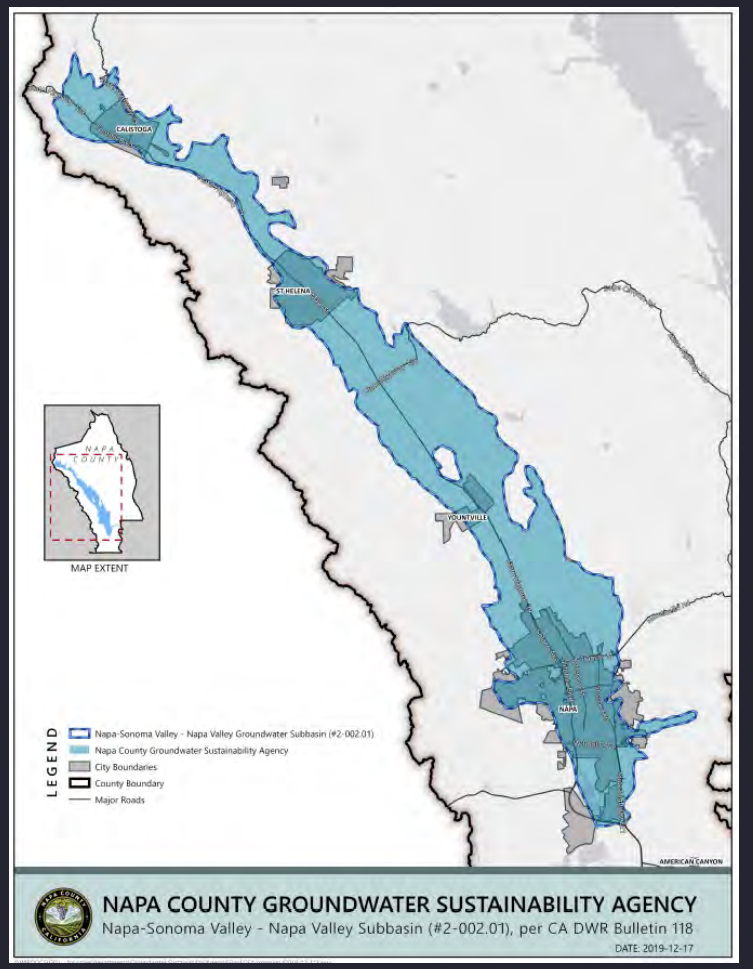
PRESENTATION OF THE DRAFT NAPA VALLEY SUBBASIN GROUNDWATER SUSTAINABILITY PLAN TO THE NAPA COUNTY GSA



PRESENTED BY

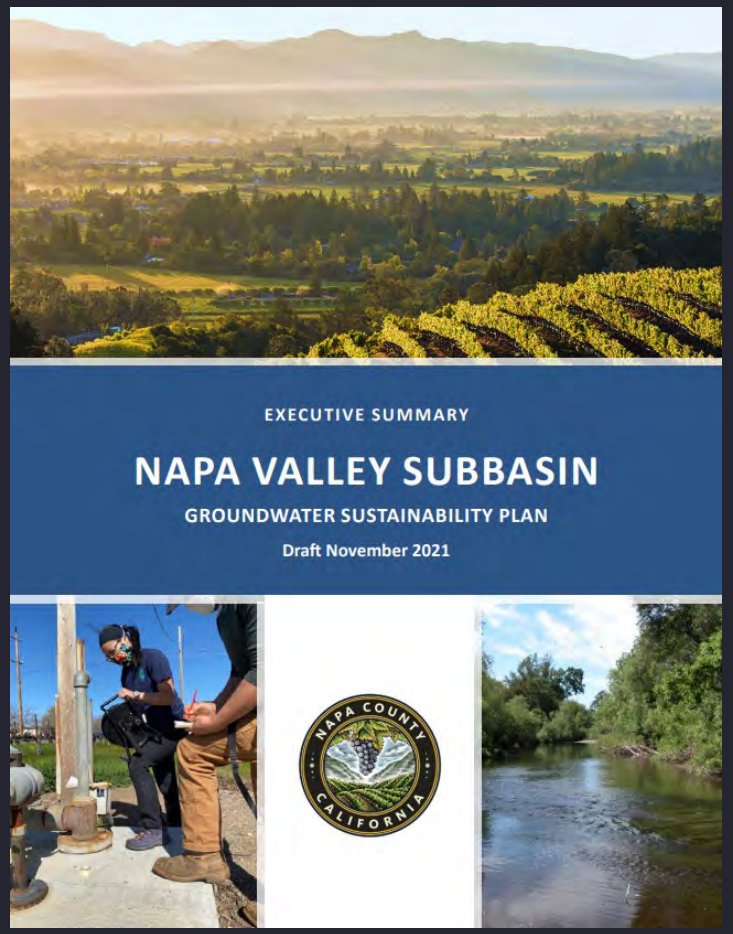
DAVID MORRISON
DIRECTOR OF PLANNING, BUILDING, & ENVIRONMENTAL SERVICES

JAMISON CROSBY
NATURAL RESOURCES CONSERVATION MANAGER

DECEMBER 7, 2021

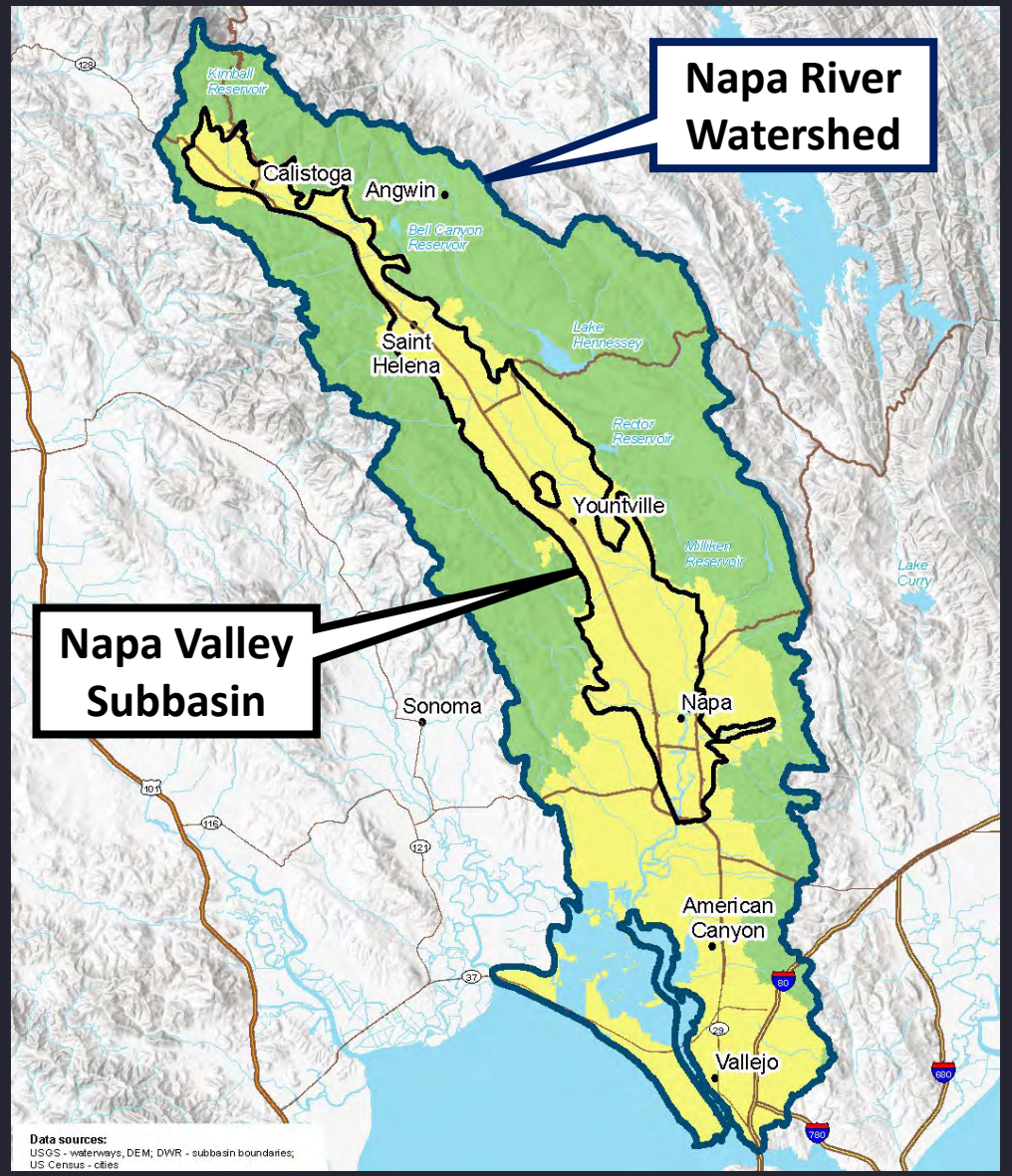
PRESENTATION OUTLINE

- SGMA
- Groundwater Sustainability Plan Advisory Committee
- Groundwater Sustainability Plan: What it Is/Is Not and Plan Sections
- Public Engagement and Key GSPAC and Public Comments on the GSP
- Plan Implementation and Recommendations
- Schedule and Next Steps



SUSTAINABLE GROUNDWATER MANAGEMENT ACT

- NCGSA must ensure groundwater in the Napa Valley Subbasin is sustainably managed over a 50-year planning and implementation horizon
- GSP must be submitted to the Department of Water Resources by January 31, 2022



GSP ADVISORY COMMITTEE (GSPAC)

- 25 members
- Charge to develop and forward a Recommended Draft GSP to NCGSA Board by November 19, 2021
- 21 public meetings and 7 ad-hoc workgroup meetings from July 2020 - November 2021
- Robust deliberation
- Received and considered public comments

WHAT THE GSP IS AND IS NOT ABOUT

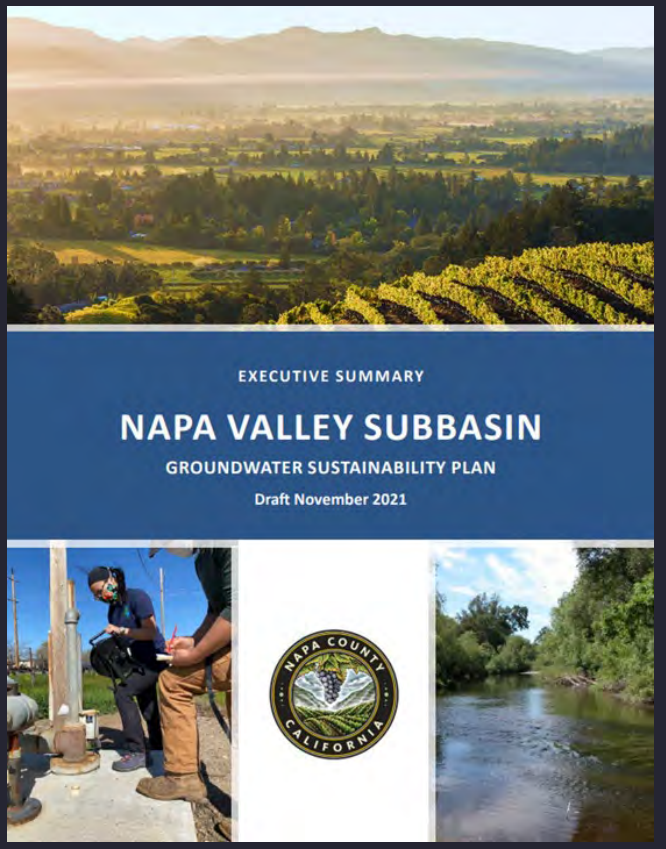
What the GSP is About	What the GSP is Not About
Long-Term Groundwater Sustainability	Restoration of the Napa River
Avoiding Undesirable Results	County-Wide Land Use Planning
Implementing Projects and Management Actions	Fire Recovery or Climate Change Planning
Applying Adaptive Management	Immediate Drought Response

WHAT A GSP IS

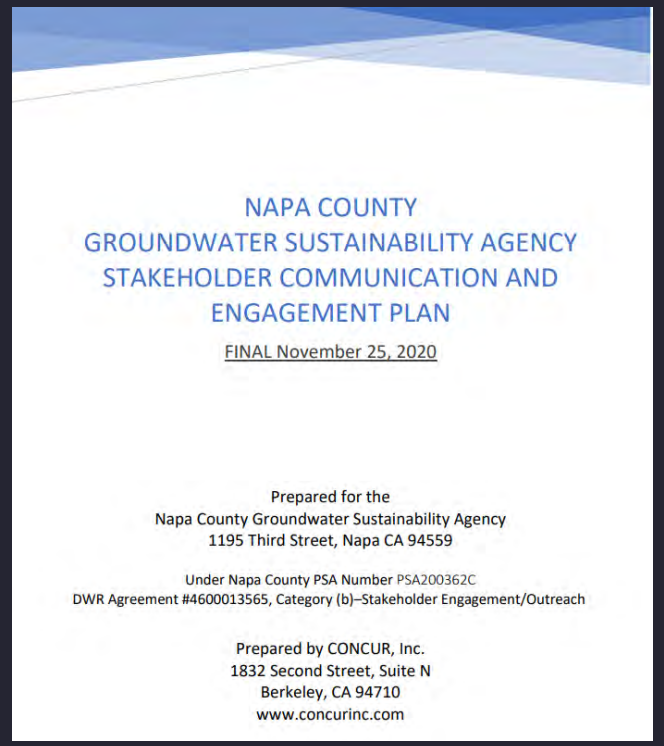
Plan Sections

1. *Introduction – Aug. 2020*
2. *Plan Area – Aug. 2020*
3. *Water Resource & Land Use Management Programs – Sept. & Nov. 2020*
4. *Basin Setting – Oct.& Dec. 2020*
5. *Monitoring Networks – Oct. 2020*
6. *Groundwater & Surface Water Conditions – Dec. 2020 – Jan. 2021*
7. *Historical, Current, and Projected Water Supplies – April – Aug. 2021*
8. *Water Budget – April - August 2021*
9. *Sustainable Management Criteria – Feb. – Oct. 2021*
10. *Data Management & Reporting – Aug. 2021*
11. *Projects and Management Actions – April & Sept. 2021*
12. *Plan Implementation – Oct. 2021*

Meeting materials and recordings available online:
tinyurl.com/Napa-Valley-GSPAC-Meetings



PUBLIC ENGAGEMENT ACTIVITIES



NAPA COUNTY
GROUNDWATER SUSTAINABILITY AGENCY
STAKEHOLDER COMMUNICATION AND
ENGAGEMENT PLAN

FINAL November 25, 2020

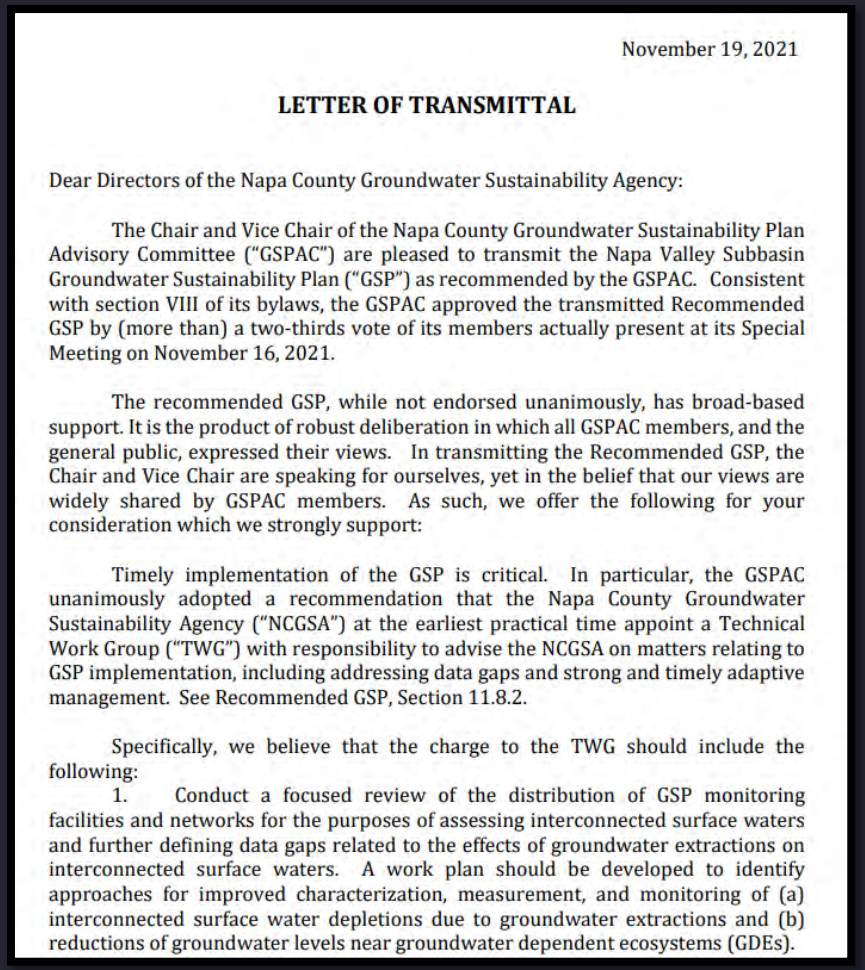
Prepared for the
Napa County Groundwater Sustainability Agency
1195 Third Street, Napa CA 94559

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

GSPAC APPROVED DRAFT GROUNDWATER SUSTAINABILITY PLAN TO TRANSMIT TO NCGSA

- GSPAC approved Draft GSP by 80% of members present on November 16, 2021
- Recommended GSP transmitted to GSA on November 19, 2021



November 19, 2021

LETTER OF TRANSMITTAL

Dear Directors of the Napa County Groundwater Sustainability Agency:

The Chair and Vice Chair of the Napa County Groundwater Sustainability Plan Advisory Committee ("GSPAC") are pleased to transmit the Napa Valley Subbasin Groundwater Sustainability Plan ("GSP") as recommended by the GSPAC. Consistent with section VIII of its bylaws, the GSPAC approved the transmitted Recommended GSP by (more than) a two-thirds vote of its members actually present at its Special Meeting on November 16, 2021.

The recommended GSP, while not endorsed unanimously, has broad-based support. It is the product of robust deliberation in which all GSPAC members, and the general public, expressed their views. In transmitting the Recommended GSP, the Chair and Vice Chair are speaking for ourselves, yet in the belief that our views are widely shared by GSPAC members. As such, we offer the following for your consideration which we strongly support:

Timely implementation of the GSP is critical. In particular, the GSPAC unanimously adopted a recommendation that the Napa County Groundwater Sustainability Agency ("NCGSA") at the earliest practical time appoint a Technical Work Group ("TWG") with responsibility to advise the NCGSA on matters relating to GSP implementation, including addressing data gaps and strong and timely adaptive management. See Recommended GSP, Section 11.8.2.

Specifically, we believe that the charge to the TWG should include the following:

1. Conduct a focused review of the distribution of GSP monitoring facilities and networks for the purposes of assessing interconnected surface waters and further defining data gaps related to the effects of groundwater extractions on interconnected surface waters. A work plan should be developed to identify approaches for improved characterization, measurement, and monitoring of (a) interconnected surface water depletions due to groundwater extractions and (b) reductions of groundwater levels near groundwater dependent ecosystems (GDEs).

KEY RECOMMENDATIONS FROM GSPAC DELIBERATIONS AND PUBLIC INPUT

- Plan for interests of all beneficial users of groundwater
- Collaborate to achieve groundwater sustainability
- Advance practices for tracking water use and conservation
- Integrate best available climate forecasts
- Expand monitoring networks and fill data gaps
- Incorporate monitoring, tracking, adaptive management, and accountability for Projects and Management Actions
- Establish a Technical Work Group to aid GSP implementation

PLAN IMPLEMENTATION

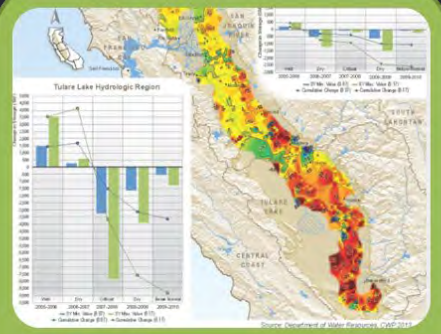
- Upon GSP adoption, initiate steps to form Technical Work Group to Advise NCGSA
- Review monitoring data and basin conditions
- Projects and Management Actions to achieve groundwater sustainability and avoid undesirable results
- Adaptive Management approach

6 SUSTAINABILITY INDICATORS

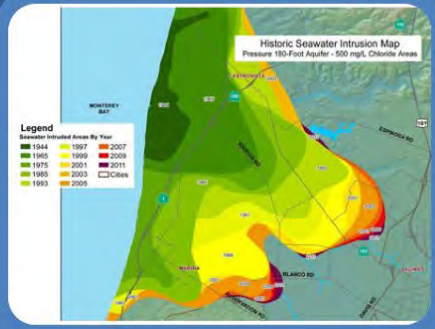
Within 20 years,
Avoiding Groundwater Conditions that Cause Significant and Unreasonable…..

Undesirable Results

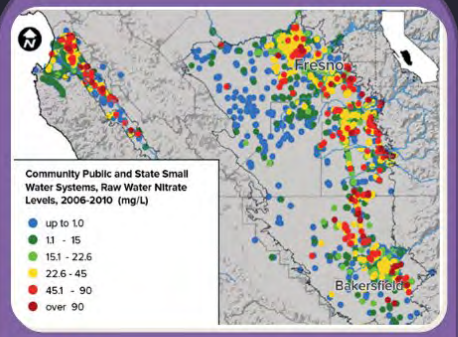

Lowering of GW Levels



Reduction of GW Storage



Seawater Intrusion



Degraded Water Quality


Land Subsidence


Depletion of Inter-connected Streams

SUSTAINABLE MANAGEMENT CRITERIA FOR SUSTAINABILITY INDICATORS

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Seawater Intrusion	Degraded Quality	Land Subsidence	Surface Water Depletion
Metric(s) Defined in GSP Regulations	• Groundwater Elevation	• Total Volume	• Chloride concentration isocontour	• Migration of Plumes • Number of supply wells • Volume • Location of isocontour	• Rate and Extent of Land Subsidence	• Volume or rate of surface water depletion

State-defined metrics for each indicator.

Review and deliberation at over 14 GSPAC meetings

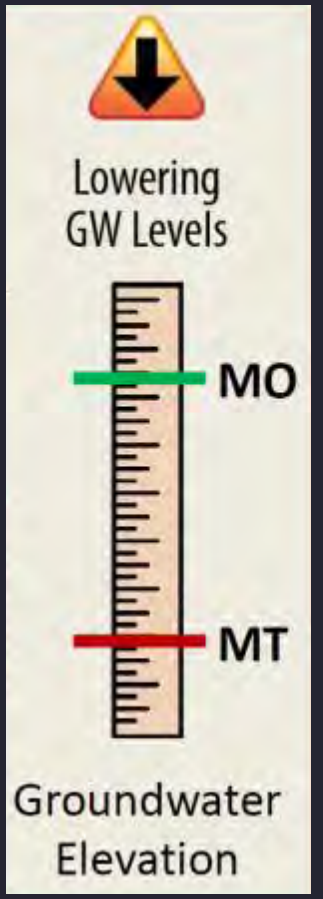
From DWR: *Not based on actual values, for example purposes only

SUSTAINABLE MANAGEMENT CRITERIA FOR SUSTAINABILITY INDICATORS

Key Measures of Sustainability

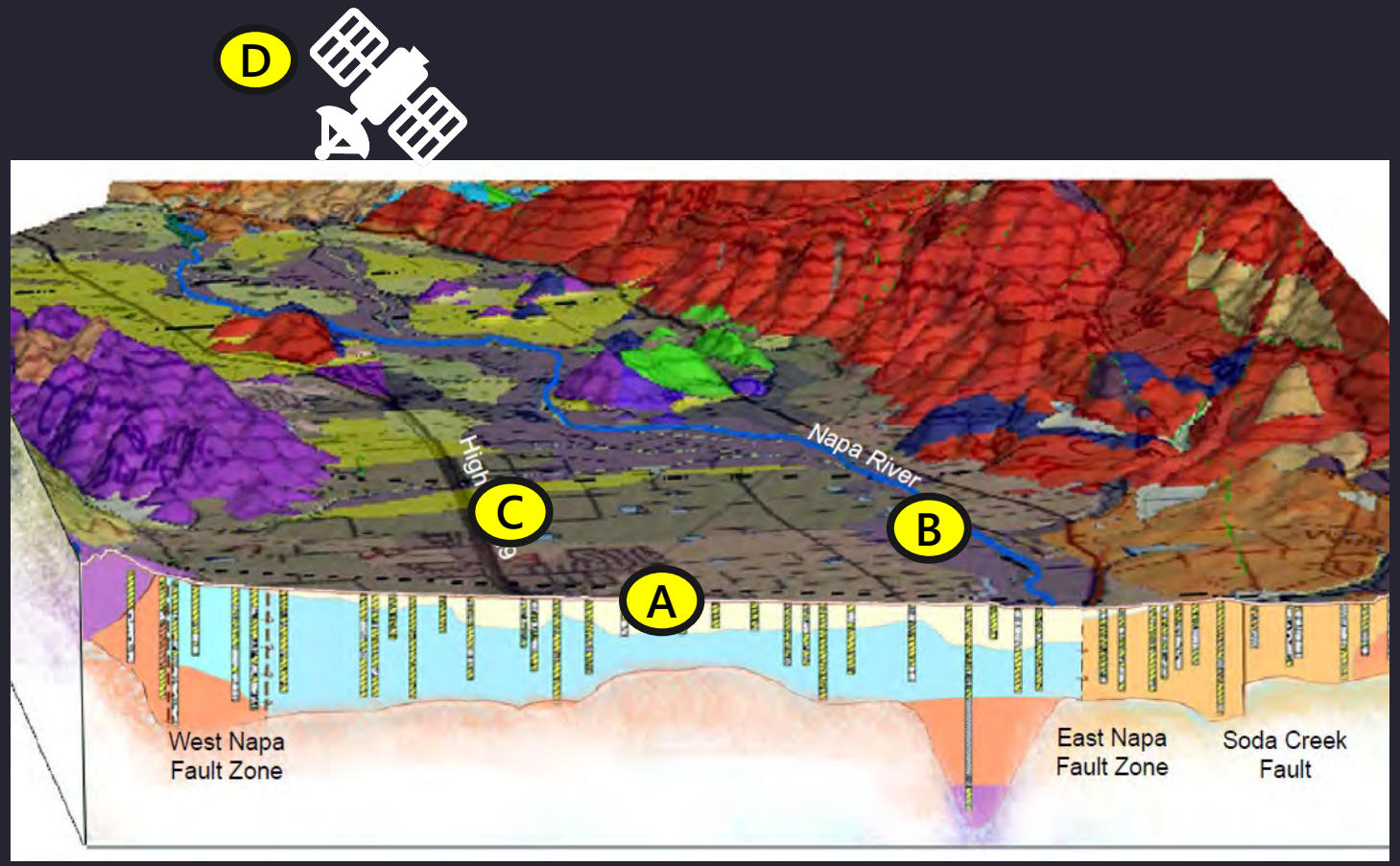
Measurable Objective – numeric values representing the long-term target for desired conditions to achieve the sustainability goal

Minimum Threshold – numeric values established at representative monitoring sites , if exceeded, may cause undesirable results



From DWR: *Not based on actual values, for example purposes only

NINE (9) MONITORING NETWORKS TO TRACK AND ENSURE SUSTAINABILITY



Land-Based

A

Wells

1. GW Levels
2. GW Storage
3. GW Quality
4. Seawater Intrusion
5. Interconnected SW
8. Land Subsidence

B

Surface Water Sites

5. Interconnected SW
6. Stage & Discharge
7. SW Quality

C

Survey Benchmarks

8. Land Subsidence

Remote Sensing

D

InSAR

8. Land Subsidence

Landsat

9. GDEs

GW = Groundwater; SW = Surface Water;
GDEs= Groundwater Dependent Ecosystems

RECOMMENDATIONS – DATA GAPS AND REFINEMENTS

Monitoring

- Install 16 Additional Monitoring Wells
- Install 4 Additional Continuously-recording Surface Water Quality Meters
- Install or Upgrade 10 Stream Gages
- Develop a Monitoring and Assessment Workplan for Interconnected Surface Waters and Groundwater Dependent Ecosystems

Model and Water Budget Refinement

- Expand Collection of Groundwater Extraction and Consumptive Use Data
- Streamflow Monitoring Network Enhancement
- Collect or Acquire Aquifer Parameter Data
- Collect or Acquire Soil Moisture Data
- Evaluate and Incorporate Updated Climate Change Projections

SUSTAINABLE MANAGEMENT CRITERIA AND ADAPTIVE MANAGEMENT APPROACH

Sustainability Indicator Monitoring and Tracking

Technical Work Group Assess/Vet

- Check site-specific trends
- Check local area trends
- Check preceding and subsequent Water Year hydrology

Data Indicate Little to No Change in Conditions

Data Indicate Triggering Event

Response/Implement

- TWG recommendation to NCGSA
- Management Actions (e.g., Conservation, Reduce Pumping)
- Projects (e.g., Recharge)

GSP PROJECTS AND MANAGEMENT ACTIONS (PMAs)

Planned PMAs

- Vineyard and Winery Water Conservation
- Managed Aquifer Recharge
- Expand Recycled Water Use
- Pumping Reductions
- Groundwater Ordinance and New Well Permit Conditions

Potential PMAs

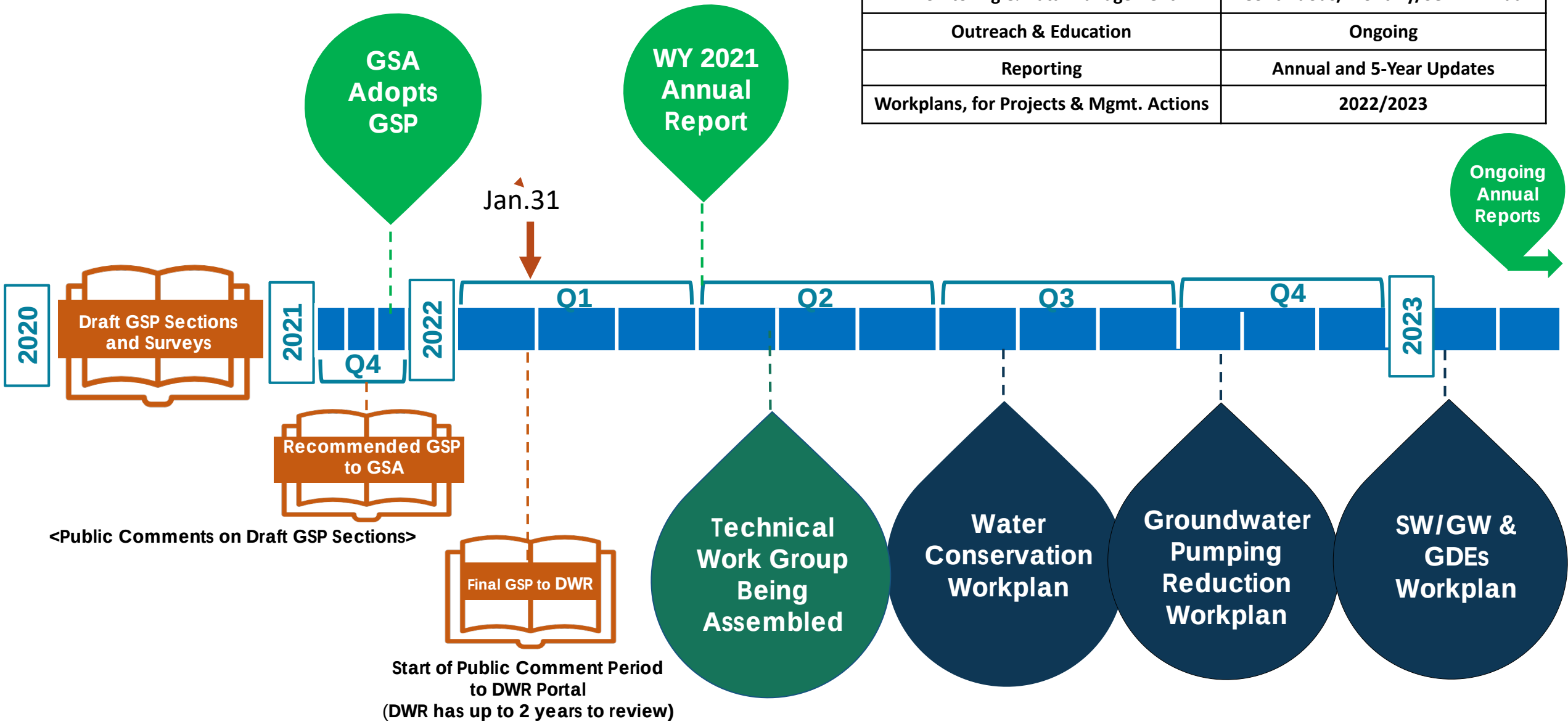
- In-lieu Aquifer Recharge
- Groundwater Ordinance and New Well Permit Conditions

Supporting Actions

- Active Production Well Inventory
- Tracking Impacts to Drinking Water Users Caused by Groundwater Management
- Stakeholder Engagement and Outreach
- Coordination with Land Use and Water Management Agencies
- Adopt Well Metering and Reporting Standards

Schedule: Q4 2021-Q1 2023

Implementation Actions	Frequency
GSA Meetings	Monthly
Technical Work Group Meetings	Monthly/Bimonthly
Monitoring & Data Management	Continuous/Monthly/Semi-Annual
Outreach & Education	Ongoing
Reporting	Annual and 5-Year Updates
Workplans, for Projects & Mgmt. Actions	2022/2023



SUMMARY OF COMMENTS RECEIVED TO DATE

- Seven comment documents received since November 12
- GSP Planning Team appreciates the time and attention that commenters have provided throughout the GSP development process
- As noted in the Draft GSP, a Comment Log is being prepared as an appendix to Section 3
- **Planned clarifications** to the draft GSP prior to 12/14 include:
  - Considerations given to **DACs, domestic well users, and GDEs** in monitoring network design and Management Criteria
  - Affirmation of incorporation of **climate change and sea level rise** as part of the projected water budget analysis
  - Affirmation of linkages between **drought effects and the adaptive management** processes to be undertaken during GSP implementation

NEXT STEPS: GSP ADOPTION, SUBMITTAL, PUBLIC COMMENT

1. NCGSA Meets to Consider Adoption of Final GSP – December 14
2. Submit GSP to California DWR – by January 31, 2022
    a. Includes all references and data used for GSP development.
    b. All submittals will be publicly available at SGMA.WATER.CA.GOV
3. Public Comment Period on Adopted GSP – through March 31, 2022


QUESTIONS?