



Santa Ynez River Valley Groundwater Basin  
Central Management Area  
Groundwater Sustainability Agency

# February 2020 Status Update

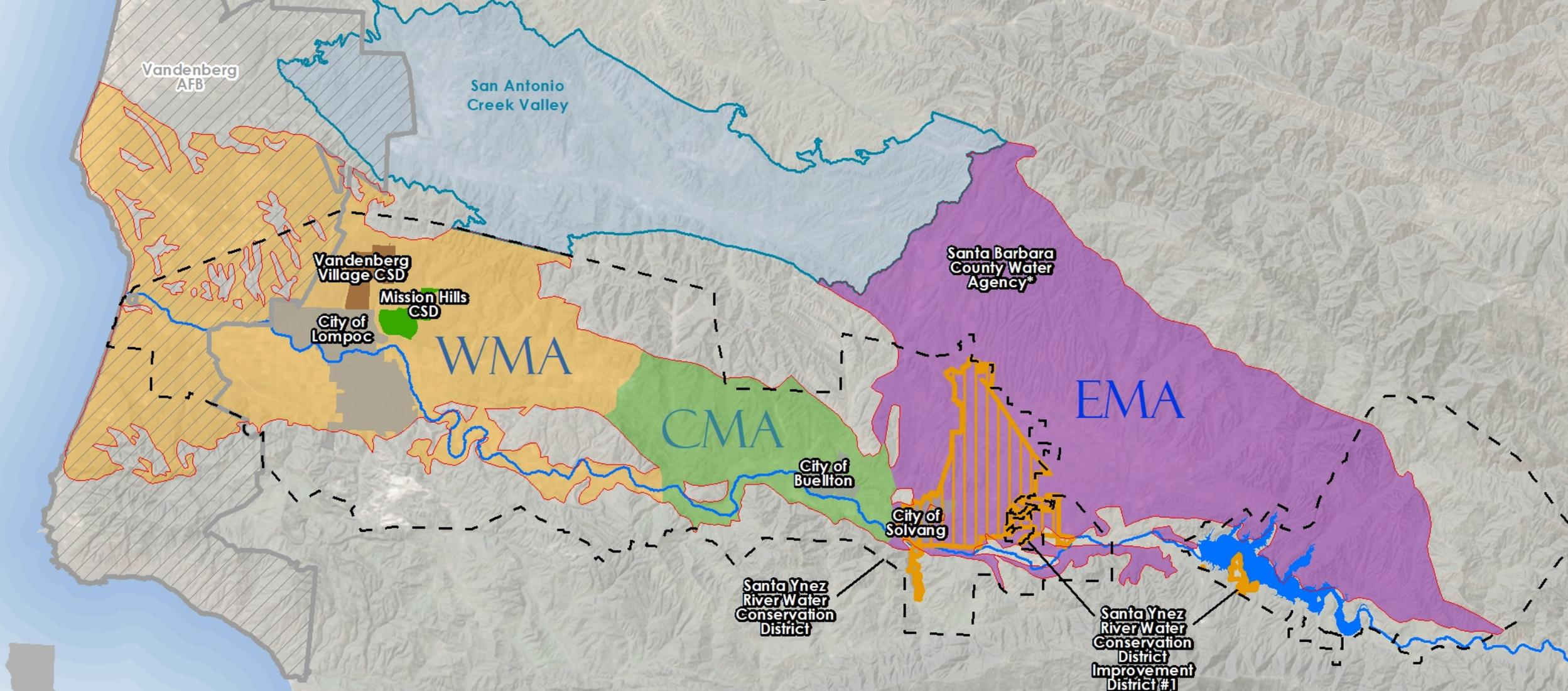


engineers | scientists | innovators

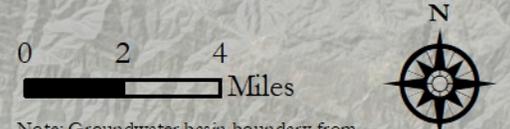
# Agenda

1. SGMA Overview & Milestones
2. Consultant Team Progress
  - Draft Final products
  - Initiated and on-going work
3. Next Steps
4. Questions

# Santa Ynez River Valley Groundwater Basin

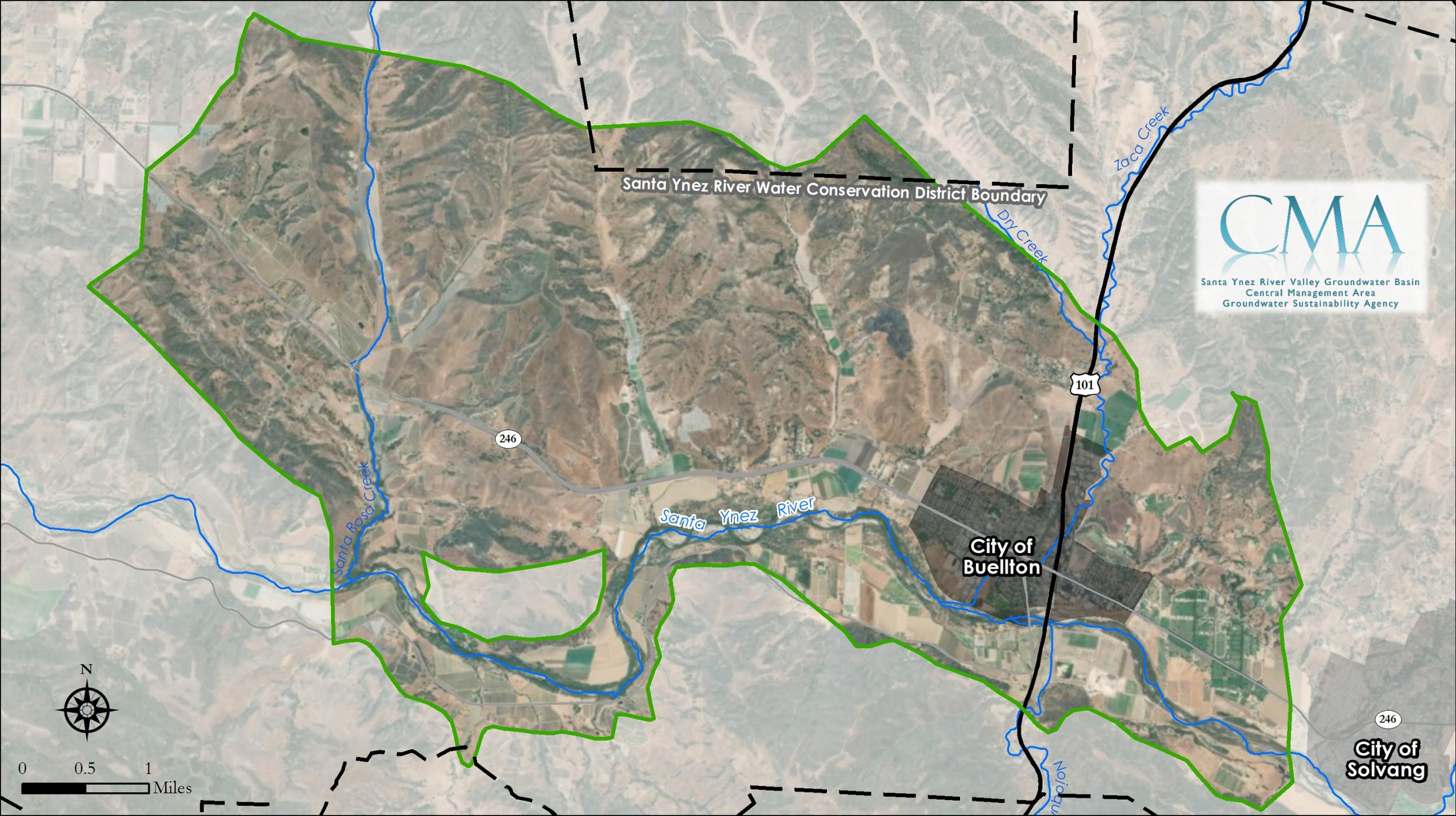


## SGMA GSAs/Management Areas



\* Management Areas outside of Santa Ynez River Water Conservation District under jurisdiction of Santa Barbara County Water Agency

Note: Groundwater basin boundary from DWR Bulletin 118 (2018 Update)



Santa Ynez River Water Conservation District Boundary

**CMA**  
Santa Ynez River Valley Groundwater Basin  
Central Management Area  
Groundwater Sustainability Agency

246

101

Santa Rosa Creek

Santa Ynez River

Zaca Creek

City of  
Buellton

246

City of  
Solvang



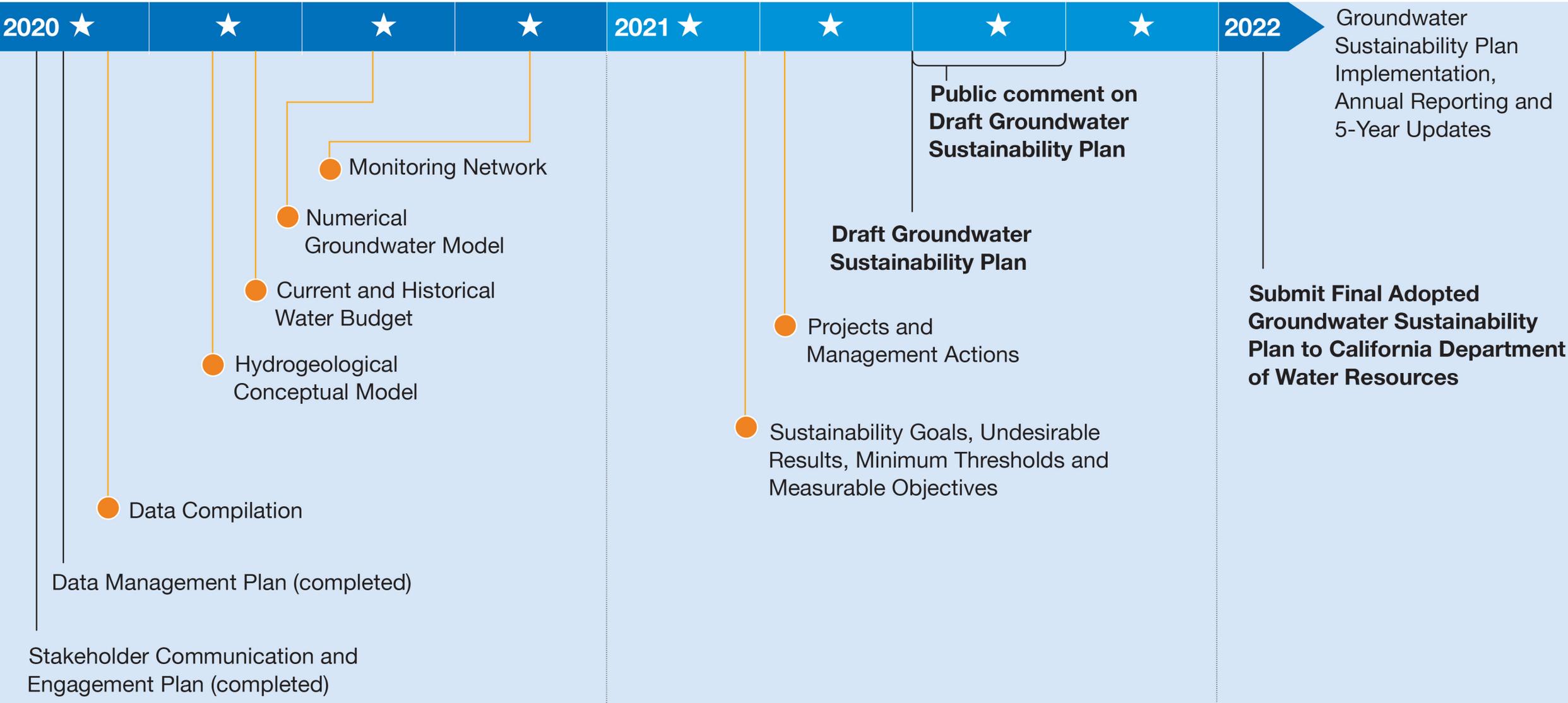
0 0.5 1 Miles

# Groundwater Sustainability Plan Development Milestones

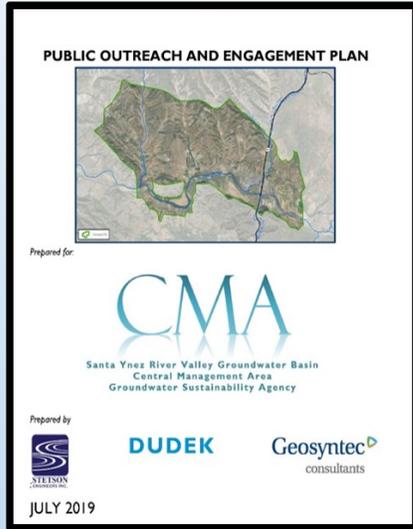


★ Groundwater Sustainability Agency Committee Public Meeting

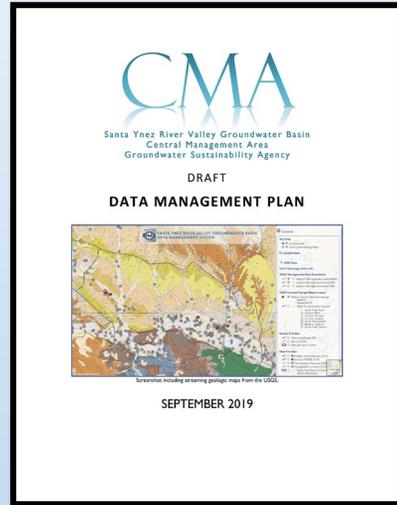
● Technical Memorandum



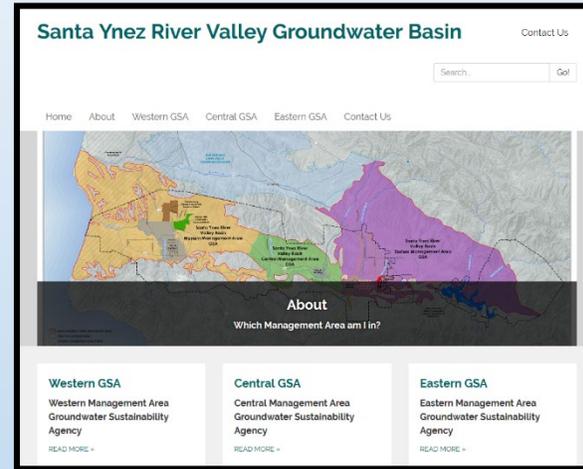
# Consultant Team Progress



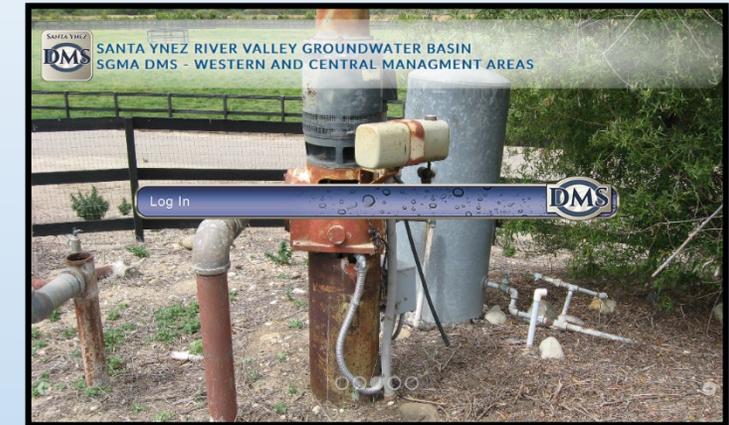
Draft Final  
OEP



Draft Final  
DMP



Release Website



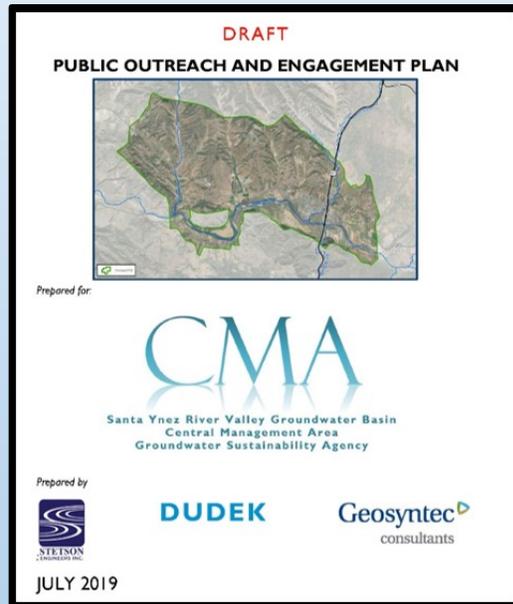
Prepare DMS  
Technical Memo



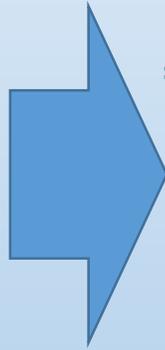
Initiate Hydrogeological Conceptual Model & Water Budget

# Outreach & Engagement Plan

## SGMA Compliant Outreach Plan



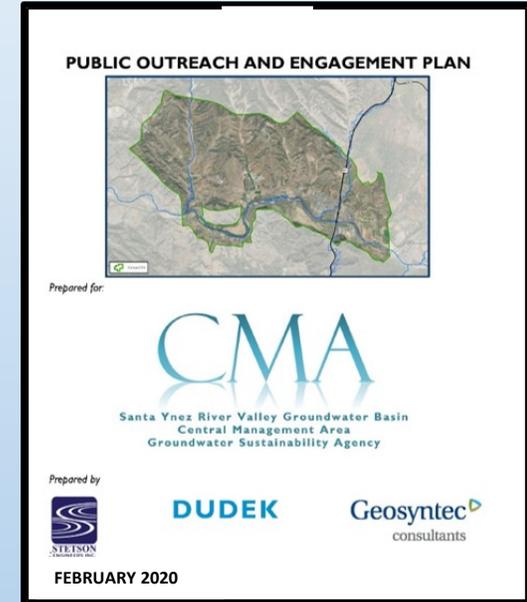
Plan Development  
(July)



Discussed at  
CMA GSA  
Committee  
Meetings  
(July 29 &  
October 28)



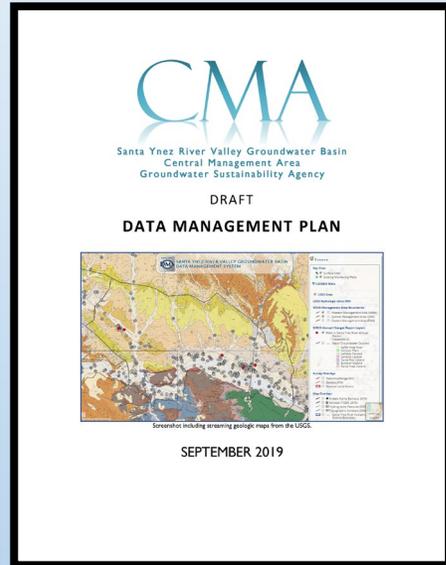
CMA Citizen  
Advisory Group  
(CAG) Meetings  
(September 12 & October 10)  
Document available for  
Public Comment  
(through November 2019)



Draft Final Plan  
Submitted to  
CMA GSA  
(February)

# Data Management Plan

## SGMA Compliant Data Management Approach



Plan  
Development  
(May-September)

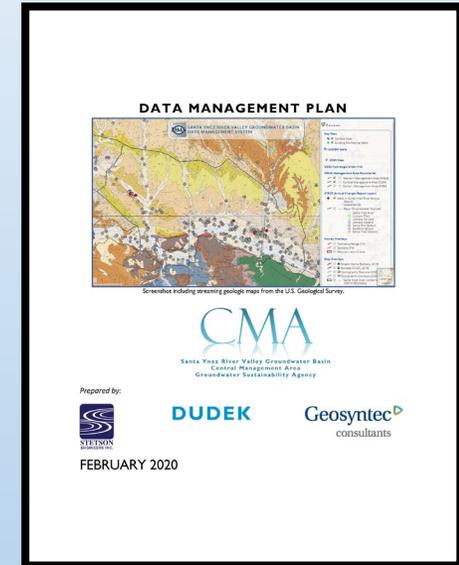


Discussed at  
CMA GSA  
Committee  
Meeting  
(September 12)



WMA  
Citizen Advisory  
Group (CAG)  
Meeting  
(October 10)

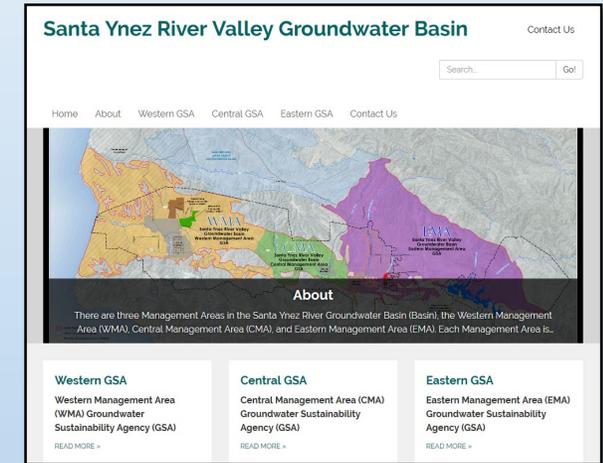
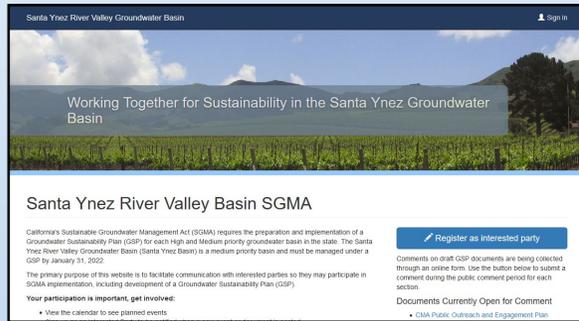
Document available  
for Public Comment  
(through November 2019)



Draft Final Plan  
Submitted to  
CMA GSA  
(February)

# Santa Ynez Water.org Website

## SGMA Compliant Outreach & Engagement Tool



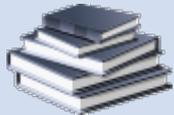
Internal Beta  
Release to  
Consultants  
(October)

Released to GSA  
Committees, CAG &  
Public in Q4 2019

Email Invitation to  
Registered  
Interested Parties  
(November, January)



# Data Management

	Type	Data Uploaded
	Pumping Data	Buellton (2007-17), Lompoc (2003-13), Vandenberg Village Community Services District (2005-19), Public Water System Statistics Surveys (2006-18) Santa Ynez River Water Conservation District (2011 - 18)
	Water Level Measurements	United States Geological Survey/County of Santa Barbara (1940-2019), United States Bureau of Reclamation (1972-2019), Buellton (2003-2017), Lompoc (1964-2013), Vandenberg Village Community Services District (2005-19)
	Water Quality	California State Waterboard GeoTracker GAMA
	Map Layers	Committee Agency Extents, General Reference: Digital Elevation Model/Topography, parcels, roads, watersheds, PLSS, etc. Linked Layers: Air Imagery/Geologic Maps
	Reports / Publications	187 Total, Examples: Santa Ynez River Water Conservation District Annual Reports, United States Geological Survey (USGS) Reports, California Department of Water Resources (DWR) Reports, Plans – Ex: Urban Water Management Plan/ Integrated Regional Water Management/ General Plans

# **Initiated and On-Going Work**

# Hydrogeological Conceptual Model

*Describes the conceptual understanding of the general physical characteristics of the groundwater basin.*

The Hydrogeological Conceptual Model consists of:

- Written narrative description
- Graphical representation of the basin that clearly portrays the geographic and climatic setting, regional geology and structures, groundwater basin geometry, general groundwater water quality, and consumptive water uses in the basin.

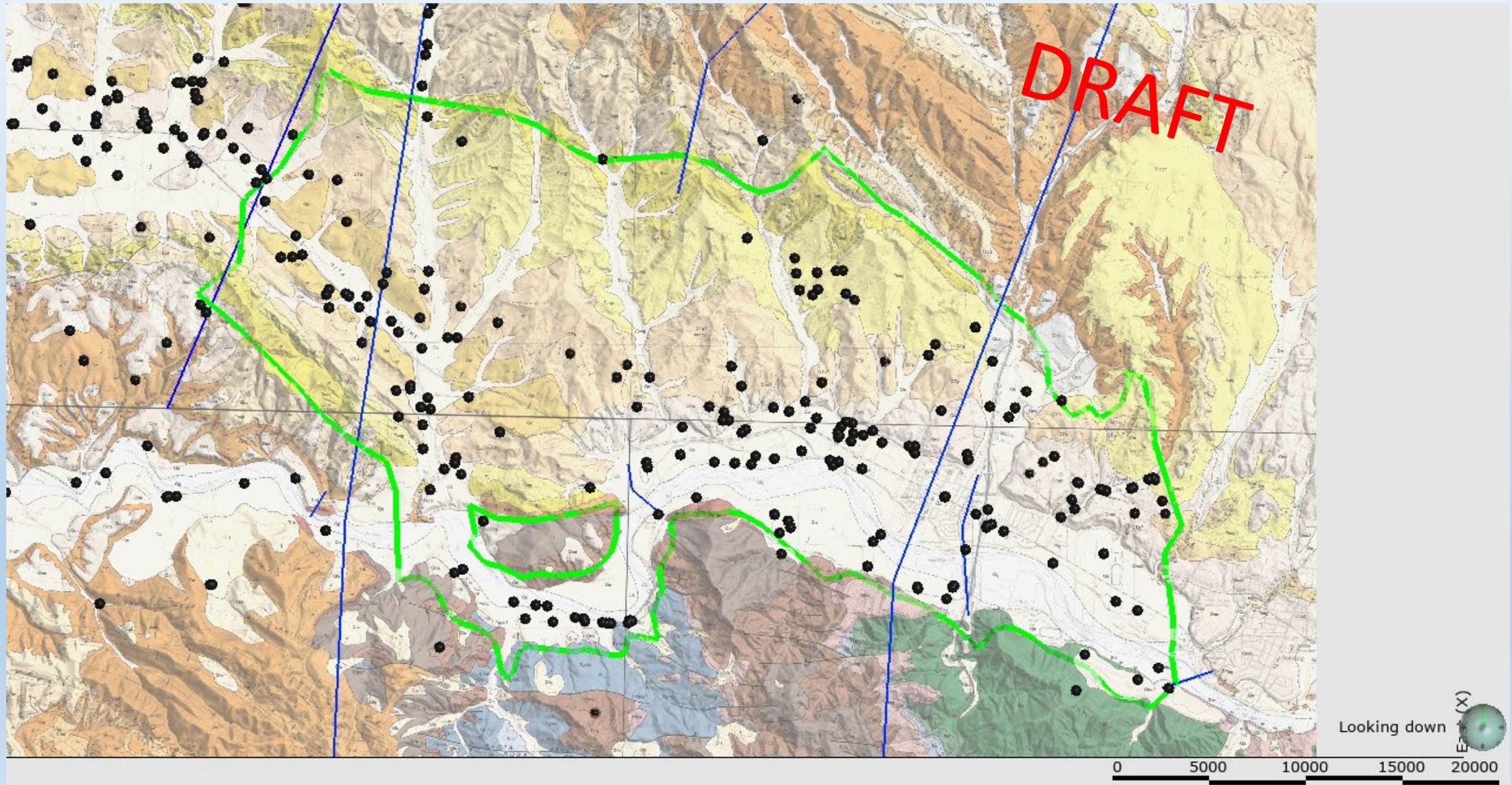
# Hydrogeological Conceptual Model

## 3D Geologic Visualization

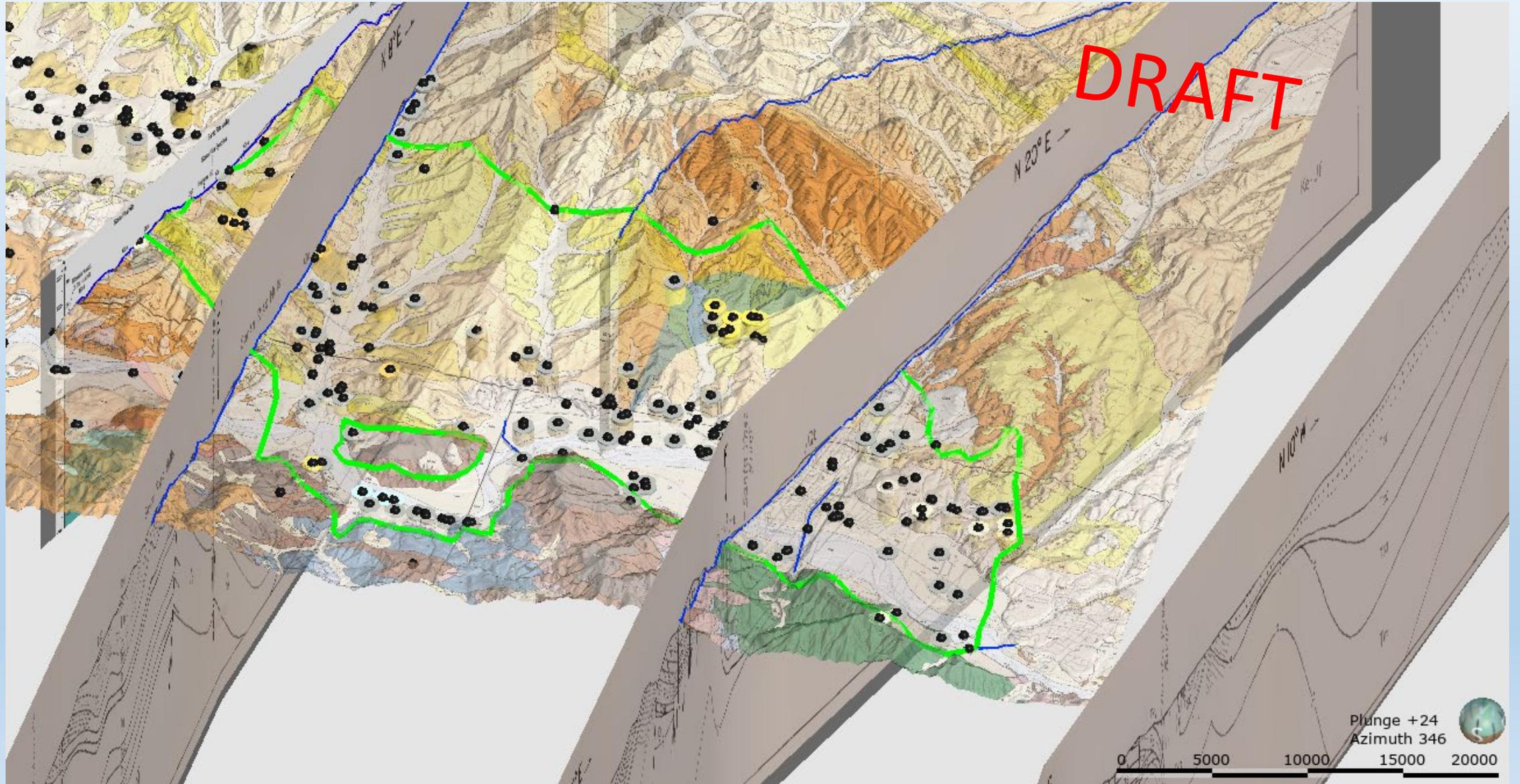
### Regional Geology – Basin Geometry:

- 3D visualization, or, geologic model, that integrates previous models and regional studies, updated and extended with new data and techniques.
- 3D extents will be exported for basin groundwater modeling.
- Graphical representation of mathematical equations, computer algorithms, and geologic interpretation.

# Hydrogeological Conceptual Model 3D Visualization Inputs – Aerial View

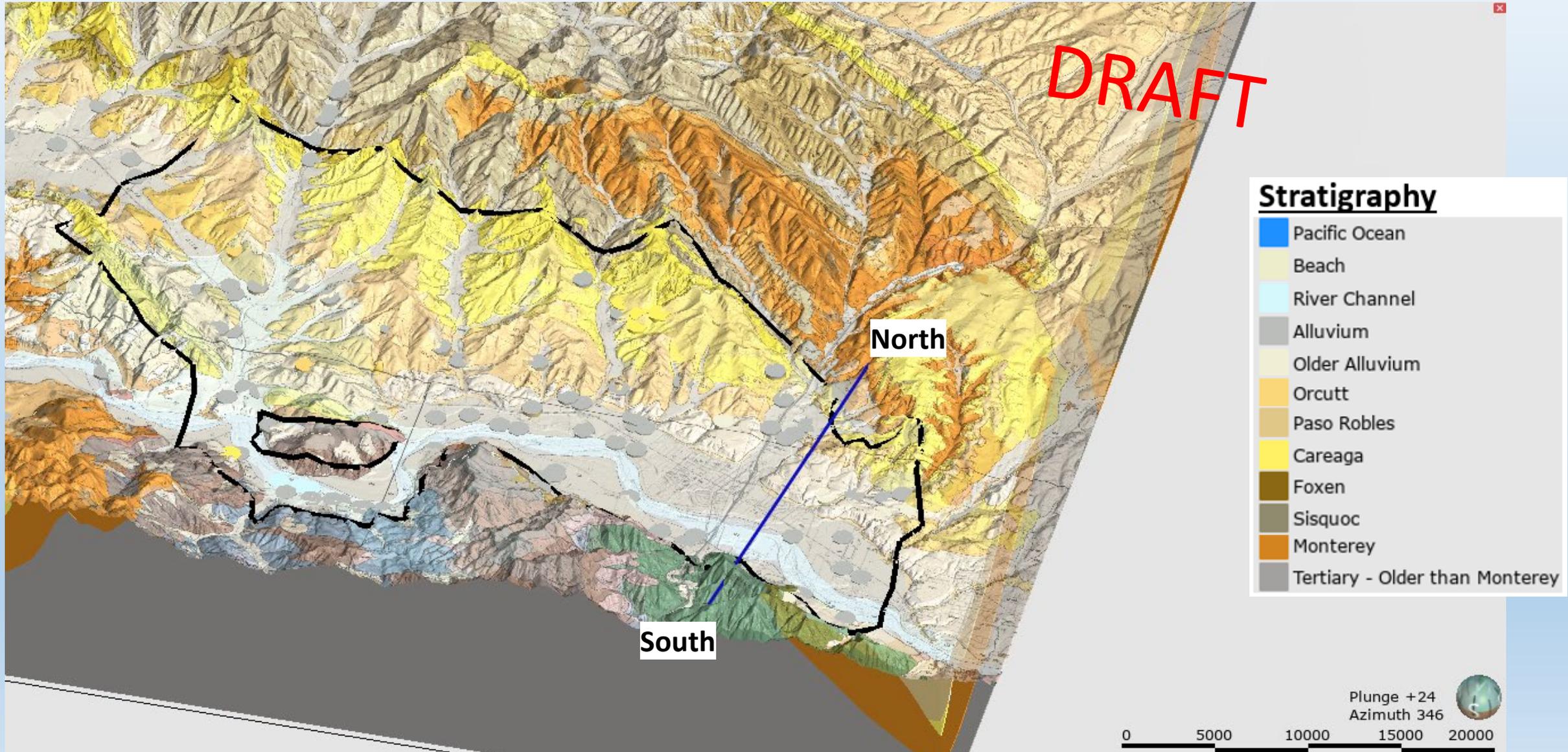


# Hydrogeological Conceptual Model 3D Visualization Inputs – Oblique View



# Hydrogeological Conceptual Model

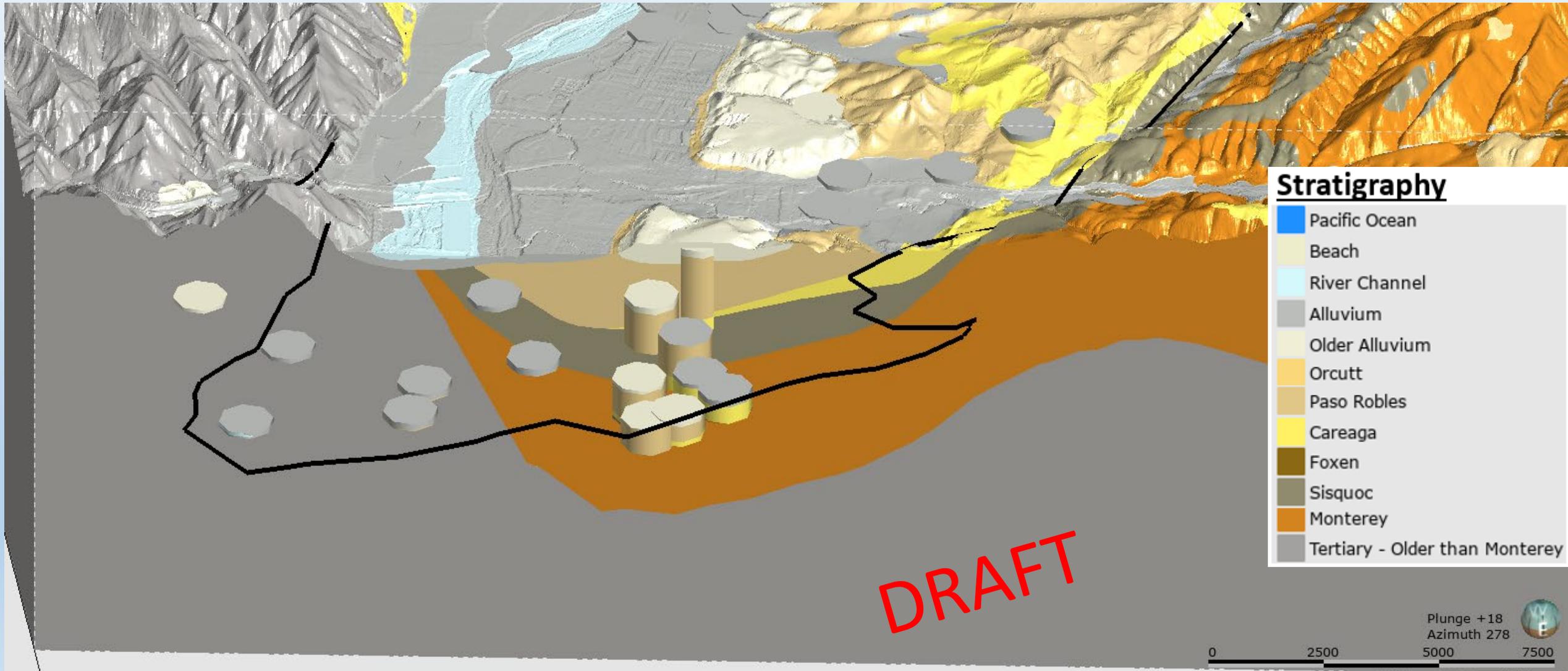
## 3D Visualization Geologic Model – Oblique View



# Hydrogeological Conceptual Model 3D Visualization – Cross-Section View

South

North



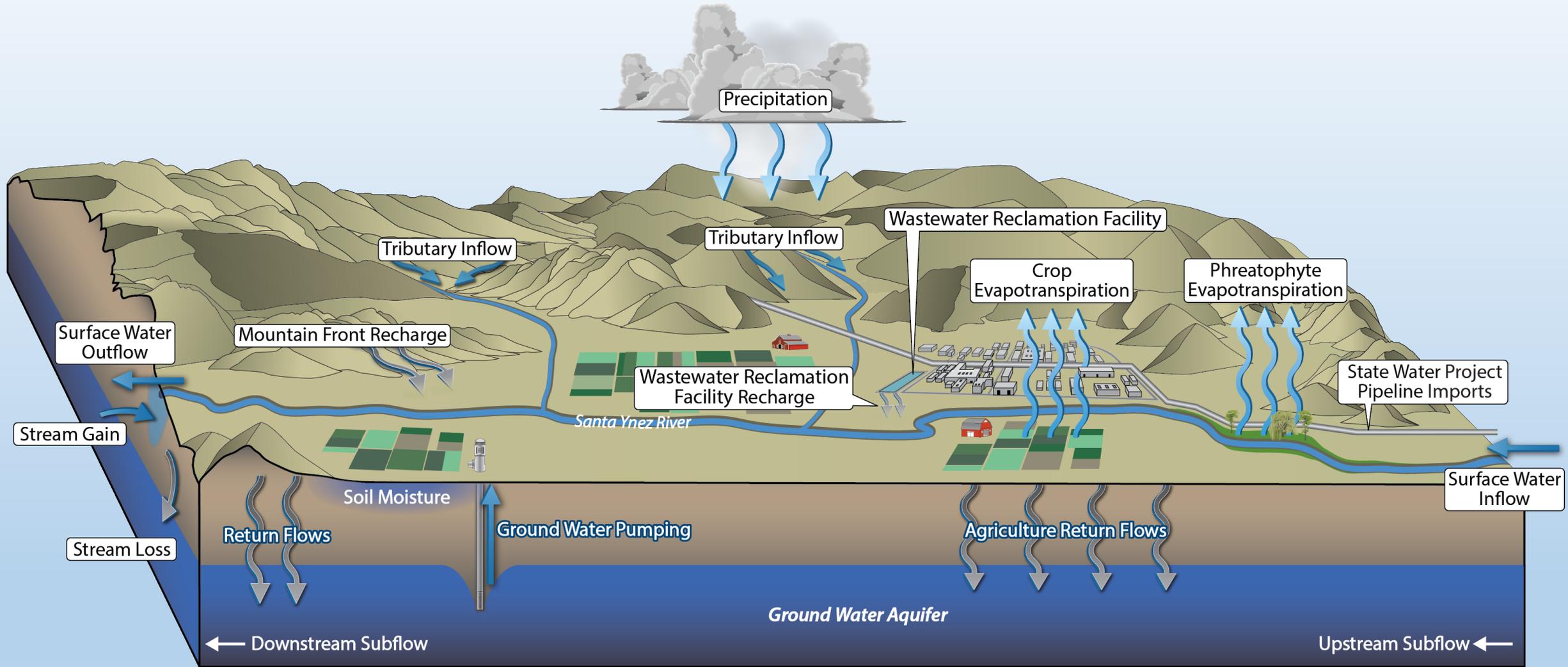
# Water Budget

*The accounting and characterization of spatial and temporal distribution of inflows and outflows to a watershed, groundwater basin, or management area.*

## Key Water Budget components:

- Total surface water entering and leaving the basin
- Inflows and outflows to the groundwater system
- The annual change in groundwater storage volume

# DRAFT CMA Water Budget

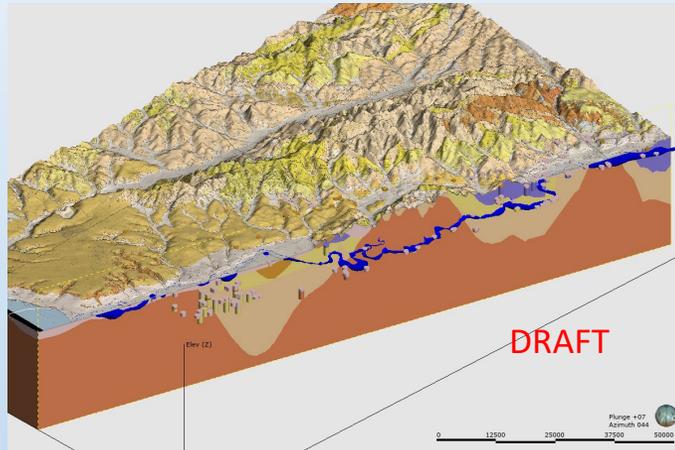


# Next Steps

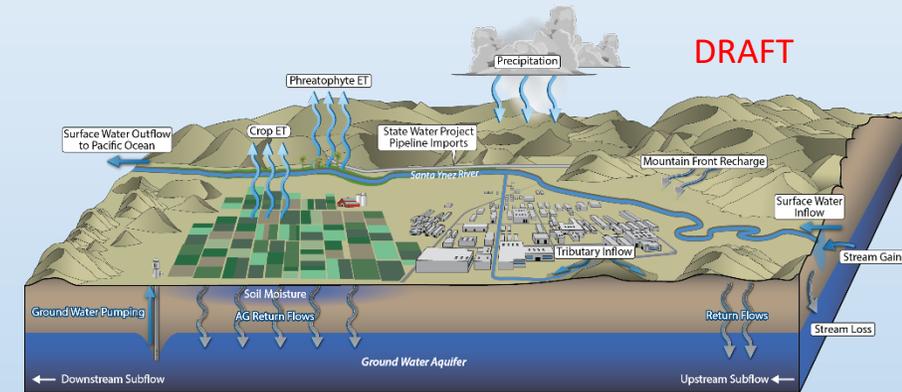
First Quarter 2020



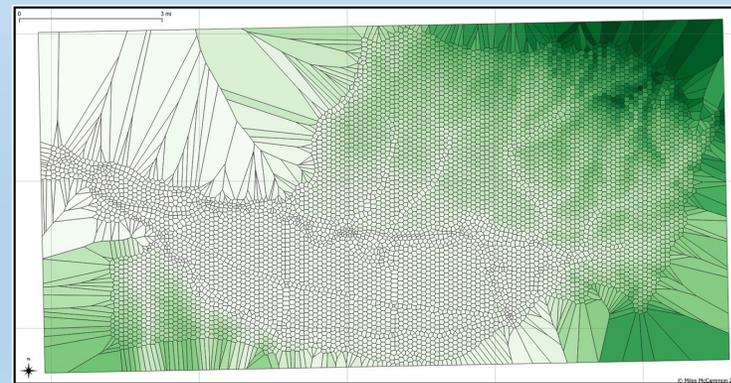
DMS Updates and  
Technical Memorandum



Hydrogeologic Conceptual  
Model  
3D Geologic Visualization



Water Budget



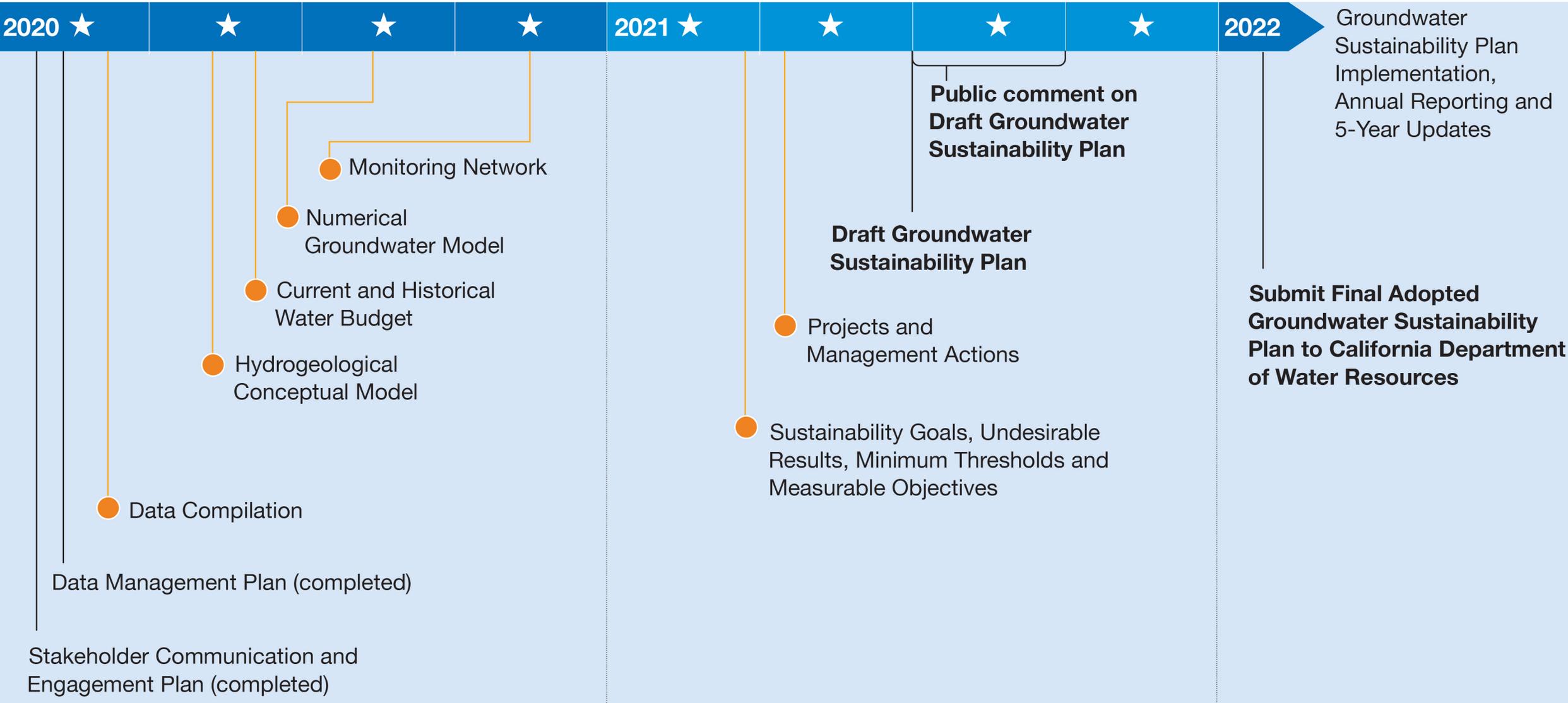
Initiate Groundwater Model

# Groundwater Sustainability Plan Development Milestones



★ Groundwater Sustainability Agency Committee Public Meeting

● Technical Memorandum



# Questions?



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Geosyntec   
consultants

engineers | scientists | innovators

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