San Benito County Water District

Groundwater Sustainability Agency

Technical Advisory Committee

November 7, 2018

Overview of Agenda

- Follow-up on last meeting
- Subsequent accomplishments
- Overview of GSP Introduction and Plan Area
- What is sustainability?
- Data types, sources, and needs
- Update on outreach
- TAC next steps

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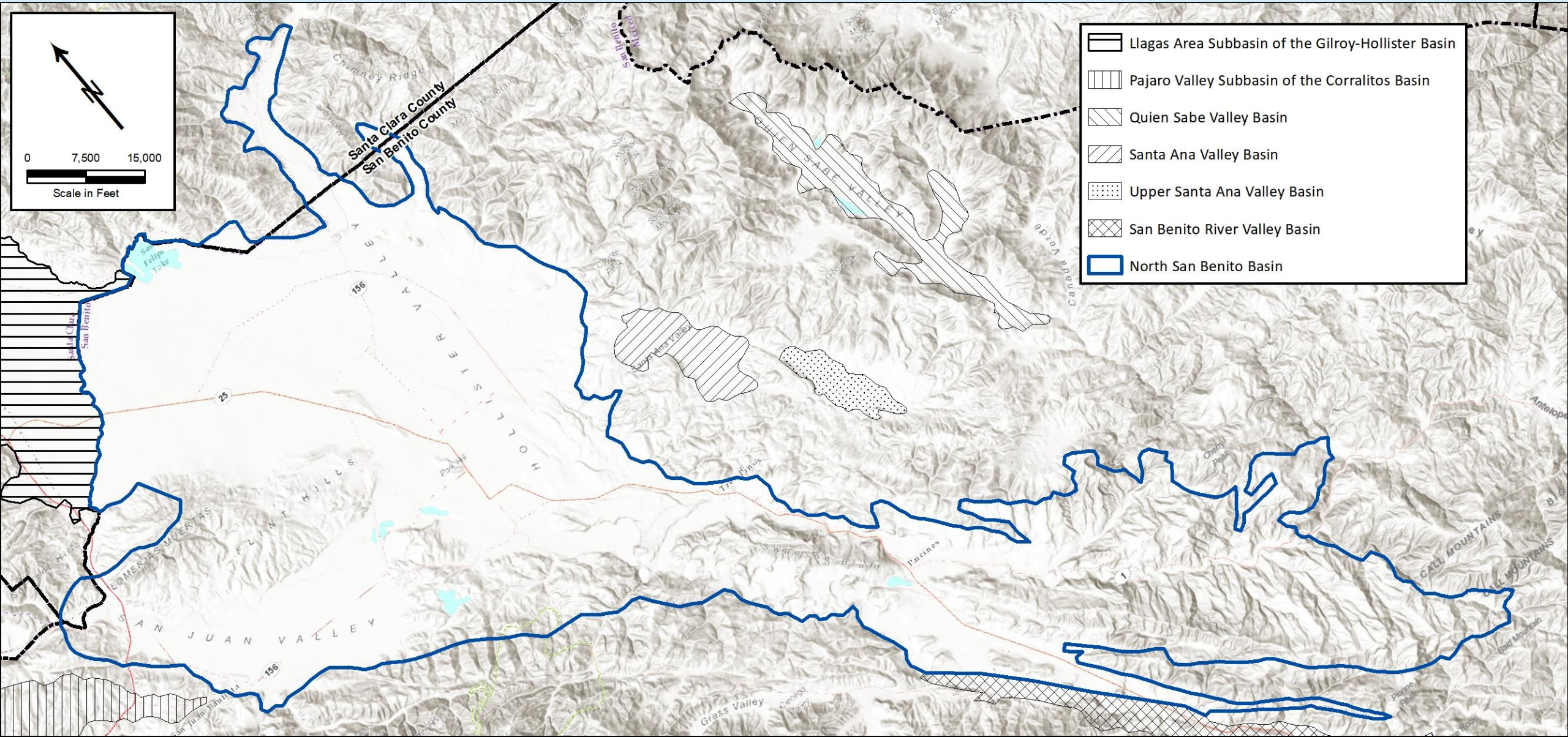
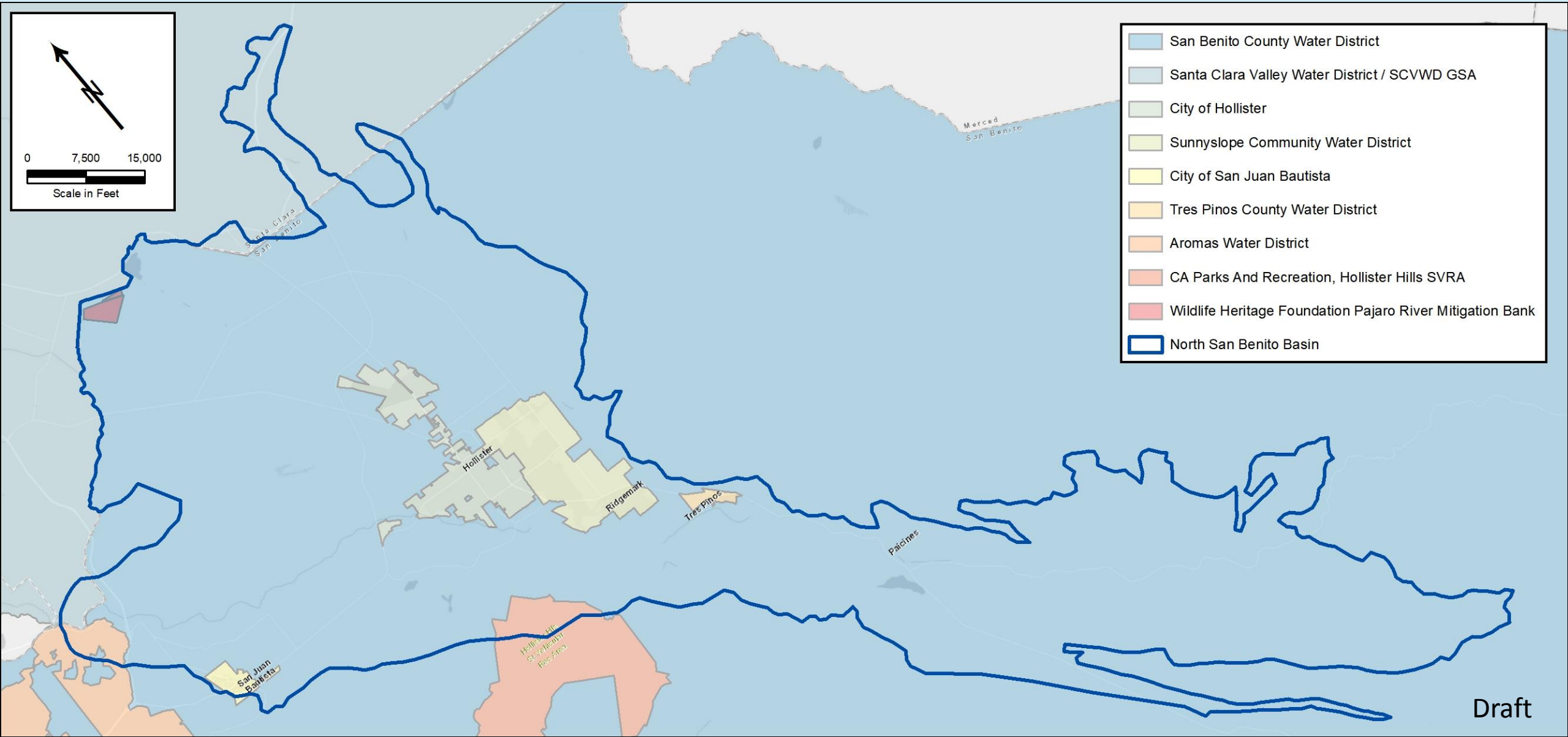
GSP Accomplishments

- Launched outreach: New SBCWD Website with SGMA Page
- Prepared draft GSP Section: Introduction and Plan Area
- Developed draft Community Engagement Plan (in binder)
- Progress on data collection and processing, identification of data gaps

GSP Introduction: North San Benito Basin



GSP Introduction: Jurisdictional boundaries



Introduction and Plan Area: Work in Progress

- Section to remain draft until GSP nears completion in 2021
- Includes gaps to be filled later
  - Sustainability Goal: overall goal and how we will achieve it
  - Costs of GSP implementation and how GSAs will fund it
  - Additional management elements that may be incorporated, for example:
    - ✓ Wellhead protection
    - ✓ Groundwater replenishment and conjunctive use
    - ✓ Well construction policies
    - ✓ Well abandonment, destruction programs
    - ✓ Efficient water management practices and more…

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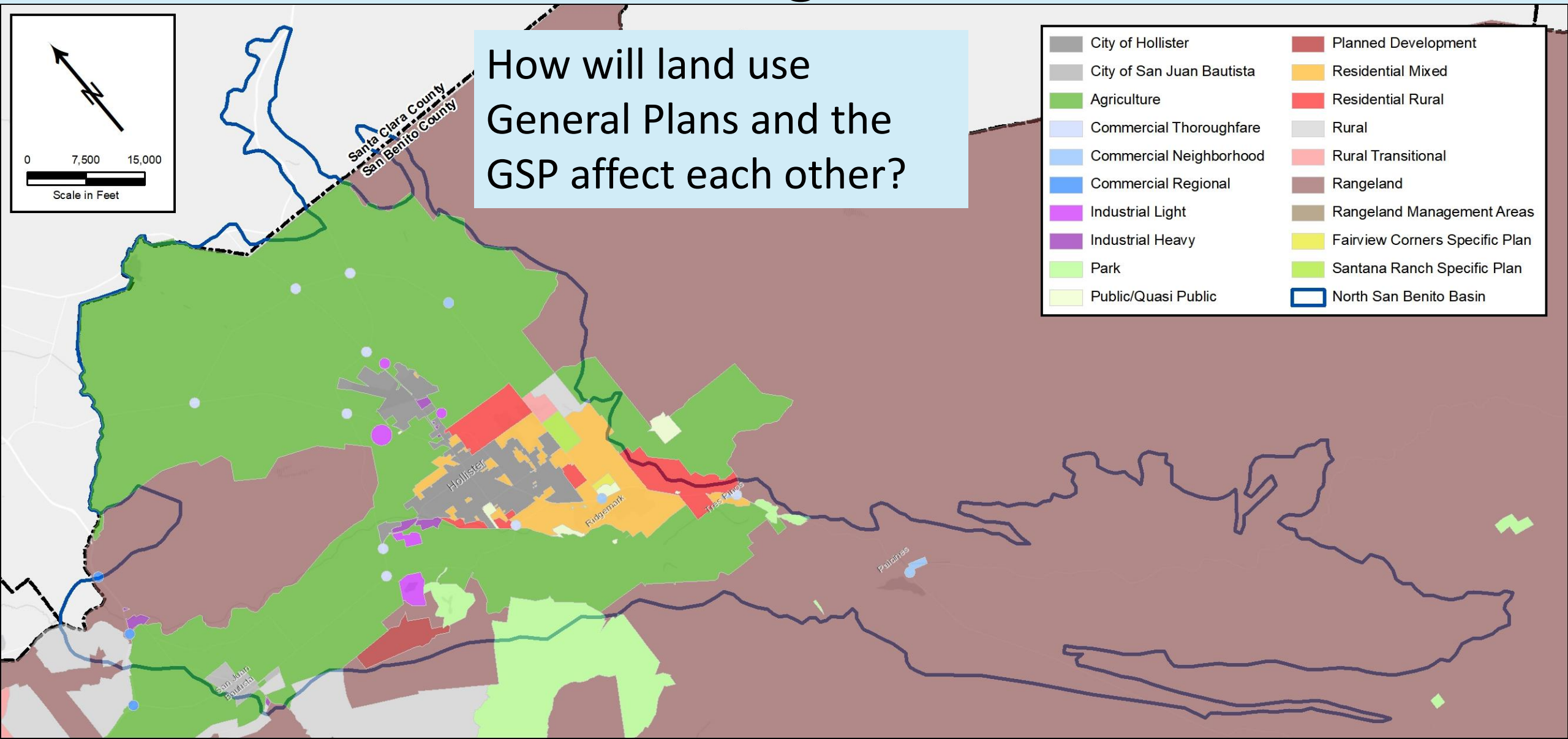
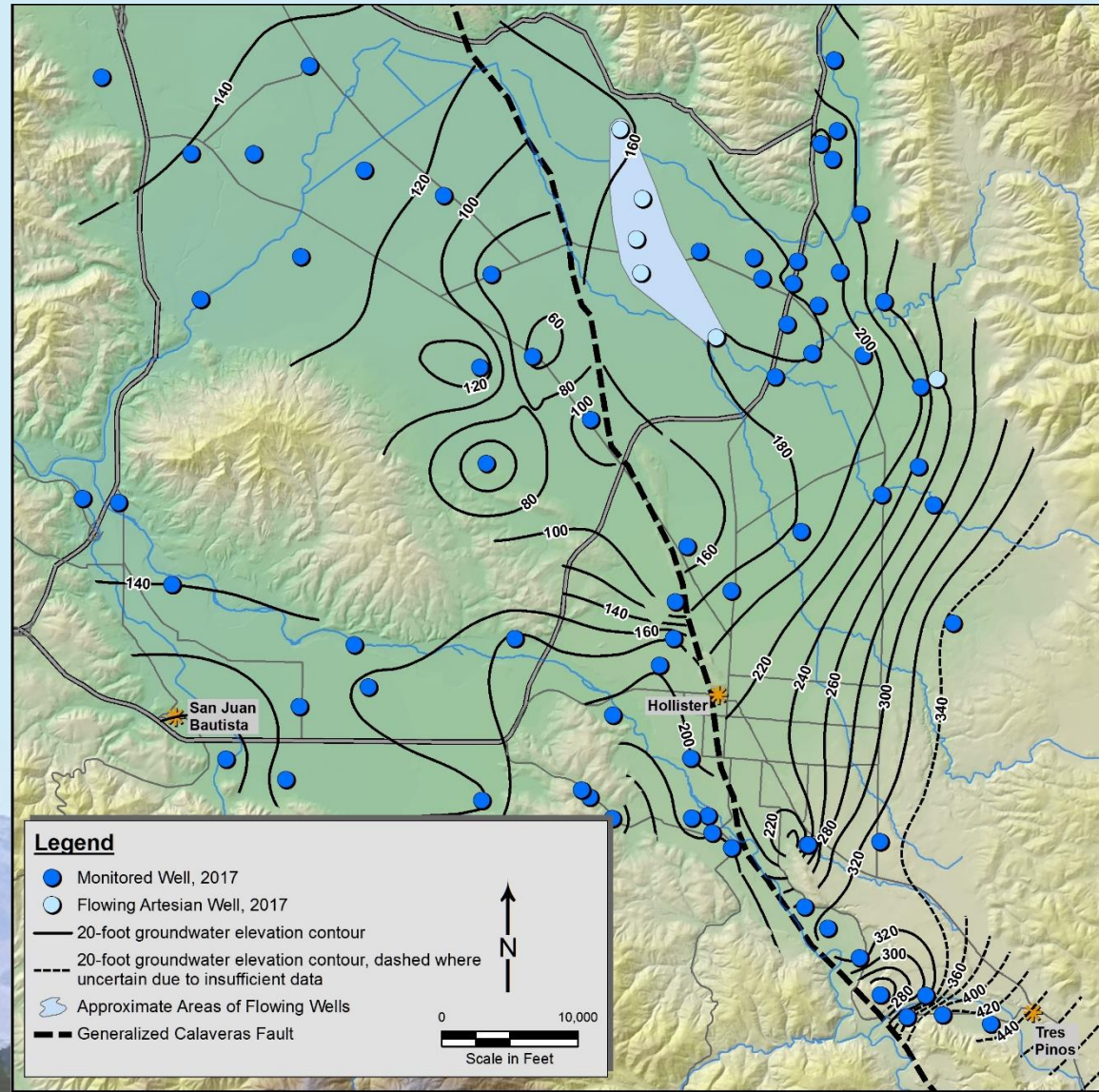
Plan Area - Work in Progress



Plan Area - Work in Progress

How will existing monitoring and management fit into the GSP process?

- Extend into southern basin
- Expand/refine to address sustainability criteria
- Assess groundwater use
- Reorganize data collection and reporting



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Data Types

- **Hydrology**
  - Climate
  - Surface water
  - Groundwater dependent ecosystems (GDEs)
- **Topography, Soils, Land Use**
  - Surface elevation
  - Soil maps
  - Land use maps
  - General plans
- **Hydrogeology**
  - Well information
  - Subsidence
- **Groundwater Data**
  - Water levels
  - Water quality
- **Water Use**
  - Groundwater
  - Imported water
  - Recycled water
- **Managed Recharge**
  - District recharge
  - Wastewater percolation

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Data Sources

- District
- Local Agencies
- Regional
- State
- Federal

Data DMS

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Data Gaps

- Streamflow Data
- Groundwater Monitoring Wells
- Hydrogeologic Data
  - Well locations, construction
  - Basin Depth
  - Pumping Tests
  - elogs
- Groundwater Pumping and Use

Please contact Maureen Reilly
➢ mreilly@toddgroundwater.com

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What is Sustainable Groundwater Management?

The management and use of groundwater in a manner that can be maintained without causing *undesirable results*

How can we define sustainability here?

What is the sustainability goal?

Undesirable results* will be accounted

Chronic lowering of groundwater levels

Significant/unreasonable reduction of groundwater storage

Seawater intrusion (not applicable here)

Significant and unreasonable degraded water quality

Land subsidence that substantially interferes with land uses

Depletion of connected surface water impacting beneficial uses

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** aka Sustainability Criteria*

Sustainability Criteria will be measured as:

 Lowering GW levels	GW elevations at representative wells
 Reduction of storage	Stored volume
 Degraded water quality	Migration of plumes; constituent concentrations
 Land subsidence	Rate and extent of subsidence
 Surface water depletion	Volume or rate of depletion

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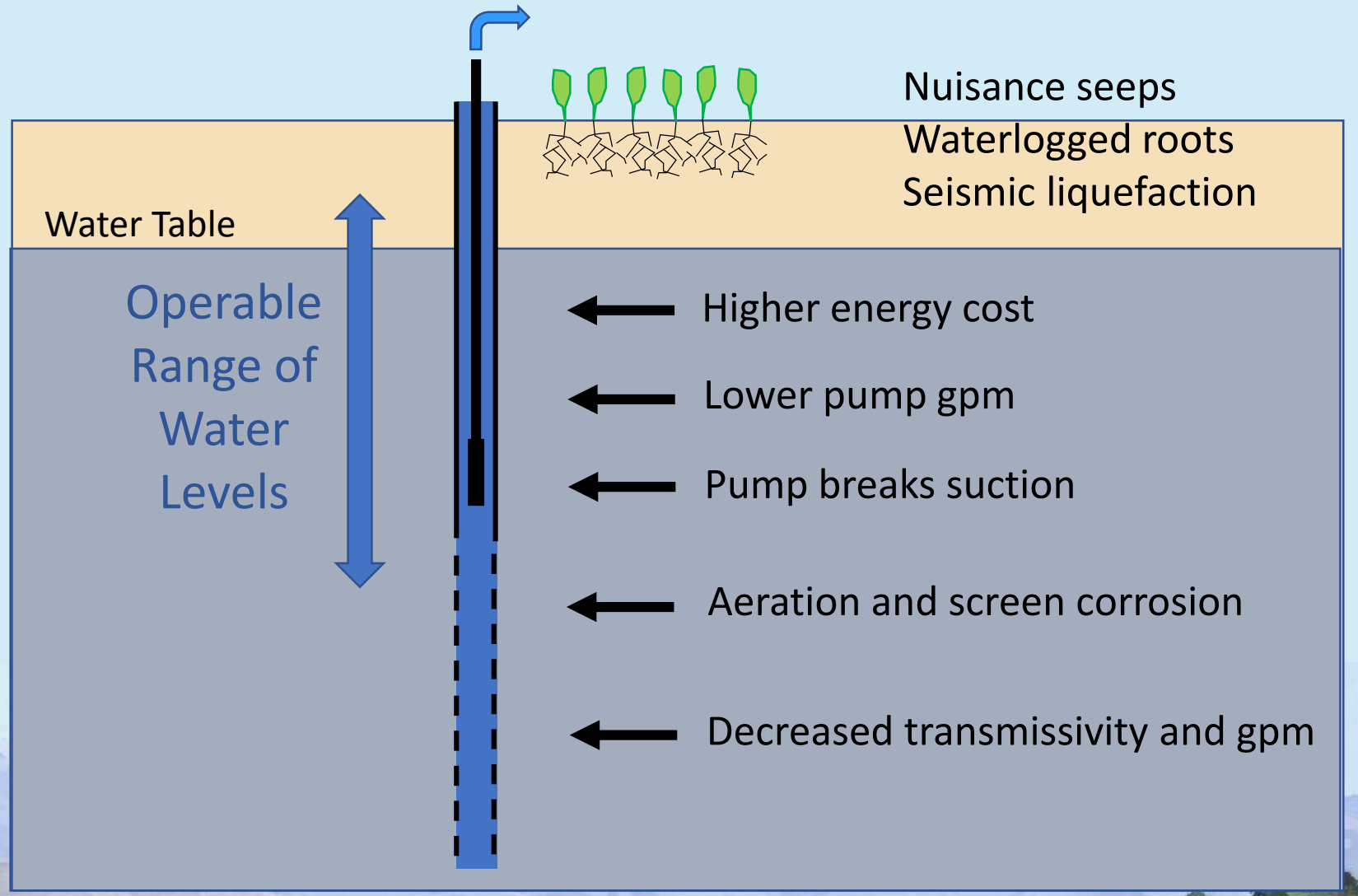
Sustainability Criteria

- Undesirable results
  - What are undesirable results that we want to avoid?
- Minimum thresholds
  - e.g. How low is too low for water levels?
- Management objectives
  - e.g. What is the desired range of water levels?

Sustainability criteria: groundwater levels

Undesirable results: adverse impacts on

- Shallow wells?
- Soil drainage?



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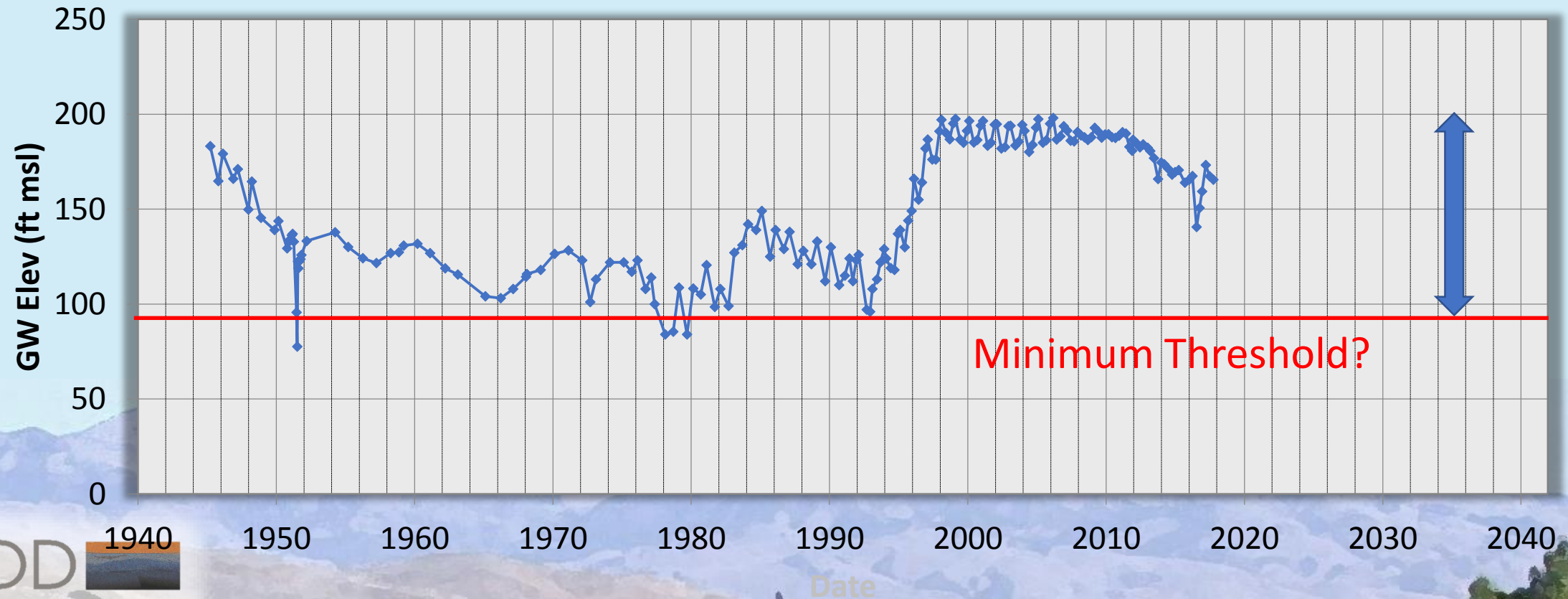
Sustainability criteria: groundwater levels

How do we establish minimum thresholds and management objectives?



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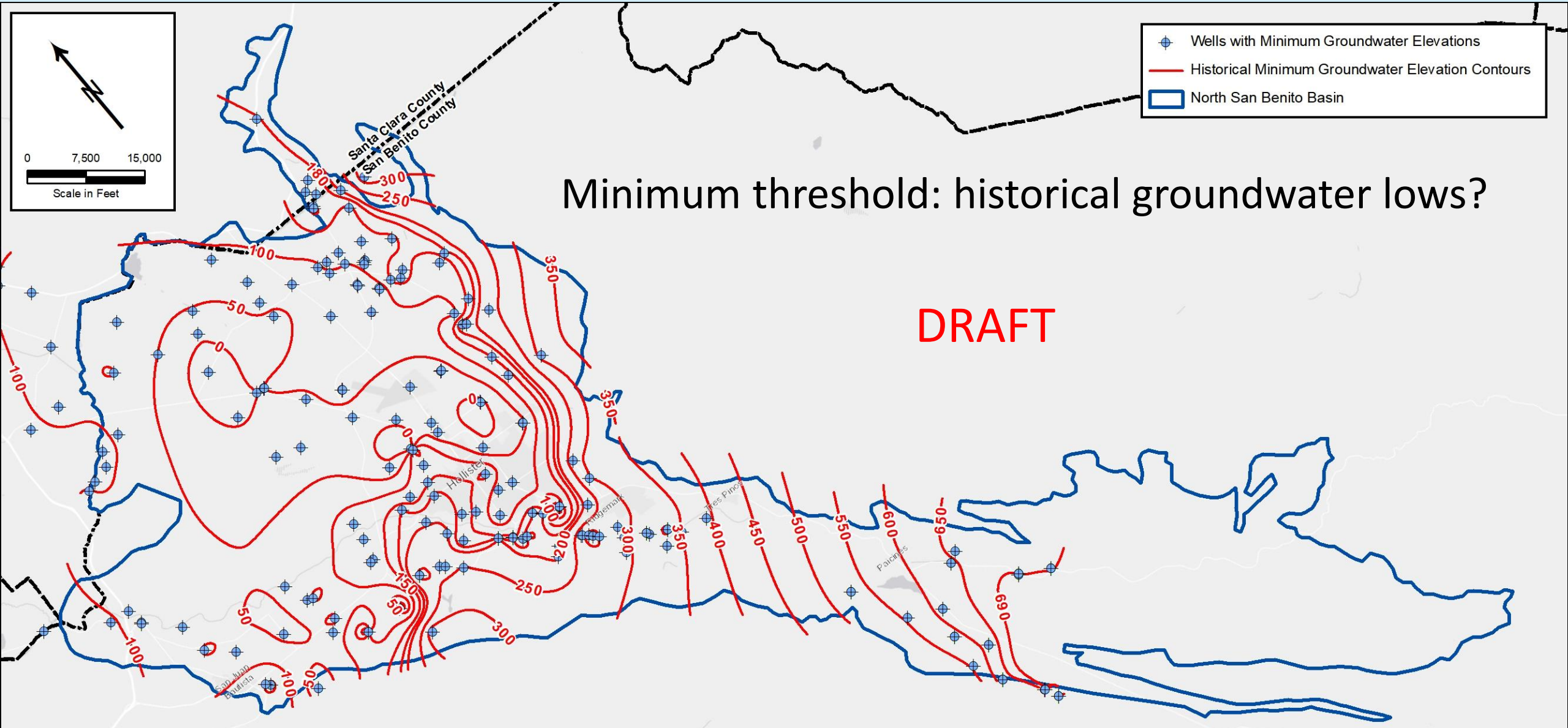
Sustainability criteria: groundwater levels



Sustainability criteria: groundwater levels

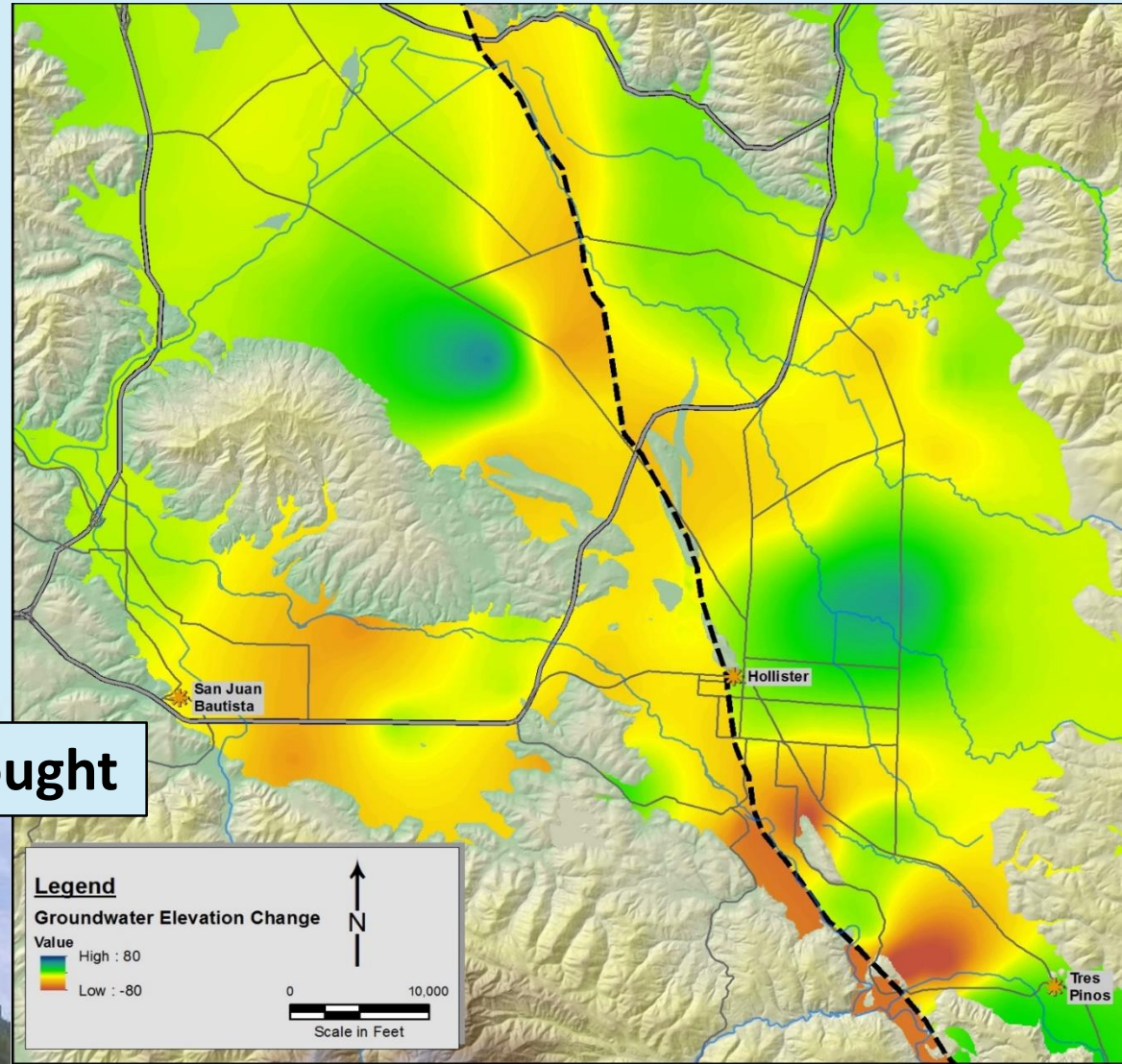
Undesirable result: potential adverse impacts on neighboring basin's ability to maintain sustainability

- Llagas and North San Benito basins are connected
- Both are monitored and managed by SCVWD and SBCWD respectively and cooperatively
- GSP includes collaborative effort to document groundwater flow between basins and interaction with Pajaro River

Sustainability criteria: groundwater storage

Undesirable result: insufficient stored groundwater for drought/shortage

Minimum thresholds and management objectives for groundwater levels can avoid unrecoverable storage depletion



Four-year change 2011-2016 Drought

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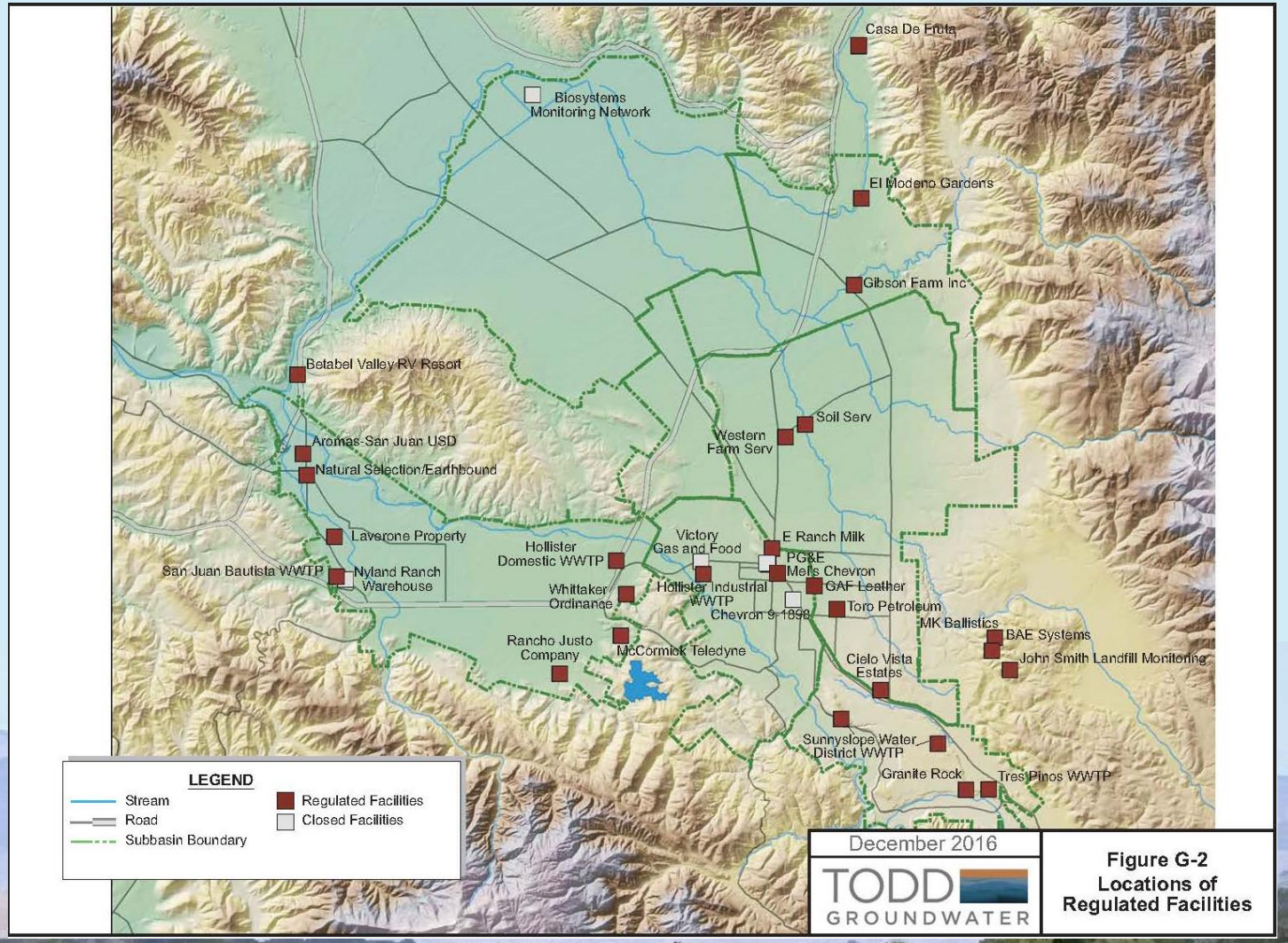
Sustainability criteria: groundwater quality

Undesirable result: induce migration or spread of plumes

- Thresholds and objectives set by regulatory agency?
- Monitoring and cleanup by regulatory agency
- Affirmation by GSAs and avoidance of undesirable results



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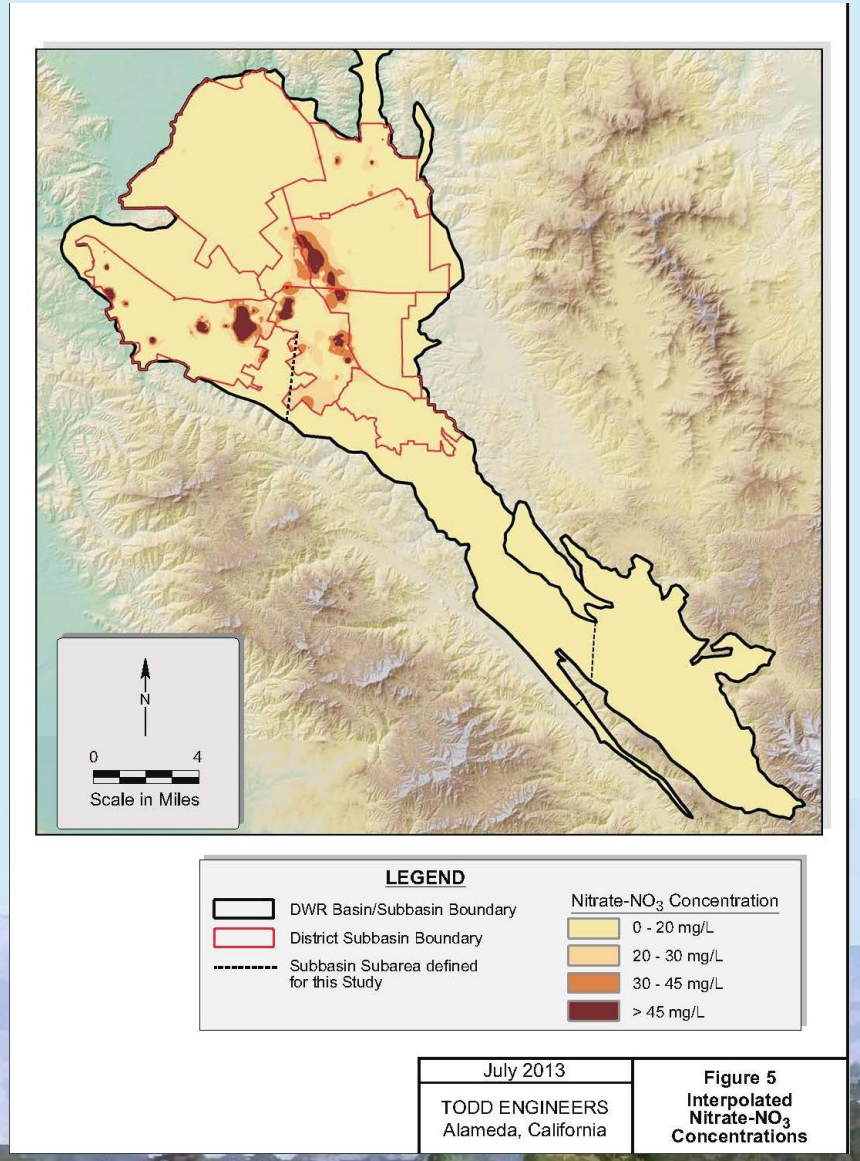
Sustainability criteria: groundwater quality

Undesirable result: for example, increase in nitrate

- Thresholds and objectives set by RWQCB?
- Support existing monitoring and management programs
- Avoid adverse impacts, e.g., from GSP management actions or projects



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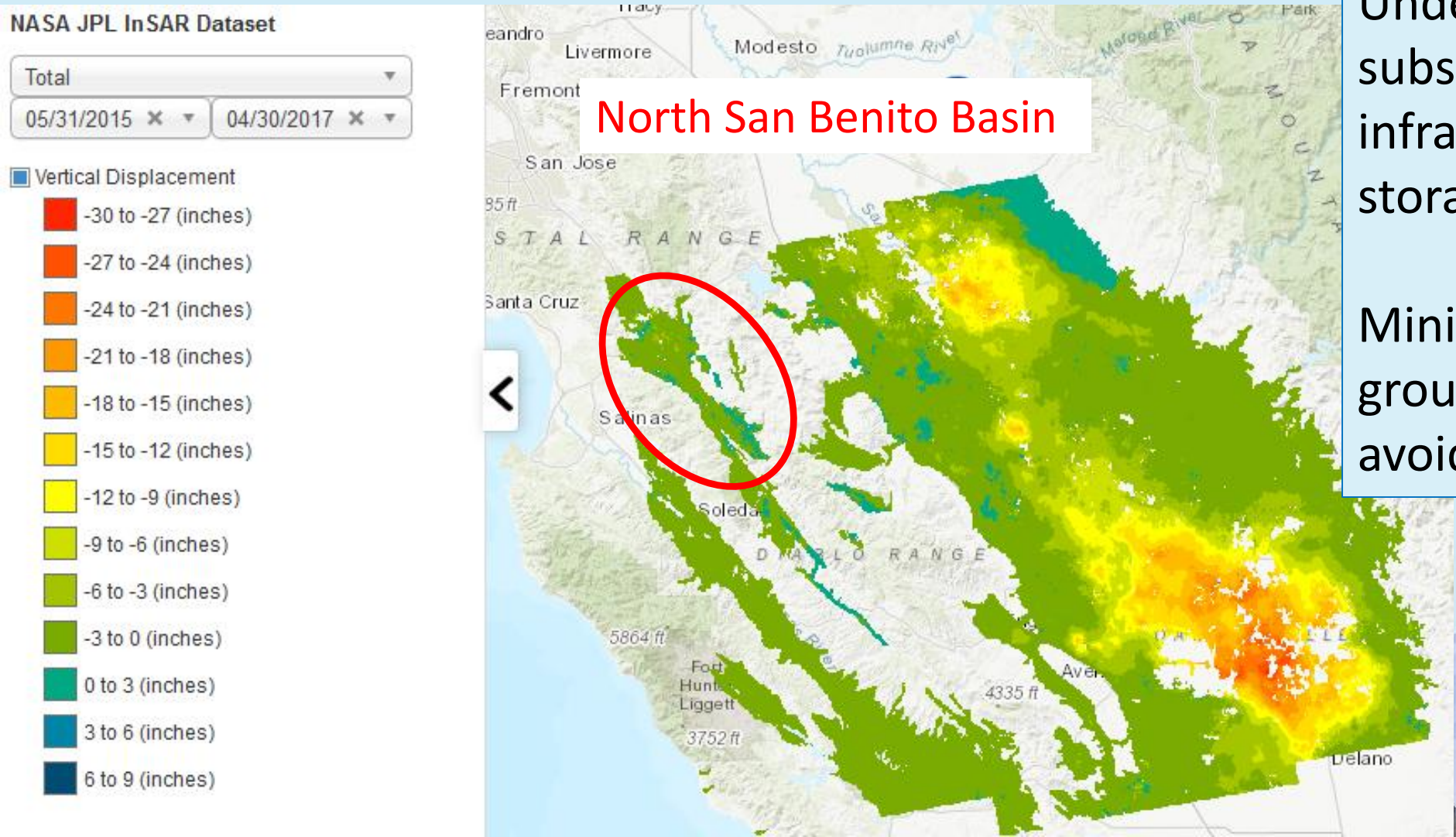
Sustainability criteria: land subsidence



Undesirable result: subsidence that damages infrastructure and basin storage capacity

Minimum thresholds for groundwater levels can avoid subsidence

Sustainability criteria: surface water depletion

Undesirable result: adverse impacts on Groundwater Dependent Ecosystems (GDEs including riparian vegetation, wetlands, fish) and on downstream surface water users

Minimum thresholds: rate or volume of stream depletion

Substantial data and analysis involved

- Evaluate vegetation commonly associated with groundwater
- Evaluate groundwater/surface water interactions

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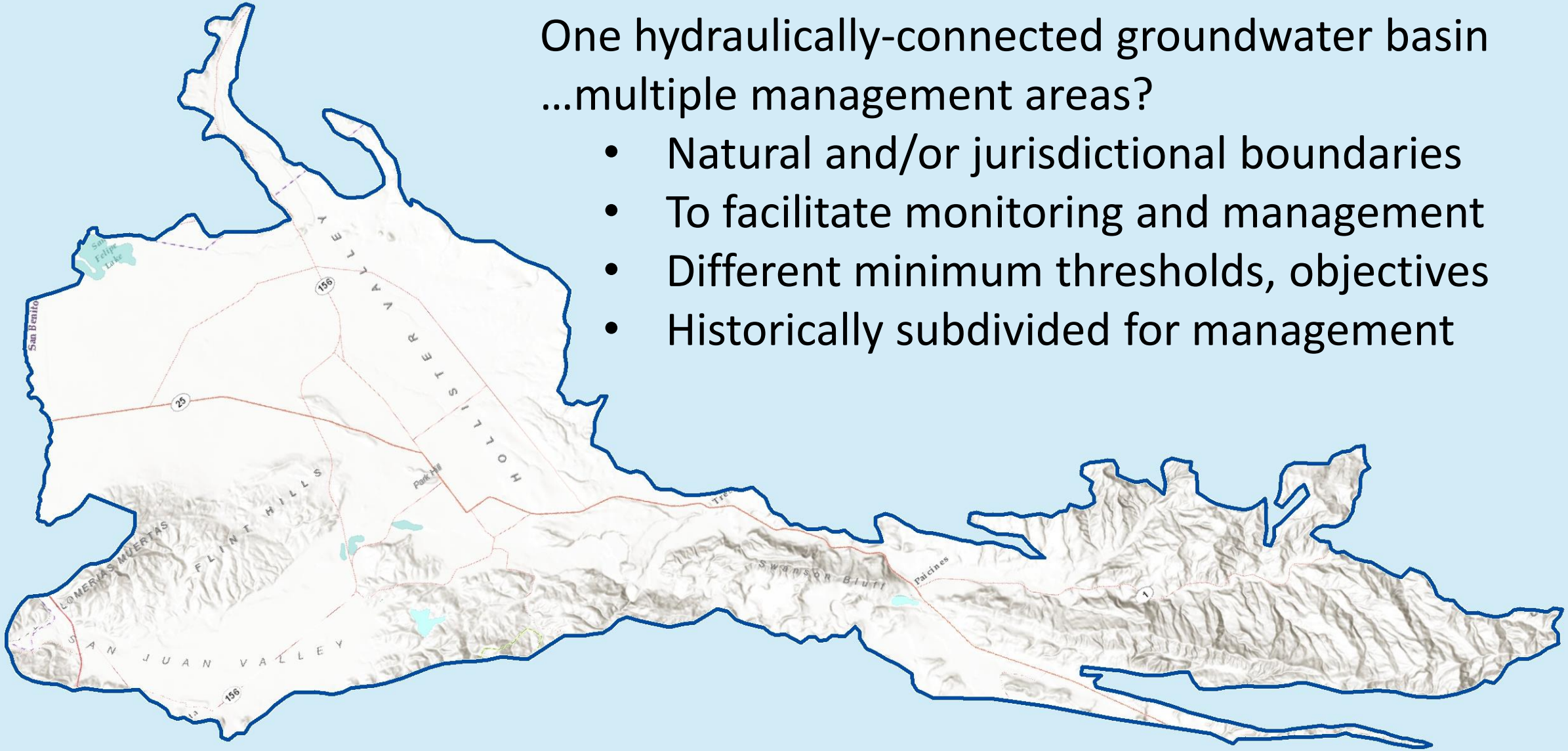
Management Areas



One hydraulically-connected groundwater basin …multiple management areas?

- Natural and/or jurisdictional boundaries
- To facilitate monitoring and management
- Different minimum thresholds, objectives
- Historically subdivided for management

Update on Outreach

- Accomplishments
  - New website with SGMA section
  - Three Fact Sheets
  - Workshop announcements-Free Lance, BenitoLink, Mission Village Voice, BenitoLive
  - WRASBC Fall/Winter newsletter (bill insert) to 11,000 homes
  - San Benito County Fair booth
  - Featured speaker at Lunch and Learn and at SBC Republican Central Committee
- Communication Plan
- Stakeholder List
- First Workshop

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GSP Overview, Workshops, and TAC Meetings ★

2021

2020

2019

2018

Plan Development

Management Actions / Monitoring

Sustainability Criteria

Management Areas / Water Budgets

Hydrogeologic Conceptual Model / Groundwater

Data Compilation / Data Management System

Plan Area / Institutional Setting

Adoption hearing

Draft GSP workshop

Evaluate actions workshop

Management options workshop

Sustainability criteria workshop

GW Conditions workshop

Kickoff workshop Nov 14

Next Steps

Kickoff Workshop	November 14, 2018
SBCWD Board of Director's Meeting • Annual Groundwater Report • SGMA strategy discussion	January 14, 2019
TAC Meeting No. 3	January 14, 2019?