

Napa County Groundwater Sustainability Agency

Annual Report – Water Year 2020

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May 4, 2021



**Luhdorff &
Scalmanini**
Consulting Engineers



Outline



Water Year 2020
Highlights



Monitoring Results



Sustainability Metrics



SGMA Planning &
Implementation Activities



Water Year 2020 Highlights



Water Year 2020

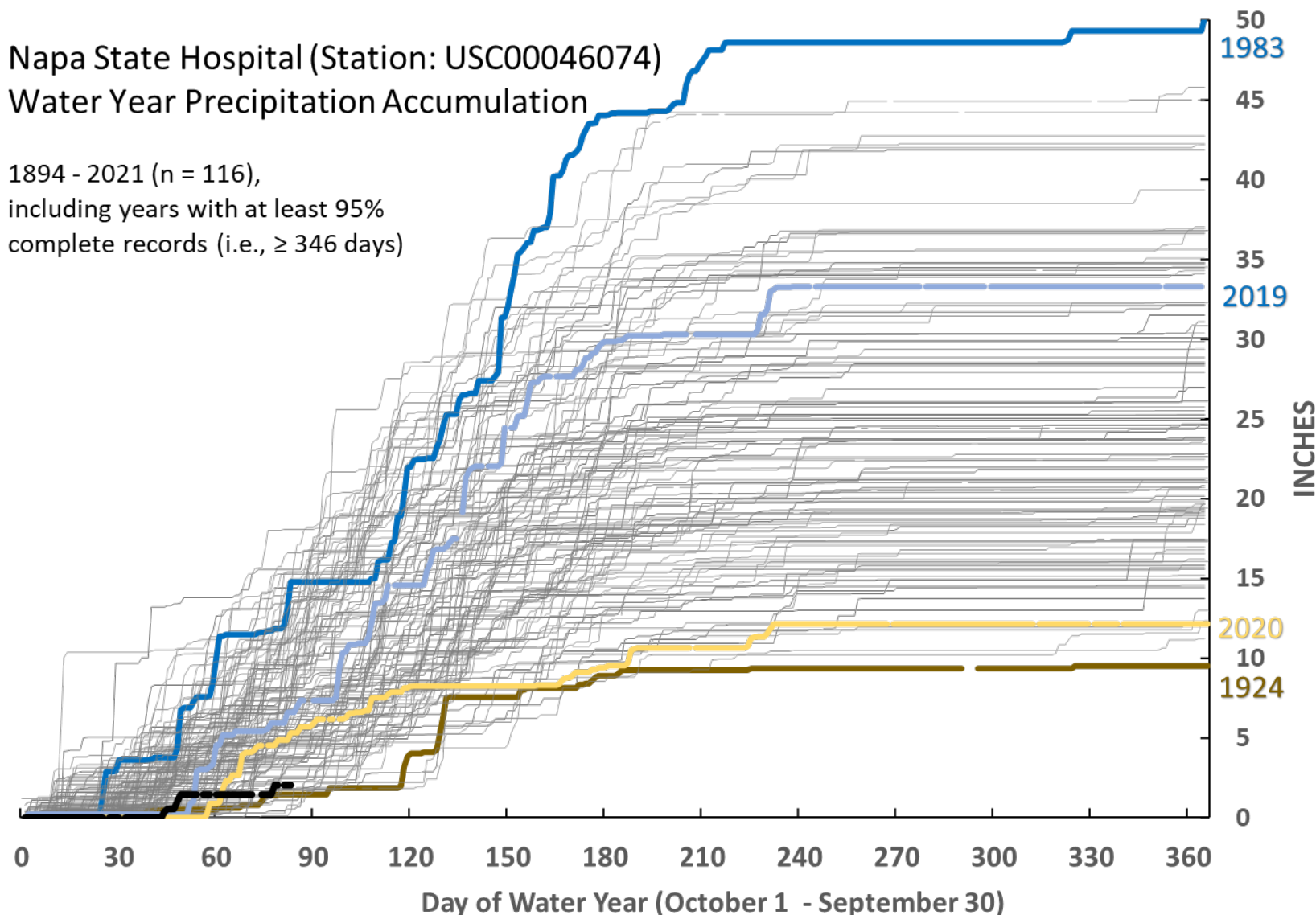
- **Very Dry,**
- **~ 50% of average**
- Third driest since 1894 in Napa
- Third driest since 1932 in Calistoga

Water Year 2021

- **Very Dry**
- **~40% of average through April**

Napa State Hospital (Station: USC00046074) Water Year Precipitation Accumulation

1894 - 2021 (n = 116),
including years with at least 95%
complete records (i.e., ≥ 346 days)



Monitoring Results

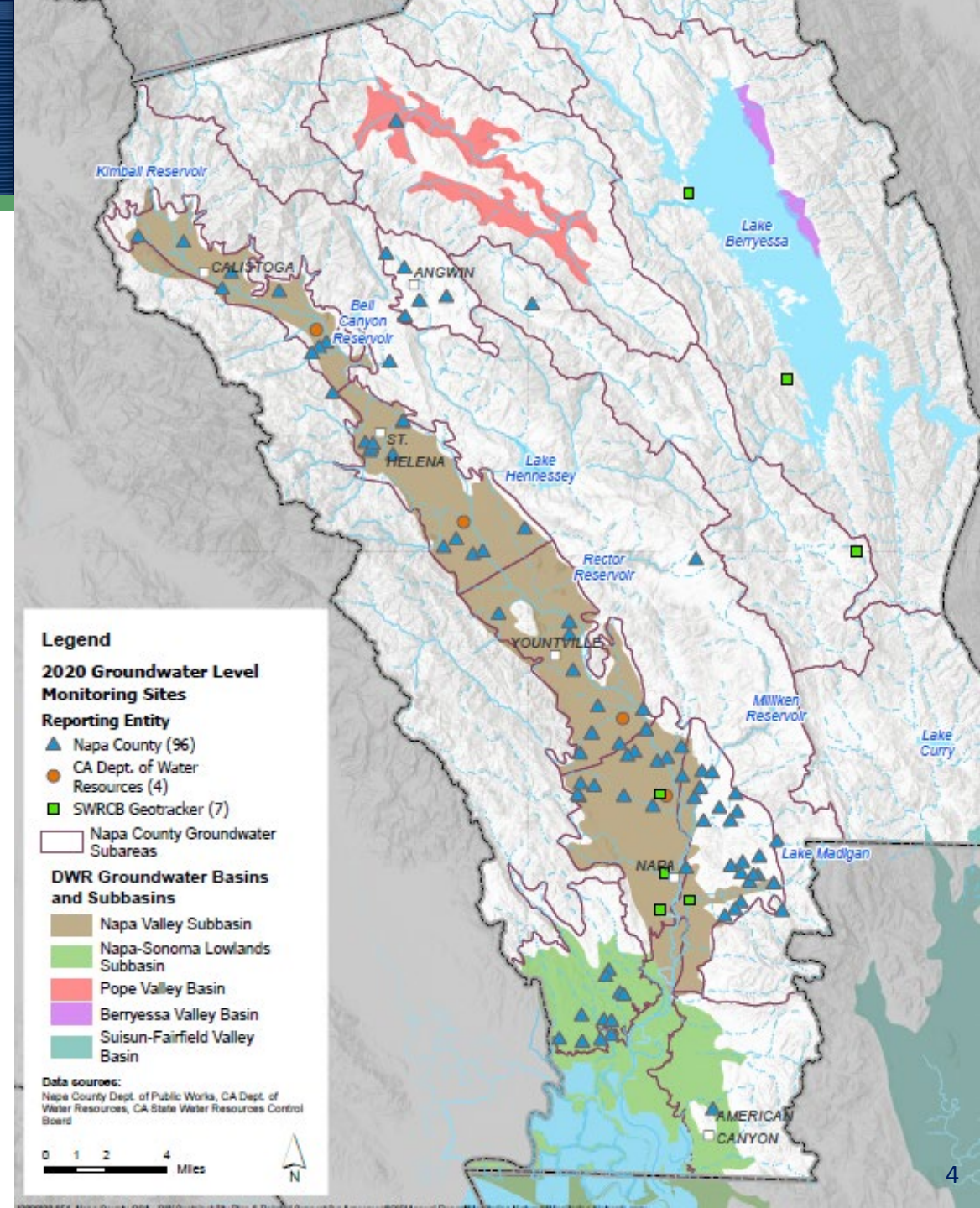


Wells Monitored, by Reporting Entity

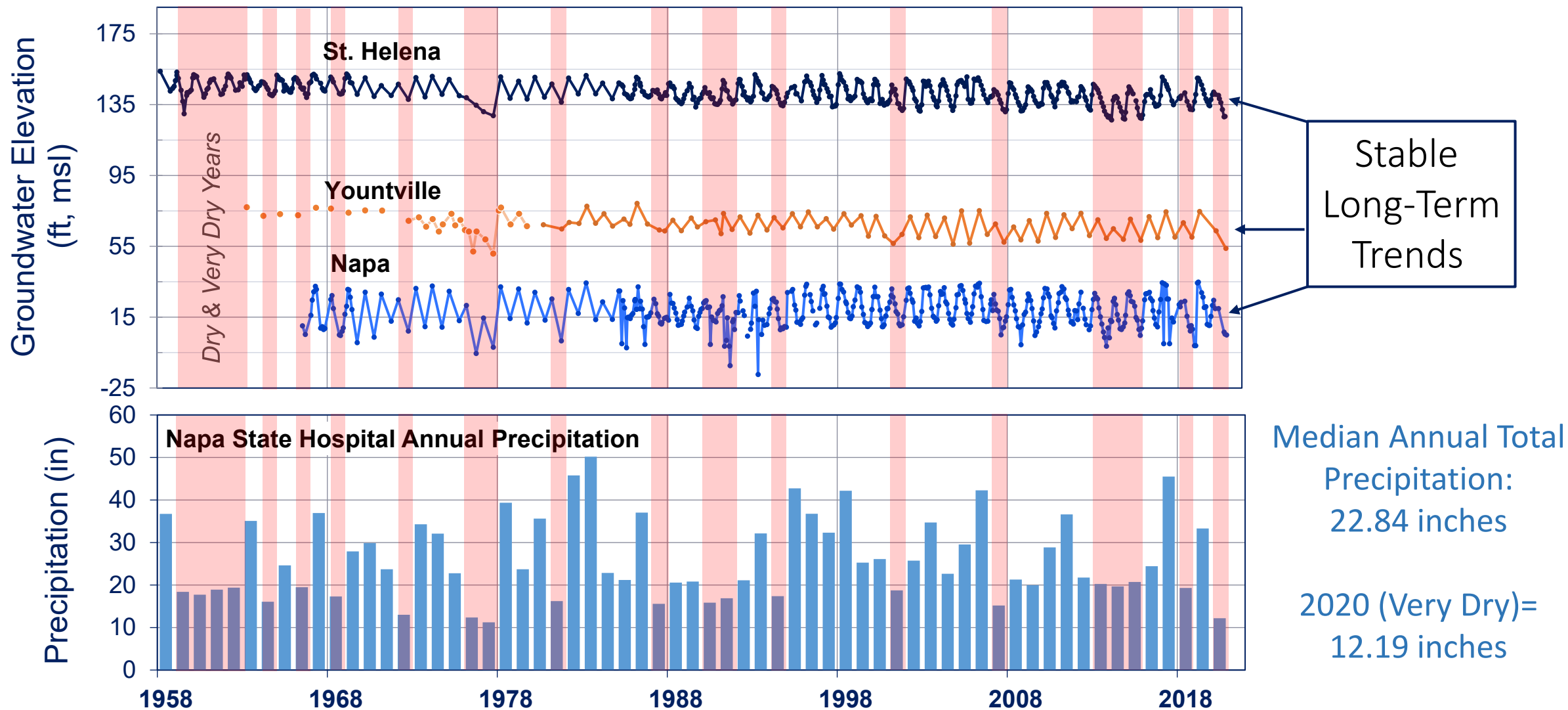
- ▲ Napa Co.: 96 (incl. 10 SW/GW)
- Department of Water Resources: 4*
- State Water Resource Control Board GeoTracker: 7

107 Wells Countywide

60 Wells in the Napa Valley Subbasin



Monitoring Results – Groundwater Levels

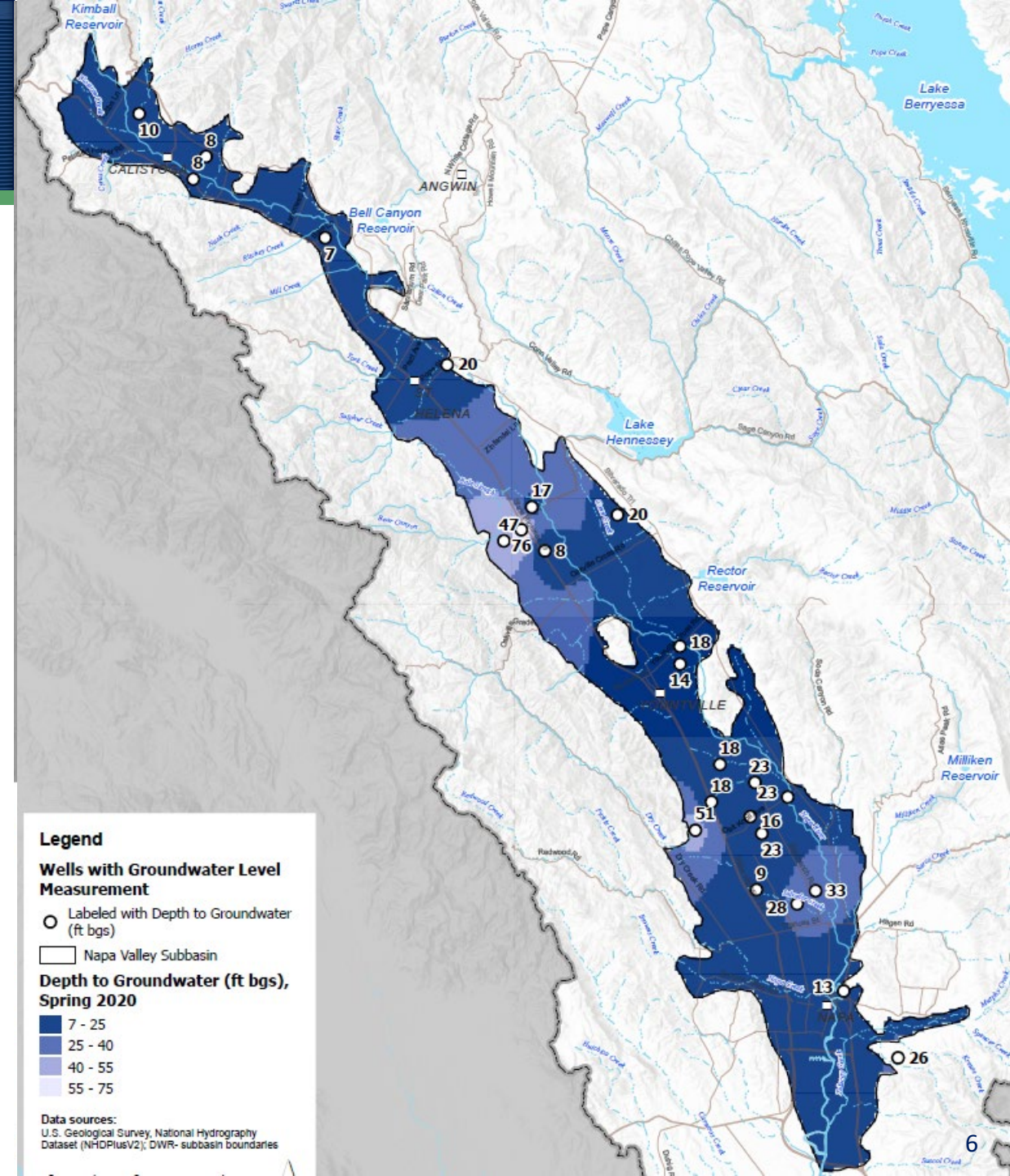


Monitoring Results Groundwater Levels



Napa Valley Subbasin

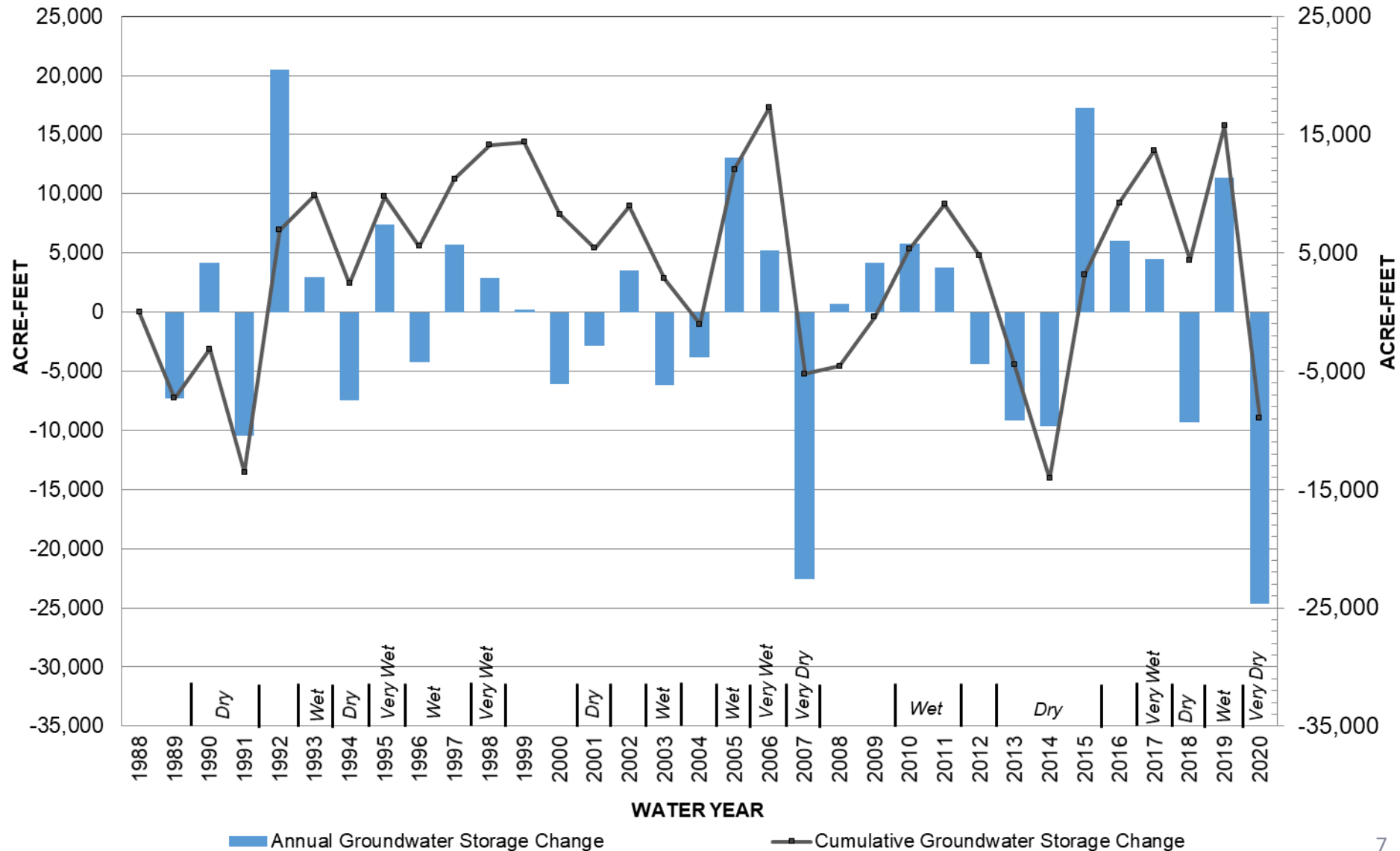
- Spring Depth to Water (DTW) in the Subbasin generally shallow and stable over time
- **2020 Spring DTW 10 to 50 ft below ground surface**



Monitoring Results – Change in Groundwater Storage



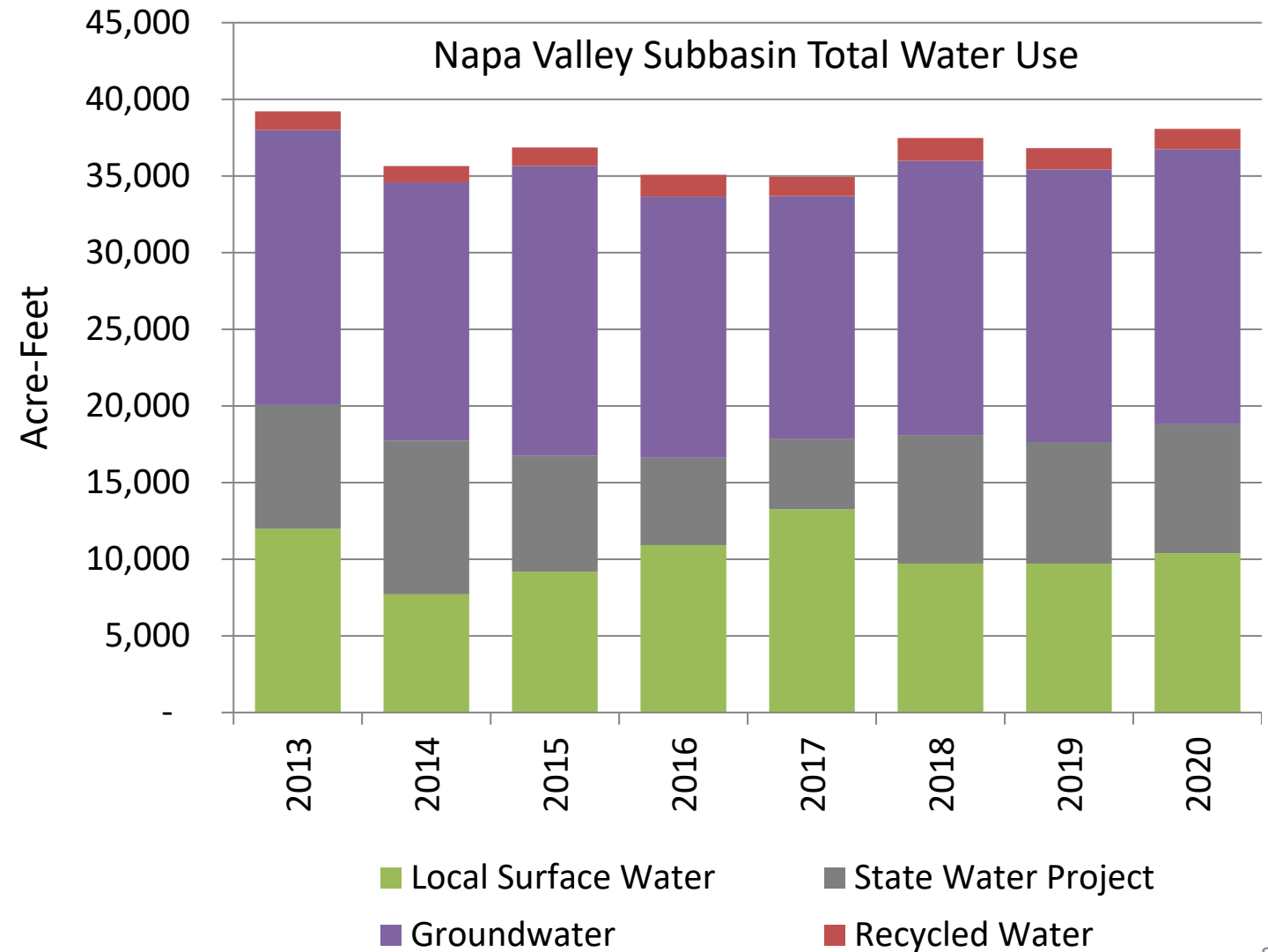
- Change in groundwater storage influenced by water year and pumping
- Total storage capacity approximately 200,000 acre-feet
- From 1988 to 2020, cumulative storage changes show no chronic depletion of supply.



Monitoring Results – Water Use



	Acre-Feet
2020 Groundwater Pumping	17,933
Sustainable Yield (Estimated Range)	17,000 to 20,000
2020 Recycled Water Use	1,338
2020 Local Surface Water Use	10,392
2020 State Water Project Use	8,410

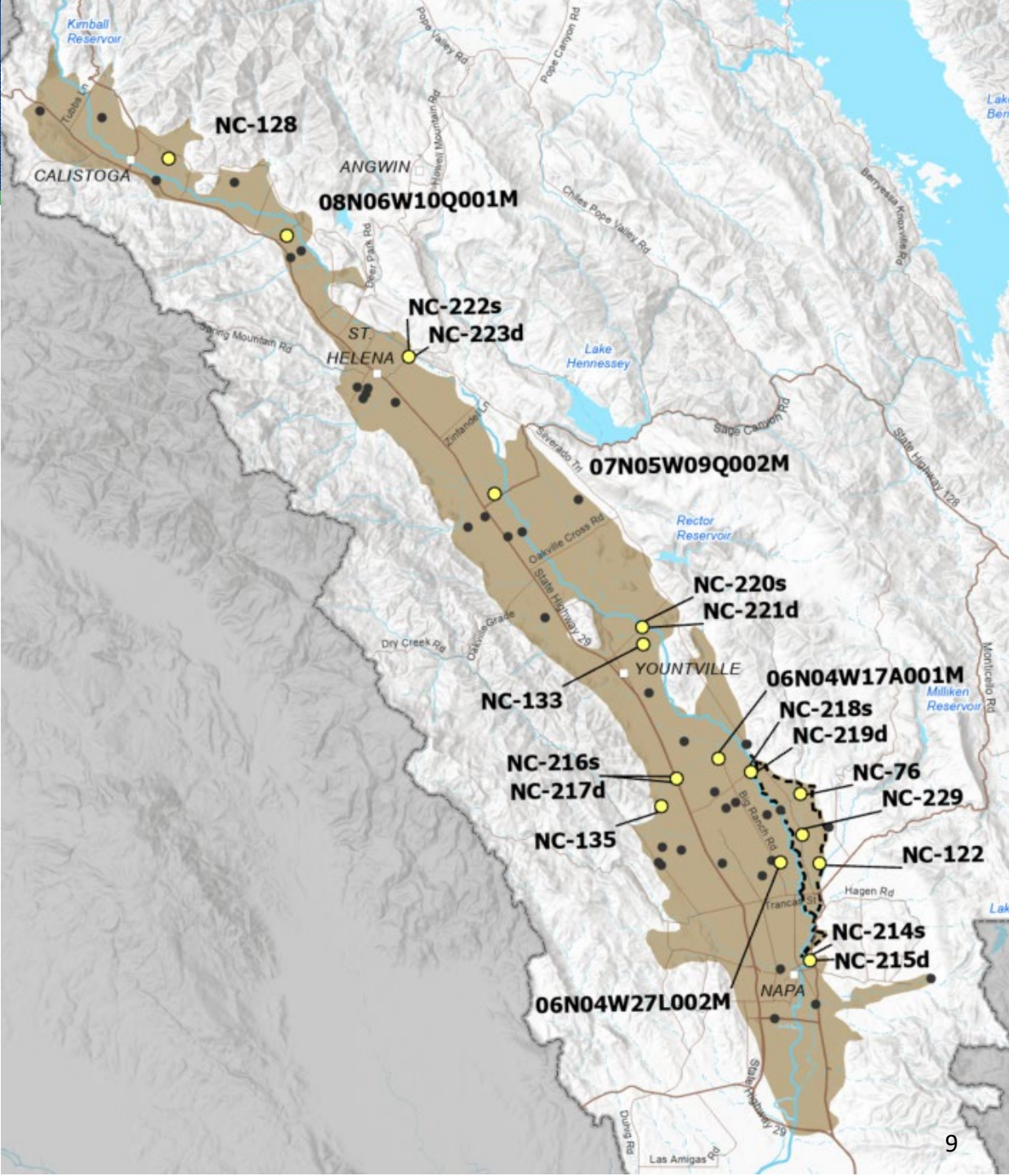


Sustainability Metrics



Representative Monitoring Site	Date Monitored	Measured Minimum 2020 Fall Groundwater Elevation (GWE) (Feet) ¹	Streamflow Depletion Minimum Threshold (Fall GWE, Feet)	Measurable Objective (Fall GWE, Feet)
NapaCounty-128	10/19/2020	330	320	331
08N06W10Q001M	9/14/2020	246	269	281
NapaCounty-222s-swgw5	9/11/2020	185	185	190
NapaCounty-223d-swgw5	9/11/2020	156	164	175
07N05W09Q002M	9/14/2020	128	127	135
NapaCounty-220s-swgw4	9/11/2020	75	75	77
NapaCounty-221d-swgw4	9/11/2020	74	75	77
NapaCounty-133	10/23/2020	72	72	76
06N04W17A001M	10/5/2020	31	37	50
NapaCounty-216s-swgw2	9/11/2020	71	61	76
NapaCounty-217d-swgw2	9/11/2020	60	61	76
NapaCounty-218s-swgw3	9/11/2020	29	29	32
NapaCounty-219d-swgw3	9/11/2020	29	29	32
06N04W27L002M	11/9/2020	5	-2	12
NapaCounty-214s-swgw1	9/11/2020	3	2	4
NapaCounty-215d-swgw1	9/11/2020	3	2	4

1. Values below a minimum threshold shown in bold. Non-static measurements excluded, such as measurements affected by recent or nearby pumping.



SGMA Planning and Implementation Activities



- Napa County GSA Stakeholder Communication and Engagement Plan (adopted Dec. 2020)
- SGMA stakeholder outreach survey and surveys on draft GSP Sections
 - Stakeholder survey June 2019 – July 2020
 - 7 Surveys on the Draft GSP and Sustainable Management Criteria Surveys: August 2020 - present
- Evaluating groundwater dependent ecosystems
- Tracking well permits and construction
- Development of a web-based tool for reporting groundwater use data

Thank You

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