



South County Recharge: San Pedro Ponds Optimization Study

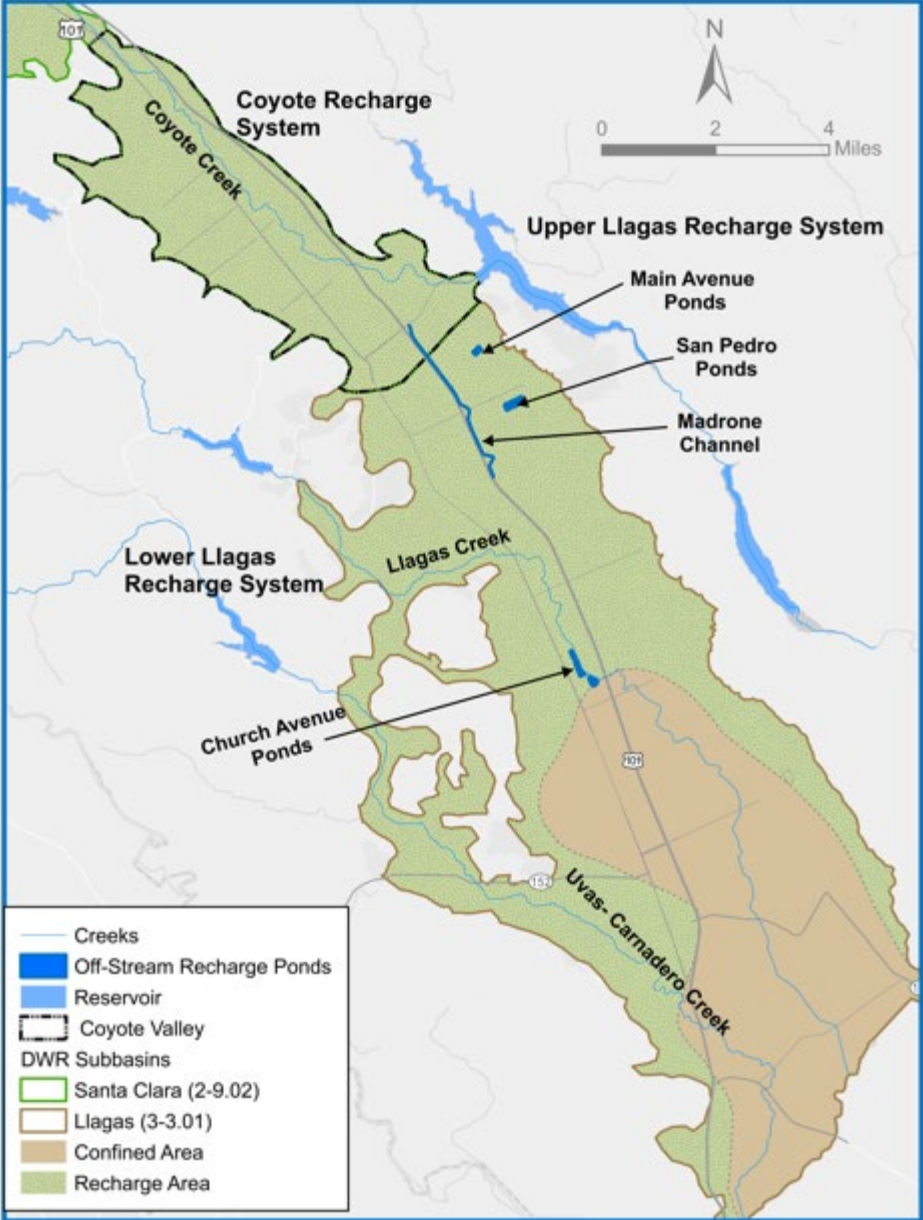
Water Supply and Demand Management Committee

Presented by: Bassam Kassab, P.E., Water Supply Operations Manager

Attachment 4, Page 1 of 10

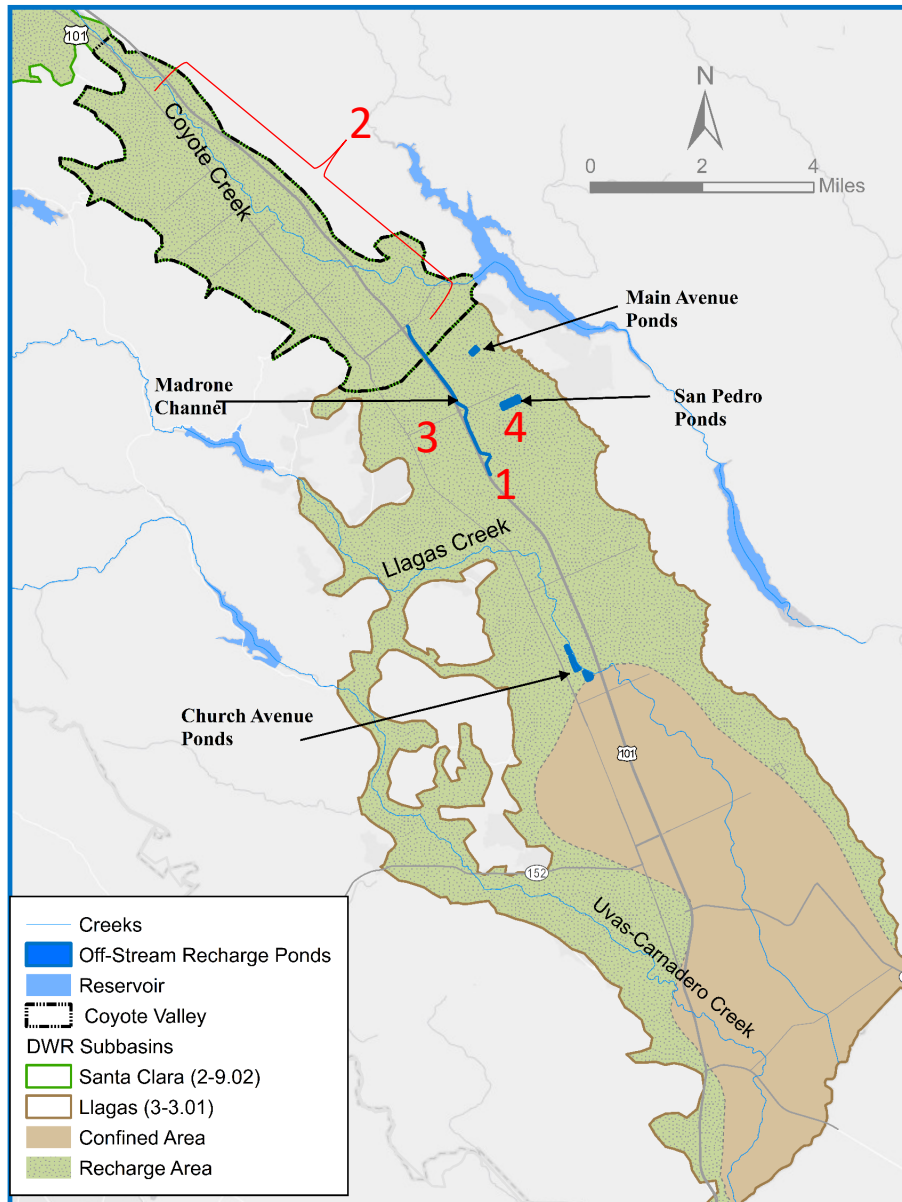
April 27, 2026

Current South County Recharge Facilities



- Managed recharge supports:
 - Municipal wells for cities and unincorporated areas
 - Thousands of privately owned domestic, agricultural, and industrial wells
- Three recharge systems
 - Coyote
 - Upper Llagas
 - Lower Llagas
- In-stream recharge from reservoir and imported water releases
- Off-stream recharge ponds

Potential South County Recharge Projects



- A. Madrone Channel Expansion:** increase recharge capacity of the existing facility
- B. Coyote Valley Recharge Pond:** construct new off-stream recharge pond(s)
- C. Butterfield Channel Recharge:** connect the Butterfield Channel to Valley Water's raw water conveyance system
- D. San Pedro Ponds Improvement Project:** implement project(s) to enable existing seven ponds to be operated at full capacity without interfering with nearby septic systems

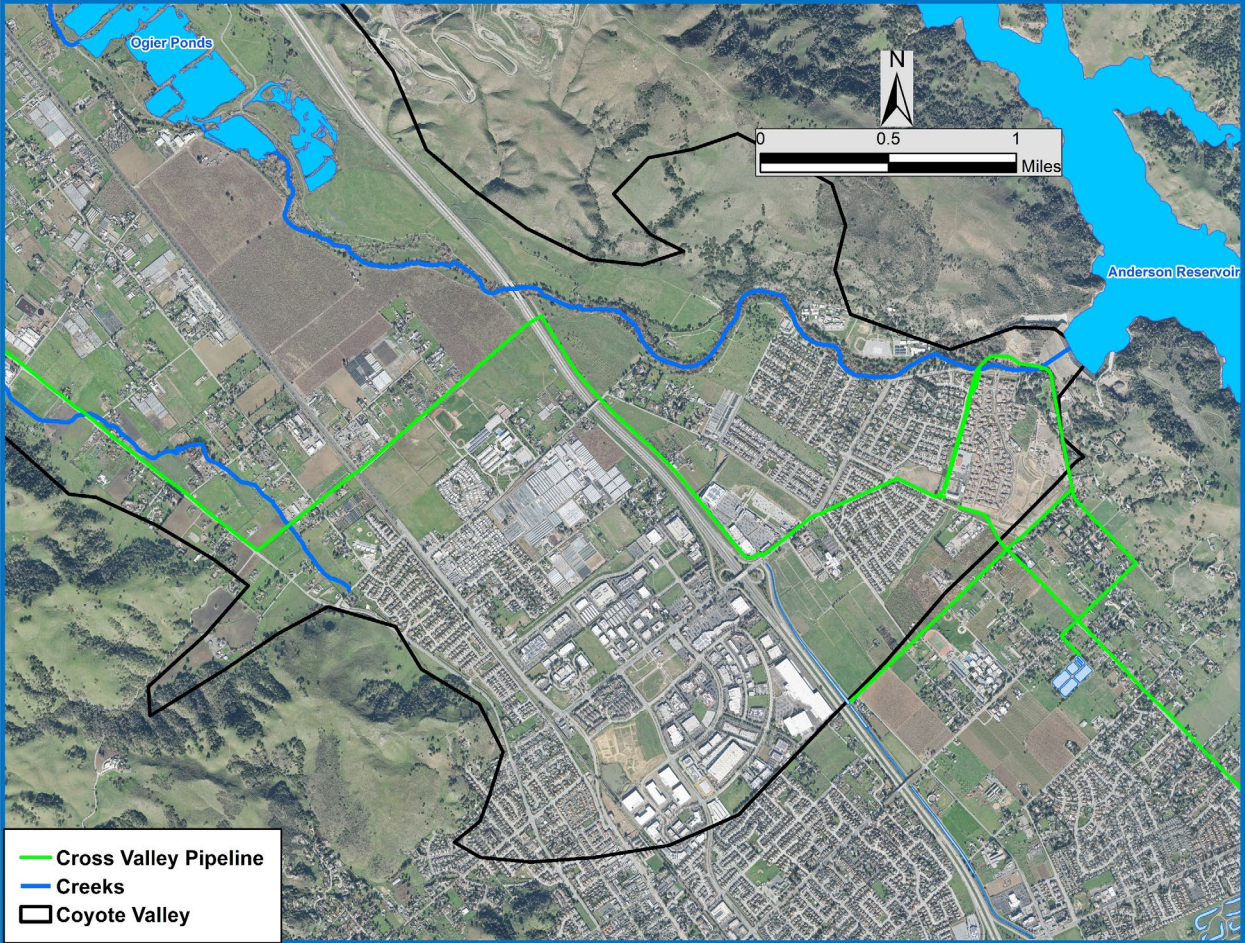
Potential South County Recharge Projects

A. Madrone Channel Expansion



Potential South County Recharge Projects

B. Coyote Valley Recharge Pond



Potential South County Recharge Projects

C. Butterfield Channel Recharge

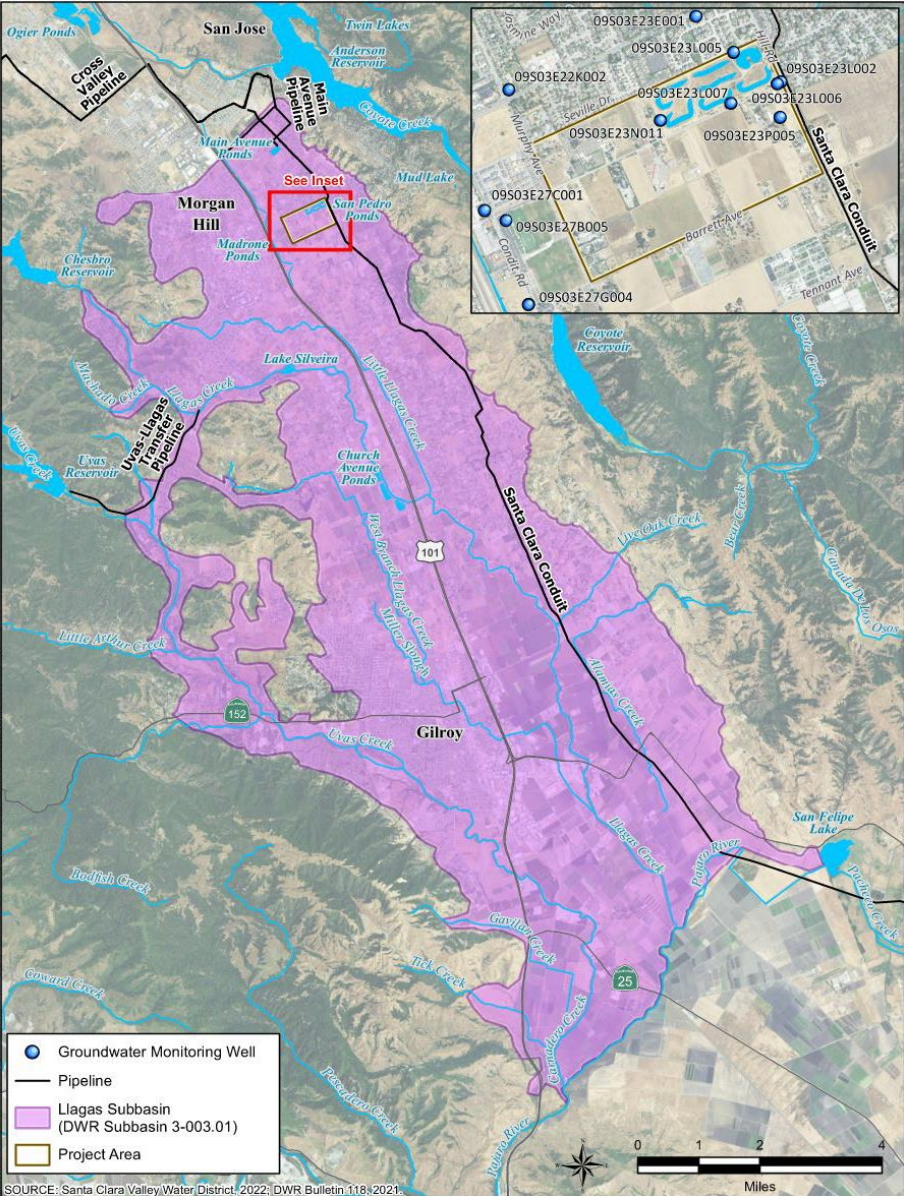


Potential South County Recharge Projects

D. San Pedro Ponds Improvement Project



San Pedro Ponds Optimization Study



- Pre-planning (feasibility) study conducted in 2022-2023 by GEI Consultants
- Final optimization report issued in November 2023
- Desktop analysis of eight alternatives to fully or partially restore the 4,700-AFY operating capacity of the ponds

San Pedro Ponds Optimization Study

The eight (8) alternatives that were considered are:

1. Low Pond Level Operation
2. Installing and Operating Extraction Wells
3. Installing a Cut-off Wall
4. Creating a Subdrain
5. Passive Infiltration Through Vertical Bore Holes/Conduits
6. Installing Alternative Wastewater Treatment Systems at Adjacent Properties
7. Sanitary Sewer Connection
8. Property Acquisition

San Pedro Ponds Optimization Study

- Using scoring criteria and weighting factors, team scored 8 alternatives. Scores ranged from 42.5 to 57.
- Following four alternatives received the highest scores.
- It's recommended to further analyze the top four alternatives in a future planning study.

Top Ranking Alternatives	Pros	Cons
Alt. 6: Installing Alternative Wastewater Treatment Systems at Adjacent Properties	Highest score (57); Preferred alternative	N/A
Alt. 7: Sanitary Sewer Connection	2 nd highest score (56)	Need to secure buy-in from LAFCO
Alt. 1: Low Pond Level Operation	2 nd highest score (56)	Partial restoration of ponds capacity
Alt. 8: Property Acquisition	3 rd highest score (54)	Could be expensive unless properties are resold