San Pasqual Valley Groundwater Sustainability Plan (GSP) Stakeholder Workshop

Annual Report for Water Years 2020 and 2021

April 6, 2022

Stakeholder Input Format

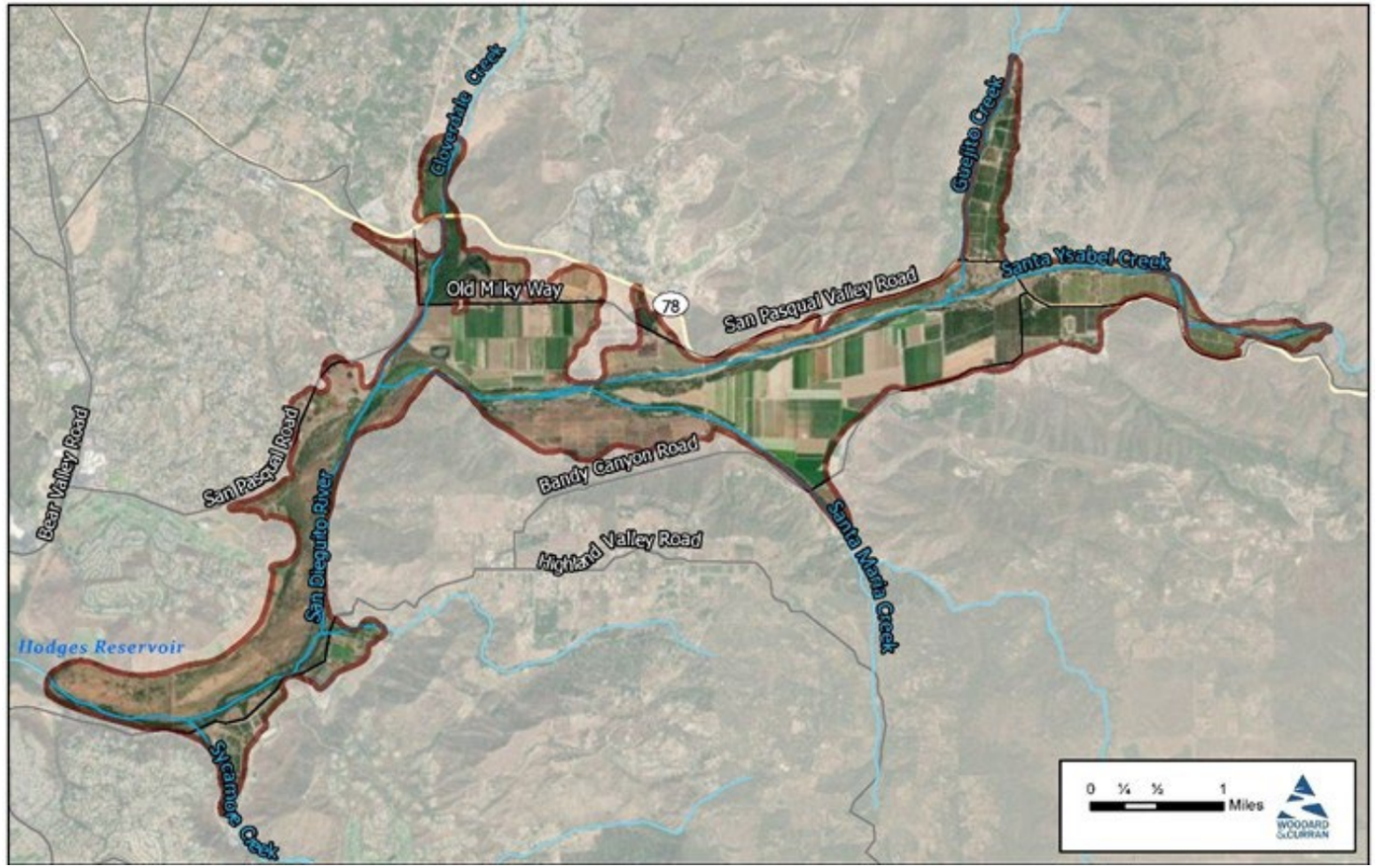
- This is a stakeholder workshop and anyone is welcome to ask questions or provide comments
- Public comment will take place at the end of each agenda item
- Those wishing to speak should place their name and organization in the **Chat**; participants will be called on in the order received
- Follow-up comments and questions can be sent to **Staci Domasco (SDomasco@sandiego.gov)**

Meeting Agenda

- Roll Call and Introductions
- Purpose and Objectives of the Annual Report
- Overview of Report Findings
  - Groundwater Levels
  - Change in Groundwater Storage
  - Groundwater Quality
  - Groundwater Production
- Public Comment
- Next Steps and Closing Remarks

Meeting Objectives

- Review Annual Report for Water Years 2020 and 2021
- Share data collected on groundwater levels and groundwater quality
- Evaluate Basin conditions against thresholds
- Report out on implementation of projects and management actions



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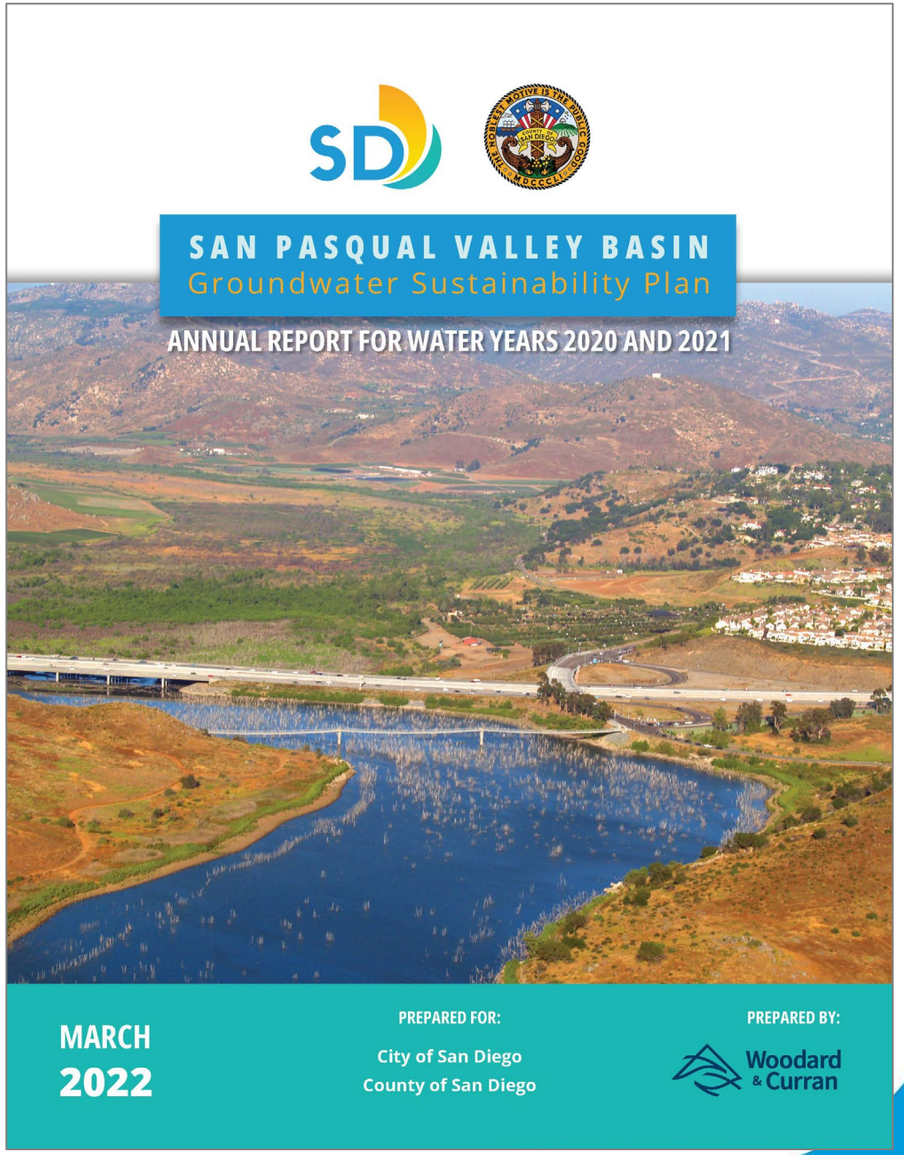
Purpose and Objectives of Annual Report

Purpose of the Annual Report

- Sustainable Groundwater Management Act (SGMA) requires submittal of Annual Reports each April 1 following adoption of the GSP
- Annual Reports provide information on groundwater conditions and implementation of the GSP for the prior Water Year (WY)
  - WY runs from October 1 through September 30
  - Our 1st Annual Report covers WYs 2020 and 2021 because the GSP data analysis was through 2019



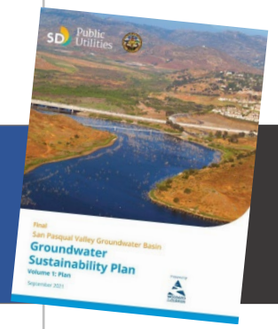
SGMA Requirements for Annual Reports

- Groundwater conditions
  - Contour maps for seasonal high and low conditions
  - Hydrographs
- Groundwater production by sector
  - Maps showing the distribution of pumping in the basin
- Surface water supply by sector
- Total water use by sector
- Change in groundwater storage
  - Maps showing the change in storage
  - Graphic showing annual and cumulative change in storage
- Progress toward GSP implementation
  - Interim milestones
  - Status of projects and management actions (PMAs)

2010 2015 2020 2025 2030 2035 2040 2045

2016
GSA Established

2021
GSP Adopted



2005-2019
GSP Baseline Period

2022-2042
GSP Implementation

2022-2042
Annual Reports

2027 *2032* *2037*
Five Year Updates

Draft Work Product

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Questions?

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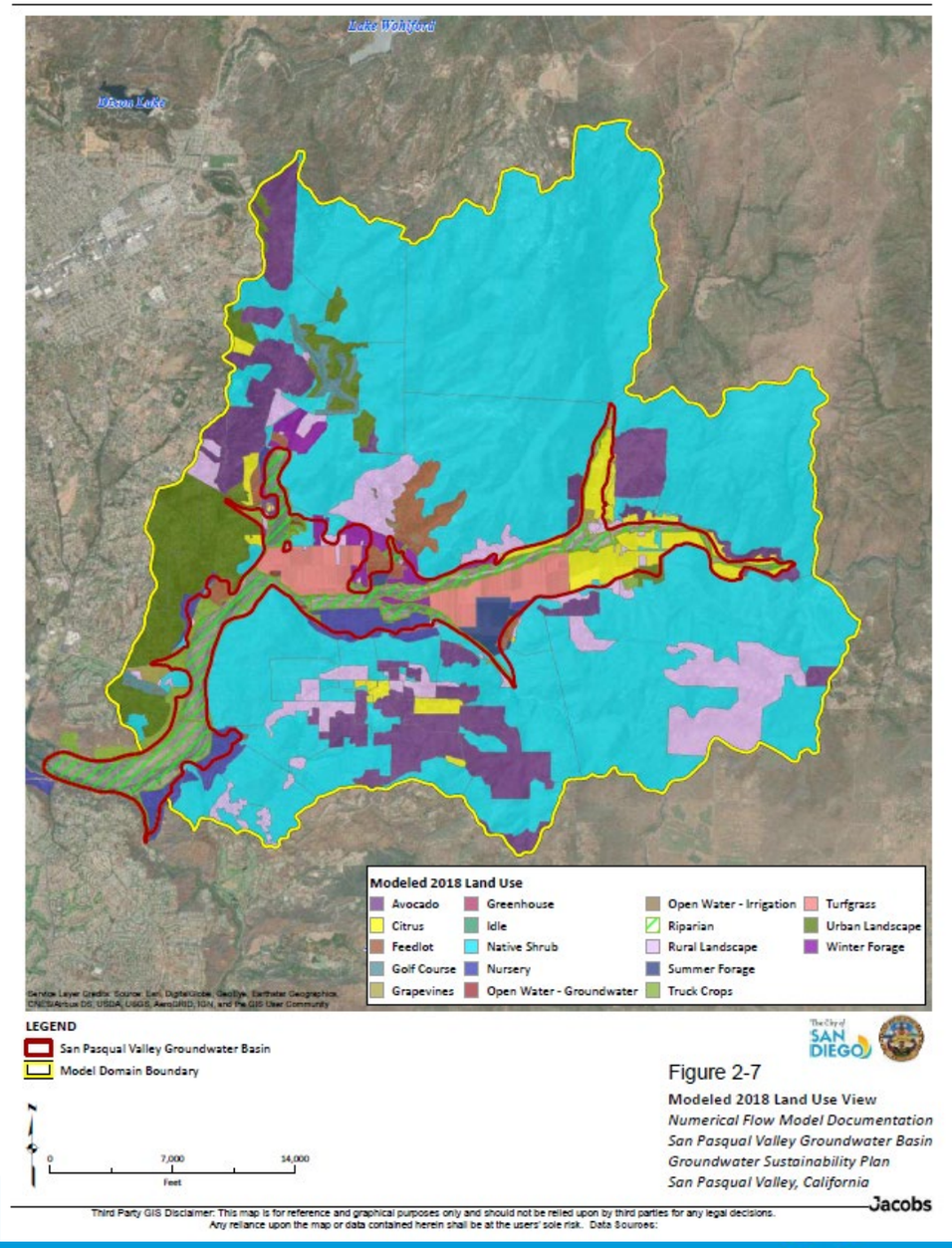
Overview of Report Findings

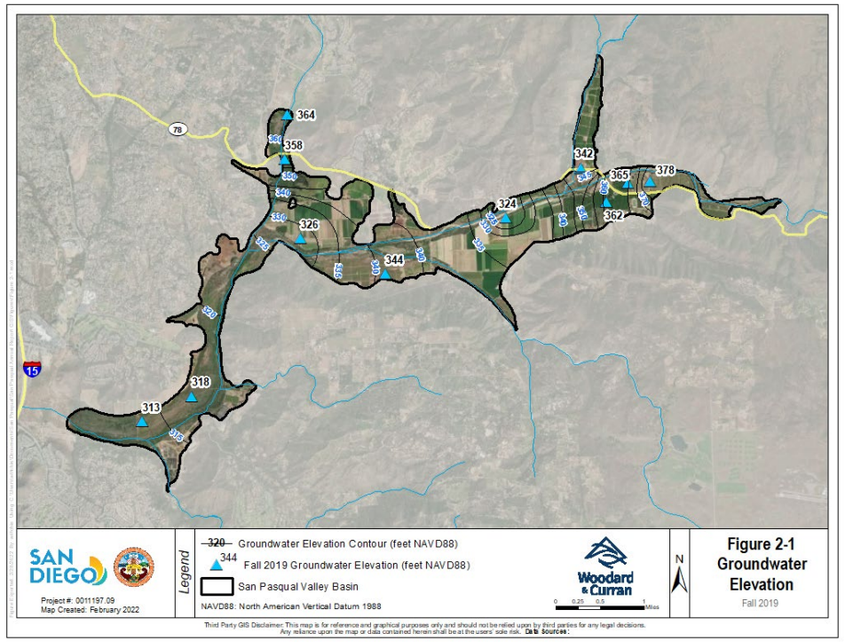
Precipitation and Groundwater Production

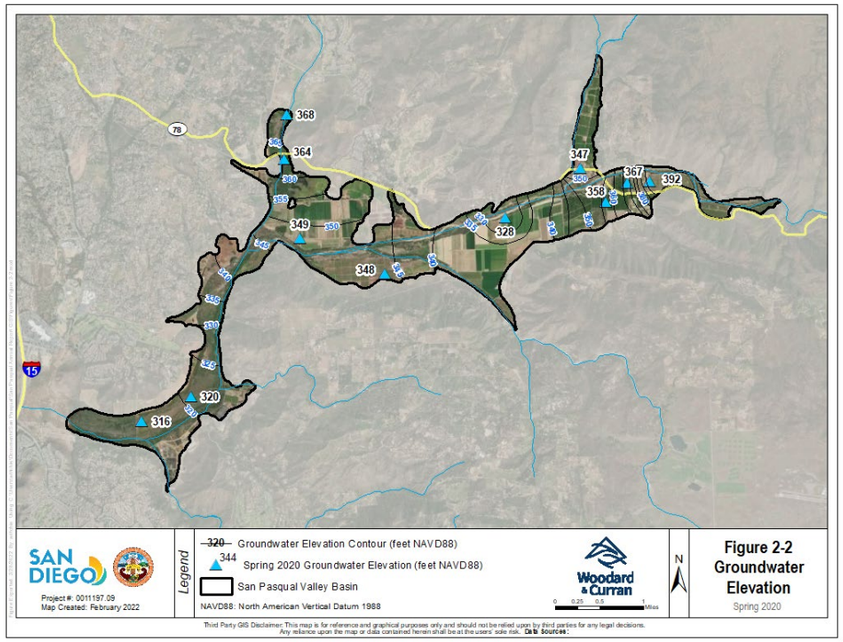
- PRISM data used for precipitation
  - WY 2020 (10/1/2019-9/30/2020): 22.0 inches – Wet year
  - WY 2021 (10/1/2020-9/30/2021): 6.9 inches – Critically Dry year
- Estimated groundwater production using SPV GSP Model approach
  - Demand based on land use and population
  - Assumes no change from 2020 conditions
  - Excludes imported applied water
  - Considers water year type and ET

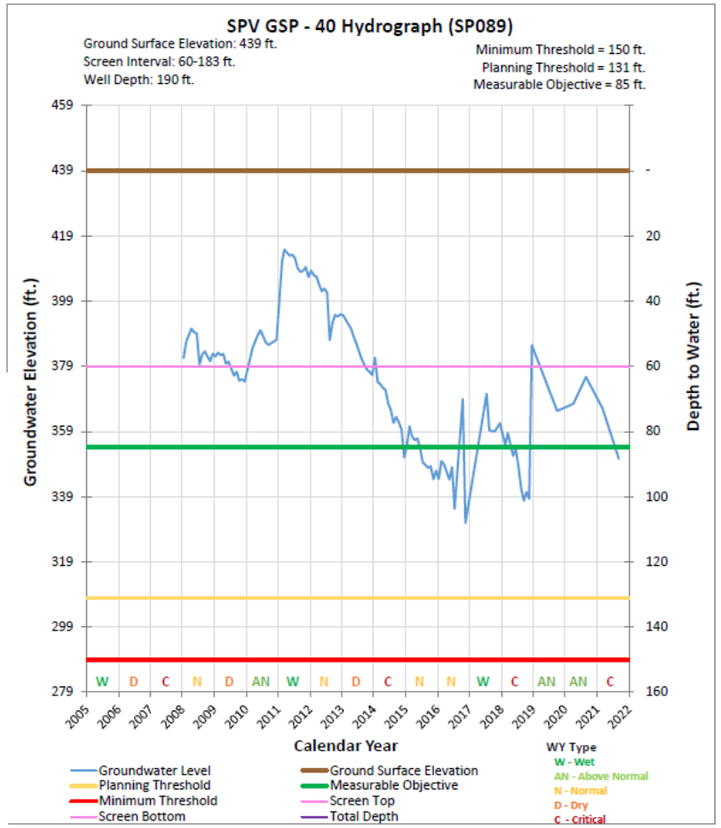


WYs 2020 and 2021 Groundwater Levels

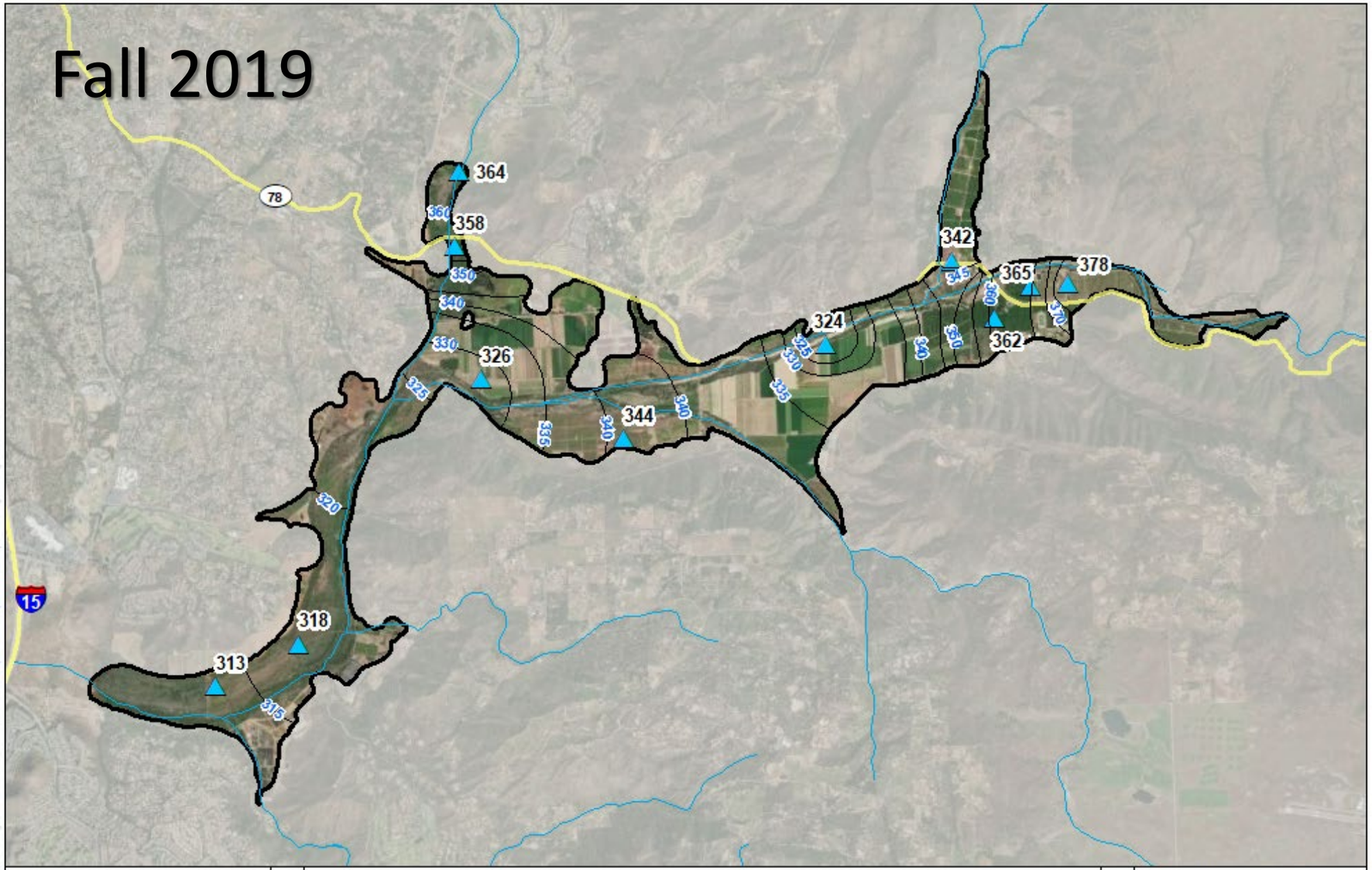
- Similar groundwater flow patterns seasonally and for both WYs
- GW level trends
  - Recovery during WYs 2019 and 2020
  - Declining levels during WY2021
- GW levels did not exceed Minimum Thresholds (MTs) or Planning Thresholds (PTs)
- GW levels for several wells were shallower than the Measurable Objectives (MOs)







Fall 2019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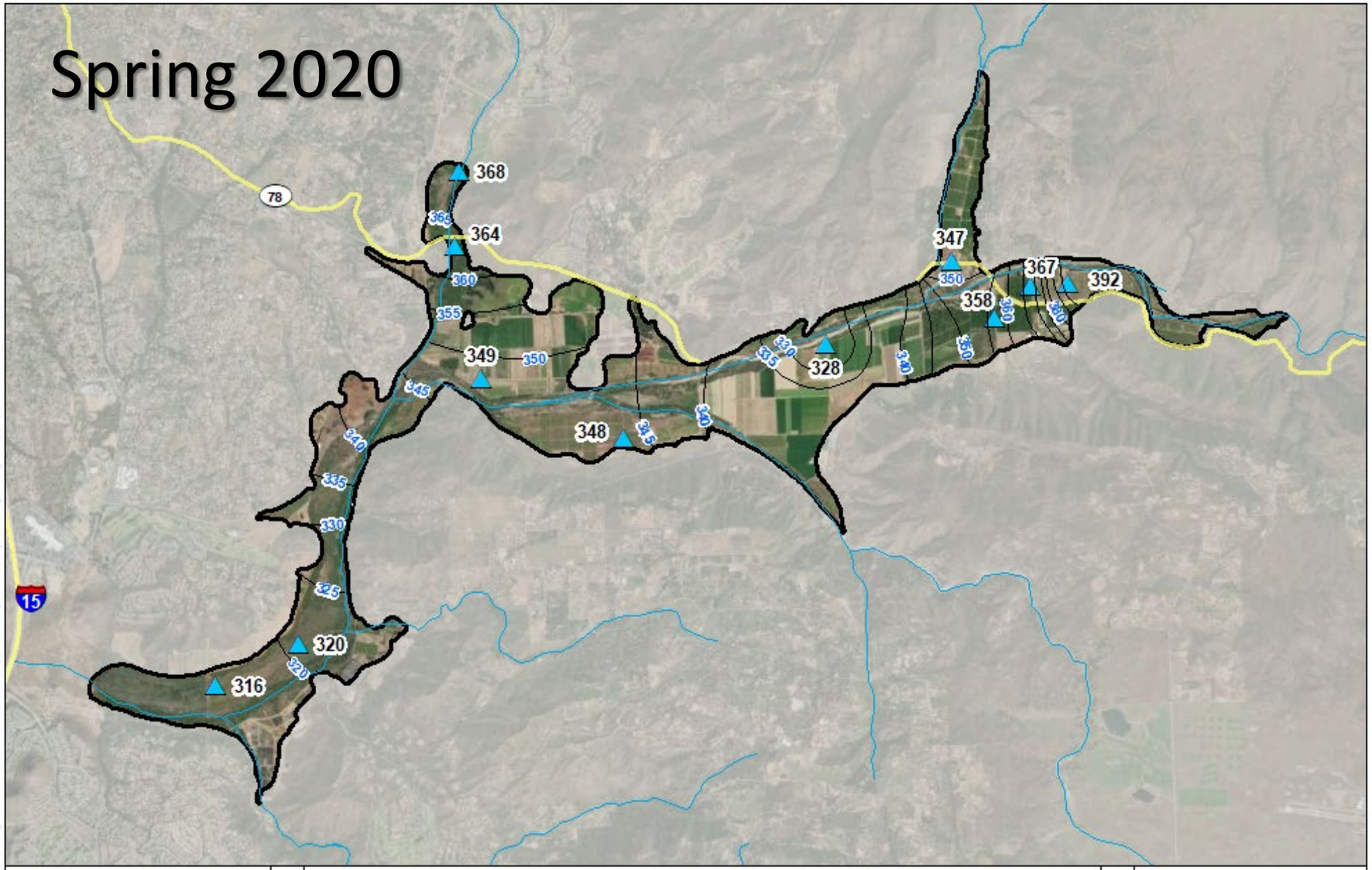
Legend
320
Groundwater Elevation Contour (feet NAVD88)
344
Fall 2019 Groundwater Elevation (feet NAVD88)
San Pasqual Valley Basin
NAVD88: North American Vertical Datum 1988
SAN DIEGO
Project #: 0011197.09
Map Created: February 2022
Woodard & Curran
0 0.25 0.5 1 Miles
N
Figure 2-1
Groundwater Elevation
Fall 2019
Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions.
Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources:

Spring 2020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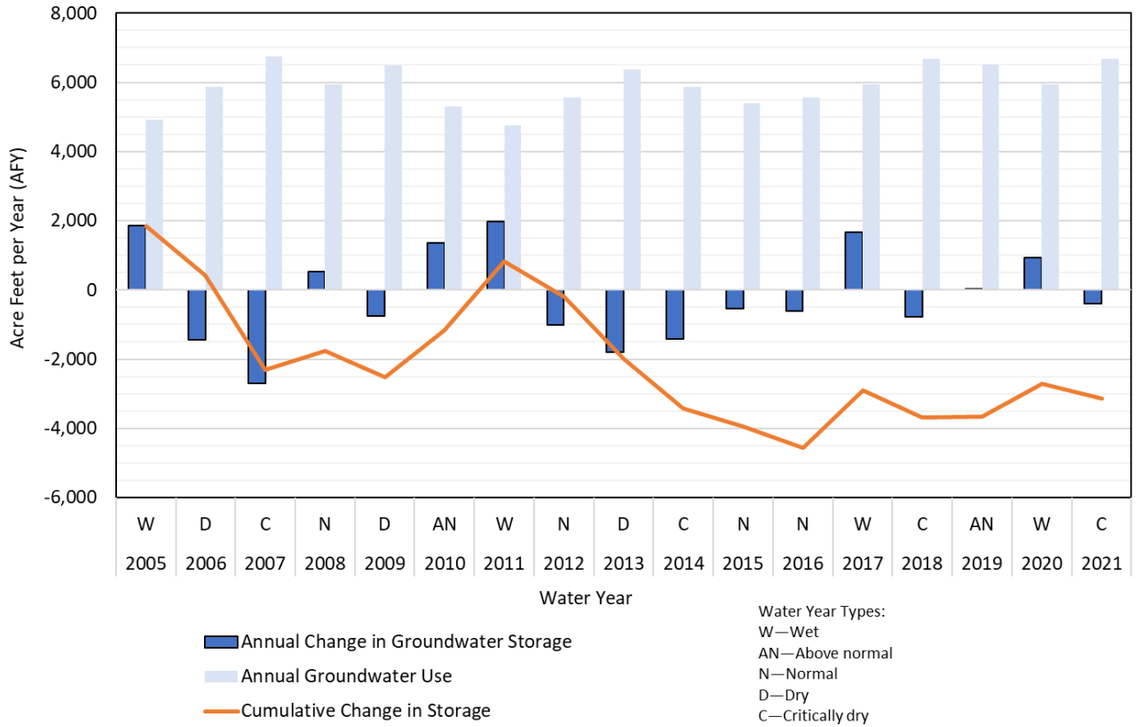
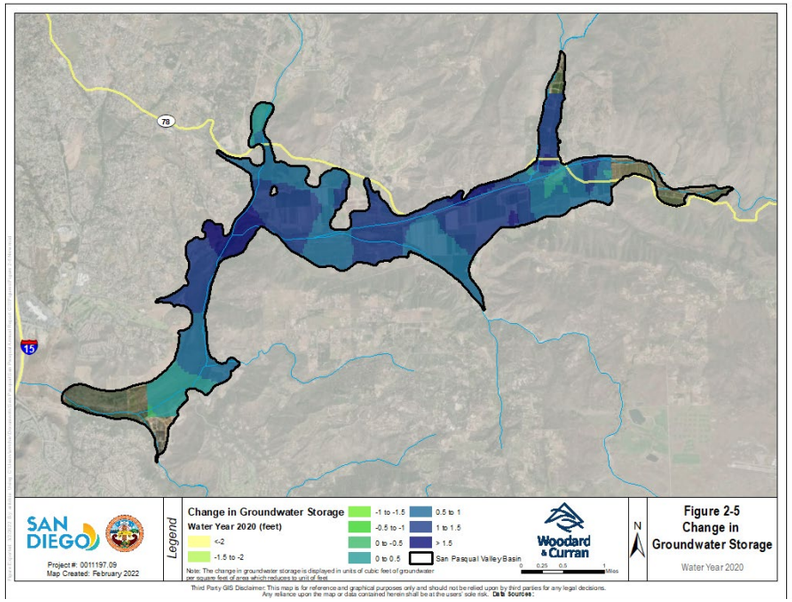
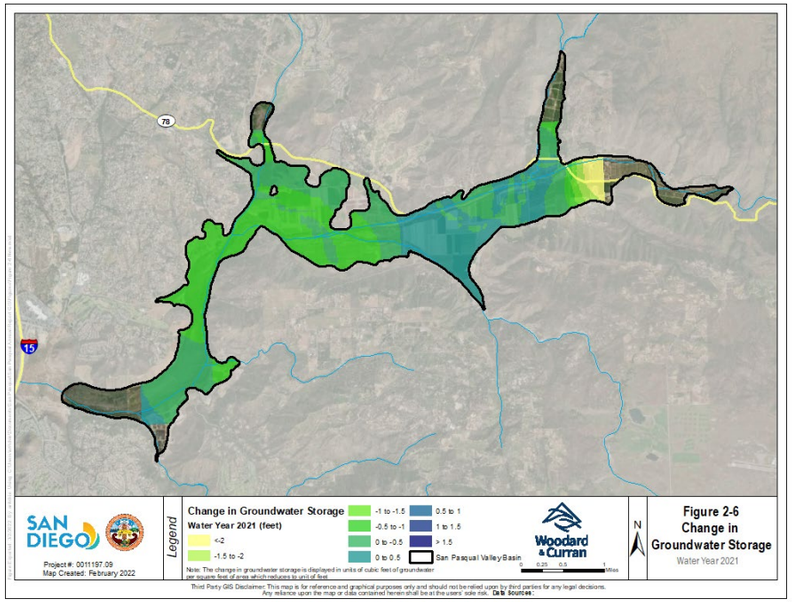
Legend
320 Groundwater Elevation Contour (feet NAVD88)
344 Spring 2020 Groundwater Elevation (feet NAVD88)
San Pasqual Valley Basin
NAVD88: North American Vertical Datum 1988
Project #: 0011197.09
Map Created: February 2022
Woodard & Curran
0 0.25 0.5 1 Miles
N
Figure 2-2
Groundwater Elevation
Spring 2020
Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions.
Any reliance upon the map or data contained herein shall be at the users' sole risk. Data Sources:

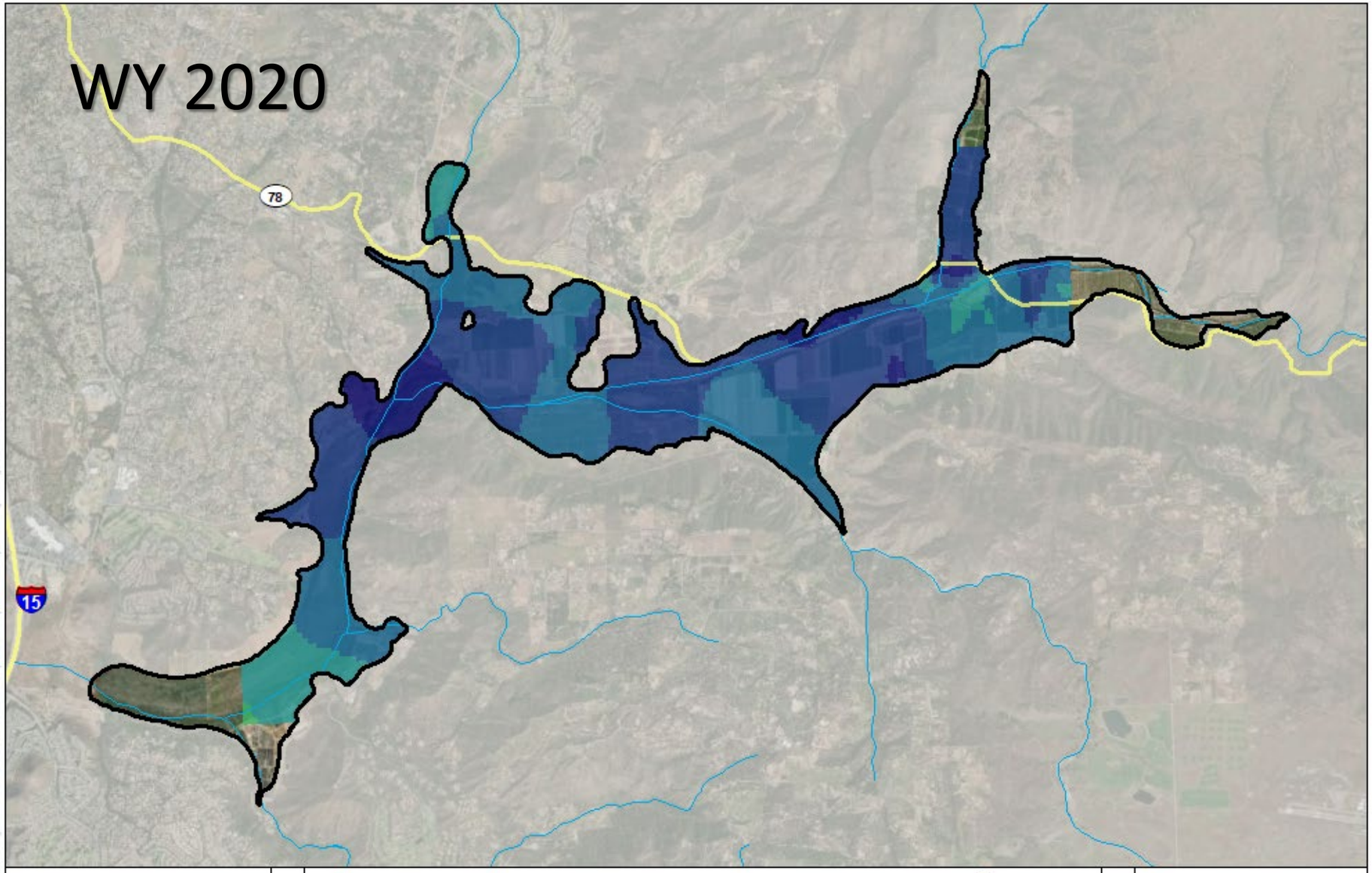
WYs 2020 and 2021 Change In Storage

- Estimated based on change in groundwater levels
- Annual Change in storage
  - WY2020 (Wet): +942 AF
  - WY2021 (Critically Dry): -409 AF
- Cumulative Change is better than 2019 (end of baseline)
  - WY 2005-2021: -3,113 AF








WY 2020
78
15
SAN DIEGO
Project #: 0011197.09
Map Created: February 2022
Legend
Change in Groundwater Storage
Water Year 2020 (feet)
<-2
-1.5 to -2
-1 to -1.5
-0.5 to -1
0 to -0.5
0 to 0.5
0.5 to 1
1 to 1.5
> 1.5
San Pasqual Valley Basin
Note: The change in groundwater storage is displayed in units of cubic feet of groundwater per square feet of area which reduces to unit of feet
Woodard & Curran
0 0.25 0.5 1 Miles
N
Figure 2-5
Change in Groundwater Storage
Water Year 2020
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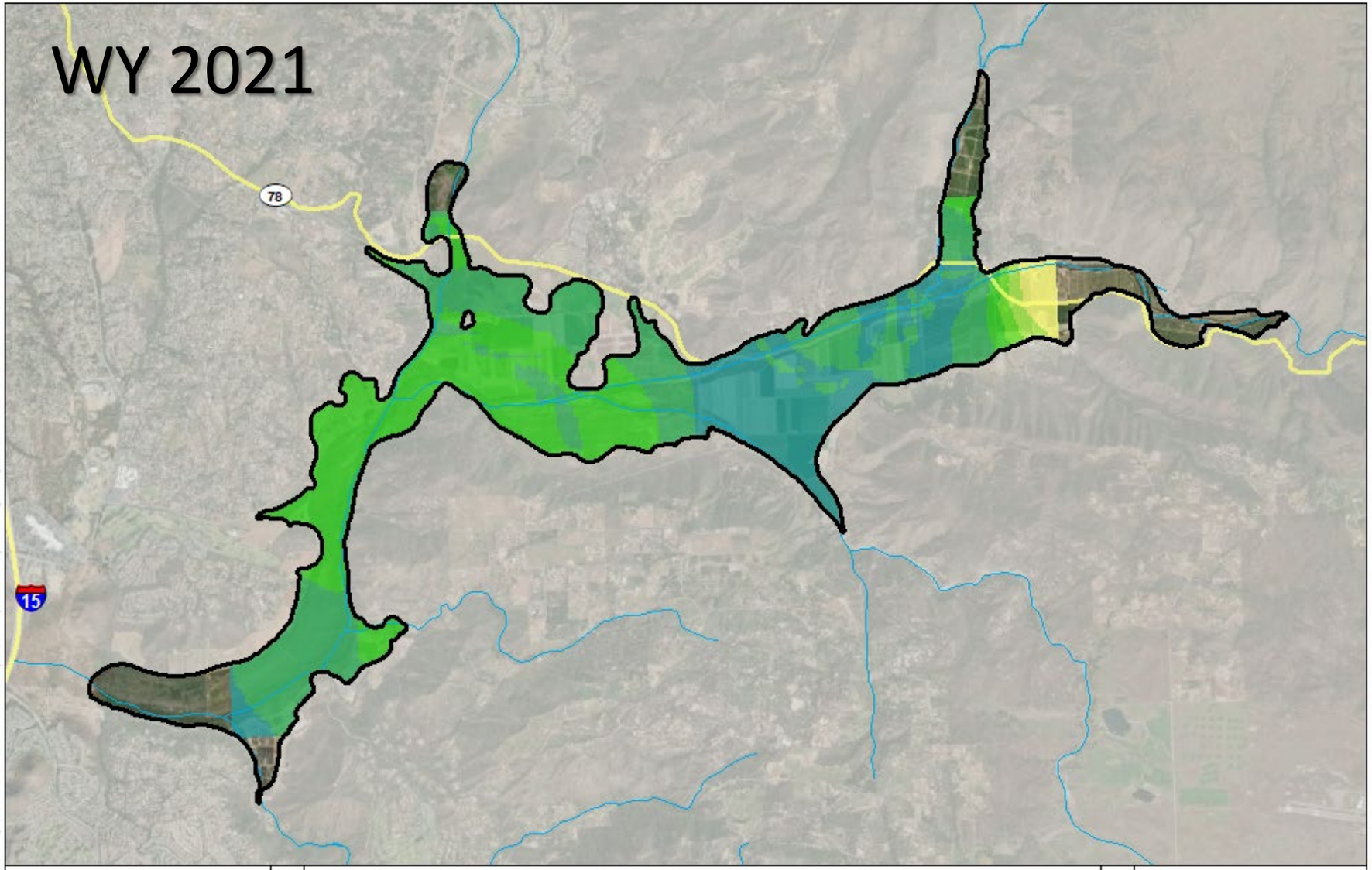
WY 2021



SAN DIEGO

Project #: 0011197.09
Map Created: February 2022

Legend

Change in Groundwater Storage
Water Year 2021 (feet)

- <-2
- -1.5 to -2
- -1 to -1.5
- -0.5 to -1
- 0 to -0.5
- 0 to 0.5
- 0.5 to 1
- 1 to 1.5
- > 1.5
- San Pasqual Valley Basin

Note: The change in groundwater storage is displayed in units of cubic feet of groundwater per square feet of area which reduces to unit of feet

Woodard & Curran

0 0.25 0.5 1 Miles

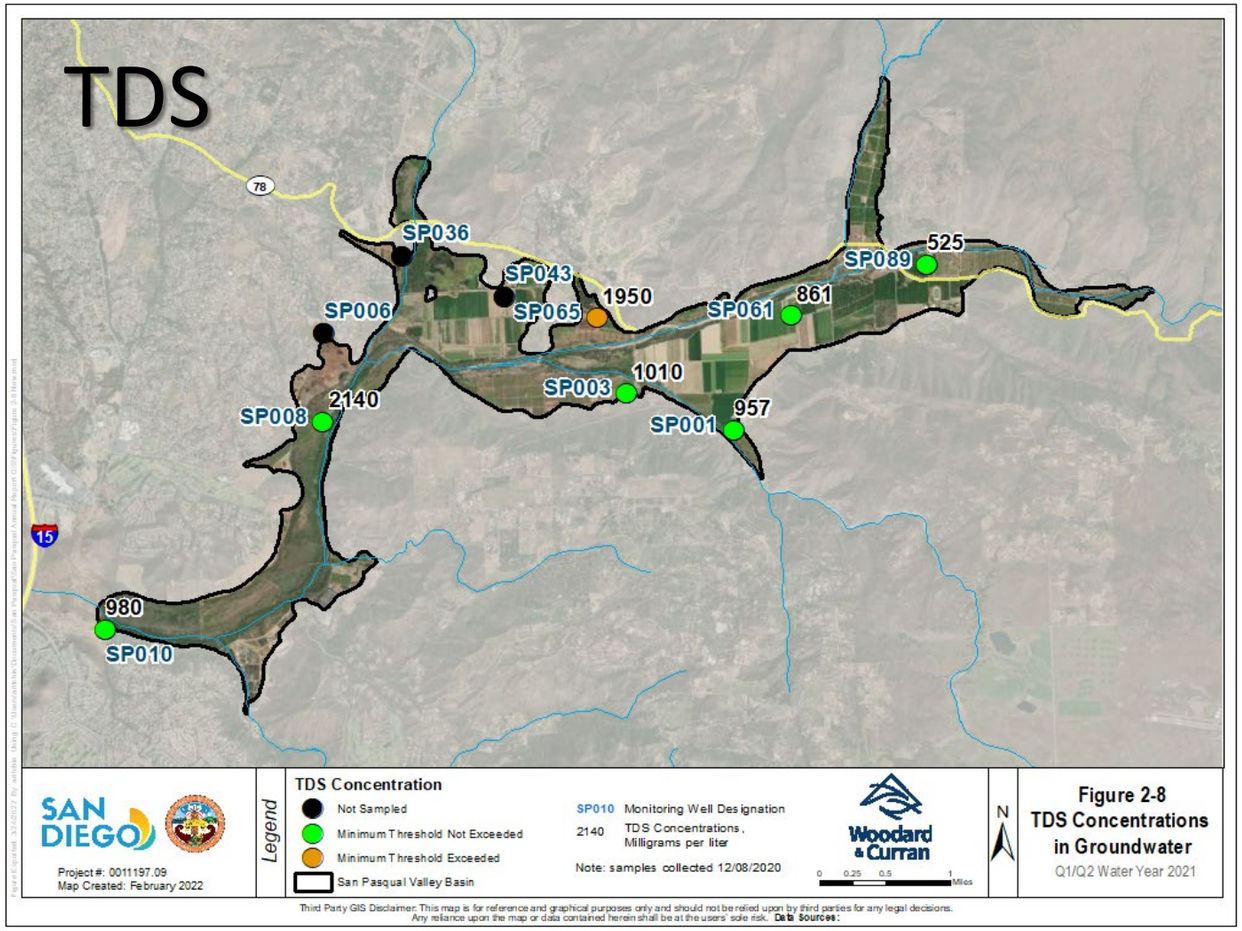
N

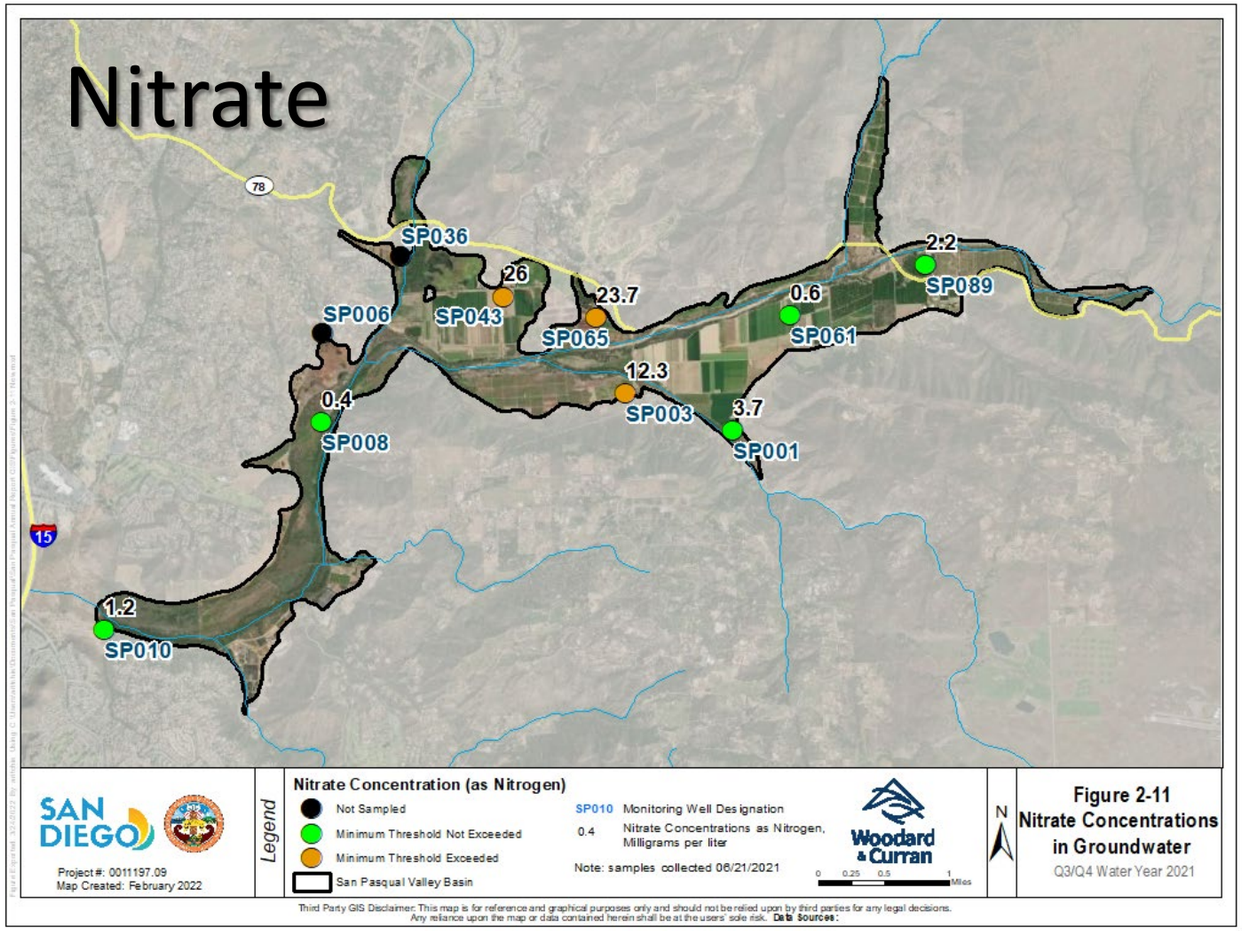
Figure 2-6
Change in Groundwater Storage
Water Year 2021

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:**

Groundwater Quality

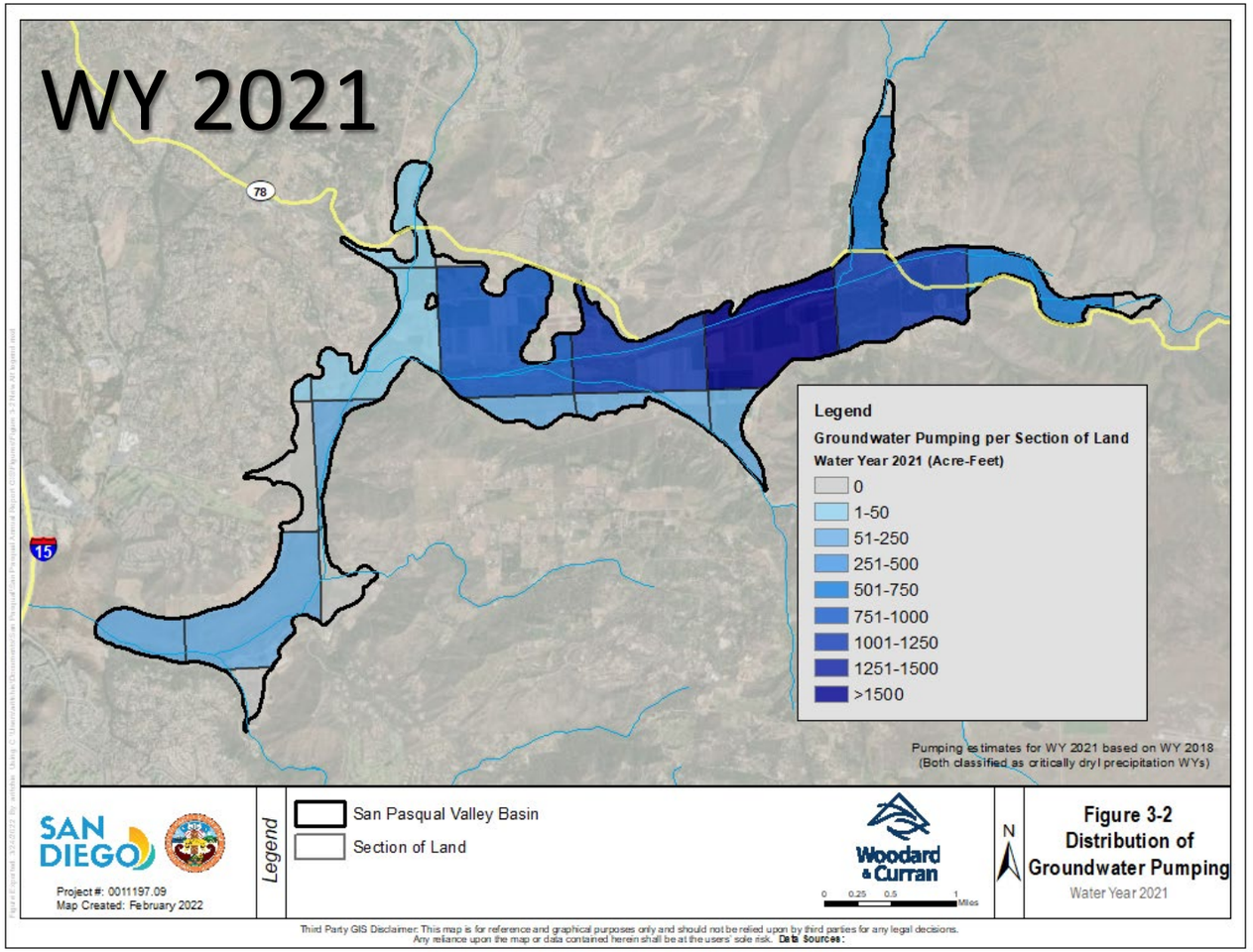
- TDS MT exceedances in one well (SP065)
- Nitrate exceedances in three wells (SP043, SP065, SP003)





WYs 2020 and 2021 Groundwater Production

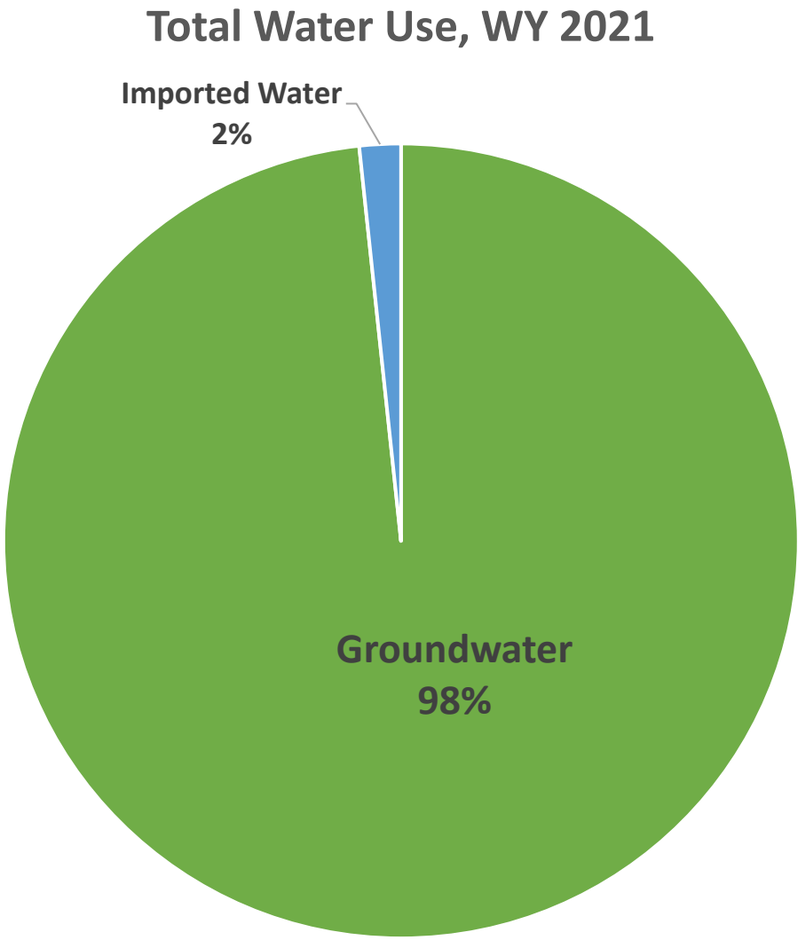
Water Year	Water Year Type	Agricultural Pumping (AFY)	Domestic Pumping (AFY)	Total Pumping (AFY)
2020	Wet	5,933	3	5,936
2021	Critically Dry	6,664	3	6,667
AFY = acre feet per year				



Total Water Use

Source	WY 2020 (AF)	WY 2021 (AF)
Groundwater		
Agricultural[a]	5,933	6,664
Domestic[b]	3	3
Surface Water	0	0
Imported Applied Water		
Agricultural[c]	100	114
Total Water Use	6,036	6,781

a) Based on SPV GSP Model results for WY 2017 (applied to WY 2020) and WY 2018 (applied to WY 2021)
b) Assumed constant population and per capita per day demand see Appendix I of the GSP
c) Based on previous modeled results for WY 2017 (applied to WY 2020) and WY 2018 (applied to WY 2021)
AF = acre-feet



GSP Implementation

Status of Management Action Implementation:

- Management Action 3 – Support Water Quality Improvement Plan (WQIP) Actions – *Continuous*
- Management Action 4 – Coordinate and Collaborate Regionally with Other Entities to Perform Monitoring and Implement Regional Projects – *Continuous*
- Management Action 5 – Education and Outreach for TDS and Nitrate – *Planned for 2022*
- Management Action 6 – Coordinate with City on Hodges Watershed Improvement Project – *Continuous*
- Management Action 7 – Initial Surface Water Recharge Evaluation – *Planned for 2022-2024*
- Management Action 8 – Study Groundwater Dependent Ecosystems, Phase I Desktop Study – *Planned for 2022*

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Questions?

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PUBLIC COMMENT

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Stakeholder Workshop

NEXT STEPS & CLOSING REMARKS

Next Steps & Closing Remarks

- San Pasqual Valley GSP Website
  - https://www.sandiegocounty.gov/content/sdc/pds/SGMA/san-pasqual-valley.html
- San Pasqual Valley GSP
  - https://sgma.water.ca.gov/portal/gsp/preview/75
- Annual Report for Water Years 2020 and 2021
  - https://sgma.water.ca.gov/portal/gspar/preview/140
- San Pasqual Valley GSP Data Management System (Opti)
  - https://opti.woodardcurran.com/sanpasqual/login.php

Next Stakeholder Workshop

- Kickoff of Management Action No 7 Initial Surface Water Recharge Evaluation
  - June 2022 – Stay tuned for workshop date announcement!