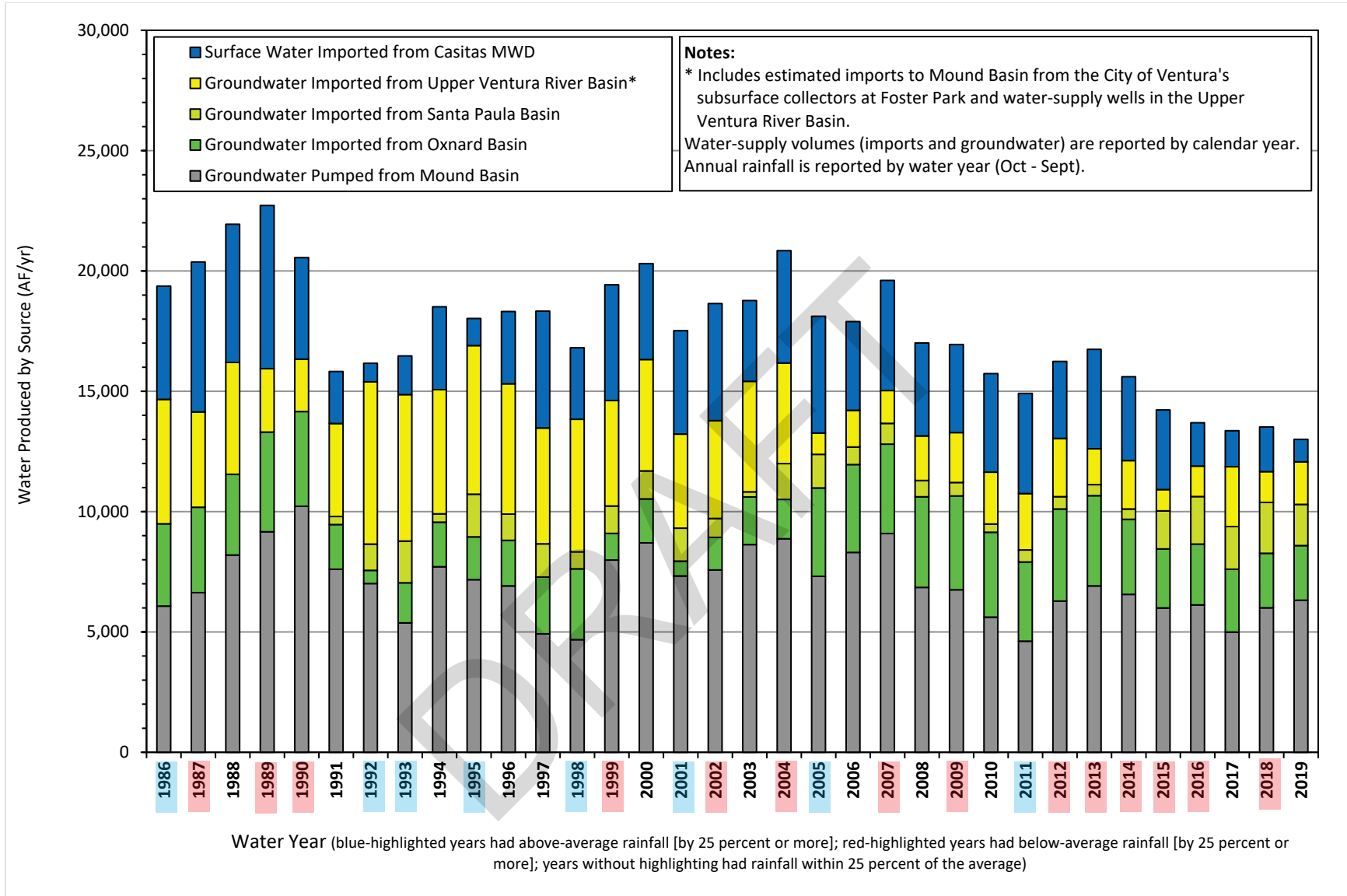


Figure 3.3-06 Long-Term Historical Surface Water Deliveries and Groundwater Production (acre-feet per year).

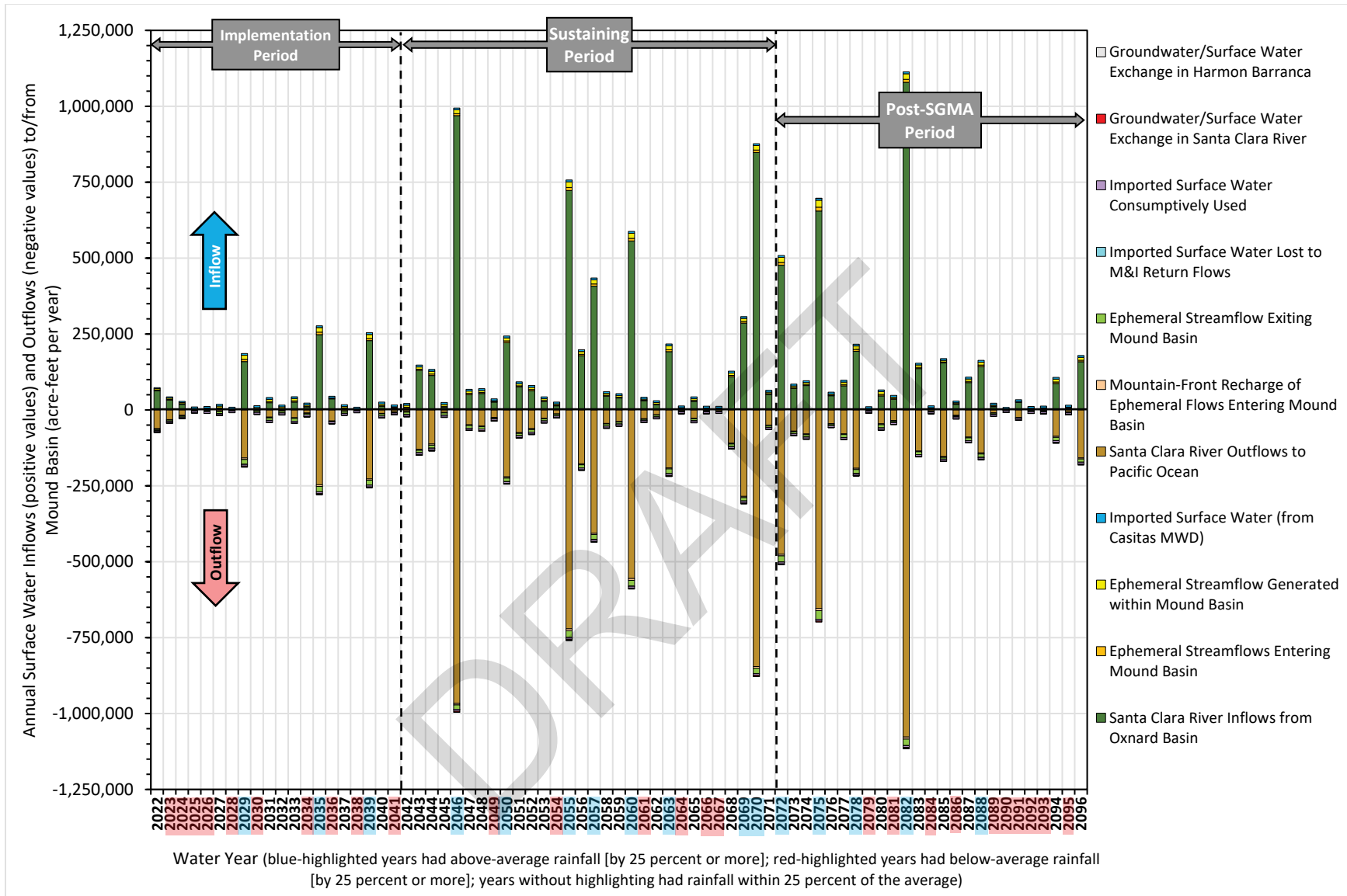


Figure 3.3-07 Baseline Projected Annual Surface Water Inflows (positive values) and Outflows (negative values) to/from Mound Basin (acre-feet per year).

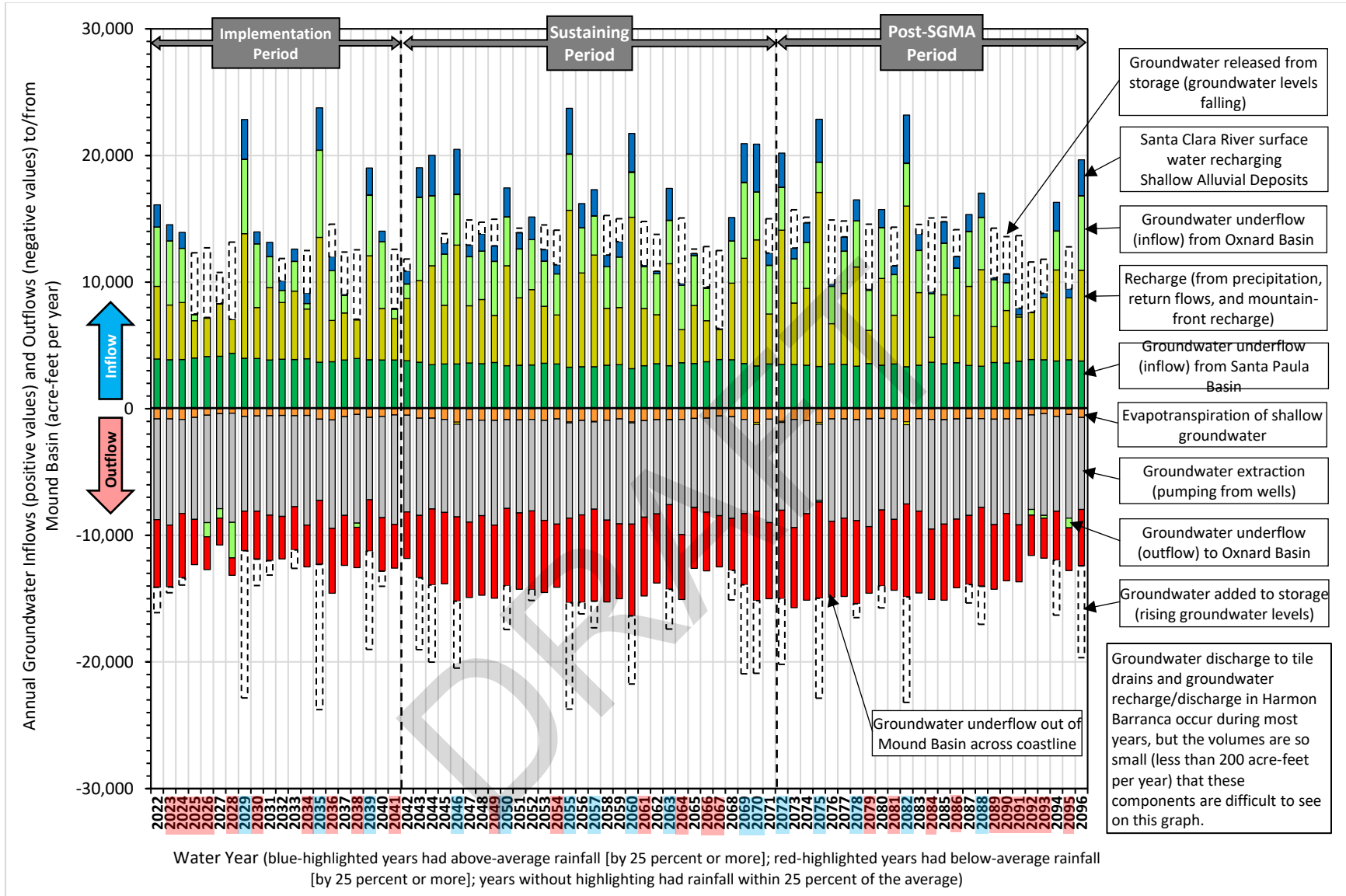


Figure 3.3-08 Baseline Projected Change in Groundwater in Storage (acre-feet) and Water-Year Extraction Volumes (acre-feet).

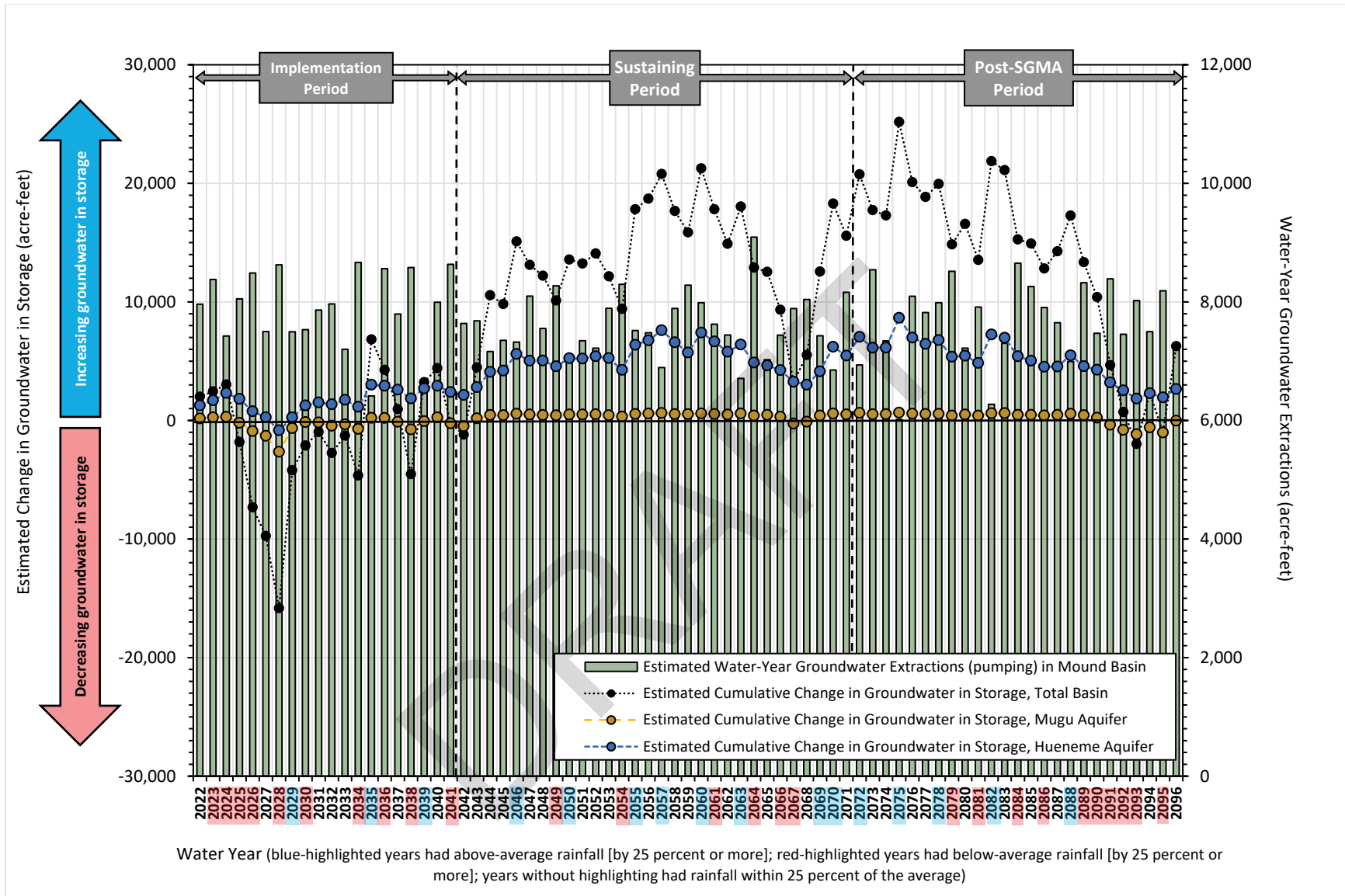


Figure 3.3-09 Projected Baseline Change in Groundwater in Storage (acre-feet) and Water-Year Extraction Volumes (acre-feet).



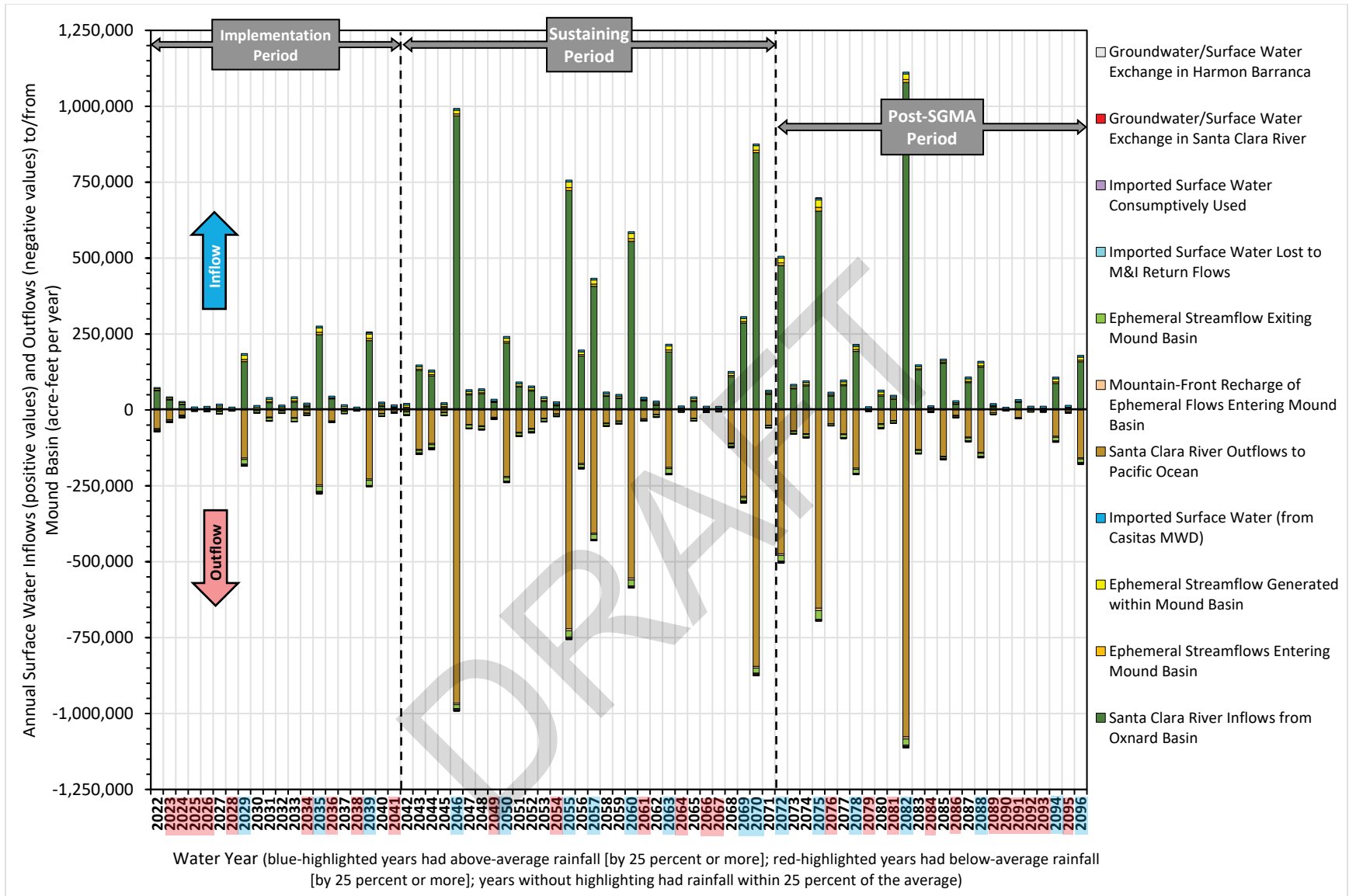


Figure 3.3-10 Projected Surface Water Budget Components Under the 2030 Climate Change Scenario.

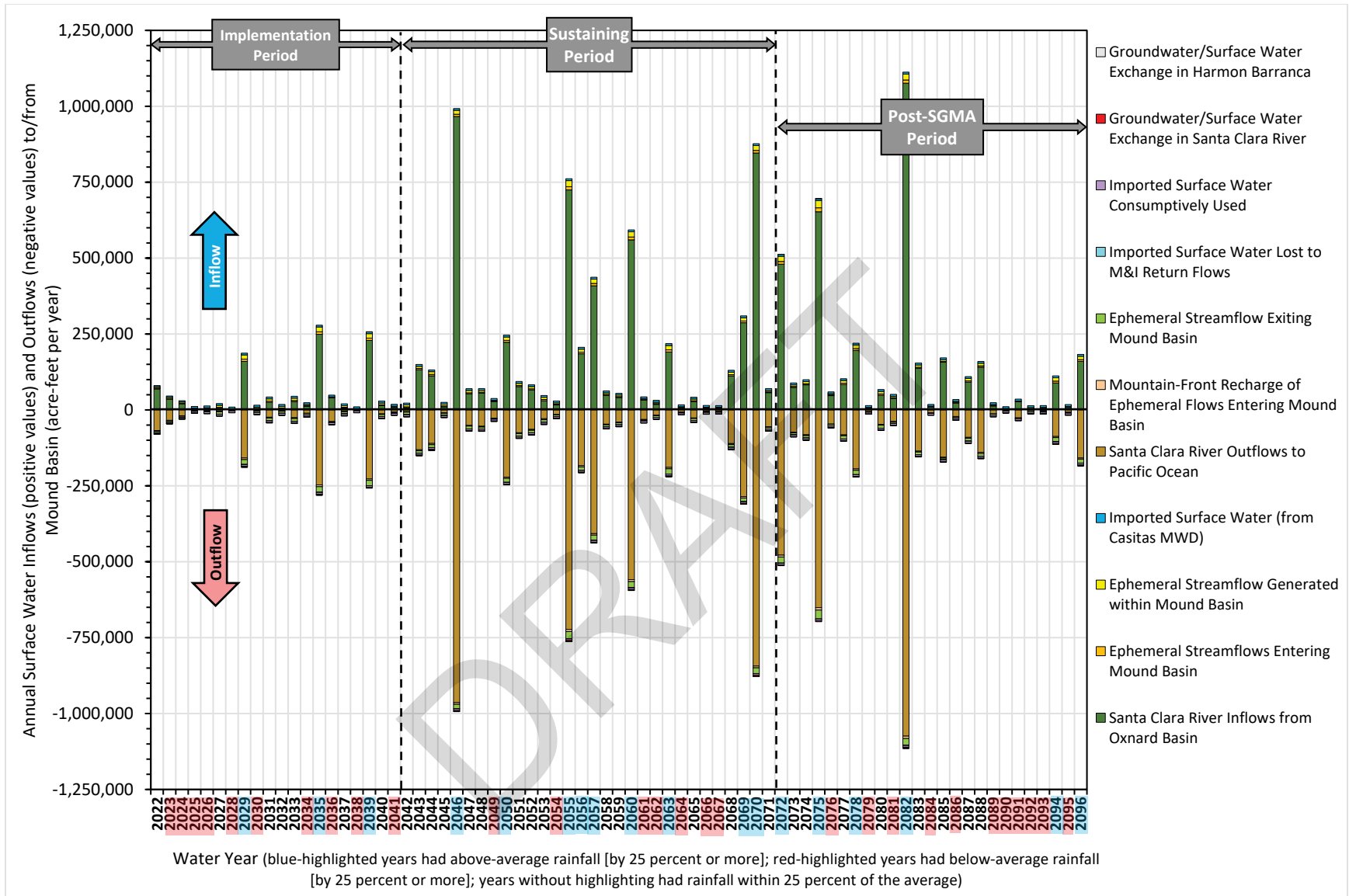


Figure 3.3-11 Projected Surface Water Budget Components Under the 2070 Climate Change Scenario.

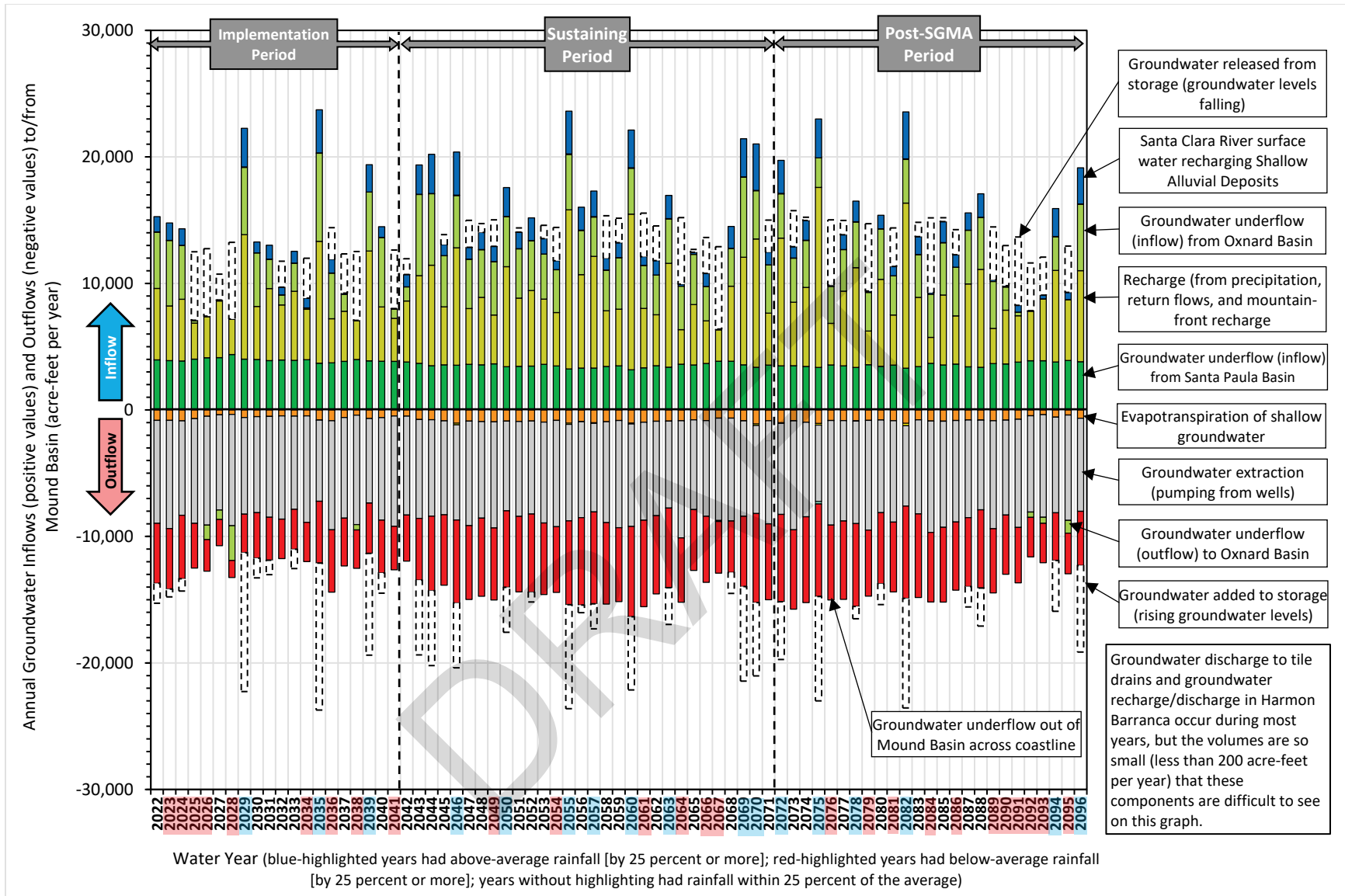


Figure 3.3-12 Projected Groundwater Budget Components Under the 2030 Climate-Change Scenario.

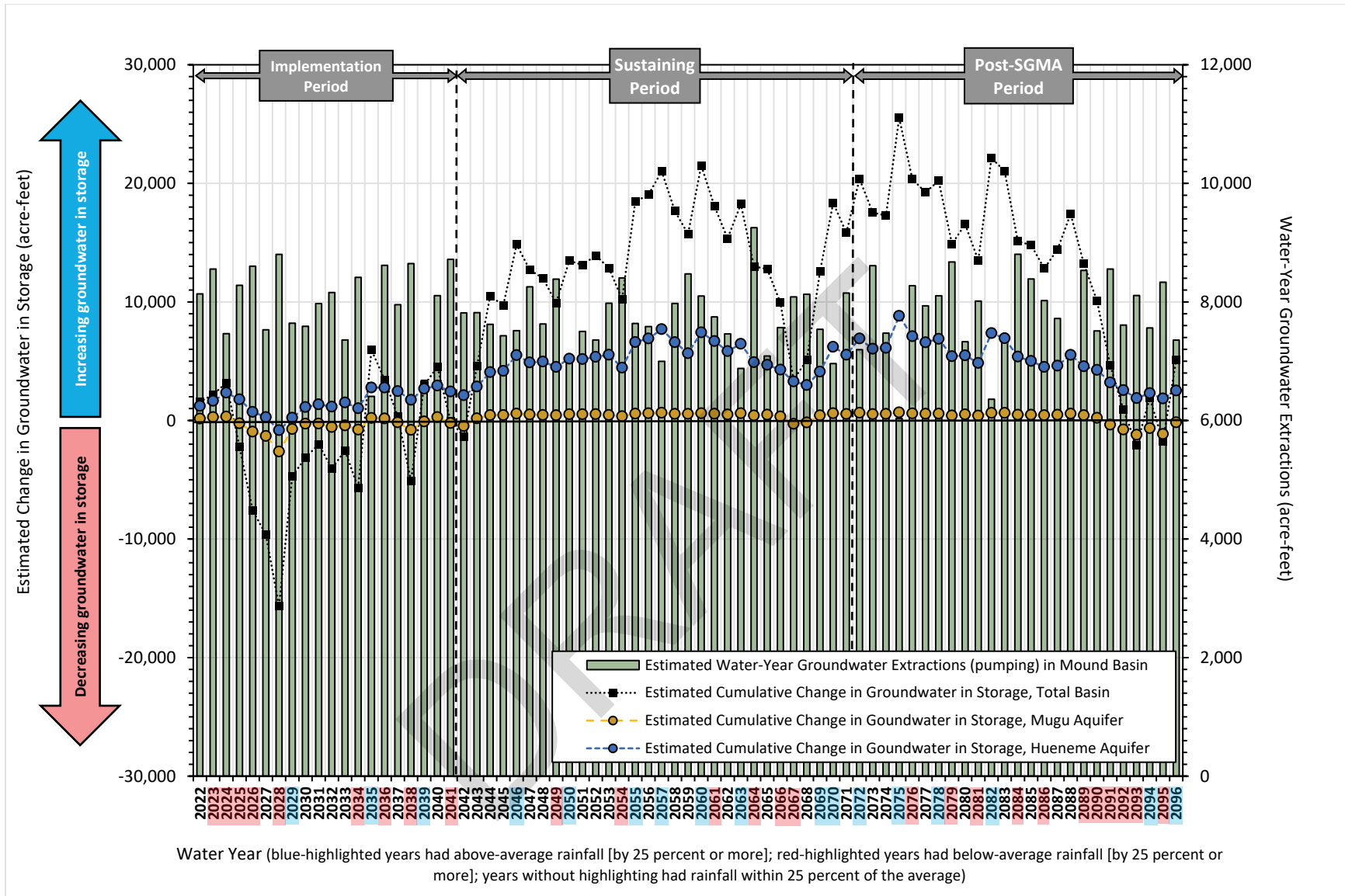


Figure 3.3-13 Projected Change in Groundwater Storage and Water-Year Extraction Volumes Under the 2030 Climate-Change Scenario.

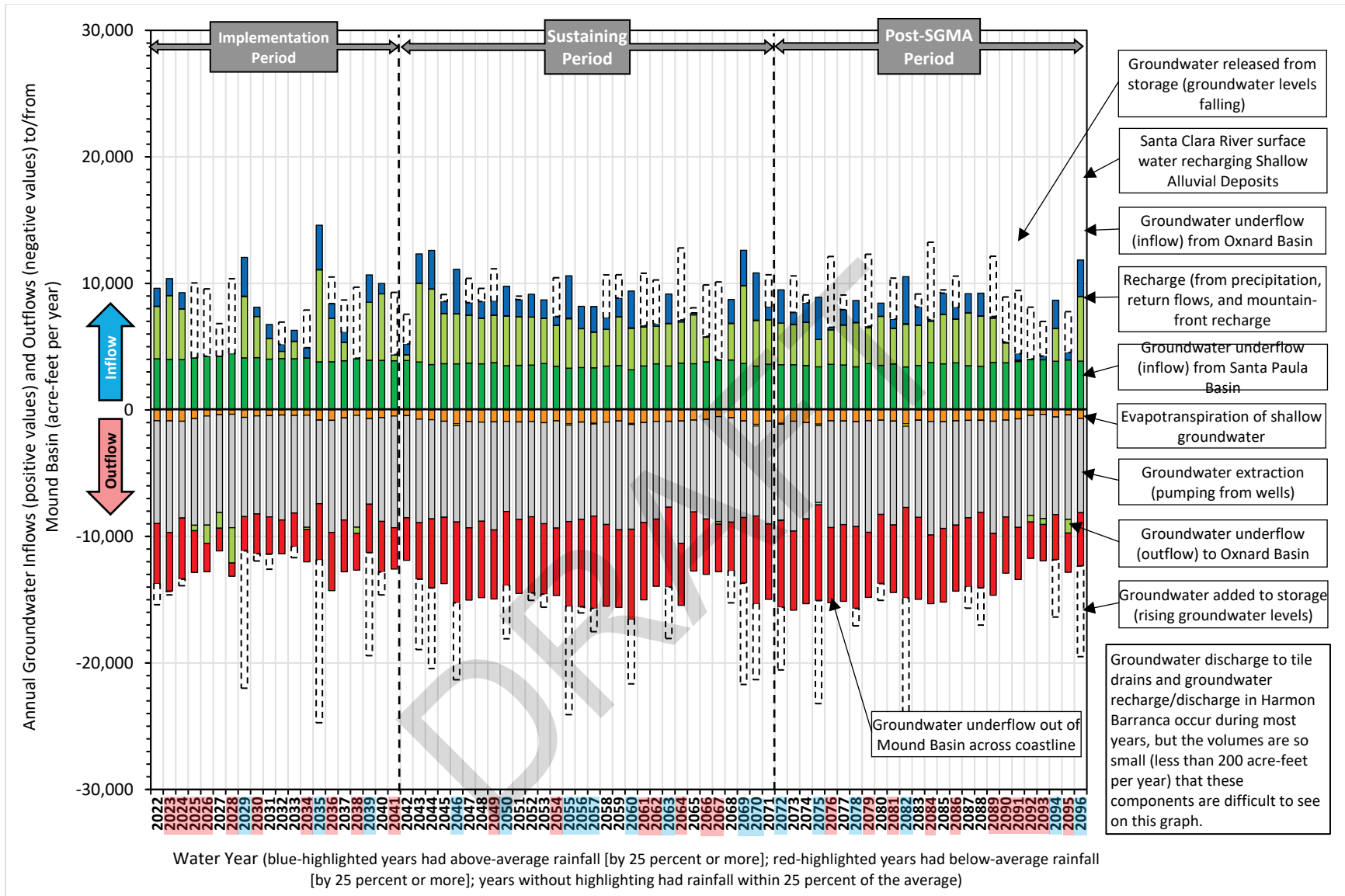


Figure 3.3-14 Projected Groundwater Budget Components Under the 2070 Climate-Change Scenario.

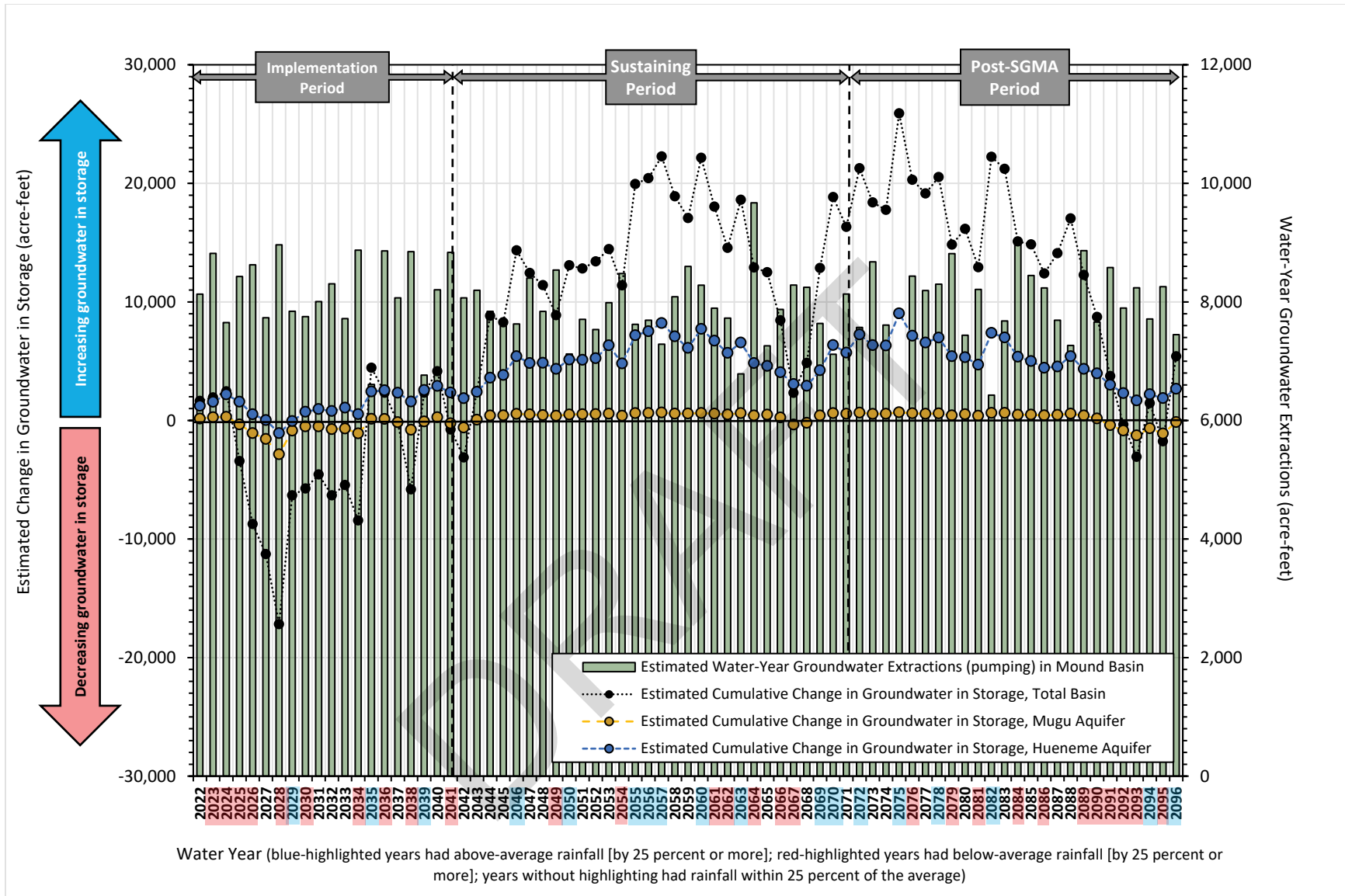


Figure 3.3-15 Projected Change in Groundwater Storage and Water-Year Extraction Volumes Under the 2070 Climate-Change Scenario.

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## Figures

### Section 4

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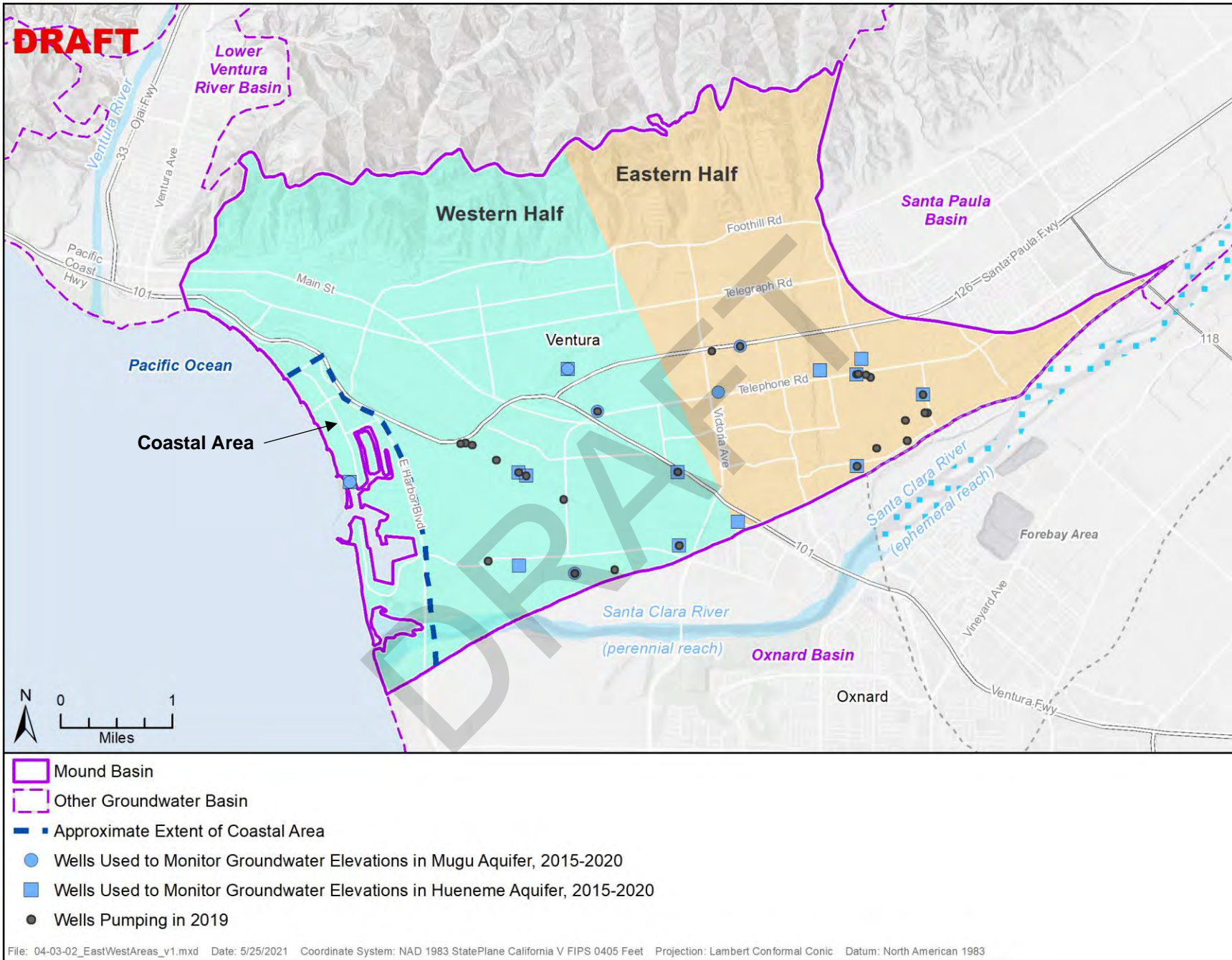


Figure 4.1-01 Mound Basin Eastern Half, Western Half, and Coastal Areas.



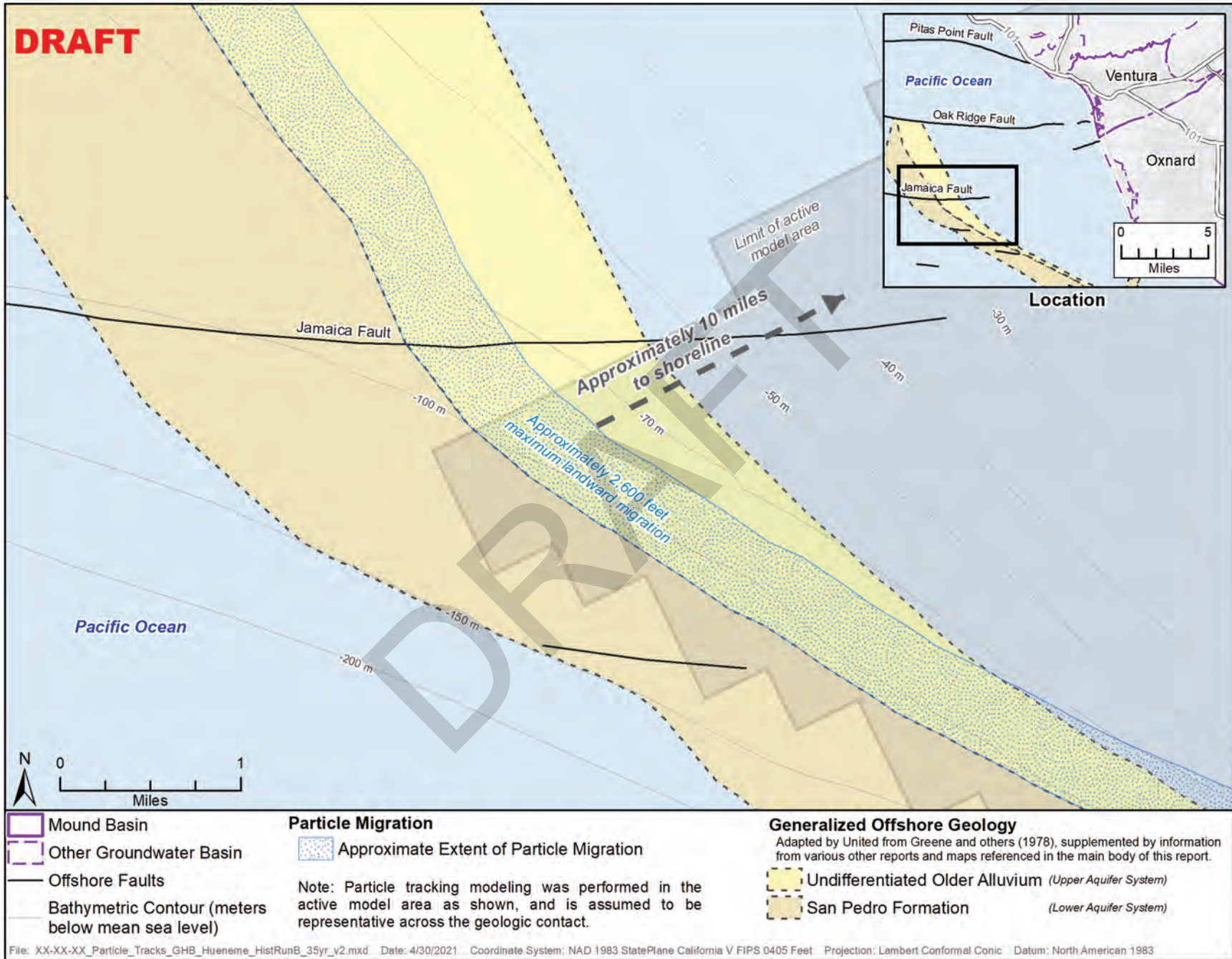


Figure 4.6-01 Estimated Historical Extent of Landward Seawater Movement in the Hueneme Aquifer.

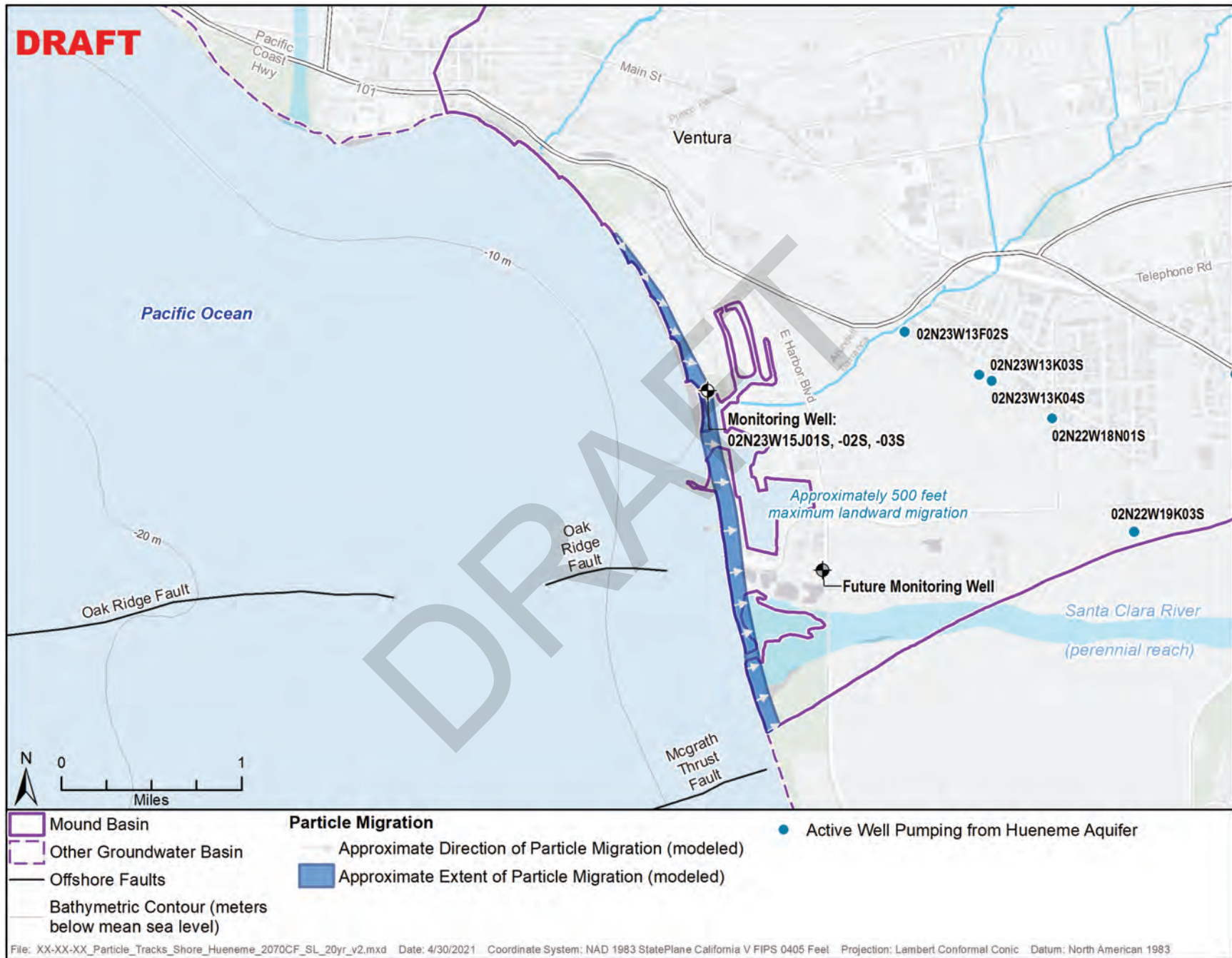


Figure 4.6-02 Estimated Landward Movement of Groundwater During 20-Year GSP Implementation Period (with 2070 Climate Change and Sea Level Rise).

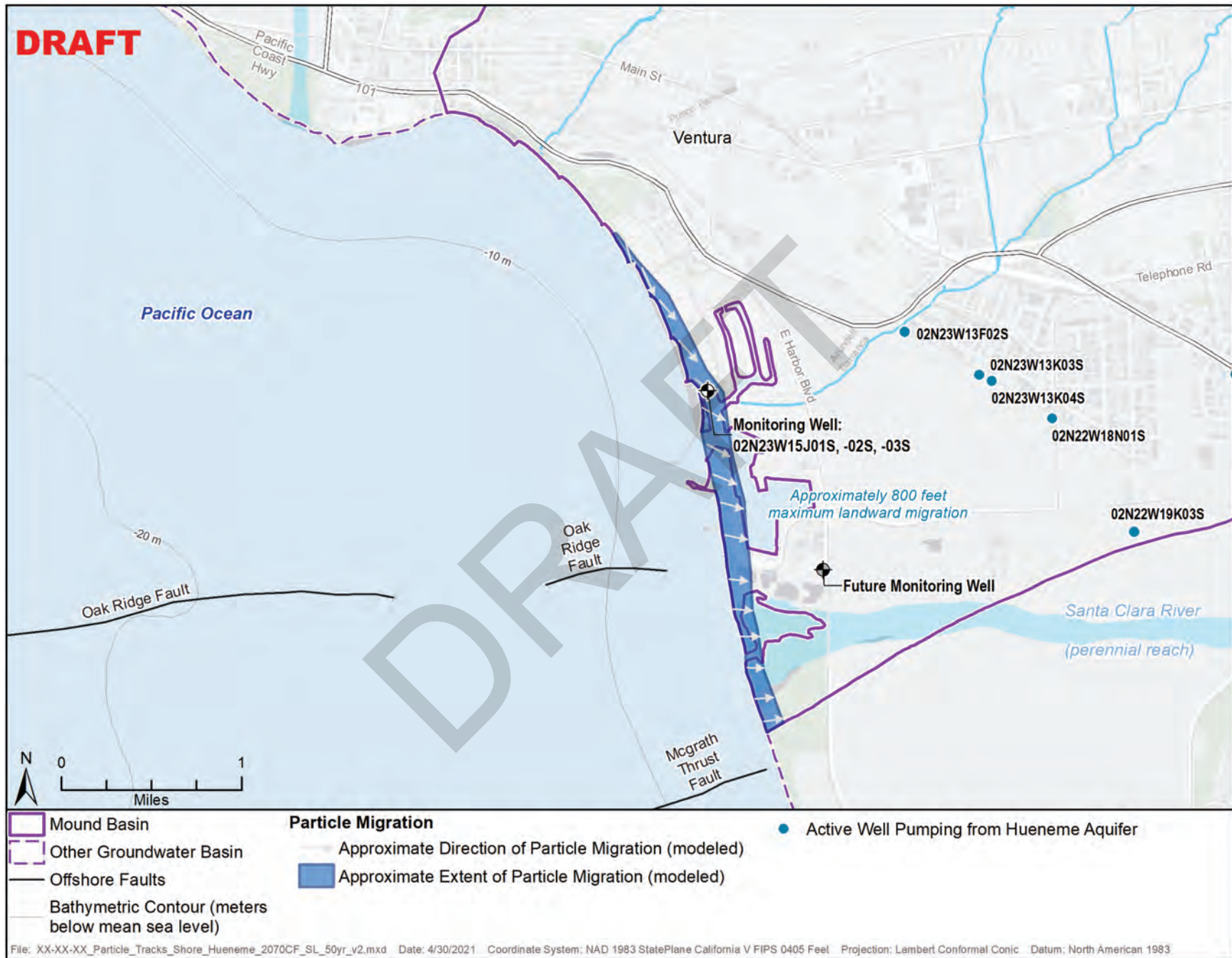


Figure 4.6-03 Estimated Landward Movement of Groundwater During 50-Year SGMA Planning Period (with 2070 Climate Change and Sea Level Rise).

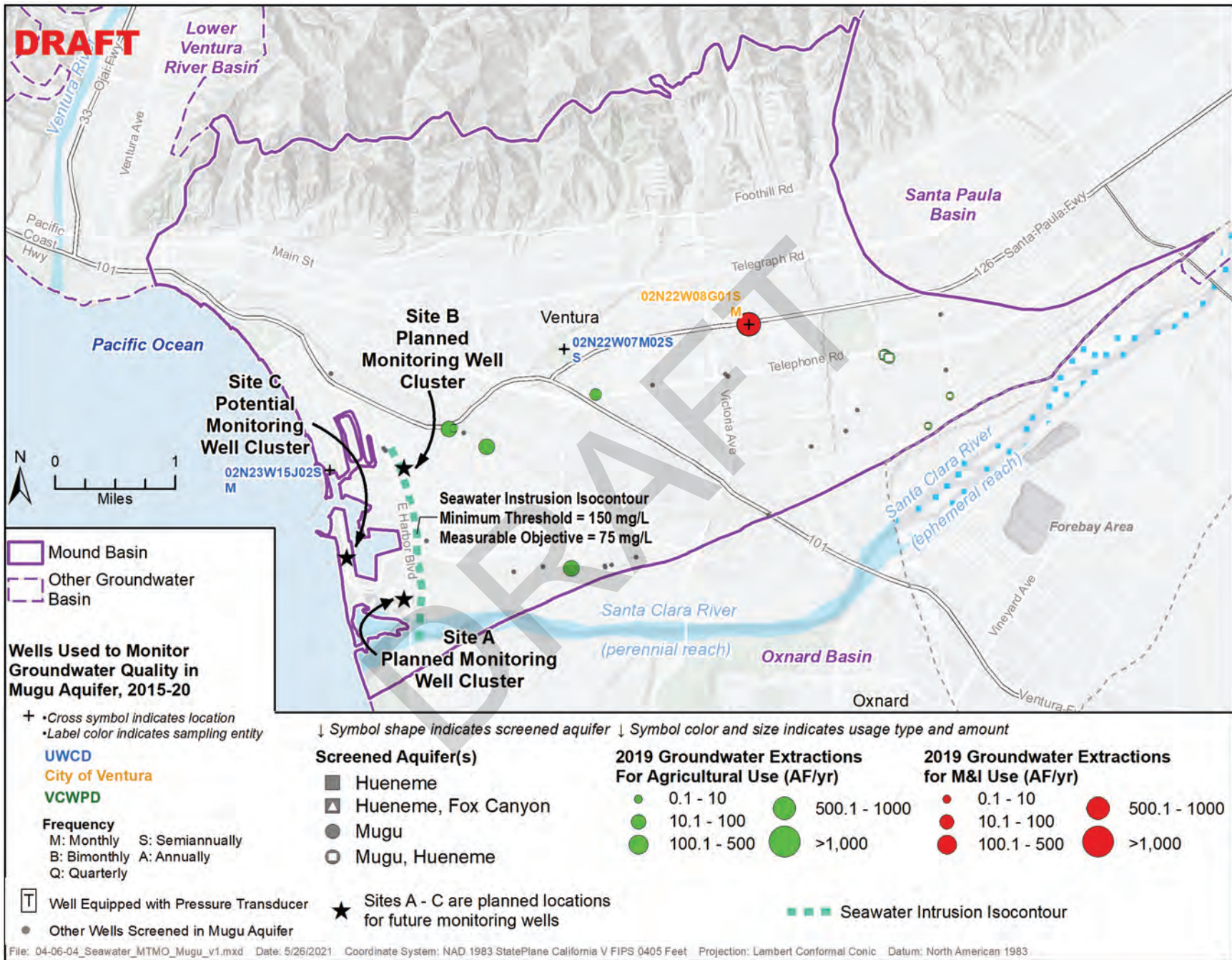


Figure 4.6-04 Map Showing Seawater Intrusion Minimum Threshold and Measurable Objective, Mugu Aquifer.

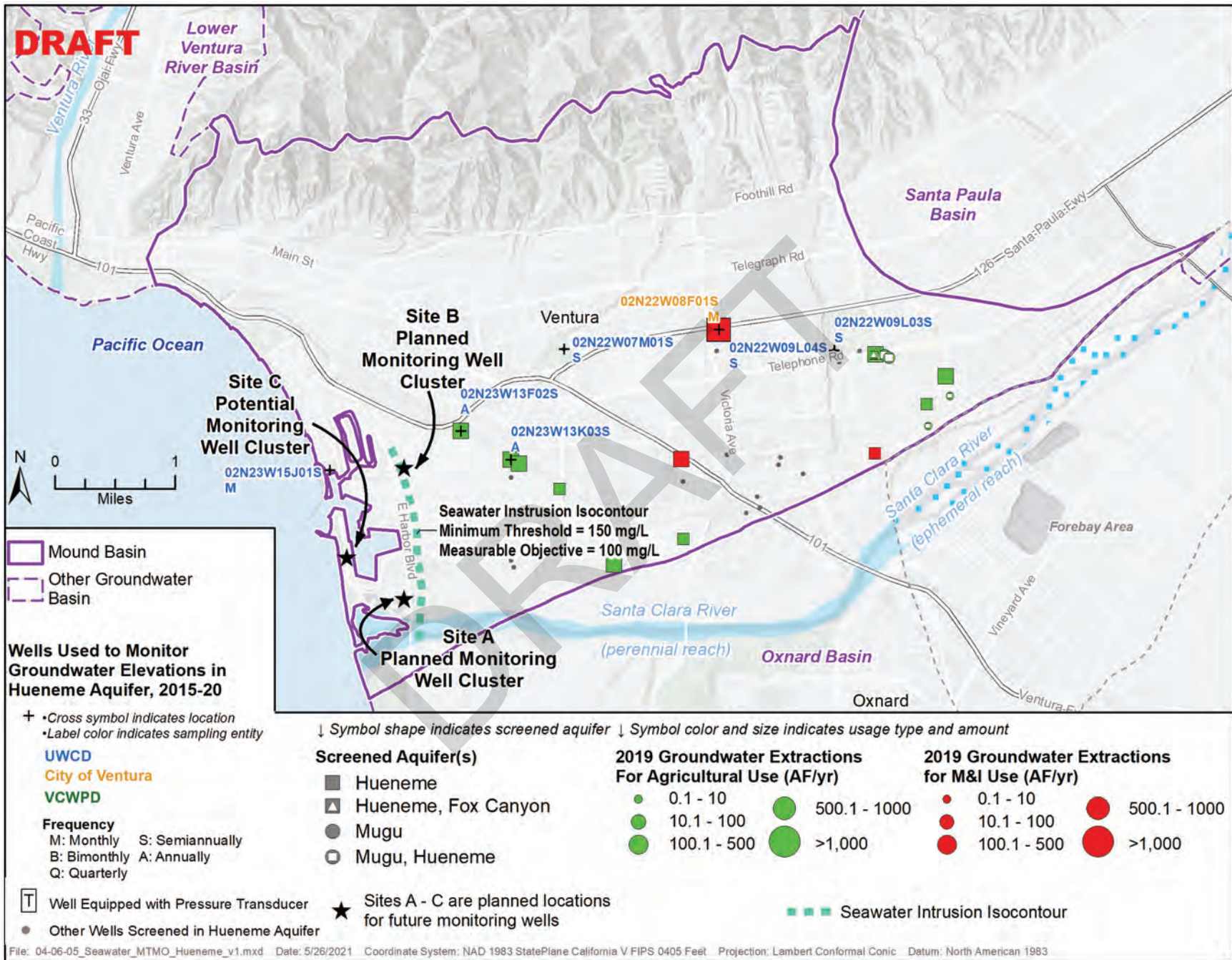


Figure 4.6-05 Map Showing Seawater Intrusion Minimum Threshold and Measurable Objective, Hueneme Aquifer.

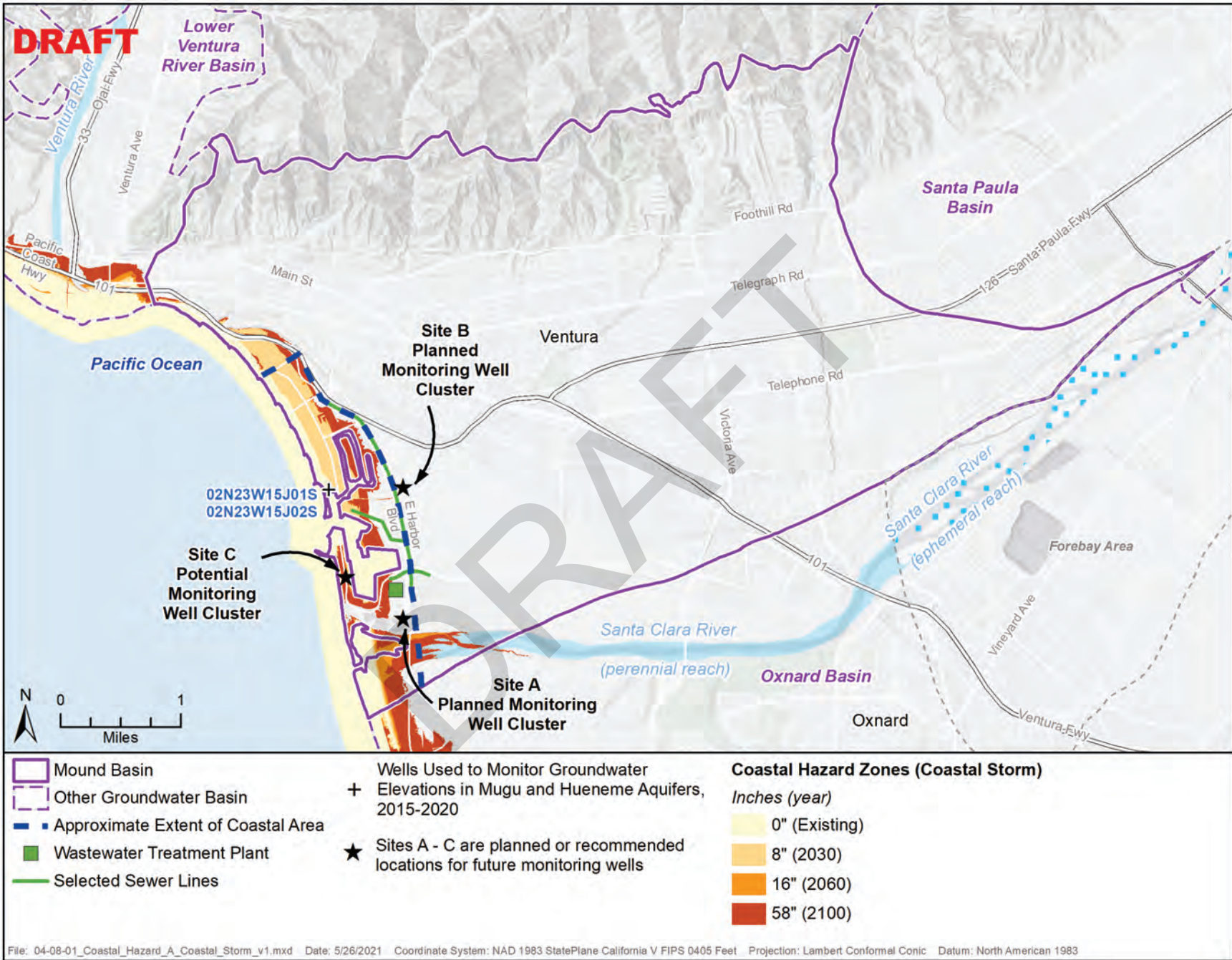


Figure 4.8-01a Seal Level Rise Associated with Coastal Storm Hazard.

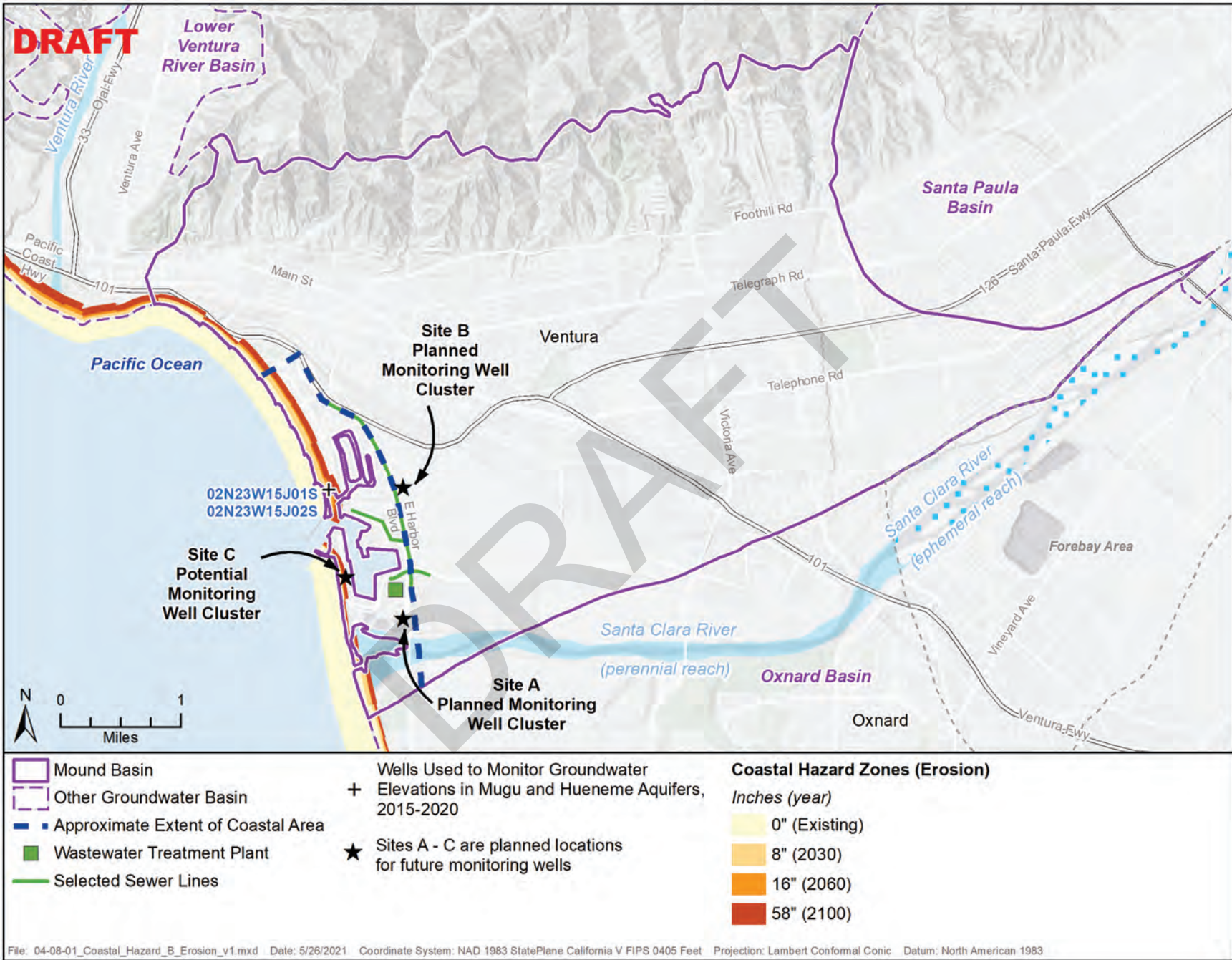


Figure 4.8-01b Sea Level Rise Associated with Coastal Erosion Hazard.

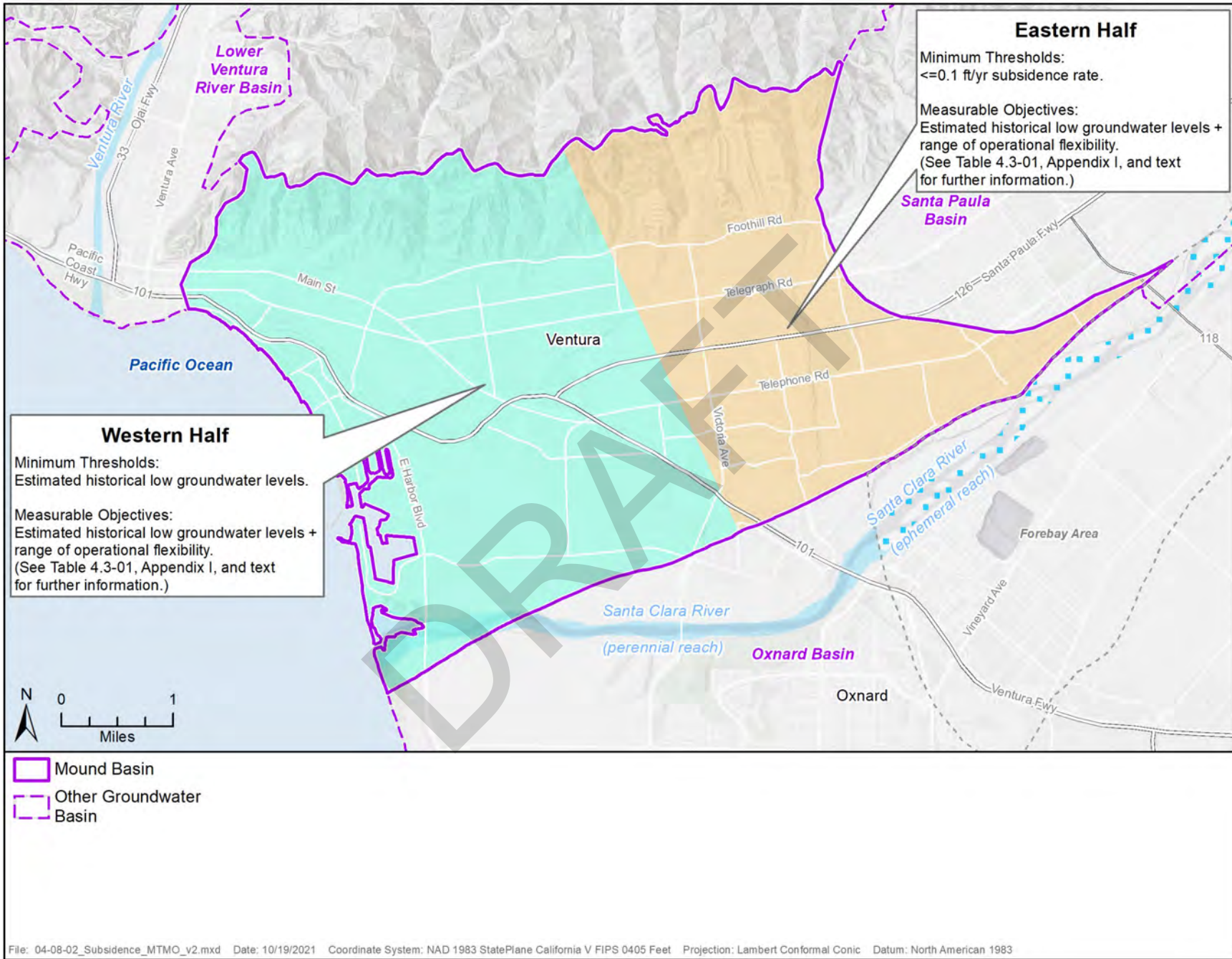


Figure 4.8-02 Map Showing Land Subsidence Minimum Thresholds and Measurable Objectives.



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## Figures

### Section 5

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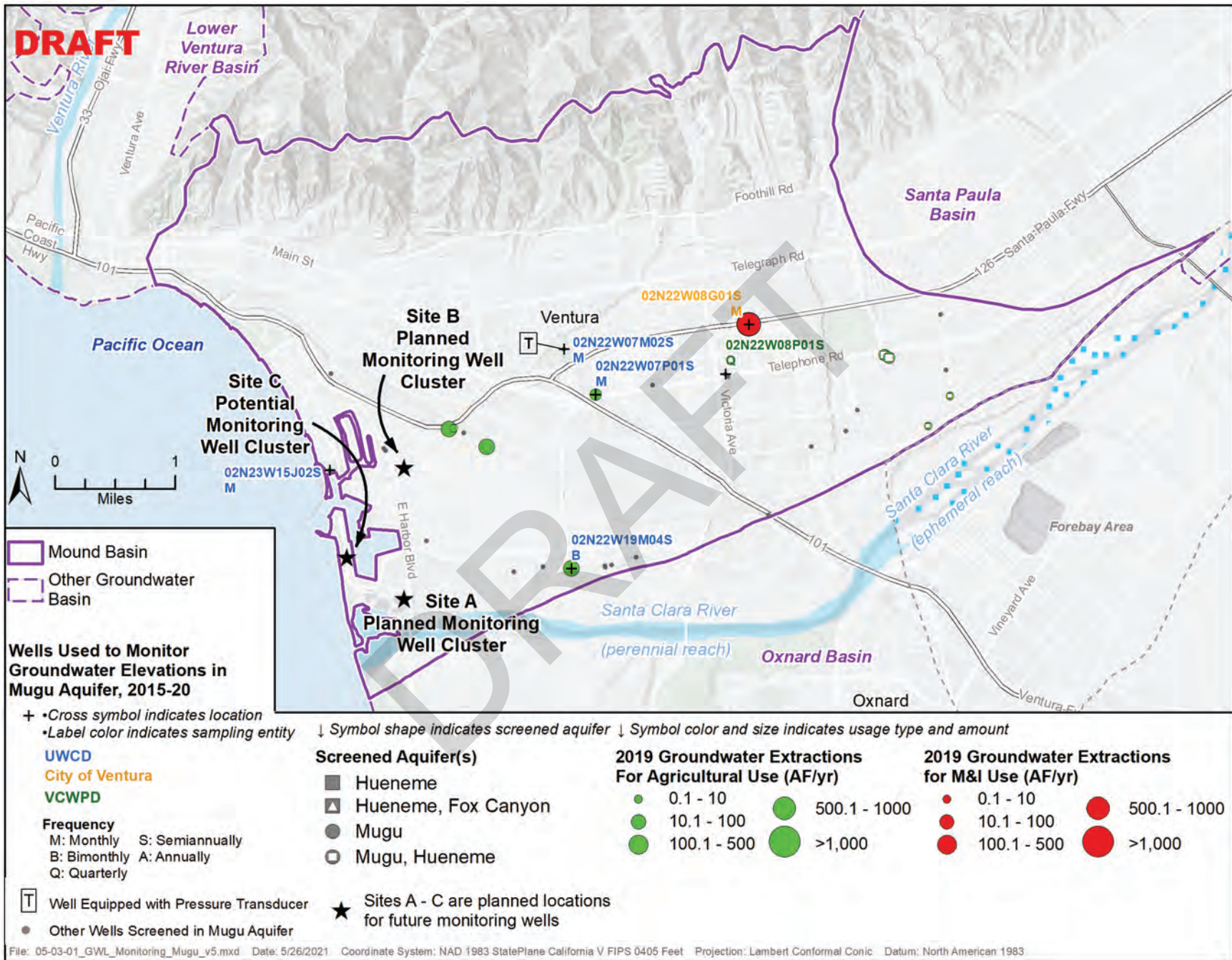


Figure 5.3-01 Map Showing the Groundwater Elevation Monitoring Network in the Mugu Aquifer of Mound Basin.

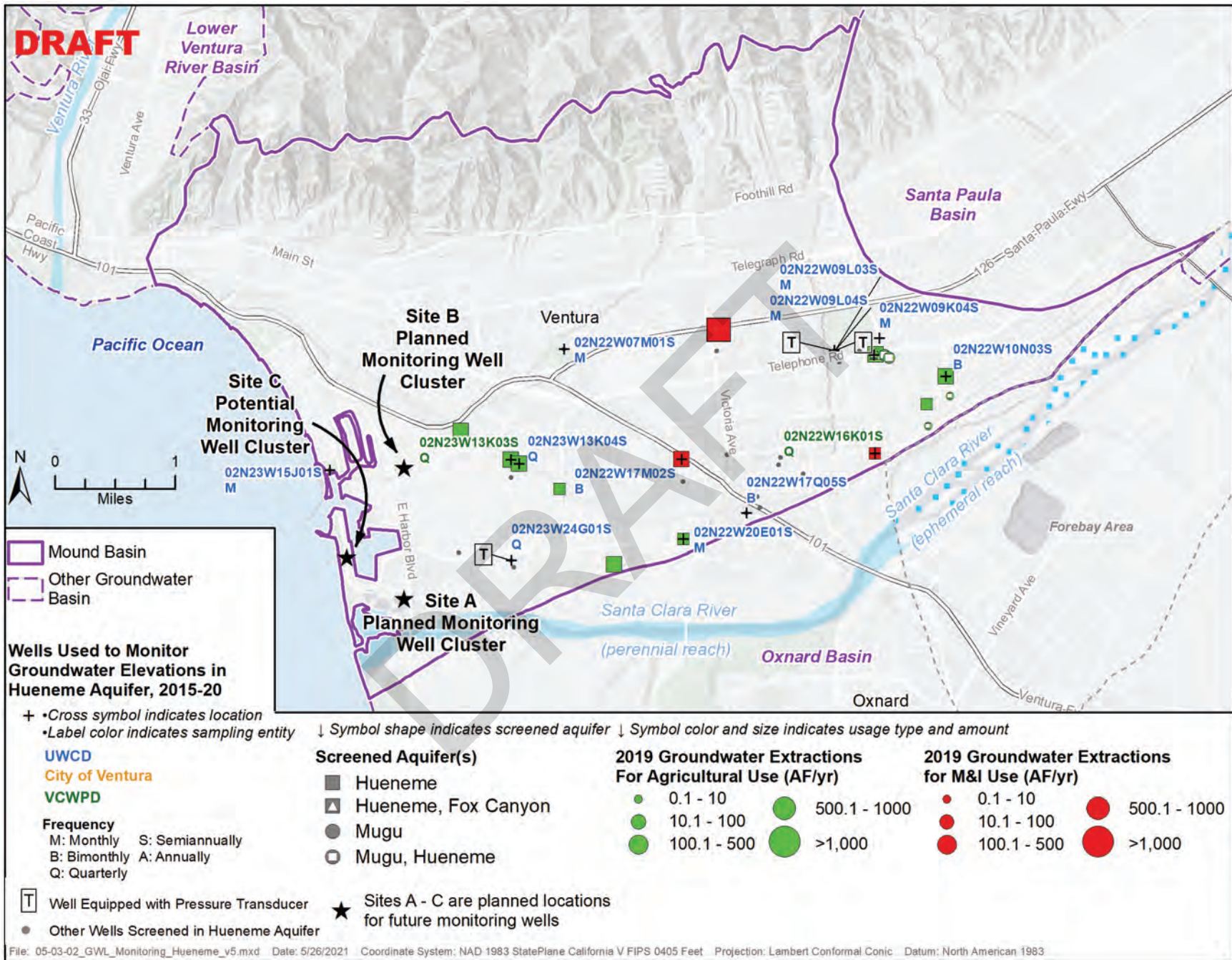


Figure 5.3-02 Map Showing the Groundwater Elevation Monitoring Network in the Hueneme Aquifer of Mound Basin.

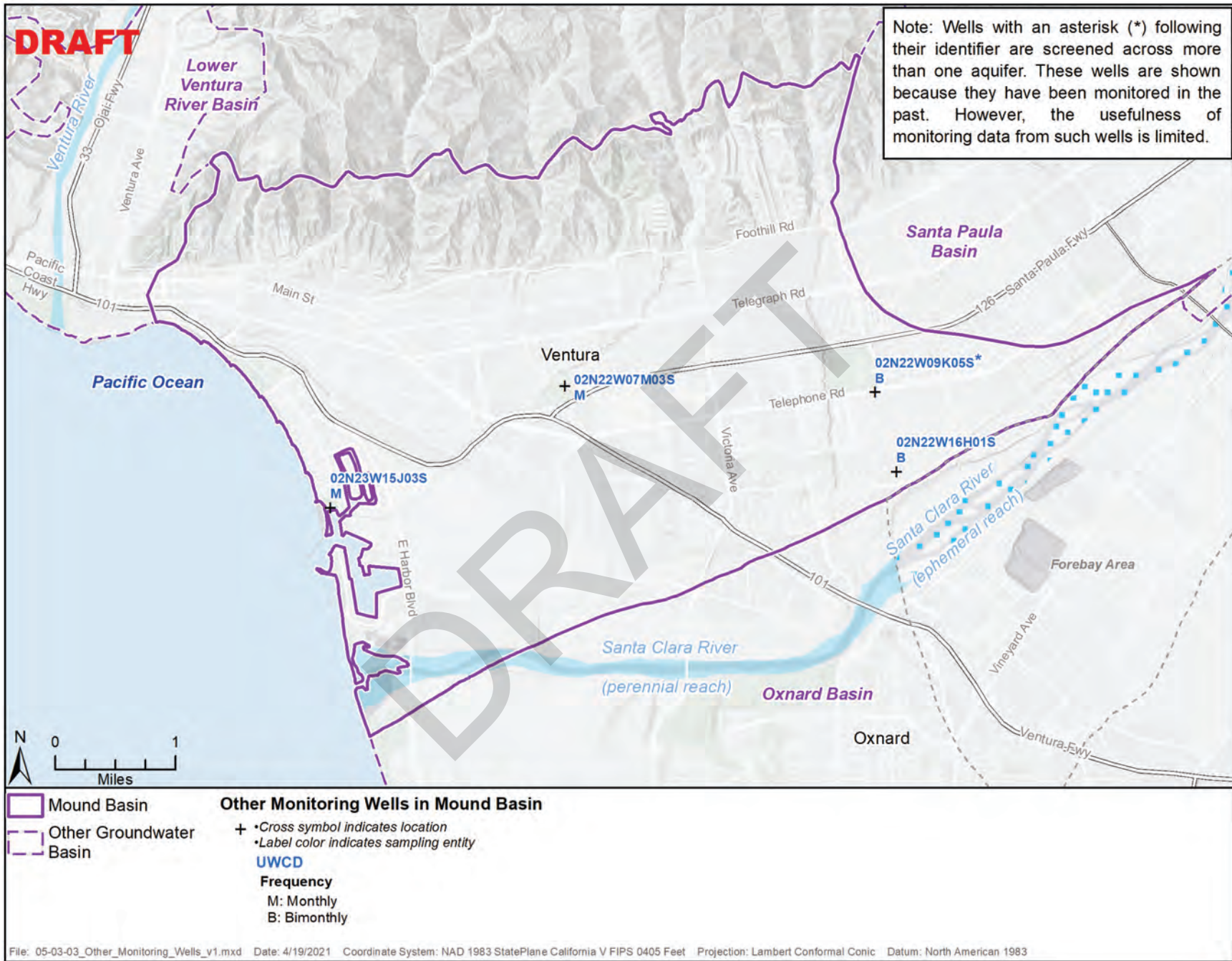


Figure 5.3-03 Map Showing Other Groundwater Monitoring Wells in Mound Basin.

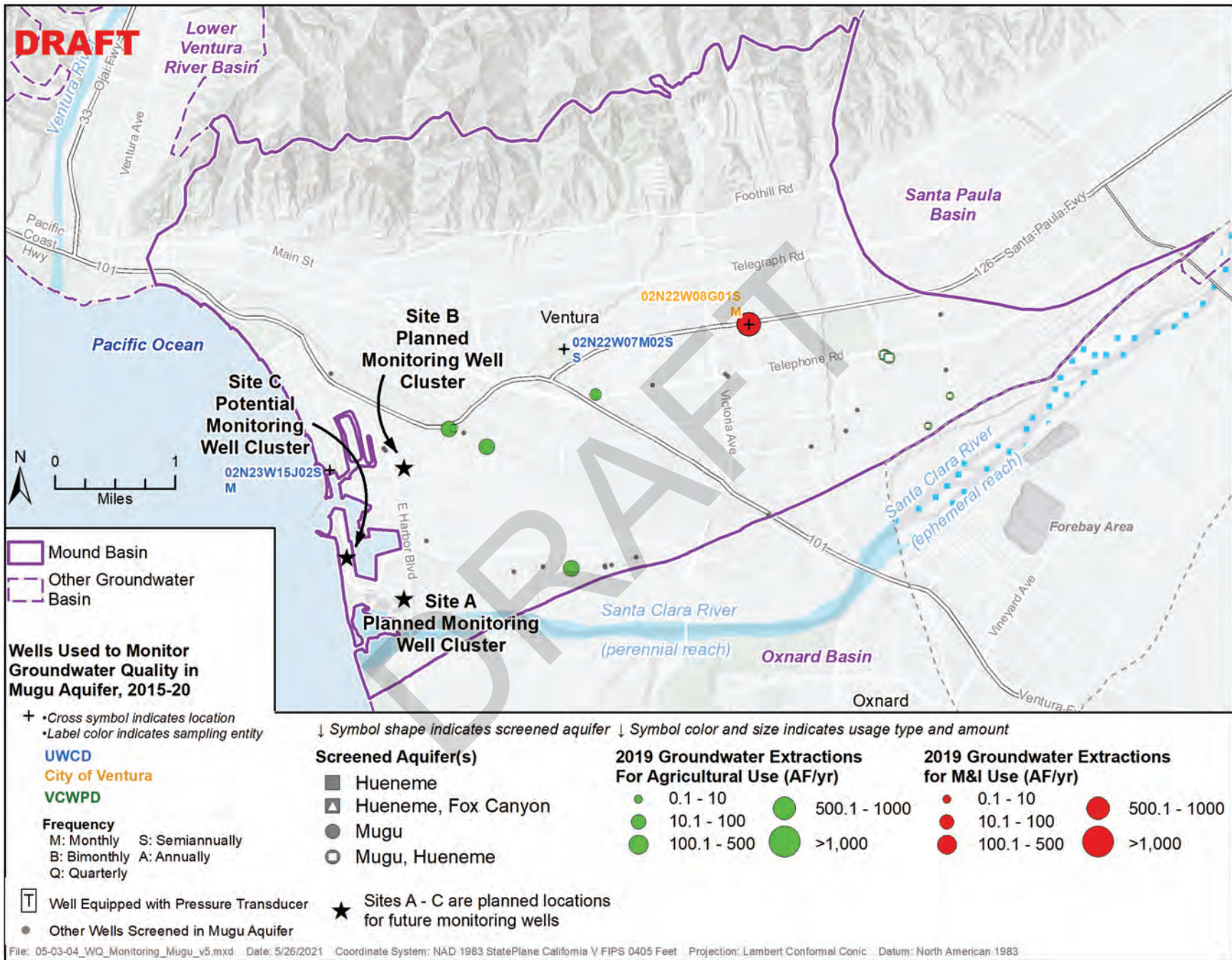


Figure 5.3-04 Map Showing the Groundwater Quality and Seawater Intrusion Monitoring Networks in the Mugu Aquifer of Mound Basin.

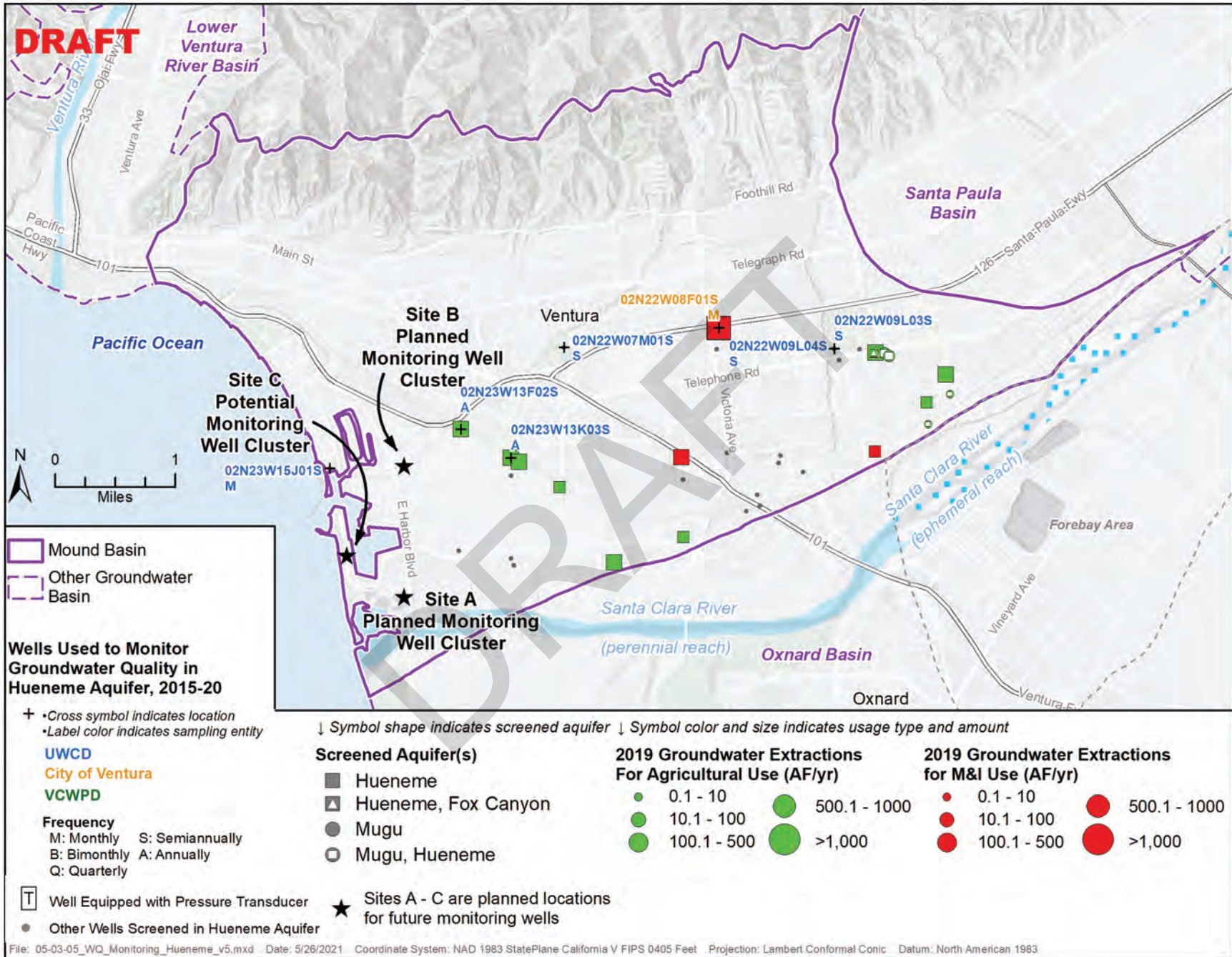


Figure 5.3-05 Map Showing the Groundwater Quality and Seawater Intrusion Monitoring Networks in the Hueneme Aquifer of Mound Basin

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Figure  
Section 6

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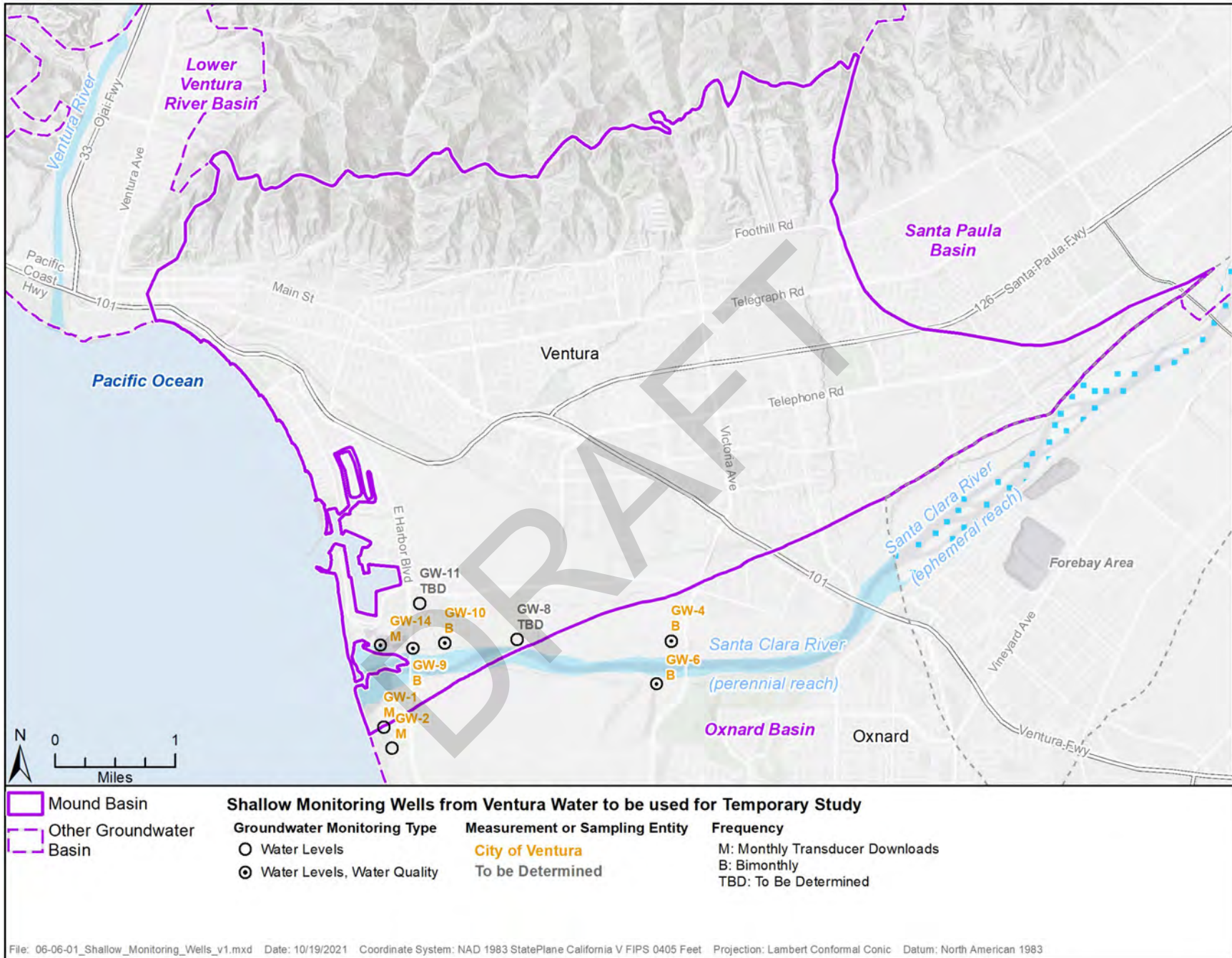


Figure 6.6-01 Shallow Monitoring Wells from Ventura Water to be used for Temporary Study