

UVB DECEMBER TECHNICAL ADVISORY COMMITTEE MEETING

Ukiah Valley Basin Annual Report

Update: Water Year 2022



LARRY WALKER
ASSOCIATES
science | policy | solutions



Annual Report

- Annual reports are to be submitted each year on April 1st following GSP submittal and include information for the prior water year
- First annual report was submitted and covers October 2020 to September 2021
- Annual Reports include:
 - GSA's progress in GSP implementation
 - Data collected from monitoring network
 - Groundwater extractions, surface water supply, total water use and changes in groundwater storage

Annual Report- Update on Hydrologic Conditions

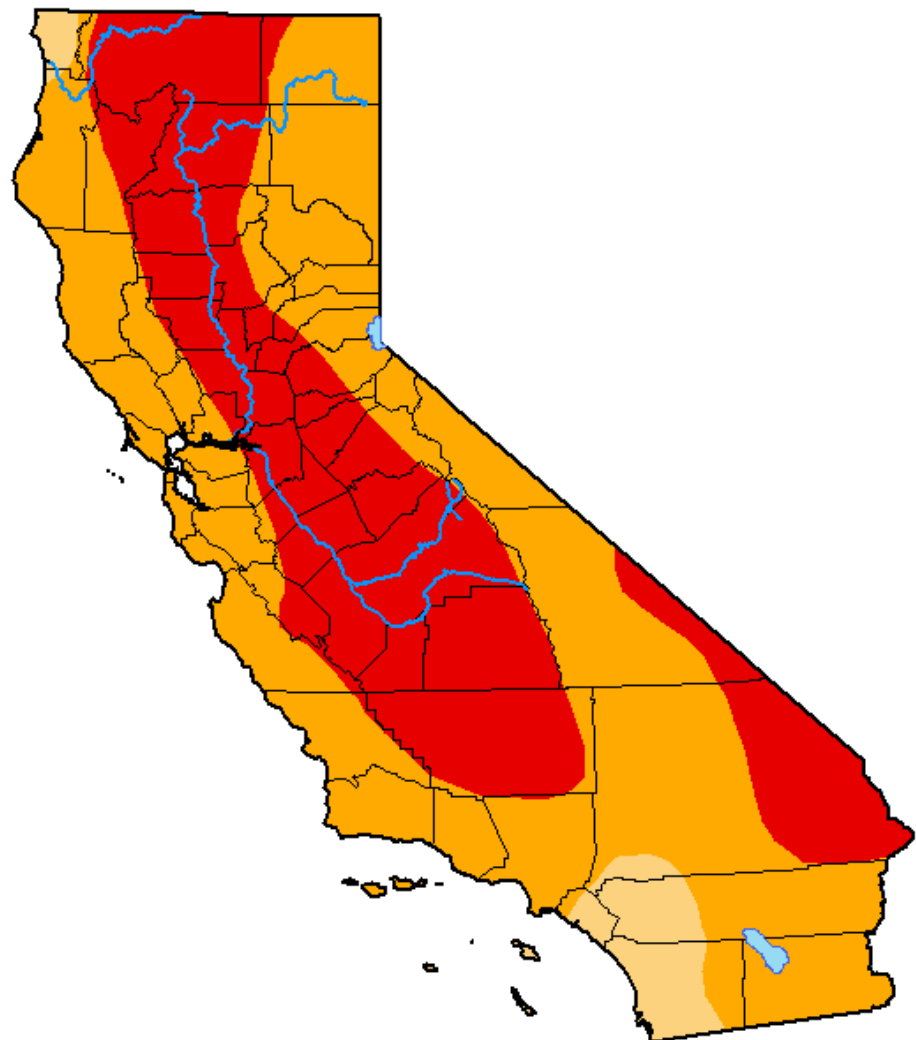
- WY2021 was dry statewide
- Drought conditions prevailed
- WY 2022 also quite dry

U.S. Drought Monitor California

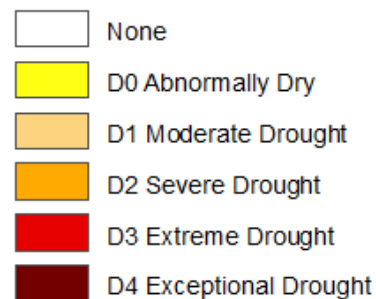
April 26, 2022

(Released Thursday, Apr. 28, 2022)

Valid 8 a.m. EDT



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu

Update on UVB Hydrologic Conditions WY 2021

- UVB high season GW elevations from WY 2020 to 2021
 - Decreases through central part of Basin
 - Increases along eastern border
- Contours generated from limited data
- Should be better for WY 2022 report
- Example hydrographs shown in following slides
 - Four Aquifer I wells
 - Three Aquifer II wells

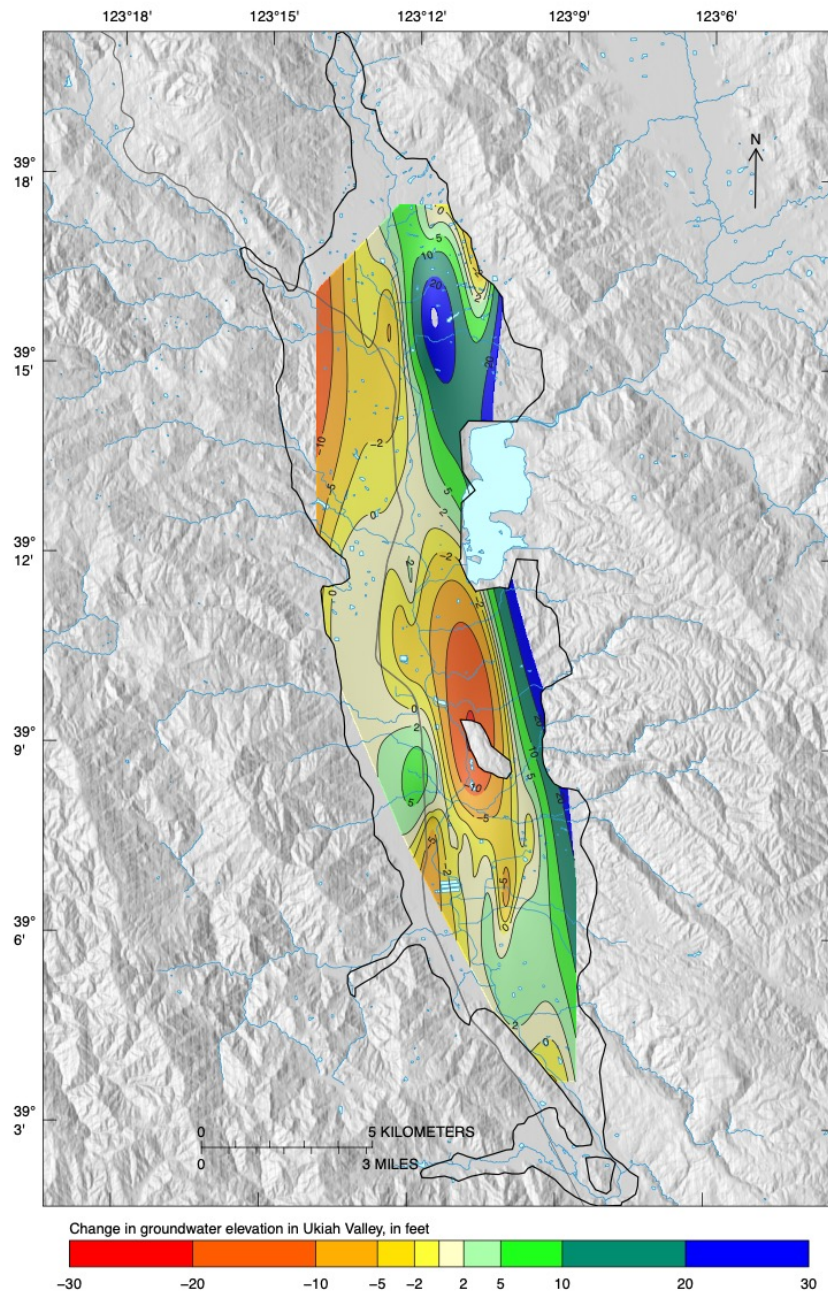


Figure 2.4: Seasonal high (spring season) groundwater elevation changes from water year 2020 to water year 2021 .

Groundwater Hydrographs & Sustainability Indicators

- Annual report includes groundwater hydrographs for representative monitoring points (RMPs) in the monitoring network and associated sustainability indicators
- Sustainability indicators have been developed for each RMP
 - **Trigger Level:** Non-regulatory warning value below which action may be required in the near future to maintain groundwater sustainability
 - **Measurable Objective:** Value above which RMP is on track to achieve groundwater sustainability within 20 years; action may be required to achieve sustainability goals
 - **Minimum Threshold:** Value below which groundwater elevation may cause an undesirable result for associated sustainability indicators; action must be taken to achieve sustainability goals

Groundwater Hydrographs & Sustainability Indicators

- Blue dashed lines between the **Minimum Threshold** and **Measurable Objective** Values indicate anticipated progress to be observed every five years at an RMP to achieve 20-year groundwater sustainability goals
- More information available in the UVB Annual Report and UVB GSP, both posted on the UVBGSA website

Figure 2.5: Site code 391225N1231852W001 hydrograph, aquifer I representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

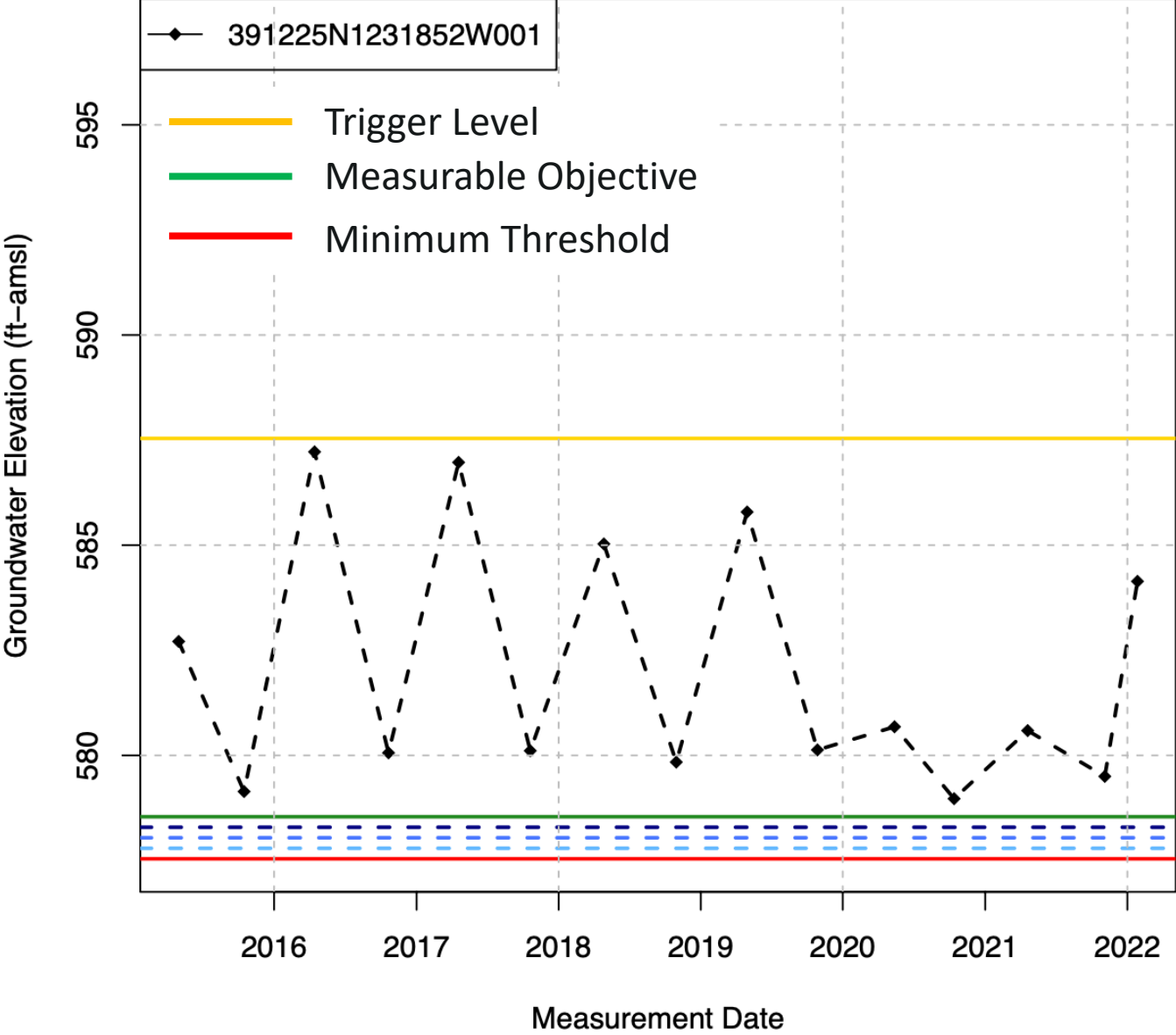


Figure 2.6: Site code 390664N1231491W001 hydrograph, aquifer I representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

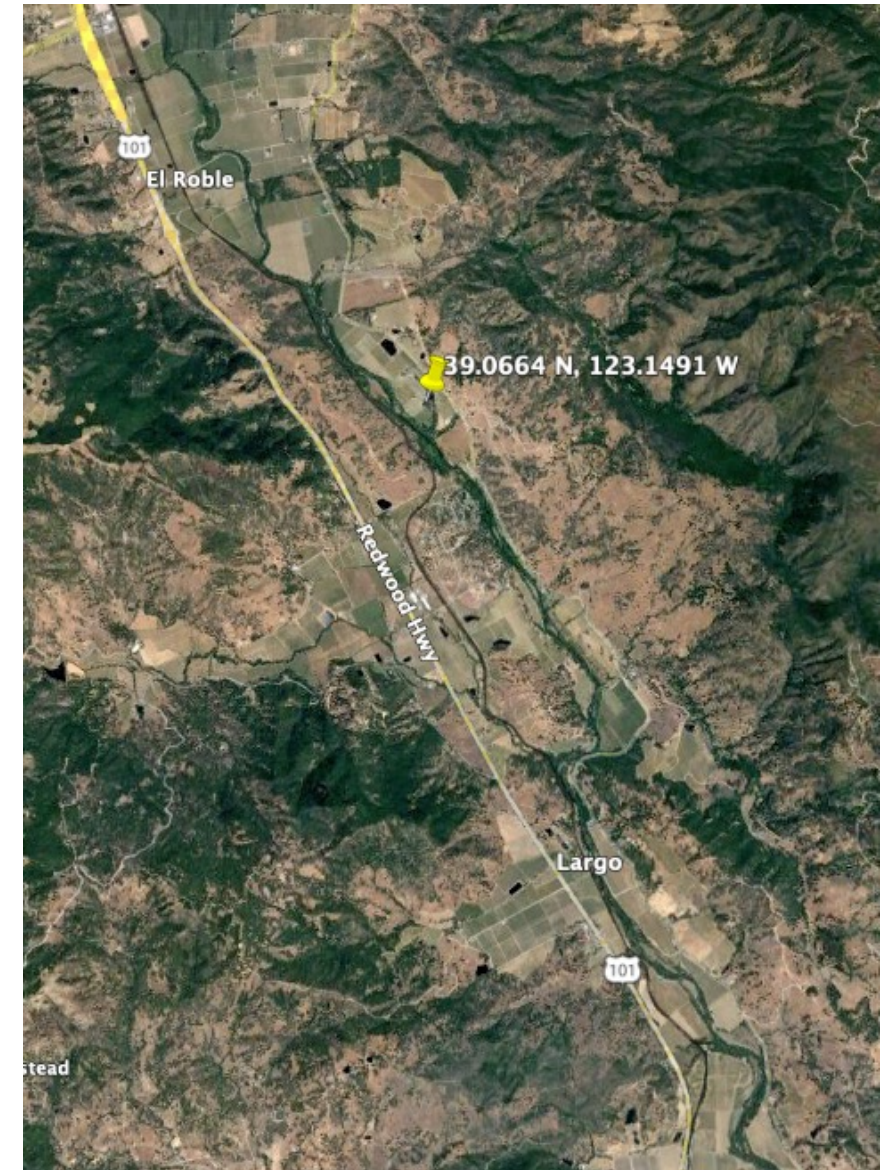
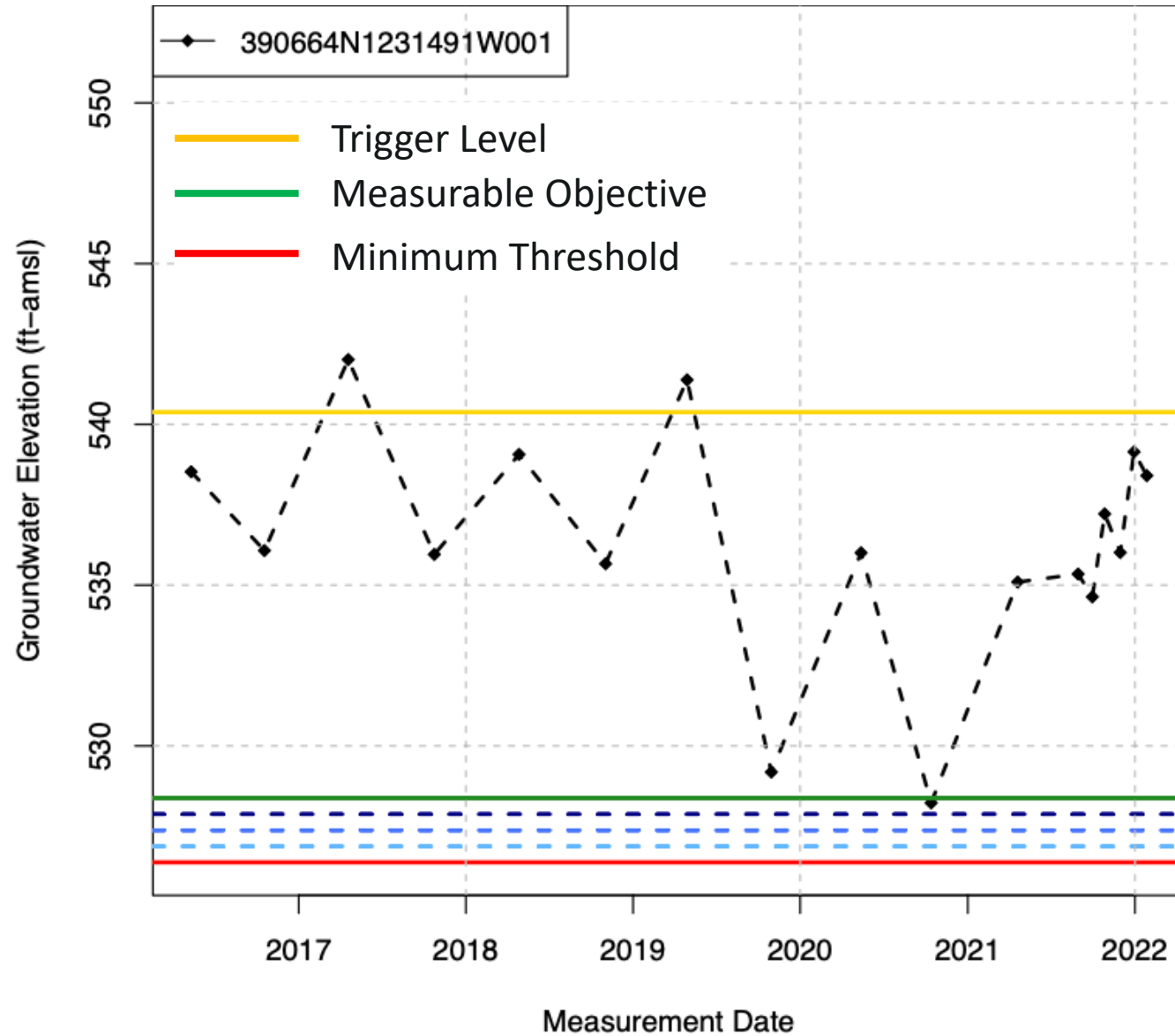


Figure 2.8: Site code 391322N1231929W001 hydrograph, aquifer I representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

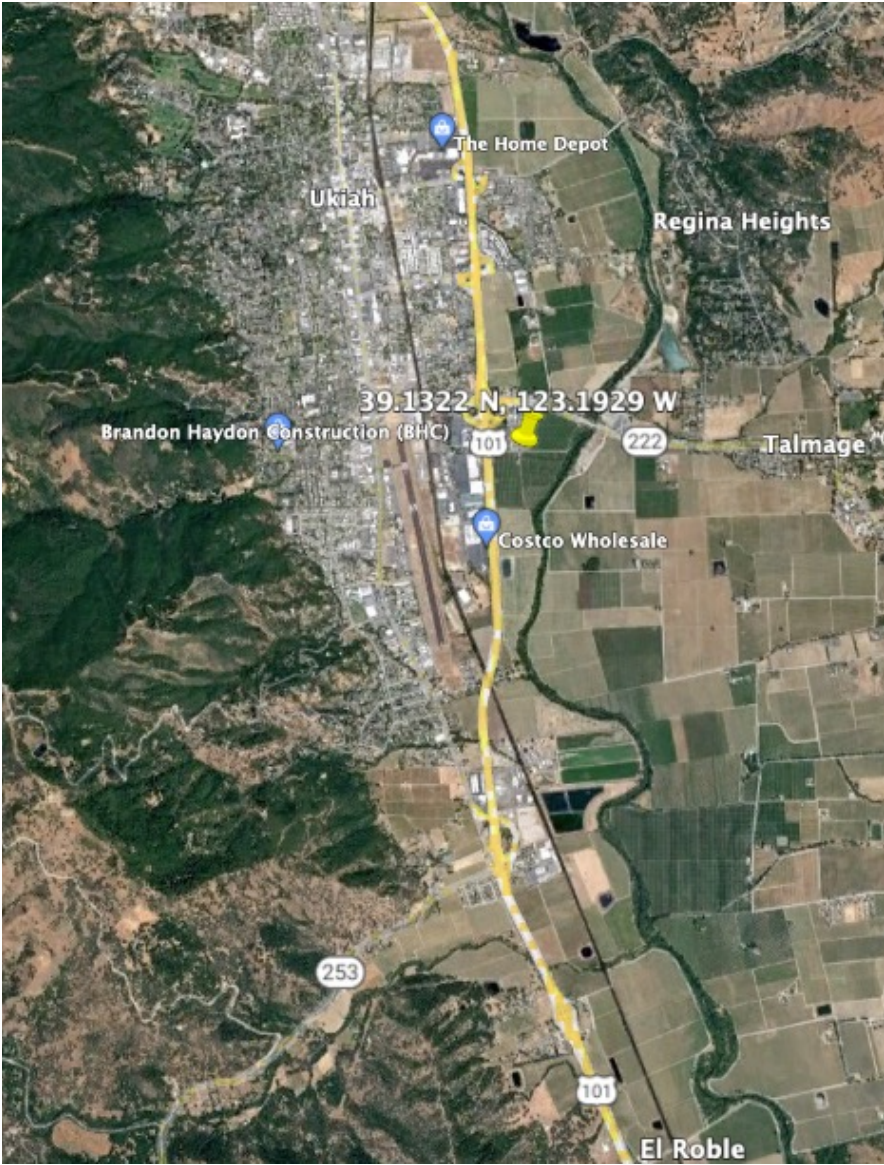
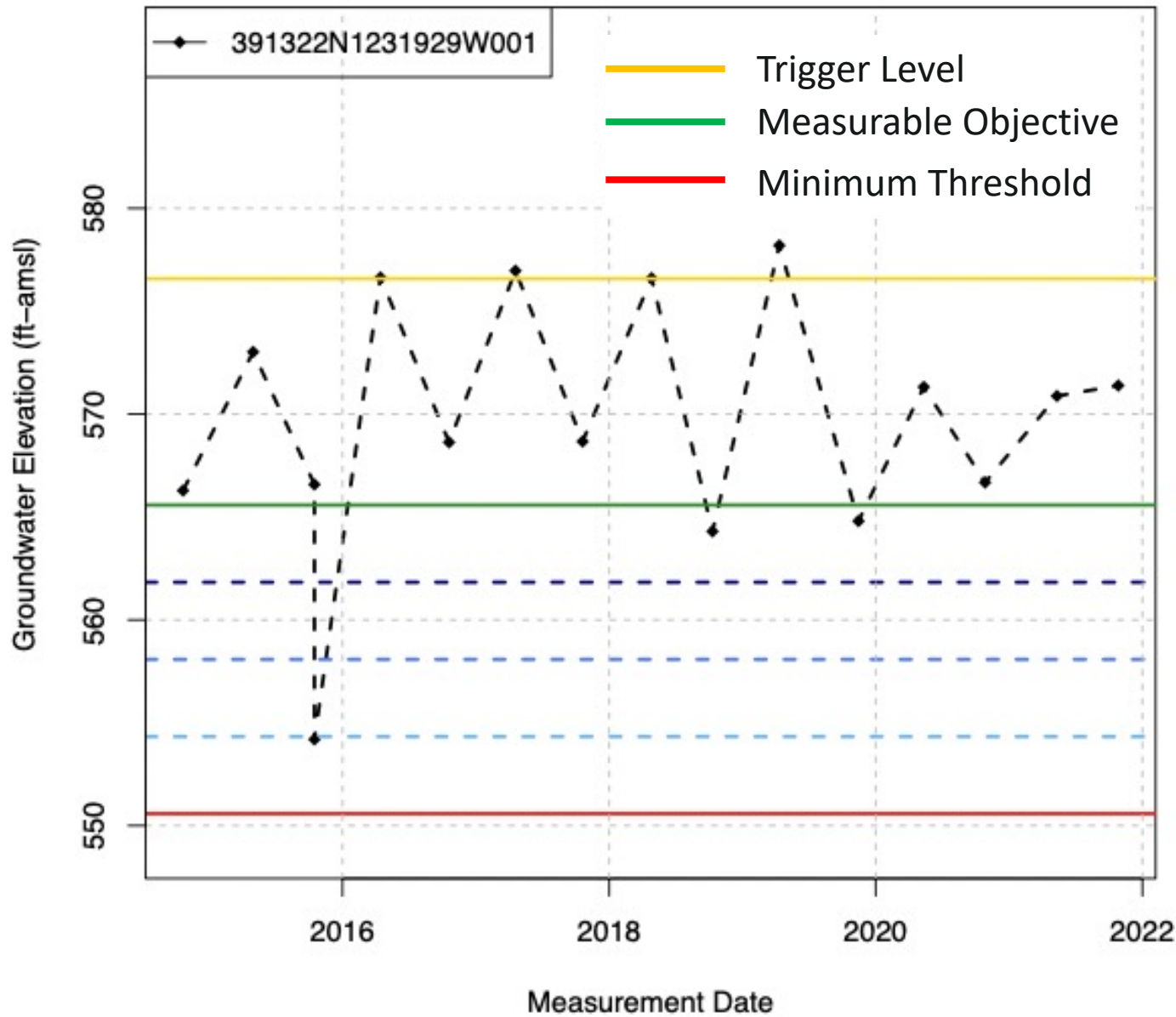


Figure 2.7: Site code 391918N1232003W001 hydrograph, aquifer I representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

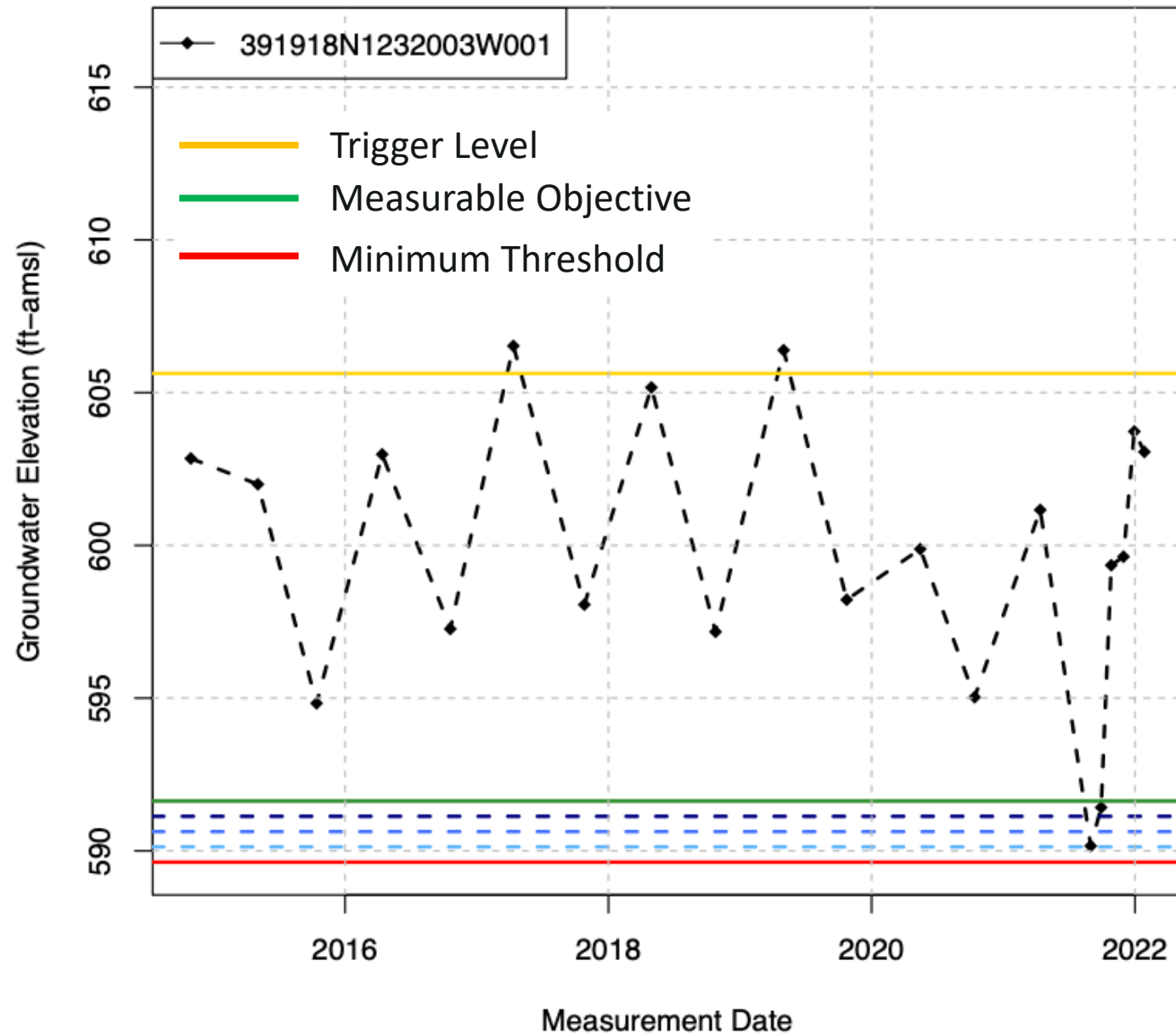


Figure 2.9: Site code 392962N1232047W001 hydrograph, aquifer II representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

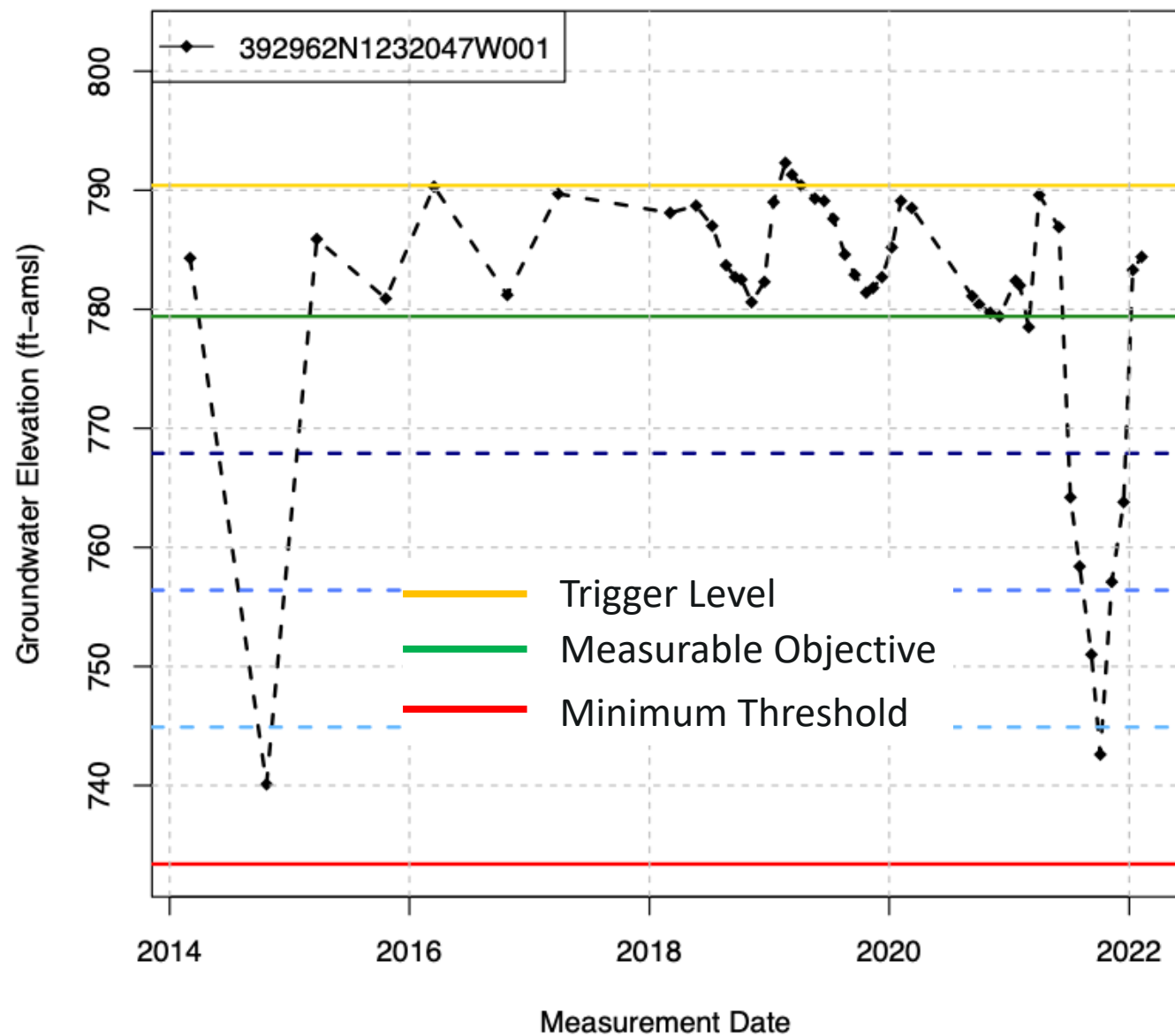


Figure 2.10: Site code 391730N1232108W001 hydrograph, aquifer II representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.

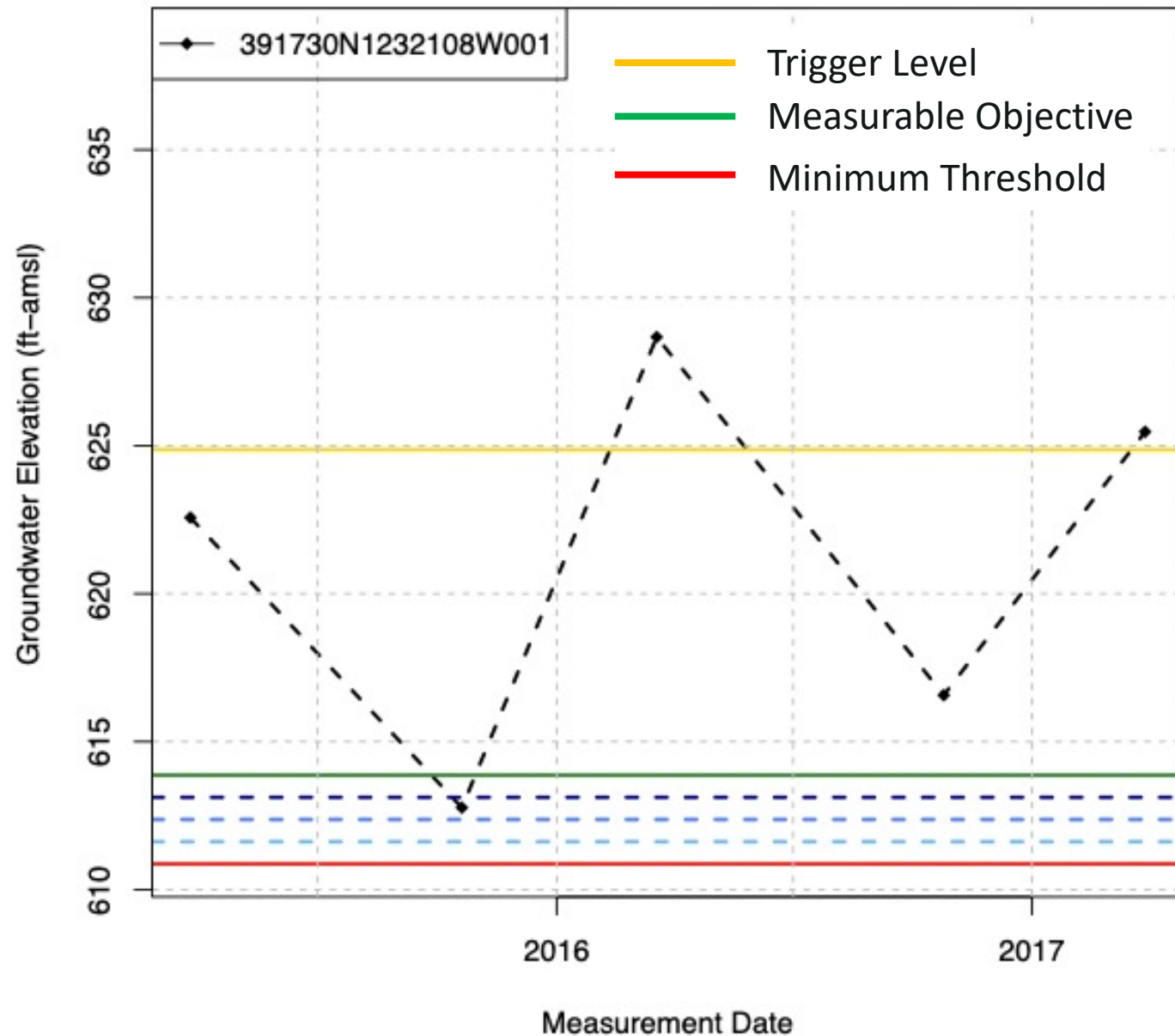
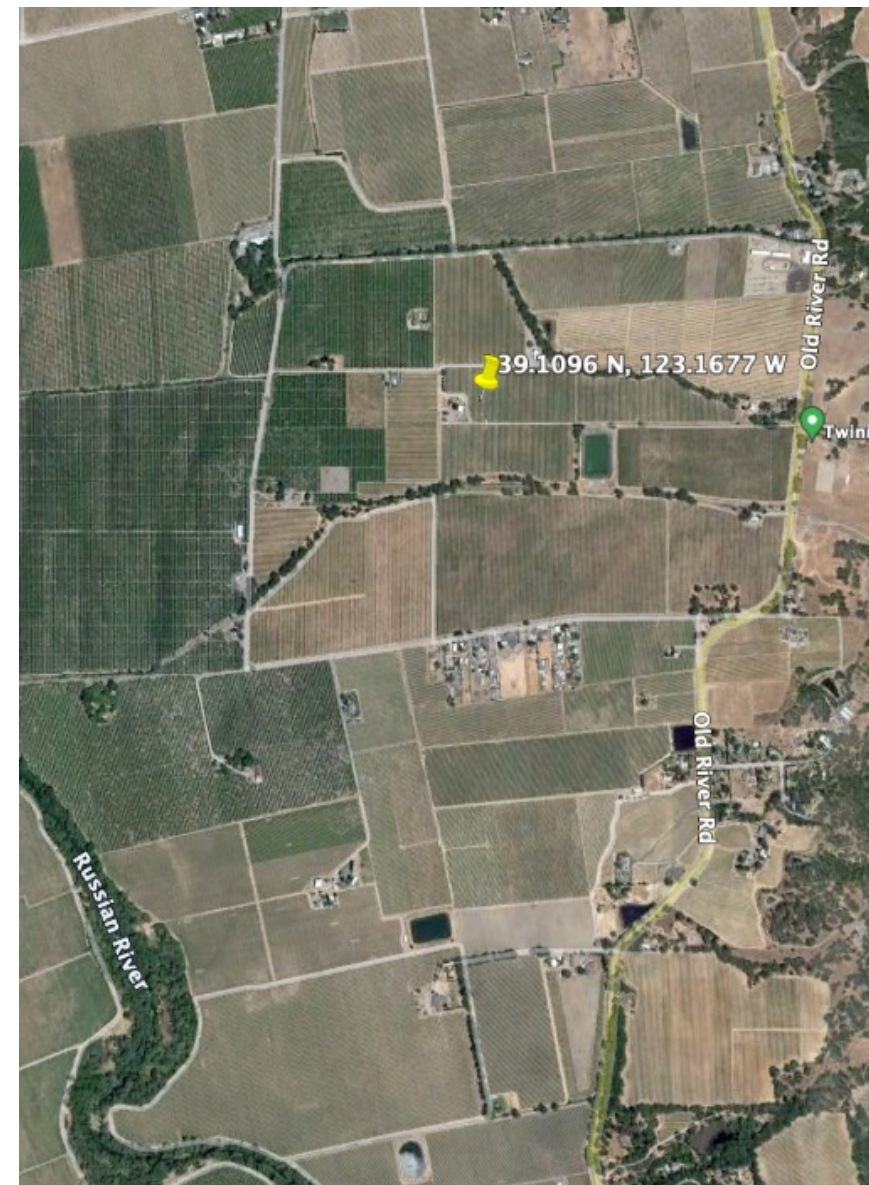
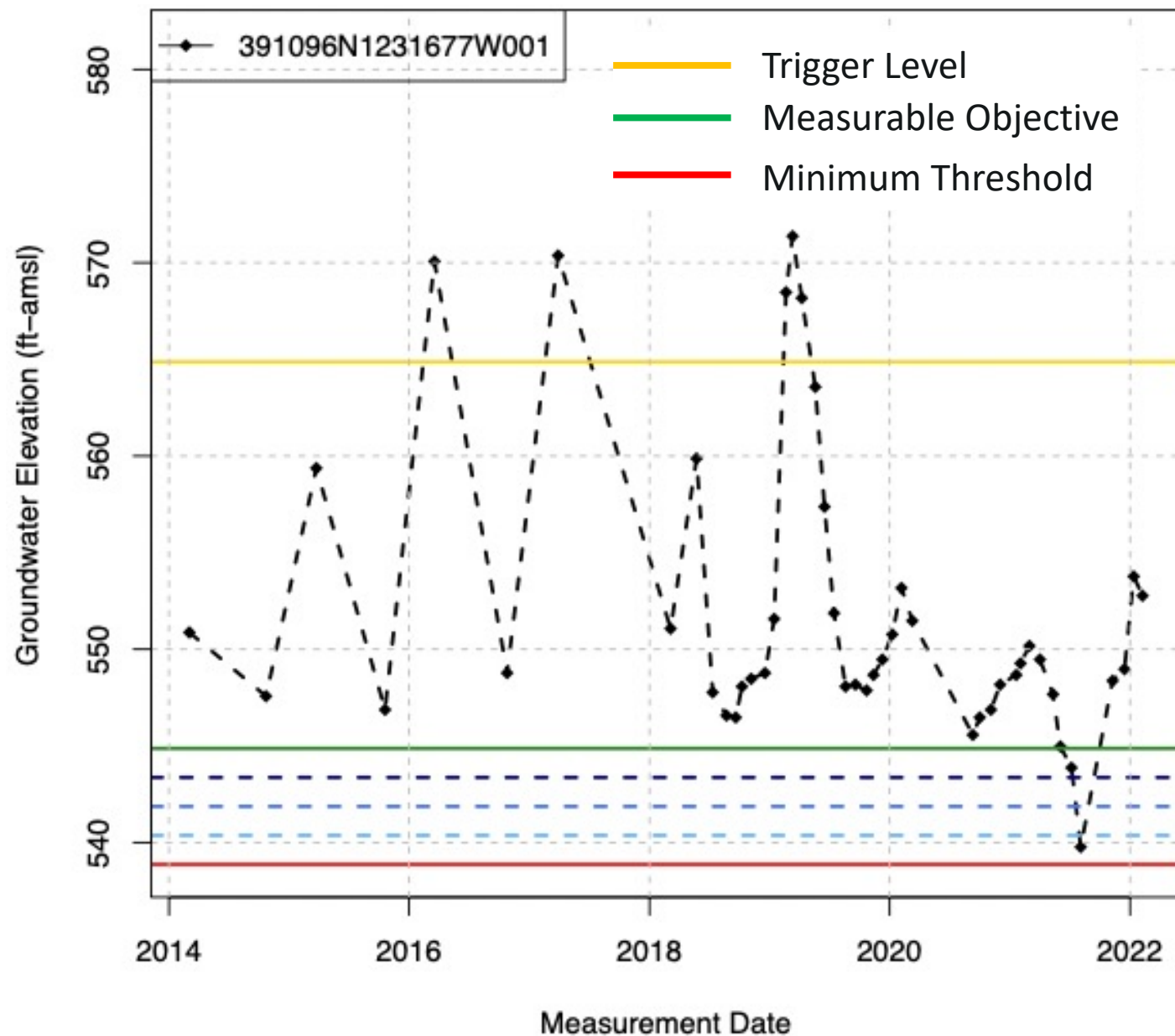
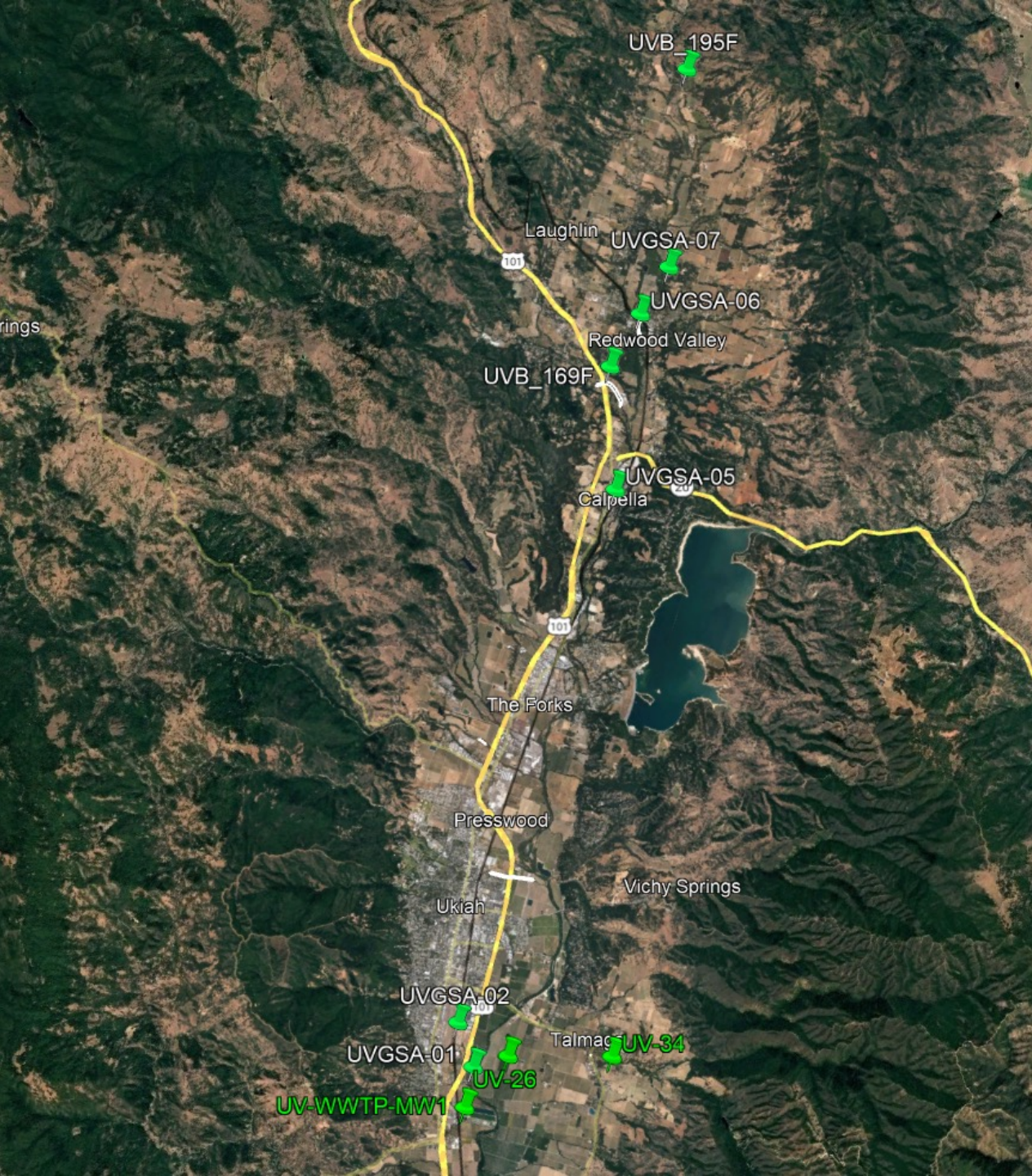


Figure 2.11: Site code 391096N1231677W001 hydrograph, aquifer II representative monitoring point for chronic lowering of groundwater elevations sustainable management criteria.



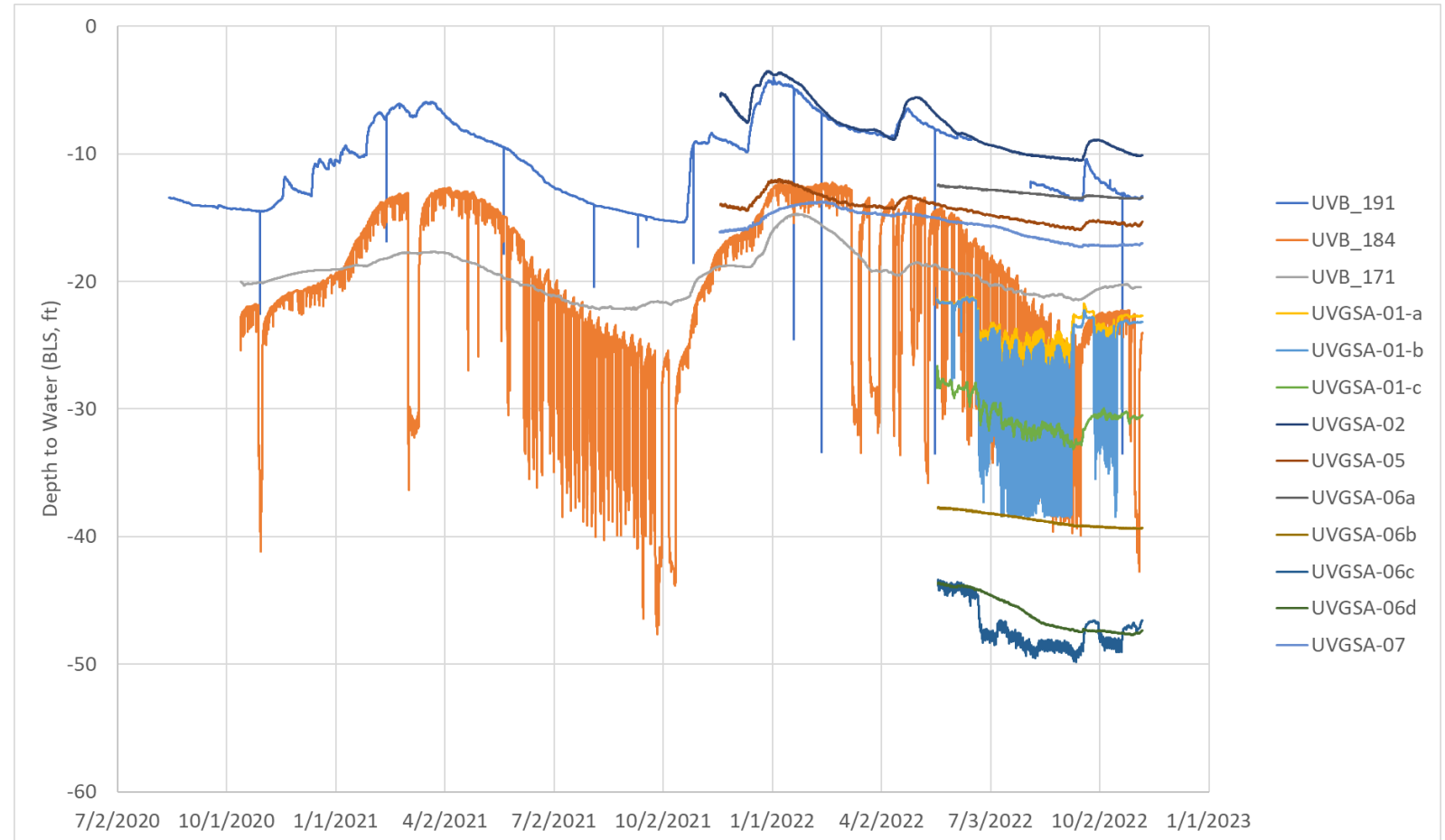
Monitoring Site Update

- Locations added since 2020



Monitoring Site Update

- Continuous water level data available from these recently installed wells
- Visible in an online dashboard



LWA's UVB WY 2022 Annual Report Timeline

December – January

- Data acquisition and compilation

January

- Update Access Database
- Update IDC Model output through WY '22

February

- Update Annual Report figures and text
- Submit draft Annual Report to UVBGSA staff for review

March

- Revise Annual Report based on feedback

April

- Submit Annual Report to DWR by April 1st