

# Sustainable Groundwater Management Act and Groundwater Sustainability Plan for the Napa Valley Subbasin

## *Overview of GSP Activities*

Presentation to Napa County  
Watershed Information & Conservation Council

Jamison Crosby  
July 22, 2021



# Napa Valley Subbasin GSP Activities: Overview



1. Sustainable Groundwater Management (2014) Defined
2. Napa County GSA and GSP Advisory Committee (GSPAC)
3. Stakeholder Engagement
4. GSP Development Process
5. Integrated Hydrologic Model, Monitoring Networks, & Sustainable Management Criteria
6. Looking Ahead

# Sustainable Groundwater Management Defined



## Sustainable Groundwater Management

*“The management and use of groundwater in a manner that can be maintained during the planning and implementation horizon **without causing undesirable results**” - Water Code Section 10721(v)*

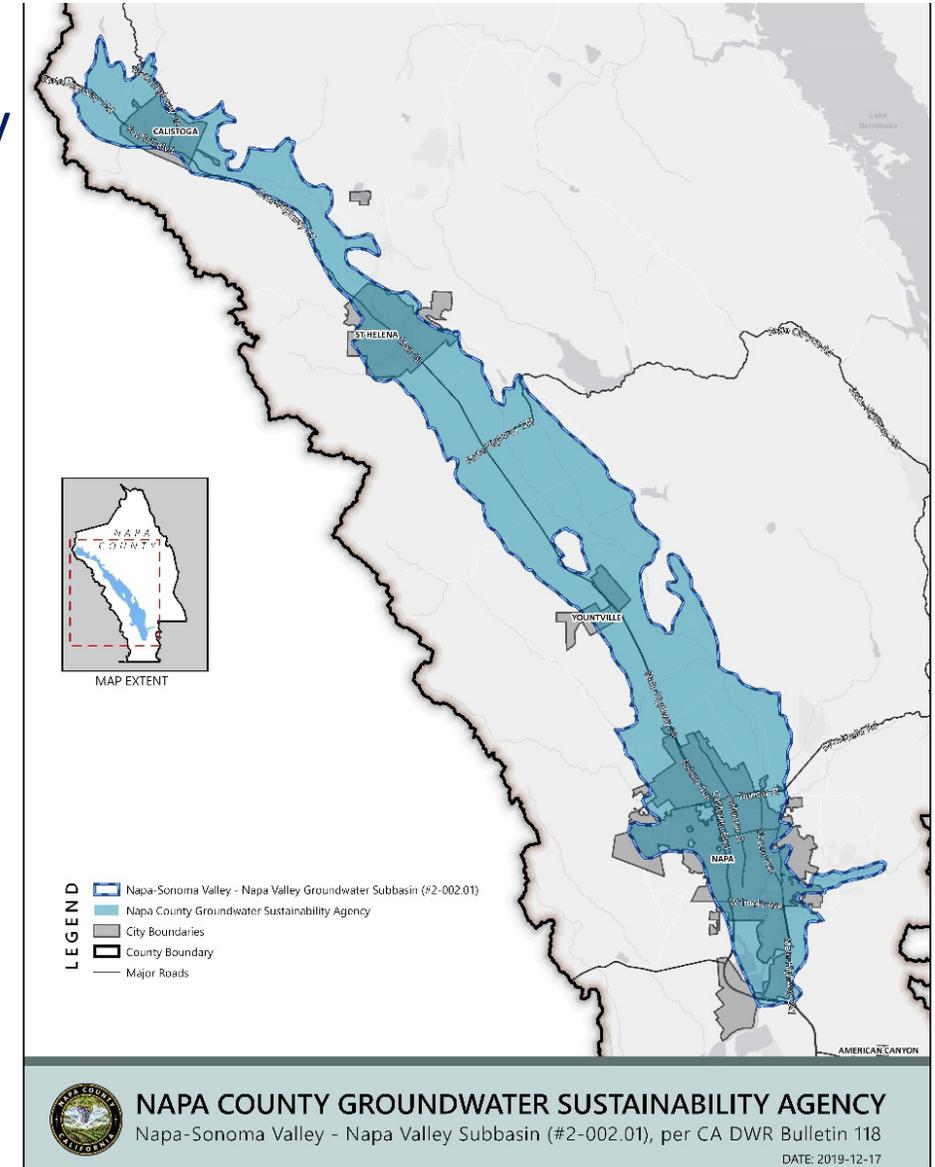
**“Planning and Implementation Horizon”** – 50 years following GSP submittal



# Napa Governance and Advisory Committee



- 5 Subbasins in Napa County – most low/v. low priority
- Napa County GSA (Resolution; December 17, 2019)
  - One GSA for Napa Valley Subbasin
- Groundwater Sustainability Plan Advisory Committee (GSPAC)
  - 25 Members appointed by GSA
  - Kick-off meeting July 9, 2020
  - Monthly public meetings to receive information and provide input on draft GSP
- Facilitation by CONCUR
- Technical support by LSCE



# Napa Valley Subbasin GSP Roadmap



## July 2020-Oct. 2021 (Monthly GSPAC Meetings)

- Present/Discuss *Draft* GSP content
- Receive input from GSPAC and Public
- Receive feedback on Draft GSP Sections through survey tools (includes stakeholders/public)
- Address comments; Update *Draft* Sections

## October 2021- January 2022

- Conclude review of individual draft GSP Sections
- Provide full Draft GSP for GSPAC review; provide 90-day notice of GSA hearing
- Final Draft GSP forwarded to GSA for review & approval in November 2021; Vote to adopt Dec. 2021
- Submit GSA-approved GSP to DWR in Jan 2022



# GSP Table of Contents



Draft GSP Sections		To GSPAC (as of 7/19/21)	Corresponding GSP Regulations
<b>1</b>	Introduction	✓	§351 / §353.6 / §354.2 / §354.4 / §354.6 / §354.8
<b>2</b>	Plan Area	✓	§354.8
<b>3</b>	Water Resource and Land Use Monitoring and Management Programs	✓	§353.8 / §354.8 / §354.10
<b>4</b>	Basin Setting (Hydrogeologic Conceptual Model)	✓	§354.12 / §354.14
<b>5</b>	Monitoring Network and Program	✓	§354.32 / §354.34 / §354.38
<b>6</b>	Groundwater and Surface Water Conditions	✓	§354.16
<b>7</b>	Historical, Current, and Projected Water Supplies		§354.16
<b>8</b>	Water Budget		§354.18
<b>9</b>	Napa Valley Subbasin Sustainability Goal		§354.20 / §354.22 / §354.24 / §354.26 / §354.28 / §354.30 / §354.36 / §354.38
<b>10</b>	Data Management and Reporting		§352.2 / §352.4 / §352.6 / §353.4 / §354.40 / §356.2 / §356.4
<b>11</b>	Sustainable Groundwater Management: Projects and Management Actions		§354.42 / §354.44
<b>12</b>	Plan Implementation		§353.2 / §355.4 / §356.4

# Stakeholder Engagement and Comment



- Draft GSP Sections (Chapters) and comment surveys available on the GSA website:
  - [www.countyofnapa.org/3081/Documents-Resources](http://www.countyofnapa.org/3081/Documents-Resources)
- Sign-up for the GSA email list:
  - <https://tinyurl.com/NapaCountyGSA-email-signup>
- Attend GSP Advisory Committee meetings
  - August 12, 2021
  - September 9, 2021 (tentative: Sept 8 or 10)
  - October 14, 2021
  - Agendas and meeting packets available online:  
[napa.granicus.com/ViewPublisher.php?view\\_id=35](http://napa.granicus.com/ViewPublisher.php?view_id=35)
  - Meetings are recorded

NAPA COUNTY  
GROUNDWATER SUSTAINABILITY AGENCY  
STAKEHOLDER COMMUNICATION AND  
ENGAGEMENT PLAN

Adopted December 15, 2020

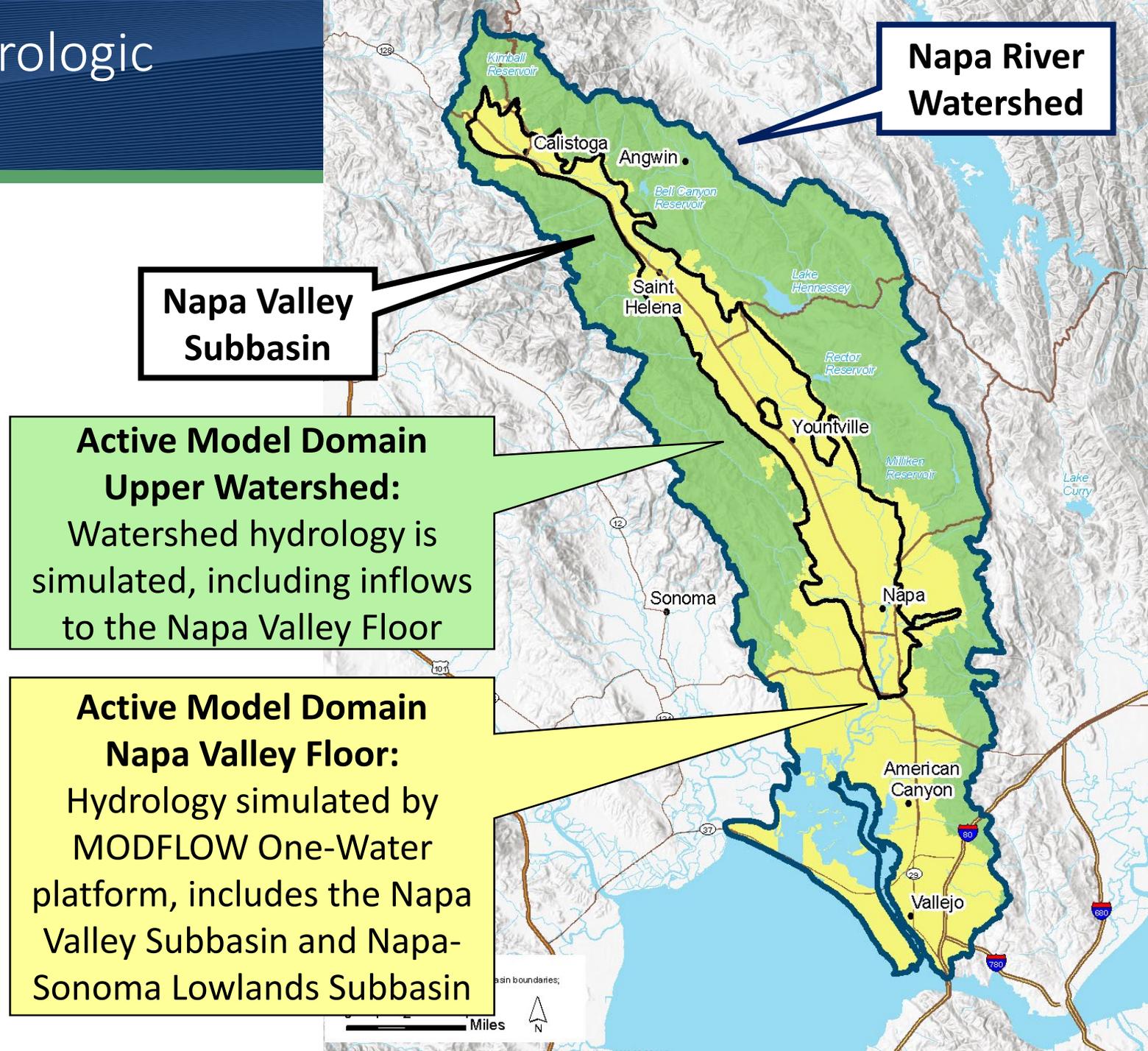
Prepared for the  
Napa County Groundwater Sustainability Agency  
1195 Third Street, Napa CA 94559

Under Napa County PSA Number PSA200362C  
DWR Agreement #4600013565, Category (b)–Stakeholder Engagement/Outreach

Prepared by CONCUR, Inc.  
1832 Second Street, Suite N  
Berkeley, CA 94710  
[www.concurinc.com](http://www.concurinc.com)

# Napa Valley Integrated Hydrologic Model (NV-IHM)

- Peer-reviewed model platform
- Simulates hydrologic responses to climate change (including sea level rise) and future land use
- Simulates runoff and recharge generated throughout the Napa River Watershed
- Simulates surface water and groundwater interconnections
- Model development presentation recordings available as part of January and February GSPAC meetings



# Napa County Groundwater Level Monitoring

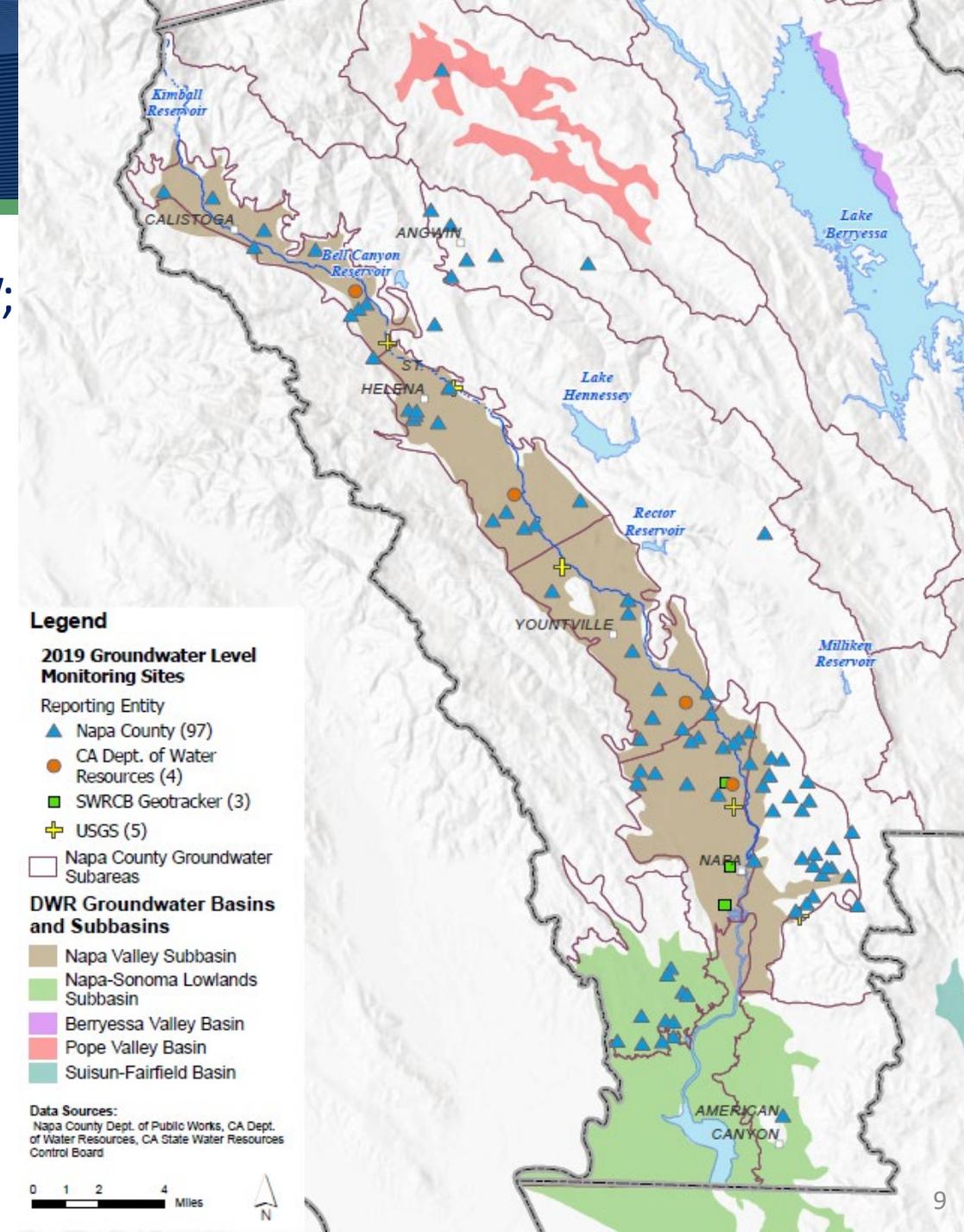
 Napa Co., 97 (incl. 10 dedicated wells for SW/GW; 87 are pub/private wells)

 California Dept. of Water Resources, 4

 State Water Resources Control Board GeoTracker, 3

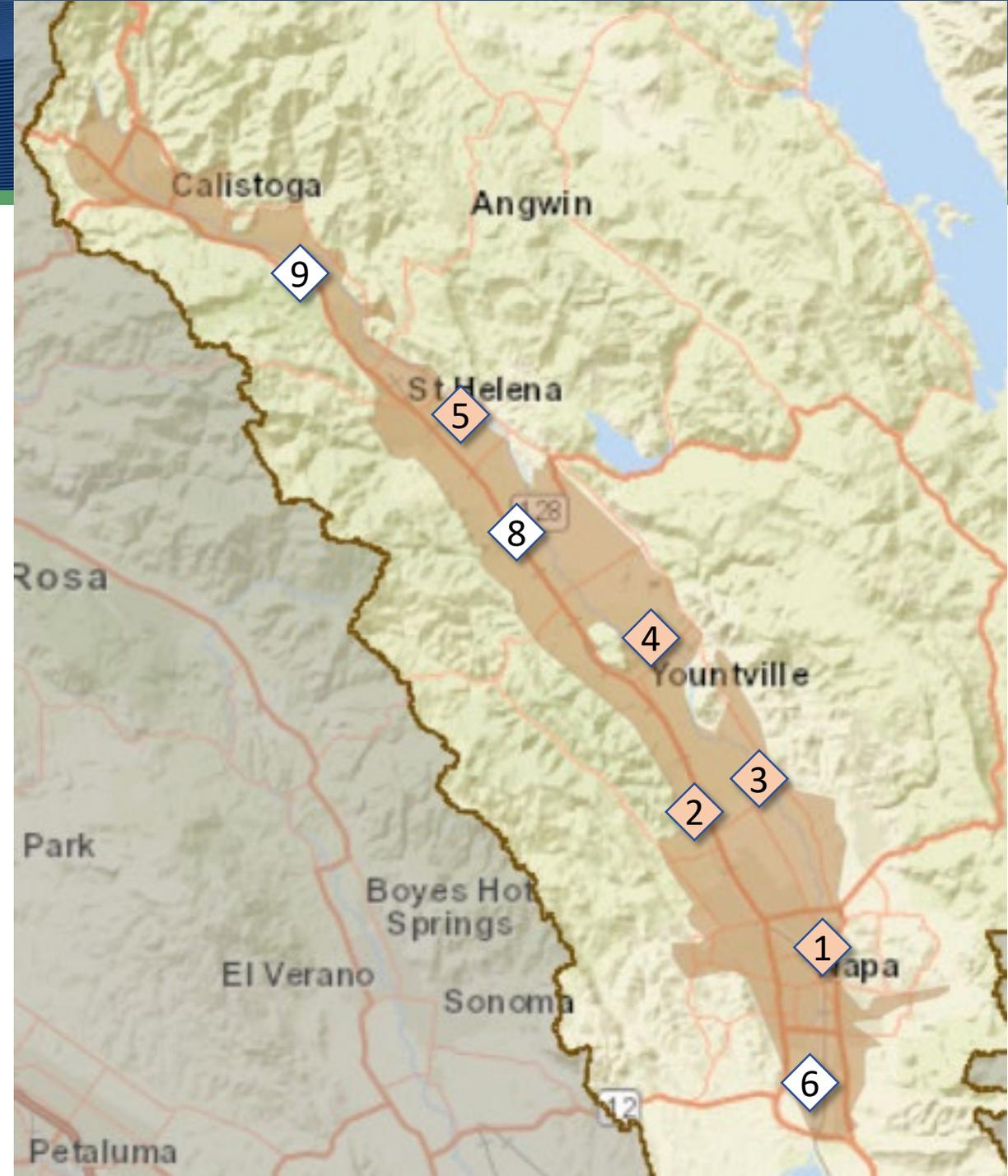
 U.S. Geological Survey, 5

**Total = 109**



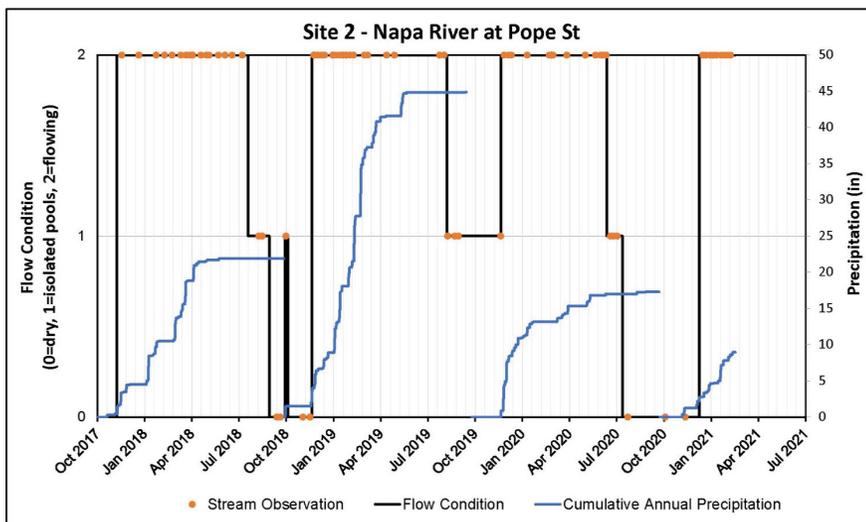
# Surface Water-Groundwater Monitoring

- ◆ Five existing sites constructed in 2014
  - ◇ Four sites to be constructed in 2021-2022
- 2 wells at each site
  - Nested monitoring wells with shallow and deeper screen intervals to evaluate GW-SW connection and vertical gradients
  - Areas of variable geology and geomorphology
  - Co-located with existing stream gauges, where possible



# Stream Watch: Community Science Stream Monitoring

- 26 sites (970+ observations to date)
- Volunteer program org by Napa RCD
- Informs GDE monitoring
- Complements data collection at permanent stream gauges
- <https://tinyurl.com/NapaValley-GW-SW-StoryMap>
- Please volunteer!



# Sustainable Management Criteria

## Undesirable Result

*“One or more of the following effects caused by groundwater conditions occurring throughout the basin:” - Water Code Section 10721(x)*

## Significant and Unreasonable ...

Chronic Lowering  
of GW Levels



Reduction of GW  
Storage



Seawater  
Intrusion



Water Quality  
Degradation



Land  
Subsidence



Depletion of  
Surface Water





# Sustainable Management Criteria

## Minimum Threshold

“a numeric value for each sustainability indicator used to define undesirable results”

GSP Regulations 351(t)

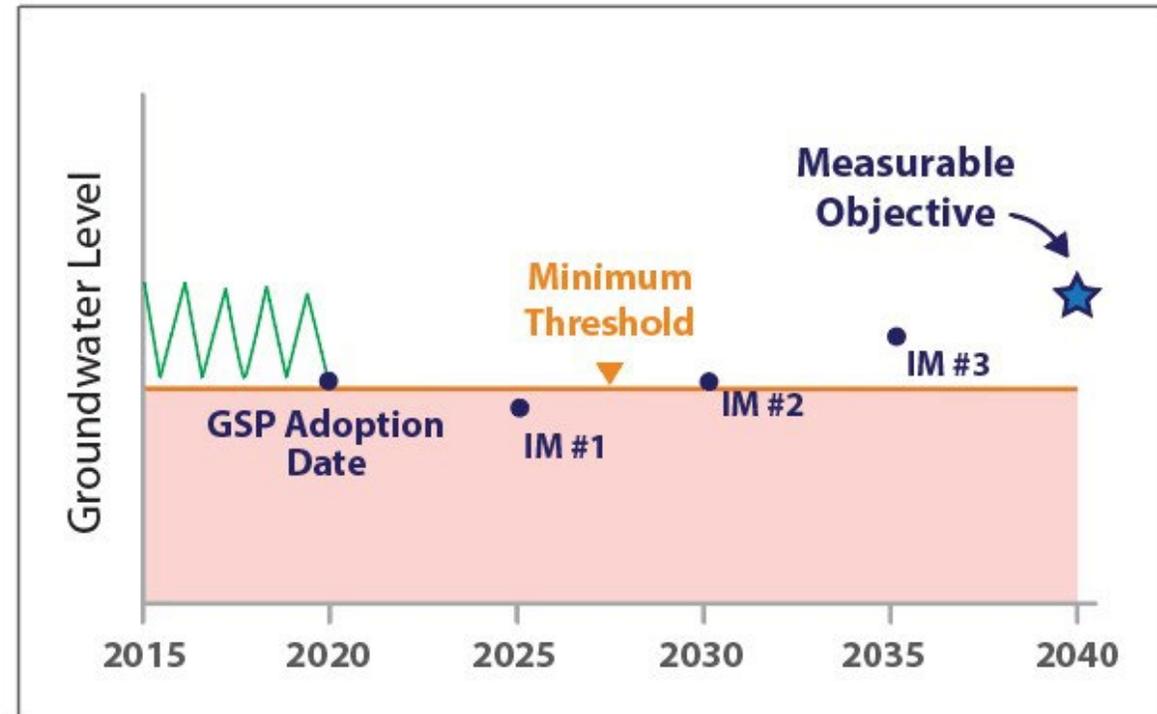
## Measurable Objective

“specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin”

Regulations 351(s)

## Interim Milestone (IM)

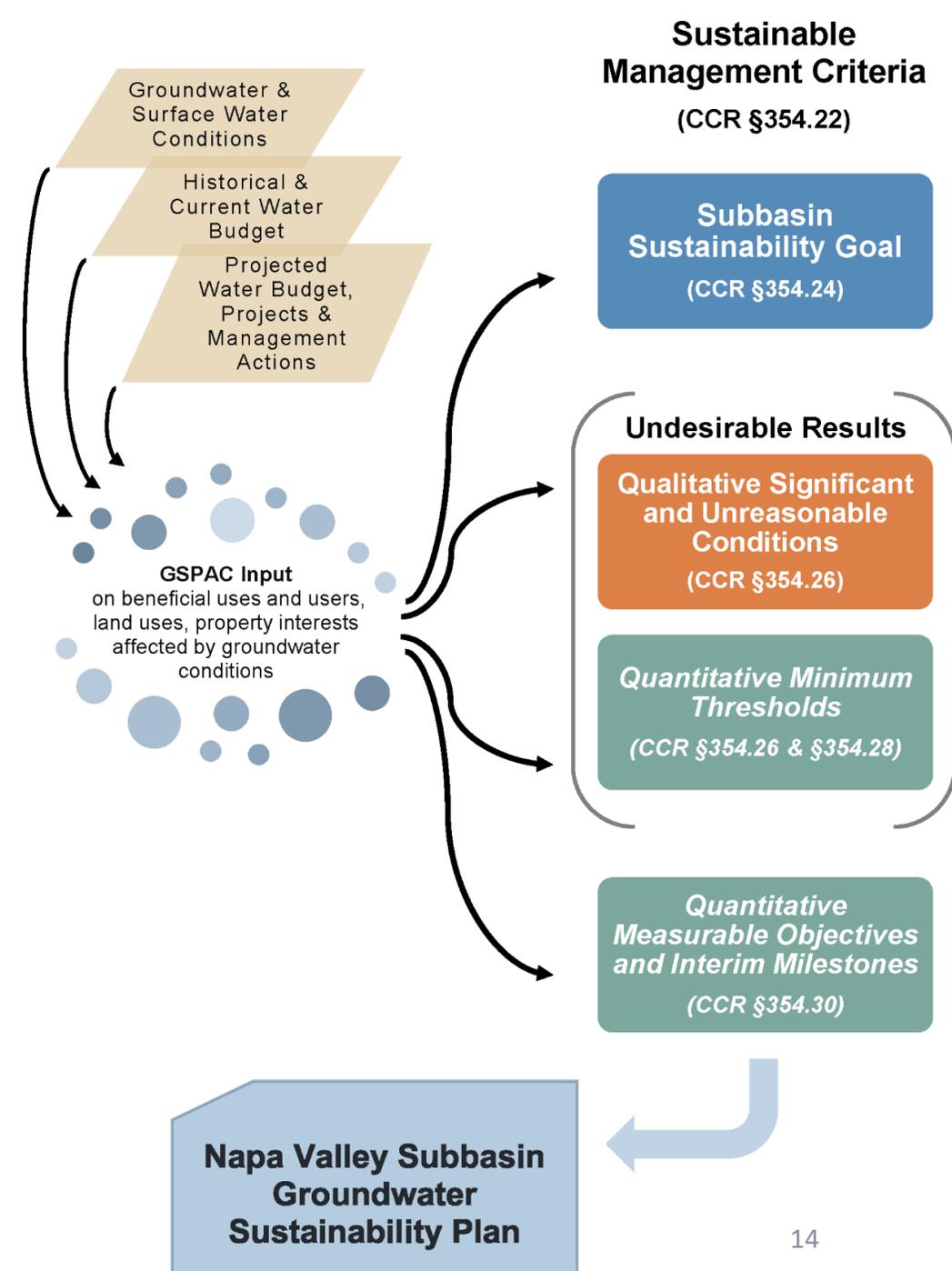
“a target value representing measurable groundwater conditions, in increments of five years, set by an Agency as part of a Plan” – GSP Regulations 351(q)



Source: DWR, Draft Best Management Practices for the Sustainable Management of Groundwater – Sustainable Management Criteria, November 2017

# Management Criteria Development Process

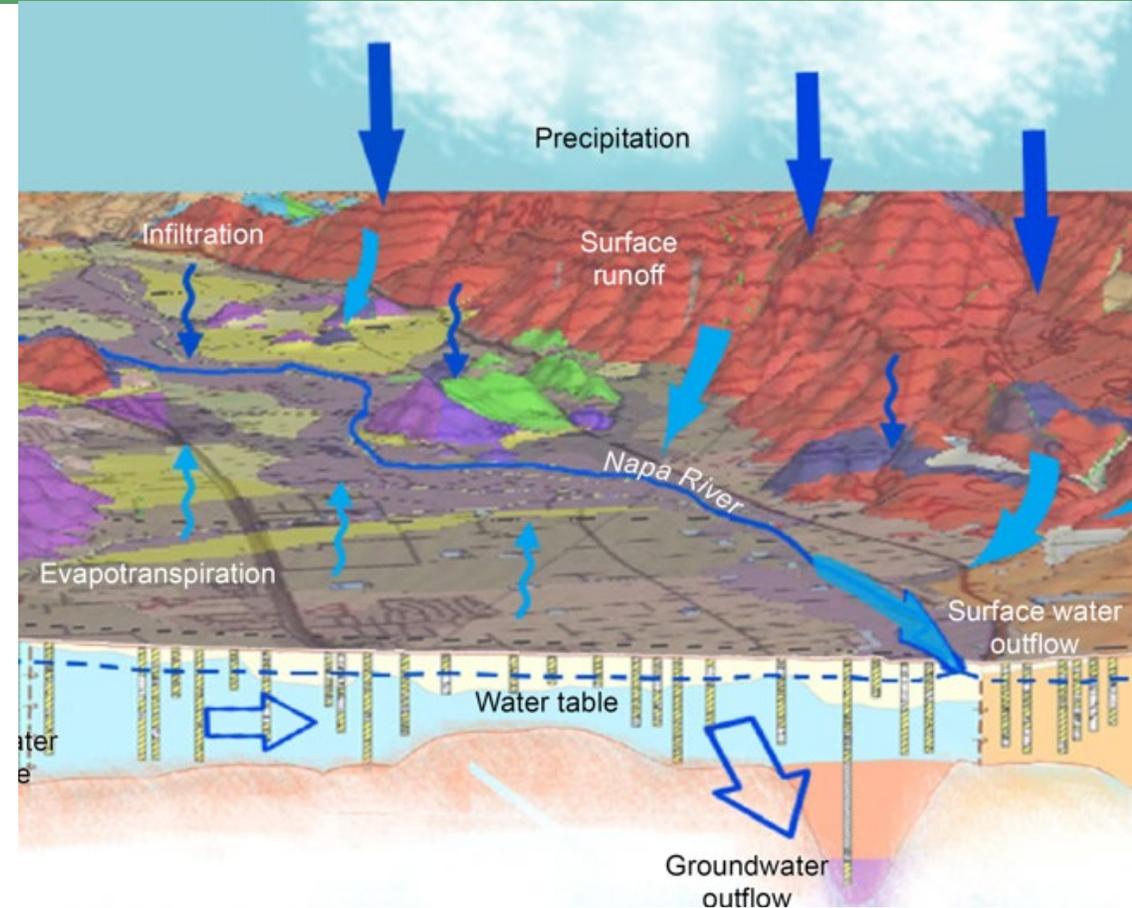
1. Solicit input from GSPAC based on information presented in the draft GSP Sections and Committee knowledge and experience
  2. Planning Team synthesizes GSPAC input
  3. Planning Team proposes Sustainable Management Criteria and tests for GSPAC support (first for qualitative criteria, then quantitative criteria)
- 6 qualitative criteria and 2 quantitative criteria approved by GSPAC through July 2021



# GSP Development: Some Next Steps

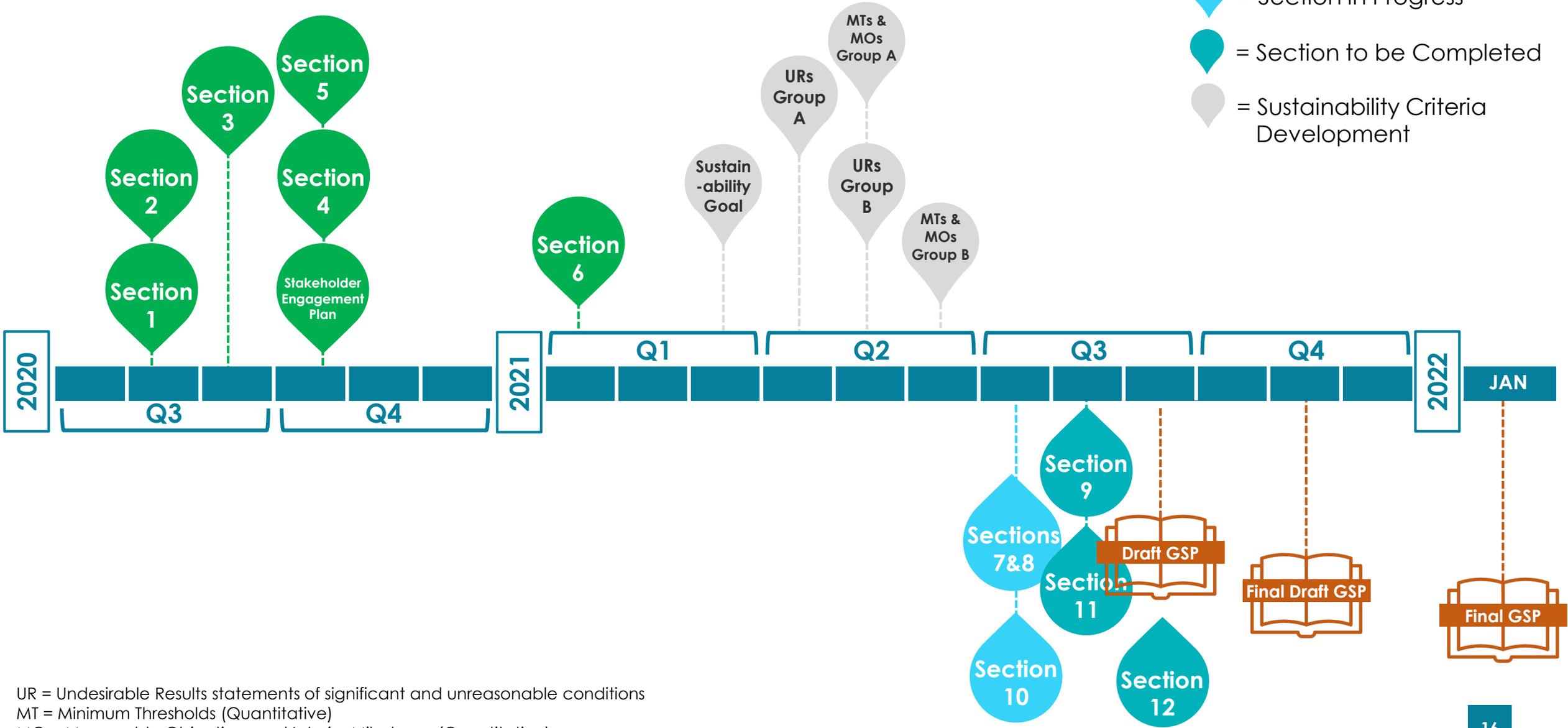


- Continue drafting GSP Sections; complete model
- Complete sustainable management criteria development
- Evaluate strategic recharge and water conservation opportunities
- Continue outreach
  - (3) Public Meetings likely in September



# Napa Valley Subbasin GSP Schedule

- = Completed Section/TM
- = Section in Progress
- = Section to be Completed
- = Sustainability Criteria Development



UR = Undesirable Results statements of significant and unreasonable conditions  
 MT = Minimum Thresholds (Quantitative)  
 MO = Measurable Objectives and Interim Milestones (Quantitative)



# Thank You

**Jamison Crosby,**  
Natural Resources Conservation Manager  
Planning, Building, and Environmental Services Dept.  
1195 Third Street  
Suite 210  
Napa, CA 94559

[Jamison.Crosby@countyofnapa.org](mailto:Jamison.Crosby@countyofnapa.org)

