



**WATER
AGENCY**

**Proposition 68 Grant Progress
Alternative Groundwater Sustainability Plan
2022 Update**

May 2021

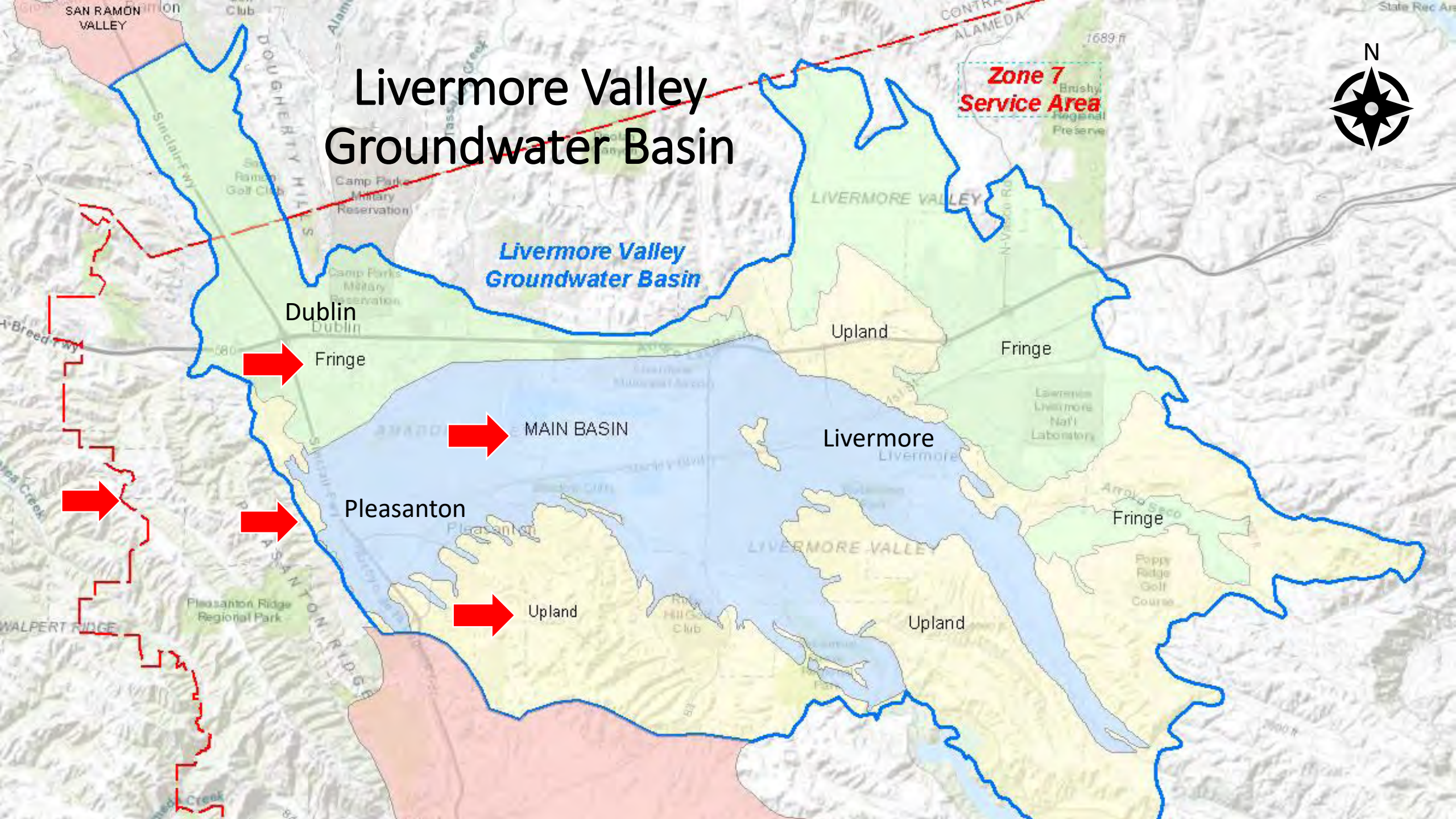
Tom Rooze
Associate Hydrogeologist
Zone 7 Water Agency

OUTLINE

- Background
 - Overview of Grant Tasks
- Current Status and Next Steps for
 - Stakeholder Engagement
 - Groundwater Programs
- Questions/Feedback

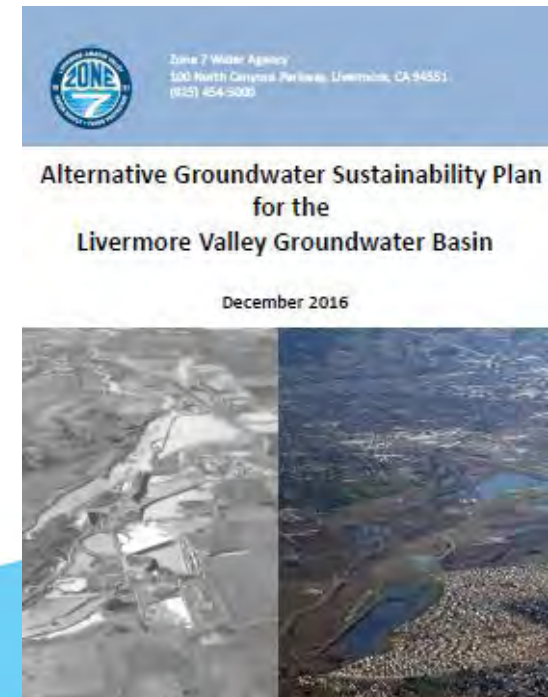
Livermore Valley Groundwater Basin

**Zone 7
Service Area**



Alternative Groundwater Sustainability Plan (2016)

- 2016 Alternative Groundwater Sustainability Plan (Alt GSP)
 - DWR Approved
 - Recommended extending programs into Fringe/Upland Basins
 - The Nature Conservancy (TNC) Response Letter
 - Recommend Study of Groundwater Dependent Ecosystems (GDEs)
- Five Year Update of Alt GSP
 - Due in Jan 2022
- Successfully secured DWR Prop 68 Grant
 - For \$500K



Grant Project - Scope of Work

- Stakeholder Engagement
- Technical Scope of Work – Update Programs for
 - Groundwater Levels – Add Program Wells in Fringe and Uplands
 - Groundwater Storage
 - Extend Cross Section into Fringe and Uplands
 - Update and Expand Areal Recharge Model (calculates rainfall & irrigation recharge)
 - SW/GW Interaction – Groundwater Dependent Ecosystems (GDEs)
 - Subsidence – Continue to Evaluate InSAR (satellite) technology
 - Groundwater Quality – Update Salt and Nutrient Evaluations
- Prepare Report

Stakeholder Engagement

- Communication & Engagement Plan
 - Identifies stakeholders & outlines outreach plans
 - Complete but “working document”
- Stakeholder Letters Mailed in
 - September 2020
 - April 2021
- Website
 - zone7water.com/alternative-groundwater-sustainability-plan
 - Live in Oct 2020; to be updated as needed
- Presentations to
 - Retailers
 - Alameda County Environmental Health, Planning
 - Regional Water Quality Control Board (RWQCB)
- Next Steps
 - Draft Final Presentations to
 - Retailers, Alameda County, and RWQCB
 - Water Resources Committee
 - Board



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7
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April 5, 2021

Subject: Proposition 68 Grant Progress
Alternative Groundwater Sustainability Plan 2022 Update
for the Livermore Valley Groundwater Basin

Dear Stakeholder,



You can also email groundwater@zone7water.com if you would like more information regarding Zone 7's activities related to the Sustainable Groundwater Management Act.

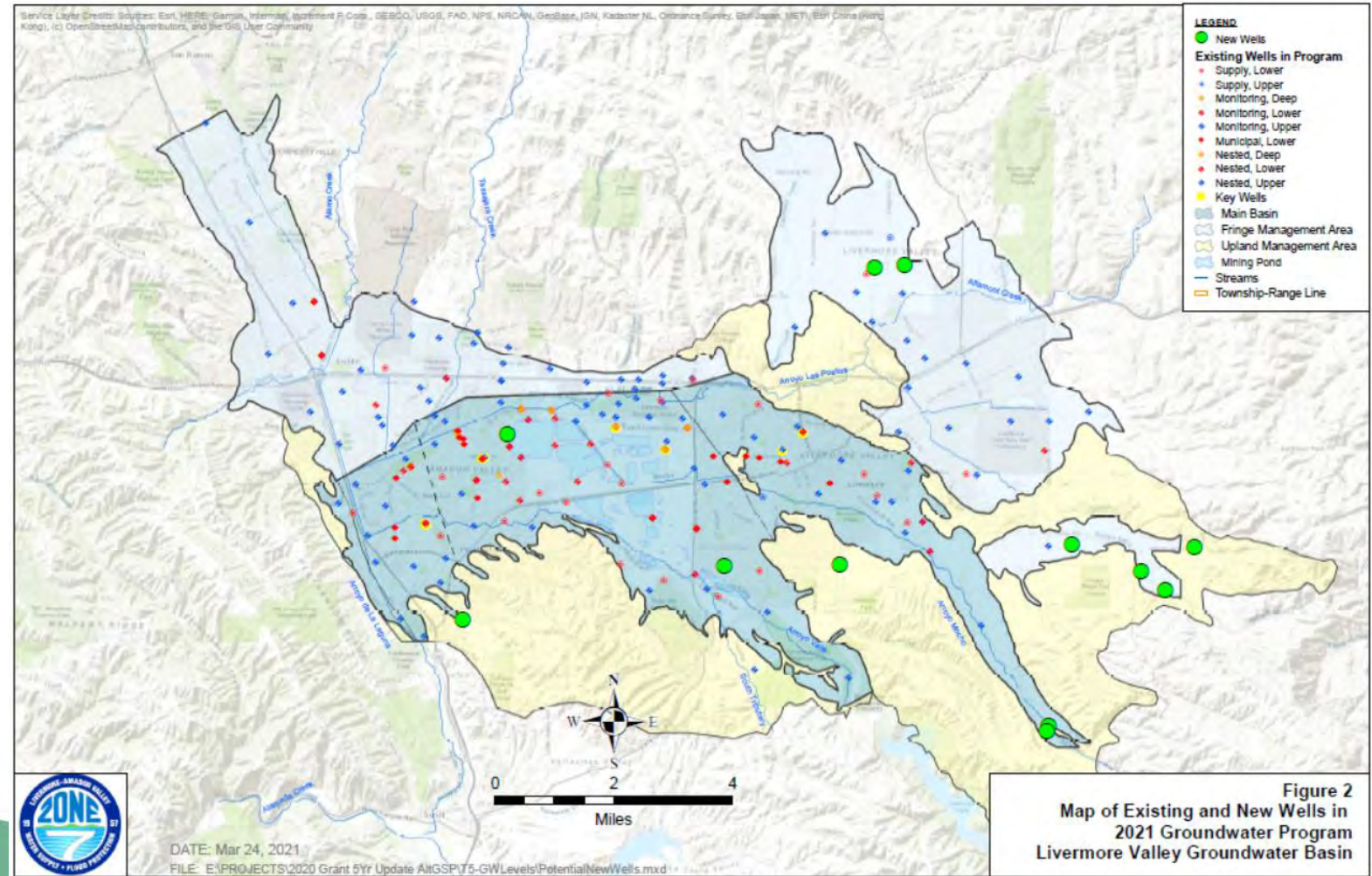
Sincerely,

Tom Rooze

Tom Rooze
Associate Hydrogeologist
Groundwater Section

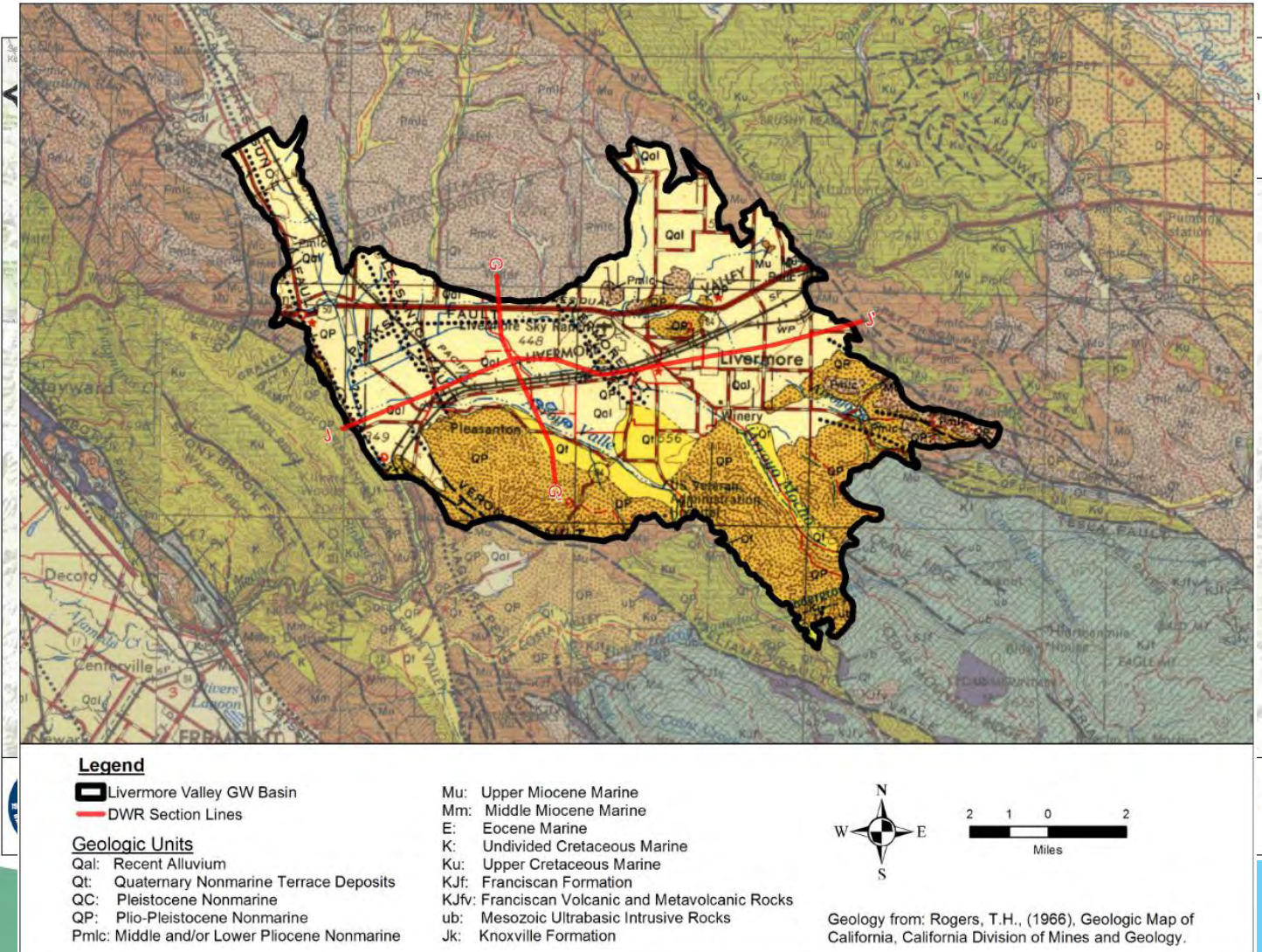
Groundwater Levels Program

- Existing Program
 - 200+ Wells
 - Focus is on Main Basin
- Tasks for Alt GSP Update
 - Add Wells in Fringe and Uplands
 - Update Depth to Water Map
 - Update Historic Low Map
- Completed
 - ~200 Letters to Well Owners
 - 15 Responses
 - 12 New Wells Added to Program
- Next Steps
 - New Depth to Water Maps
 - Update Historic Lows Maps

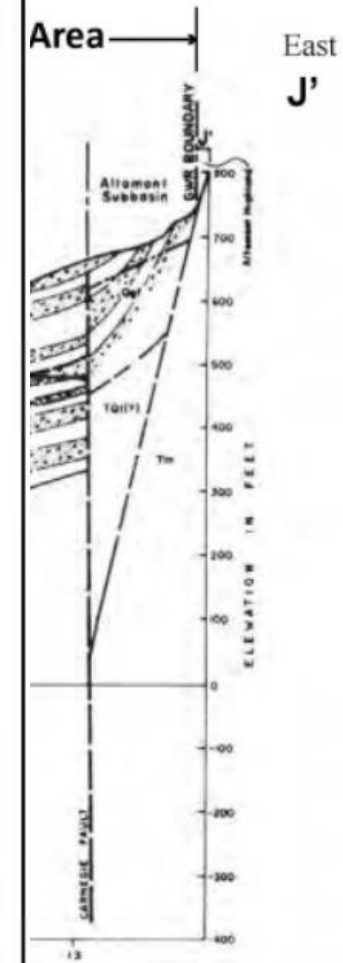
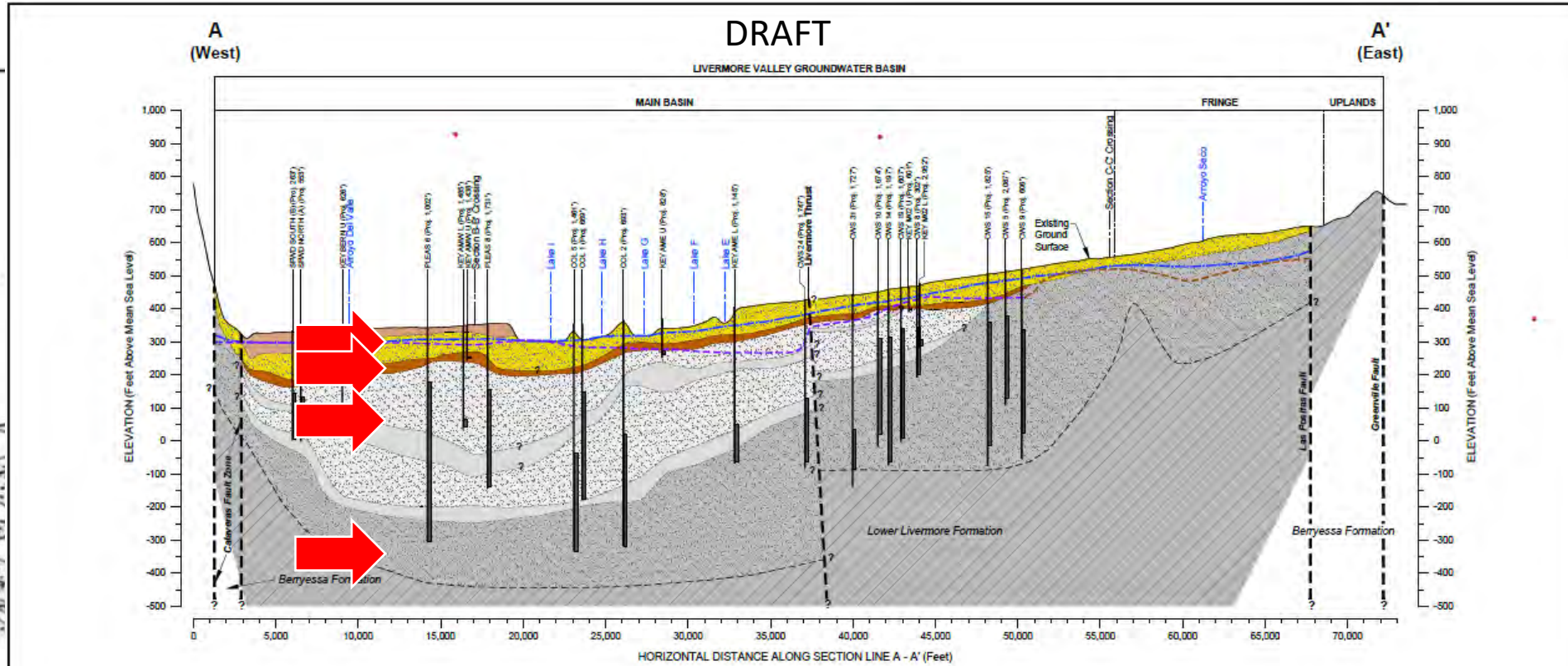
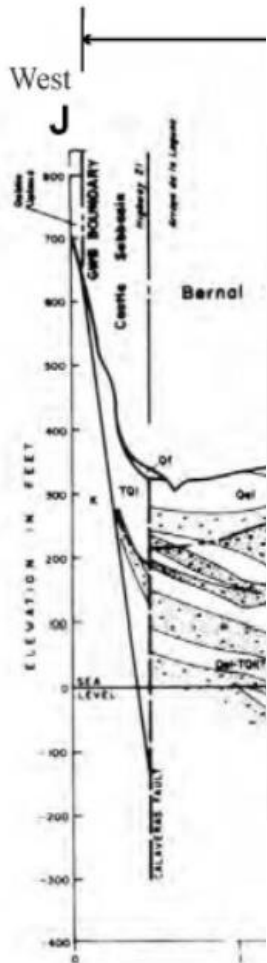


Groundwater Storage Program

- Existing Program
 - Cross Sections in Main Basin
 - Areal Recharge Model
 - for Main & Northwest Fringe Basins
- Tasks for Alt GSP Update
 - Develop Three Cross Sections
 - Basin-Wide
 - Extend Areal Recharge Model
- Completed
 - Three New Cross Sections
 - Used Rockworks Software Program
 - Focus on Groundwater Flows
- Next Steps
 - Update our Areal Recharge Model



Example: East/West Cross-Section



Cross-Section A - A'

Legend:

Stratigraphy

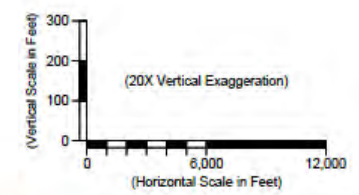
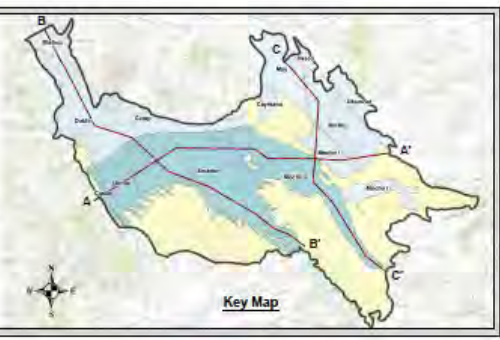
- Overburden
- Upper Aquifer
- Aquitard
- Lower Aquifer (Quaternary Gravels/Sands)
- Lower Aquifer (Quaternary Clays/Silts)
- Upper Livermore Formation
- Lower Livermore Formation
- Bottom of Groundwater Basin
- Static Water Level in Upper Aquifer (Fall 2019)
- Static Water Level in Lower Aquifer (Fall 2019)
- Static Water Level in Upper Livermore (Fall 2019)

Map Elements

- Well Log
- Screen Interval
- A-A' Cross-Section Trace Location
- Livermore Valley Groundwater Basin

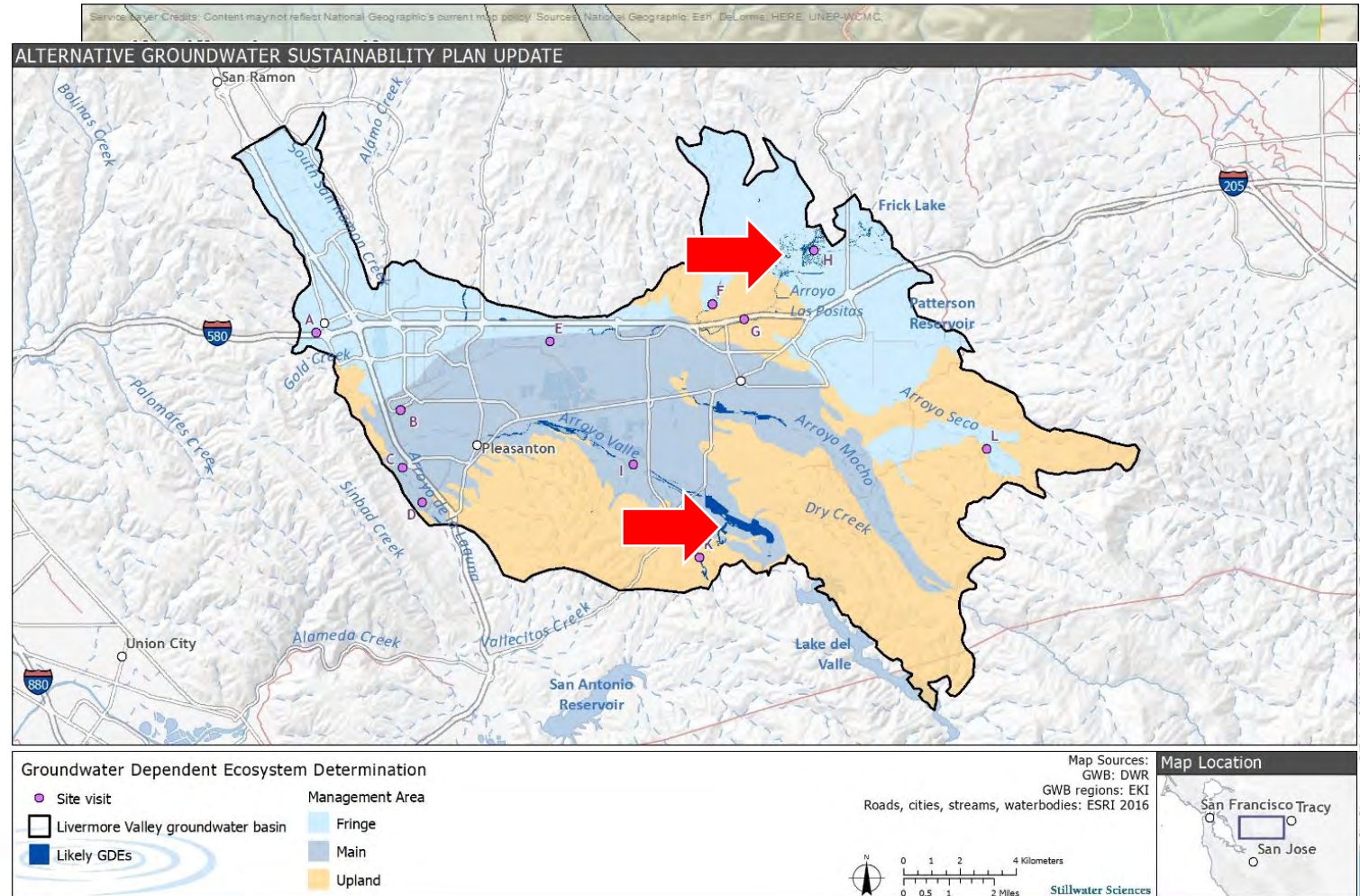
Management Area

- Fringe Management Area
- Main Basin Management Area
- Upland Management Area



SW/GW Interaction Program

- Existing Program
 - Springtown Alkali Sink
- Tasks for Alt GSP Update
 - Use Latest Data to Identify Other Potential GDEs
- Completed
 - Maps of Likely GDEs
 - Based on Latest Maps of
 - Vegetation (NCCAG)
 - Depth to Water (Zone 7)
 - Site Visits
- Next Step
 - Monitoring Recommendations

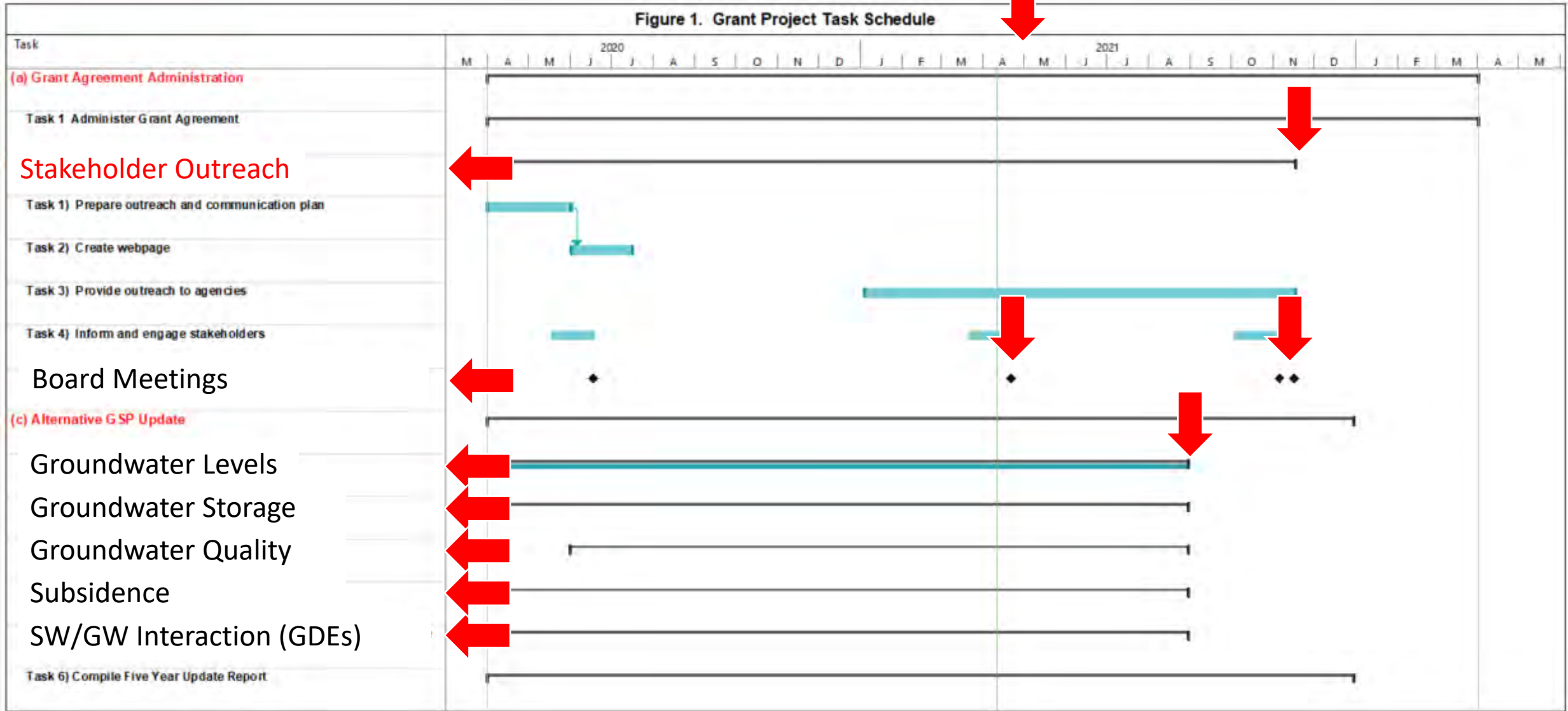


DWR's Natural Communities Commonly Associated with Groundwater

Program Summary

TASK	COMPLETED	NEXT STEPS
→ Groundwater Levels	Added 12+ new wells	Update Dept to Water Map Historic Lows Maps
→ Groundwater Storage	Three New Cross Sections	Areal Recharge Model
→ SW/GW Interaction	Map of Likely GDEs	Develop Monitoring Recommendations
→ Subsidence		Evaluate Effectiveness of InSAR (satellite) Technology
→ GW Quality		Update Graphs of Expected Future Salt, Nitrate Concentrations

Schedule



Questions

