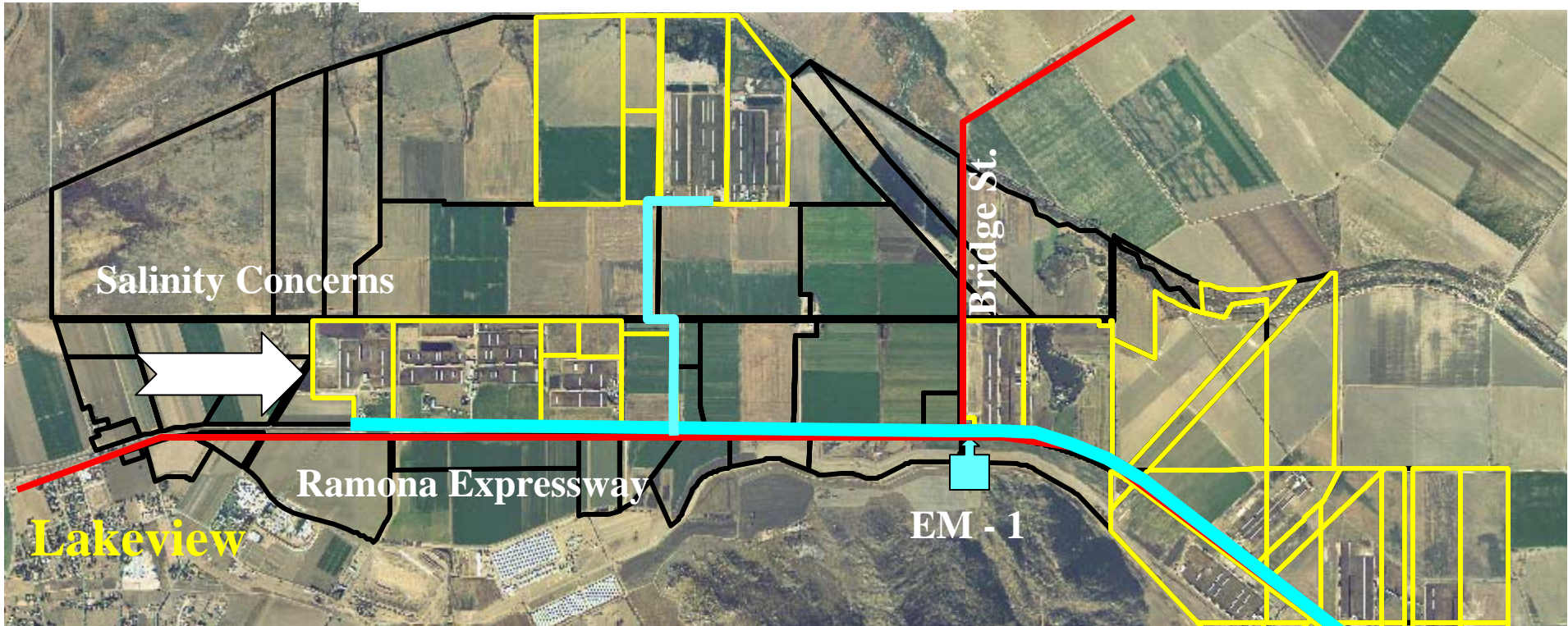




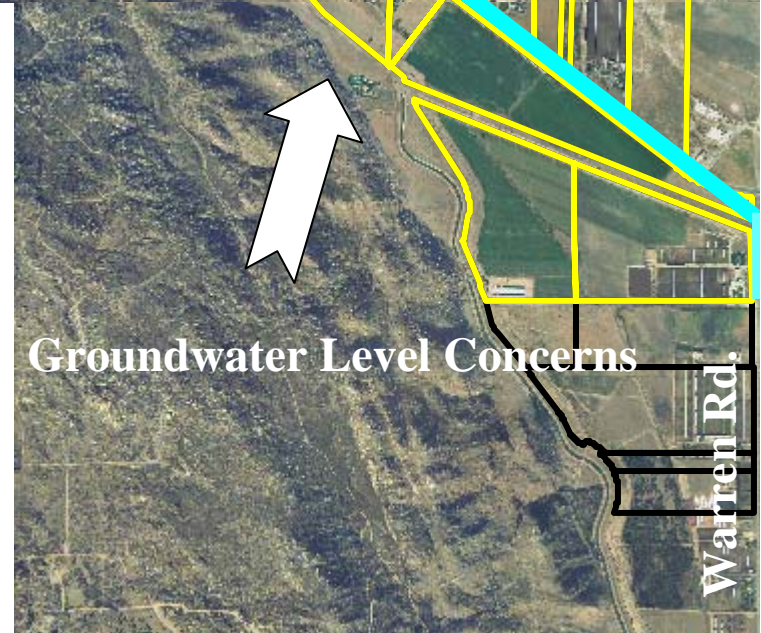
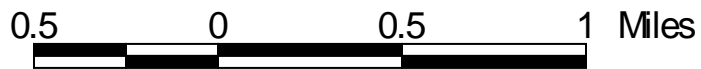
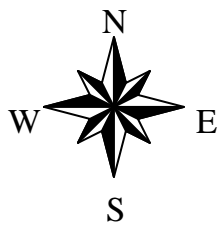
EASTERN MUNICIPAL
WATER DISTRICT

San Jacinto Watershed Council
July 8, 2004

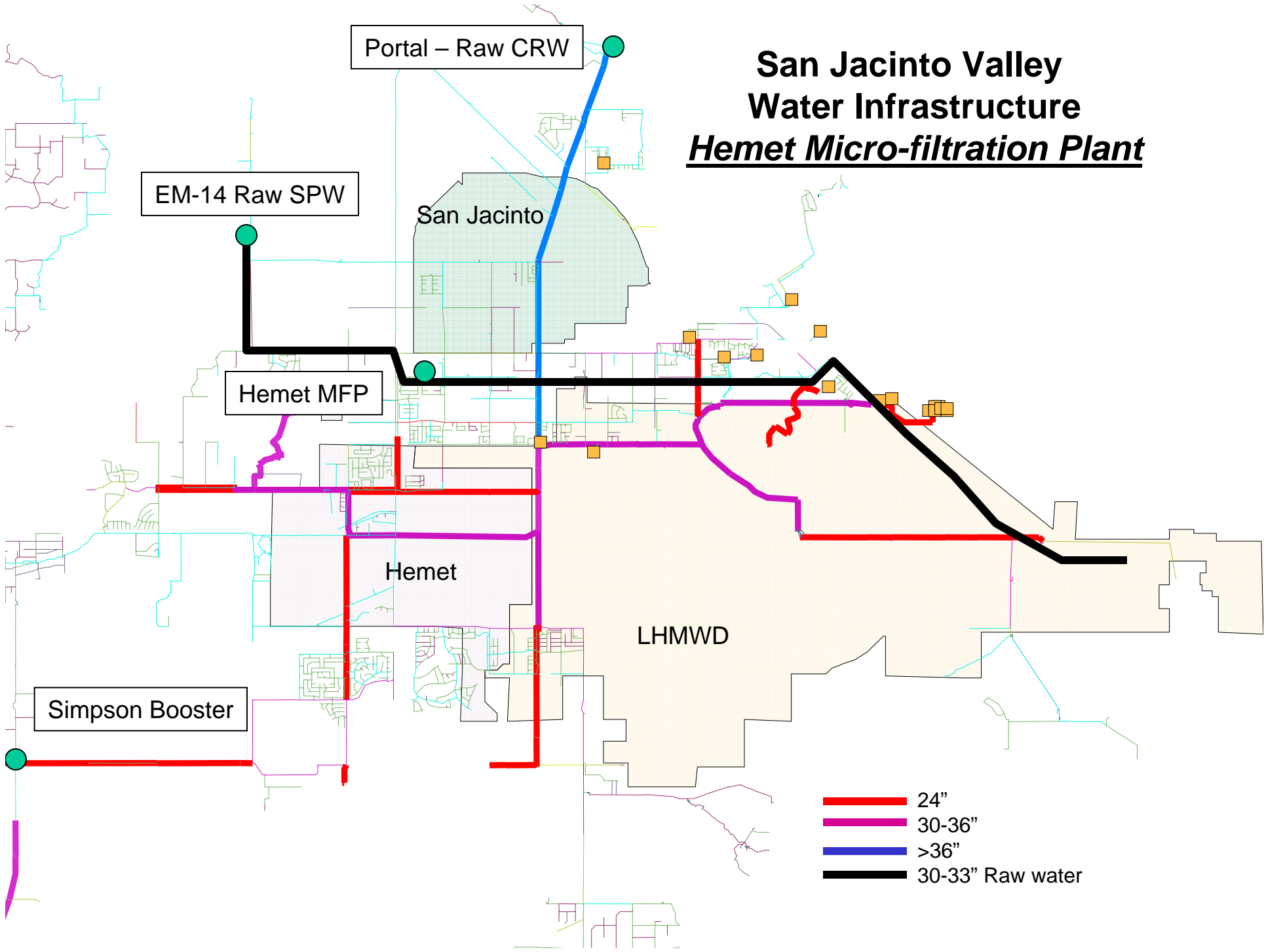
EMWD Project Update



North San Jacinto Water Supply Initiative Project Area



San Jacinto Valley Water Infrastructure Hemet Micro-filtration Plant



San Jacinto Valley

San Jacinto

Soboba

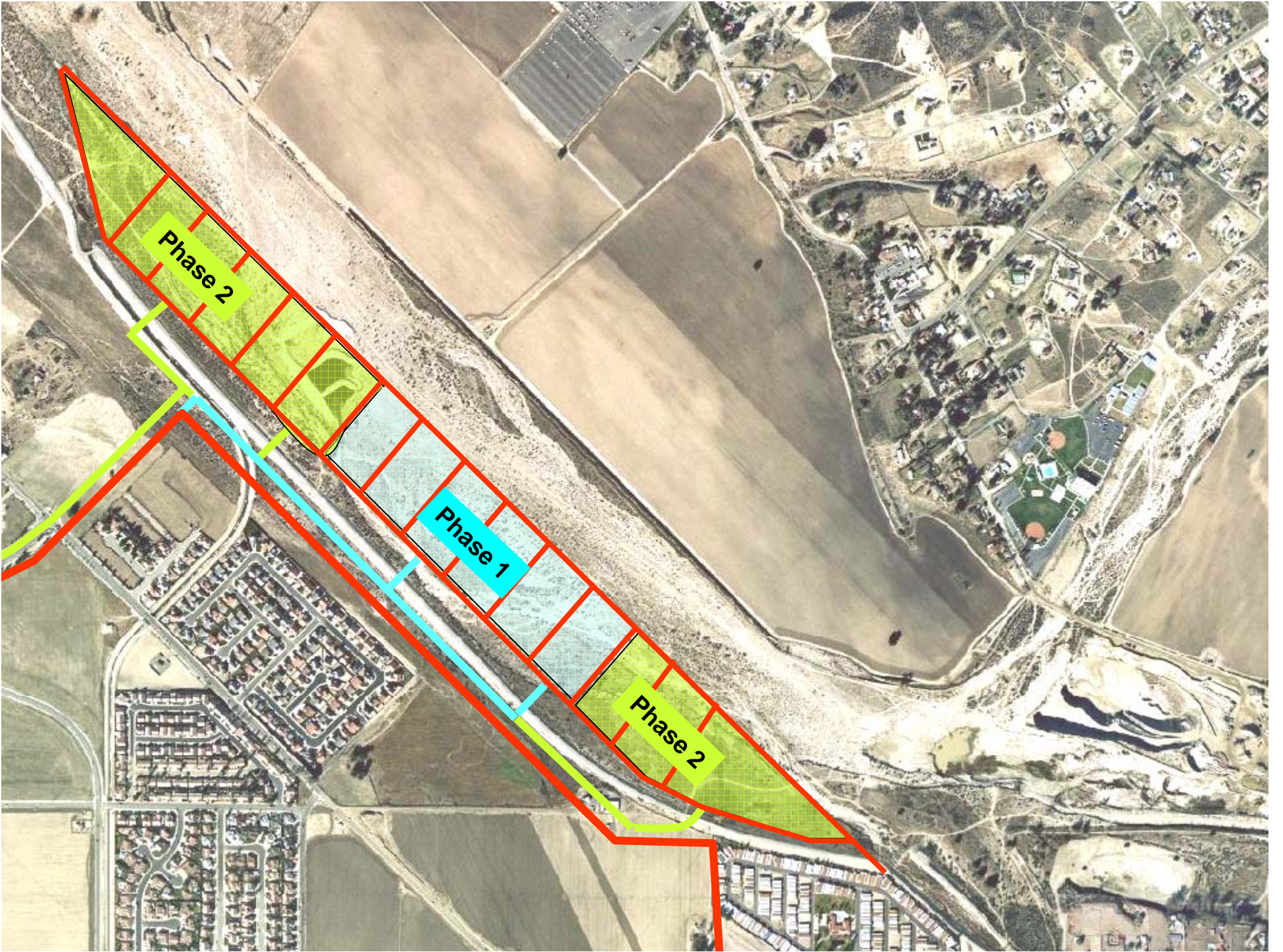
EM-12 State Water Project

Existing Raw Water Pipeline

Hemet

Lake Hemet MWD





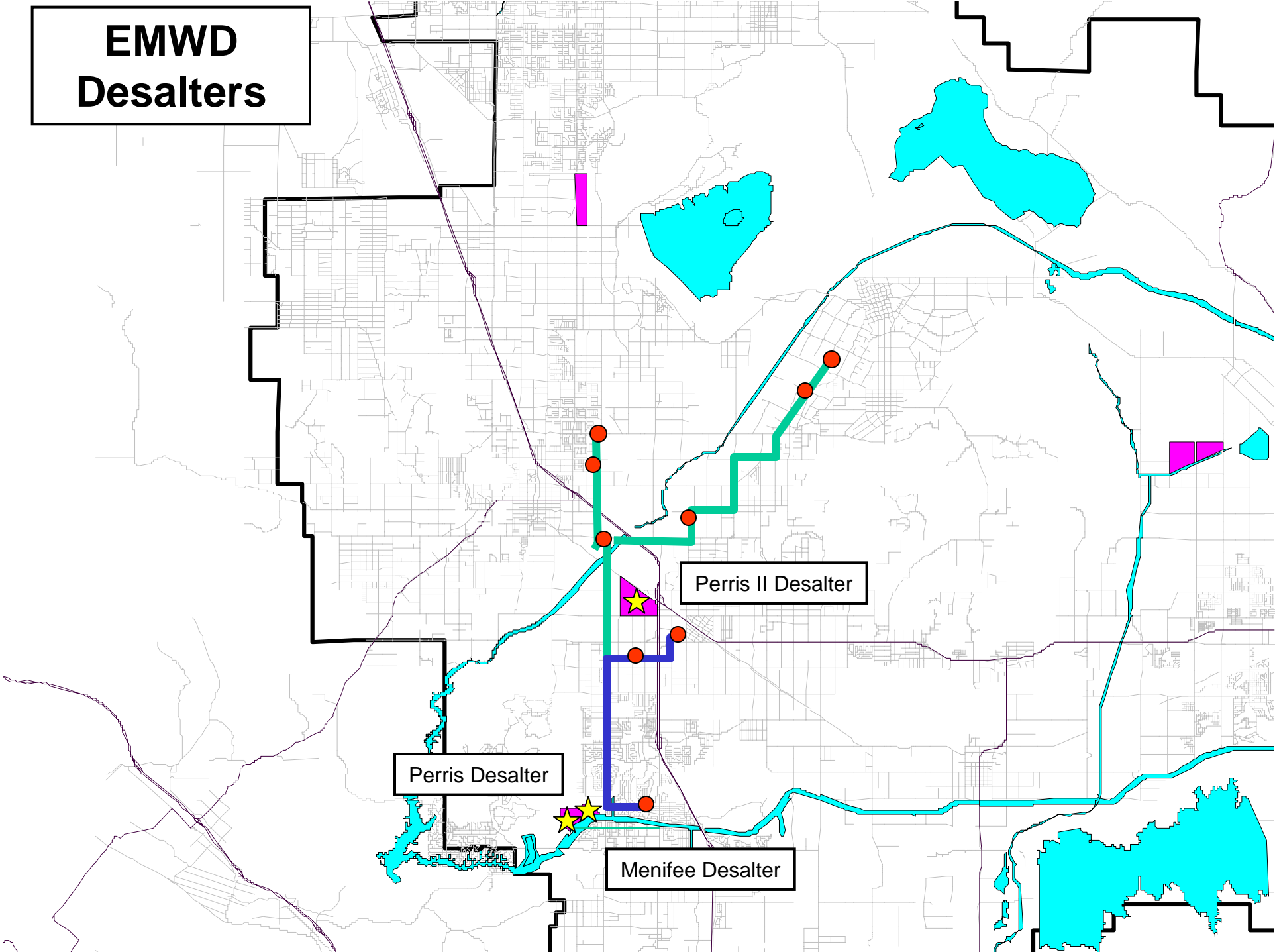
Proposed Extraction Wells

- Location of wells
- Number of wells required – 3 & 5 (8 Total)
- Location selection criteria
 - Mound contour elevation
 - Outside projected radius of influence of other wells
 - Existing land use
 - Proximity to existing pipelines

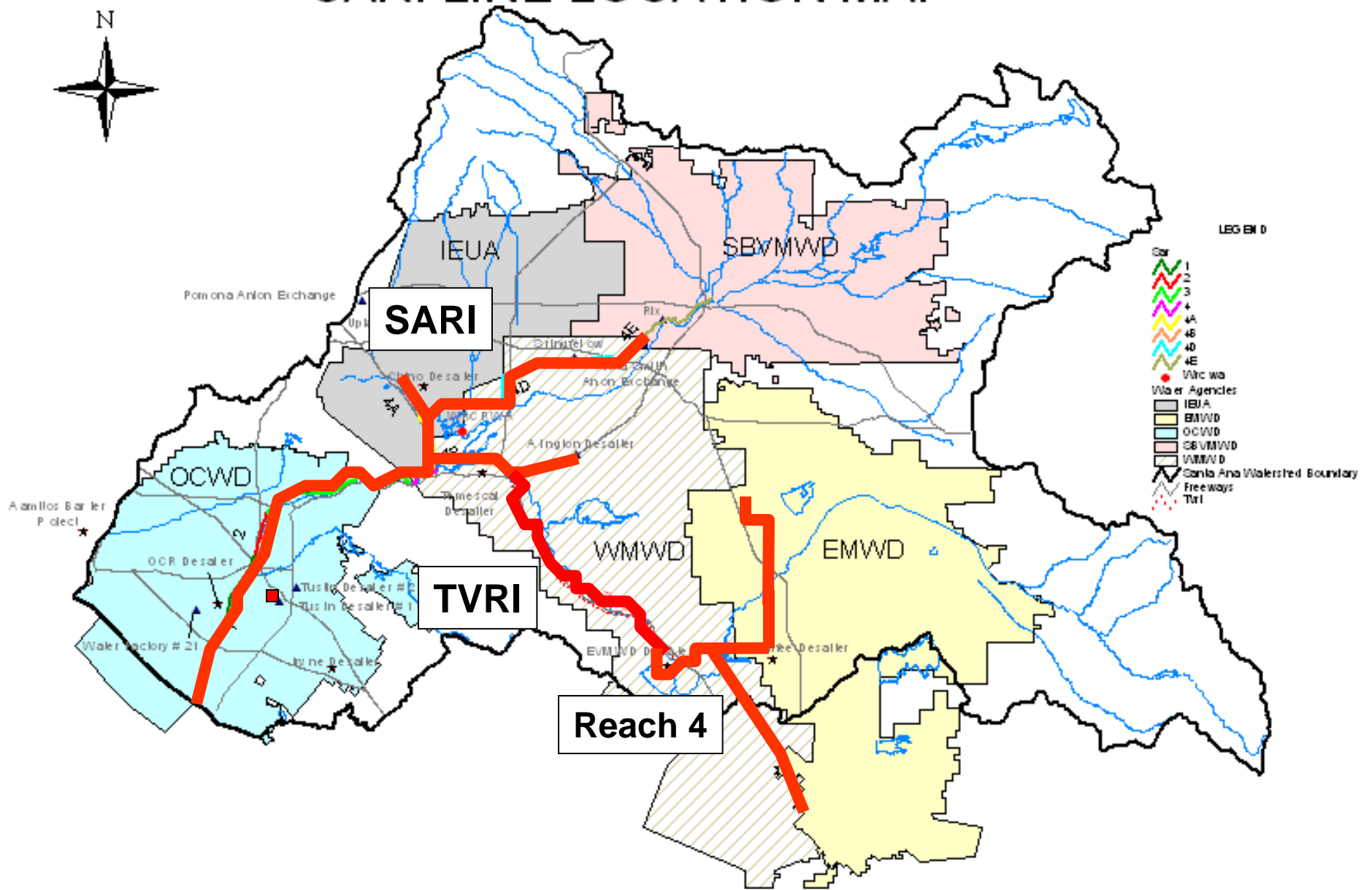
EMWD's Desalination Program

- (3) desalters (3,000 - 4,500 AF/YR each)
- Up to (12) brackish groundwater wells
- Feedwater pipelines linking extraction wells and desalters

EMWD Desalters



SARI LINE LOCATION MAP



Reach 4



Temecula Valley Effluent Pipeline

Perris Valley RWRf

Sun City RWRf

Diamond Valley Lake

Winter Discharge to Lake
Elsinore and Temescal Creek

Benefits
Increased Capacity
Lower Energy Costs
New Customers

Booster Station

Temecula Valley Effluent Pipeline

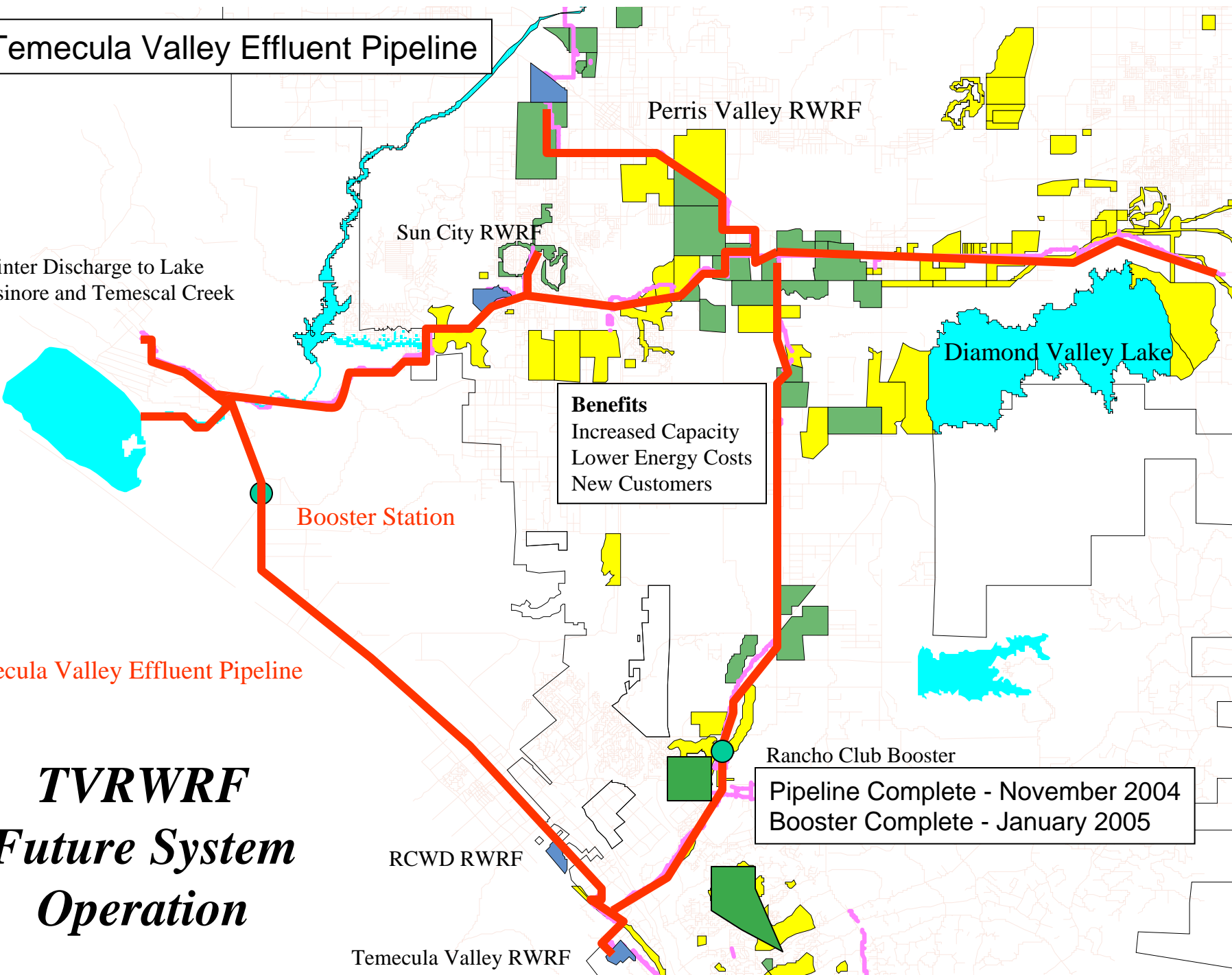
Rancho Club Booster

Pipeline Complete - November 2004
Booster Complete - January 2005

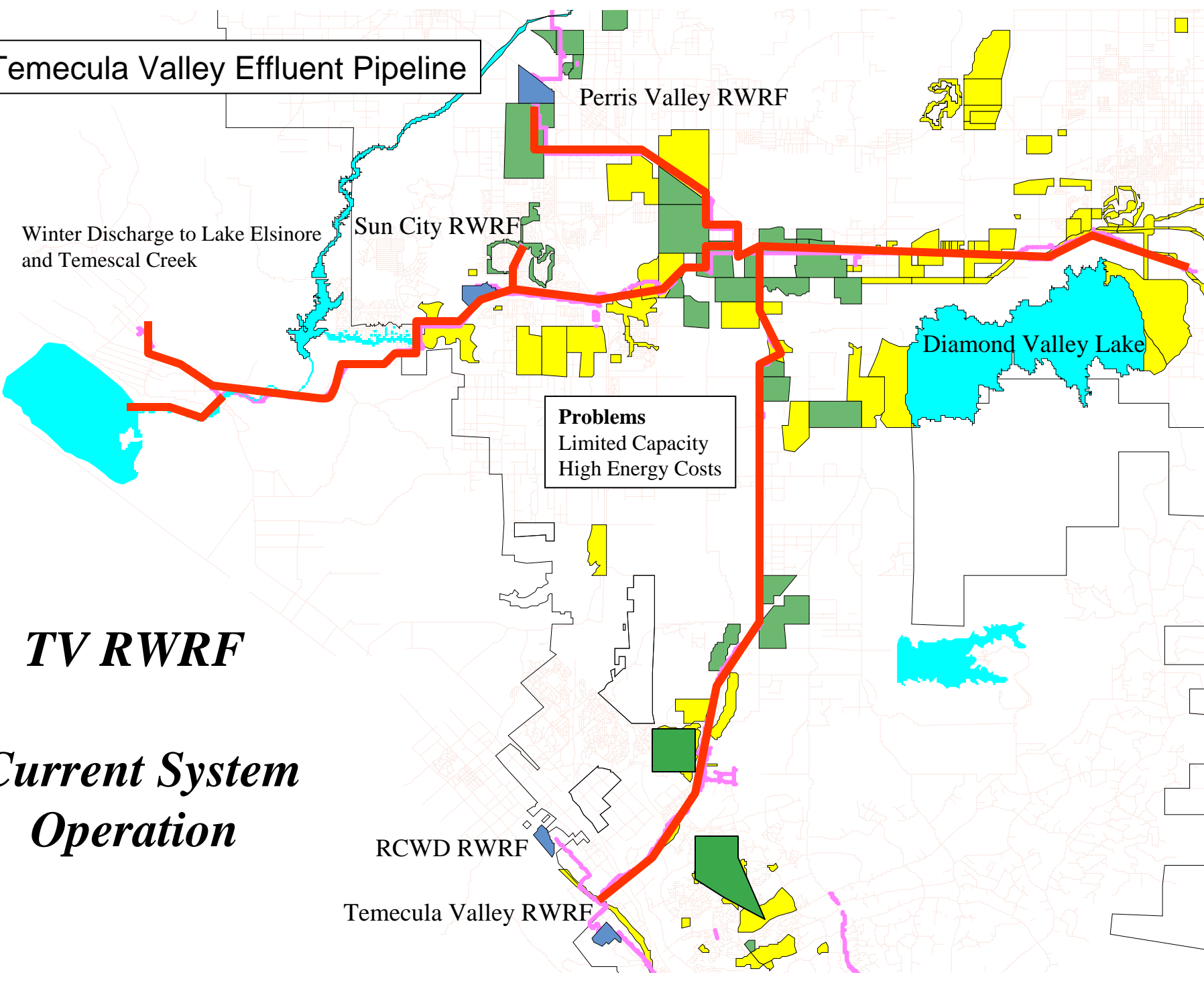
RCWD RWRf

Temecula Valley RWRf

TVRWRf
Future System
Operation



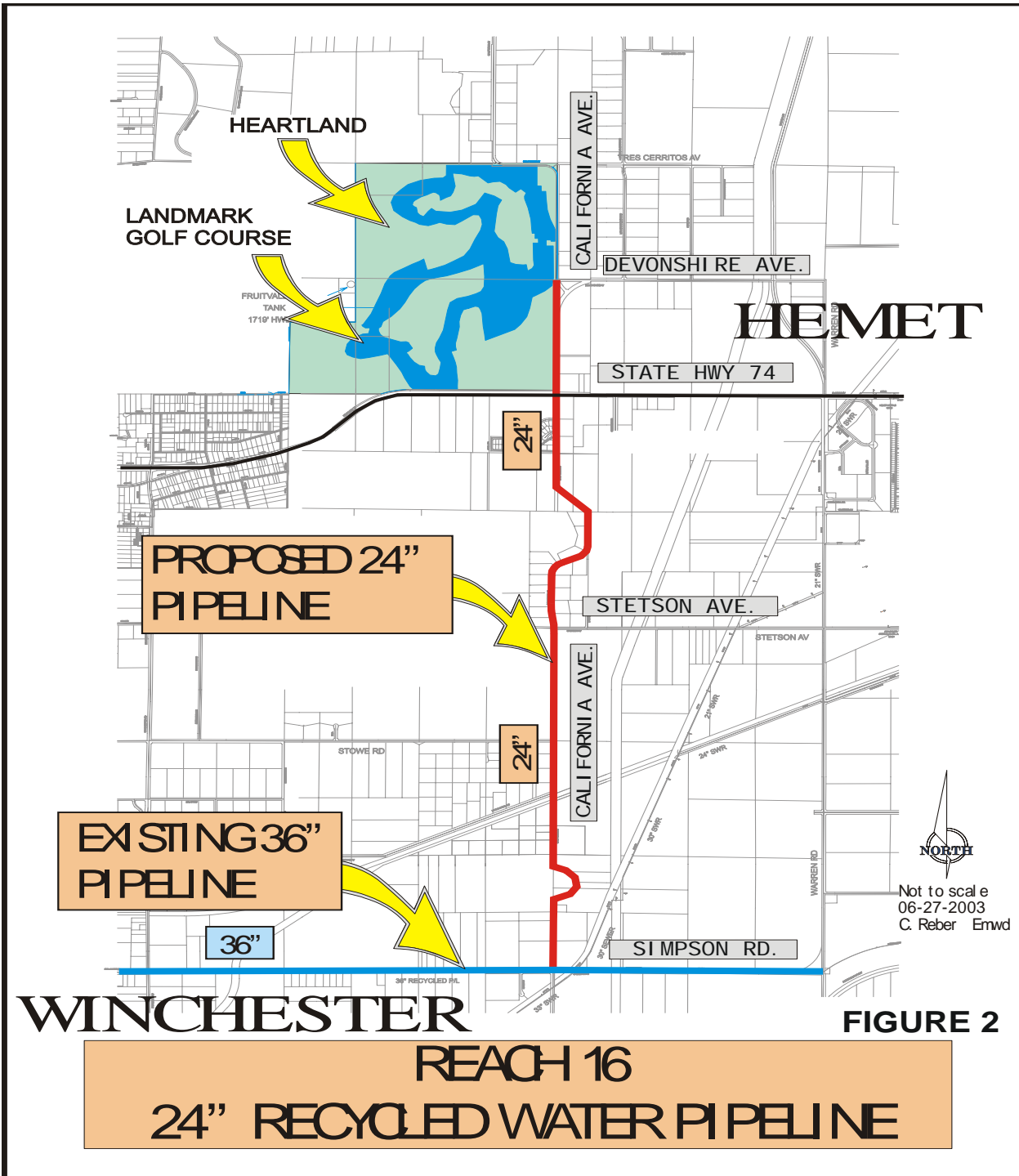
Temecula Valley Effluent Pipeline



Problems
Limited Capacity
High Energy Costs

TV RWRf

***Current System
Operation***

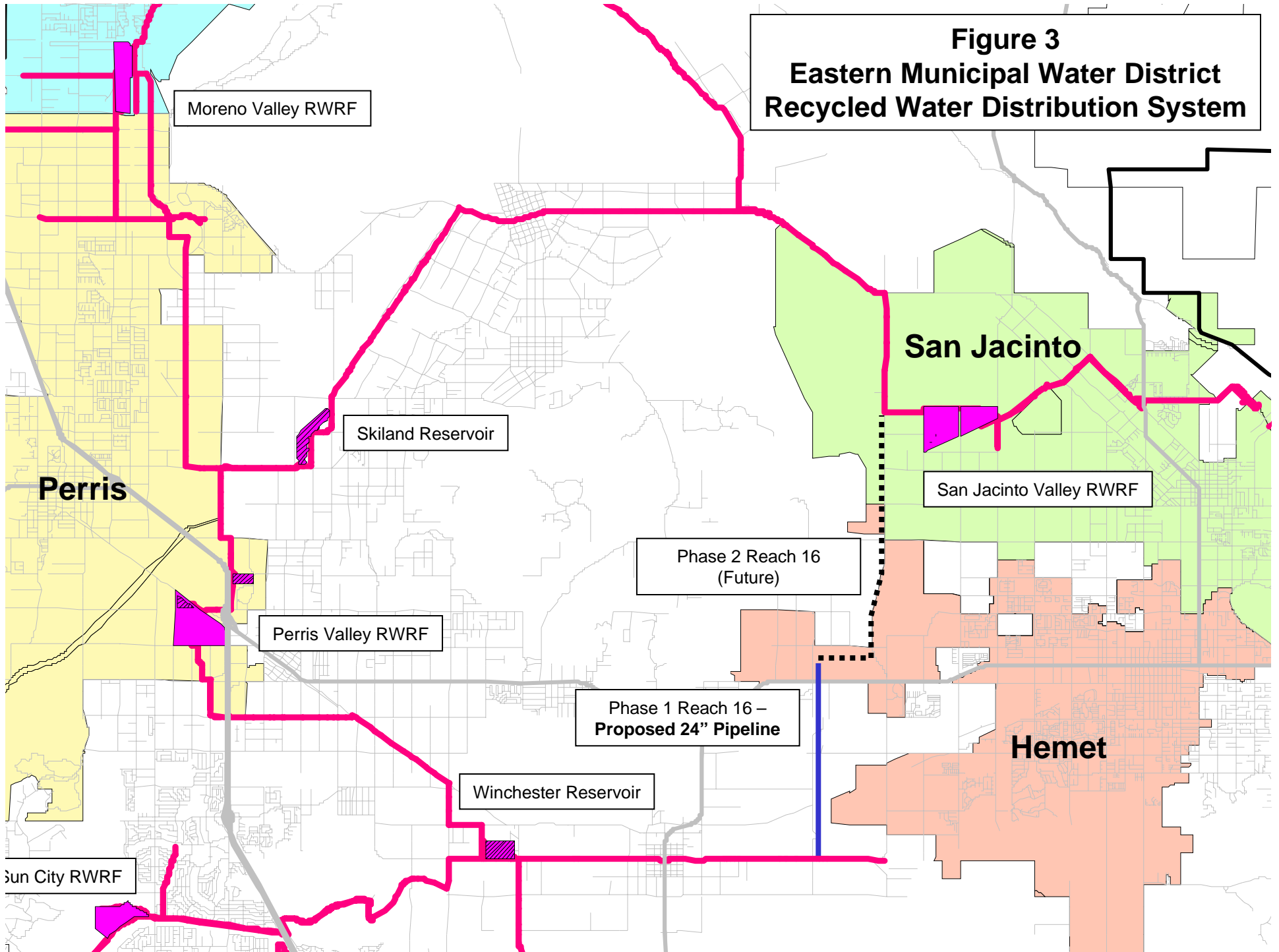


WINCHESTER

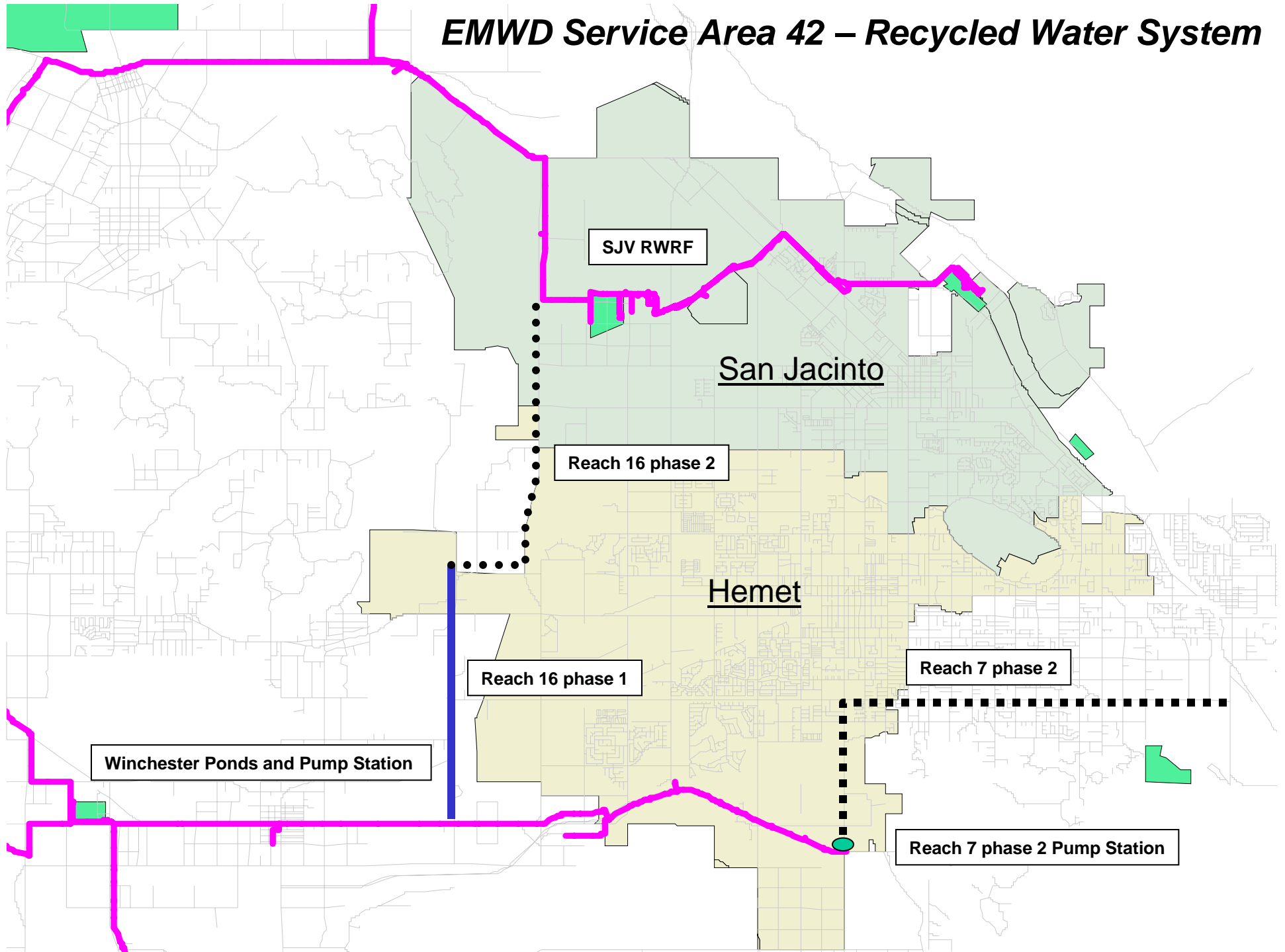
FIGURE 2

REACH 16
24" RECYCLED WATER PIPELINE

Figure 3
Eastern Municipal Water District
Recycled Water Distribution System



EMWD Service Area 42 – Recycled Water System



San Jacinto Agricultural In-lieu
Water Supply Project

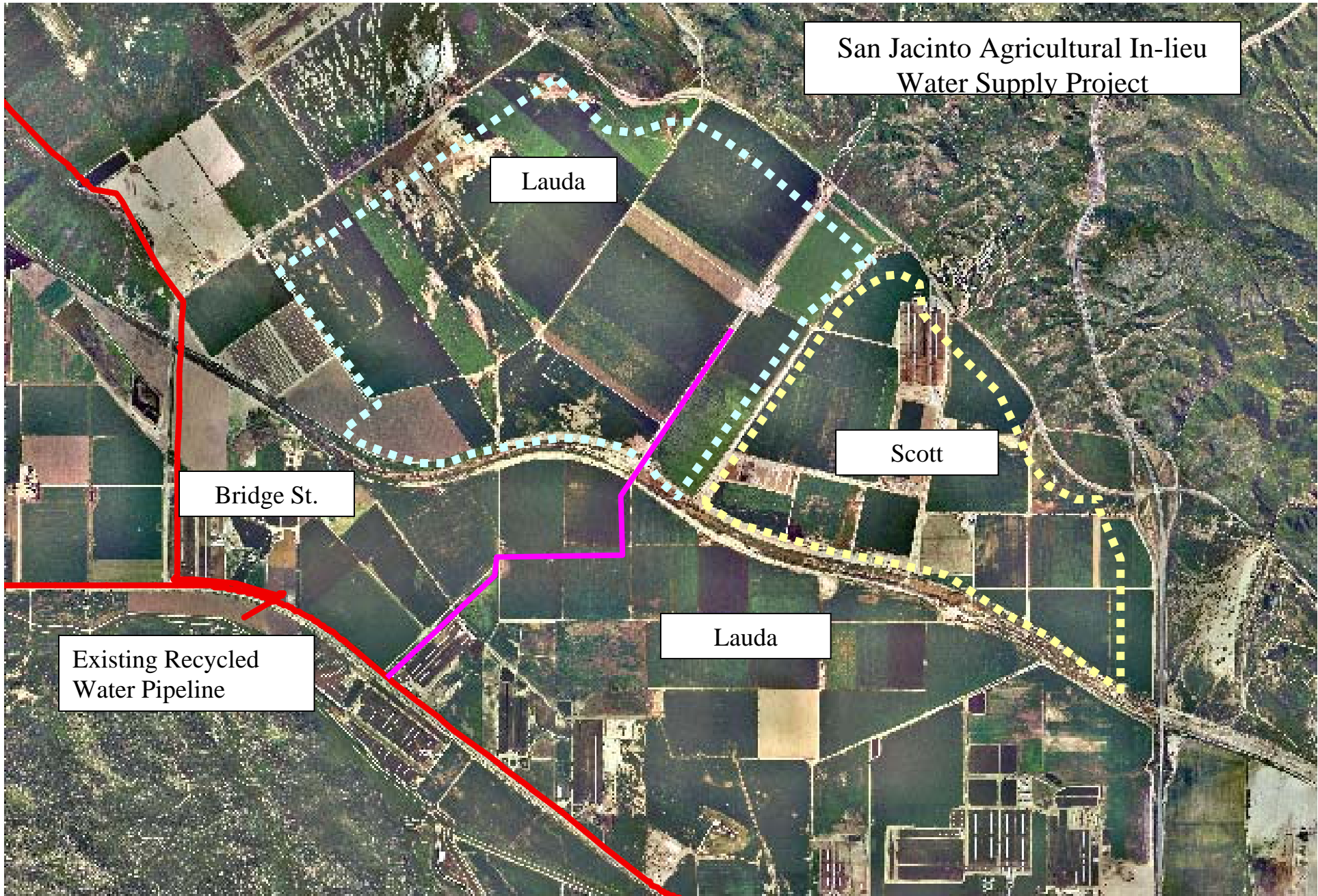
Lauda

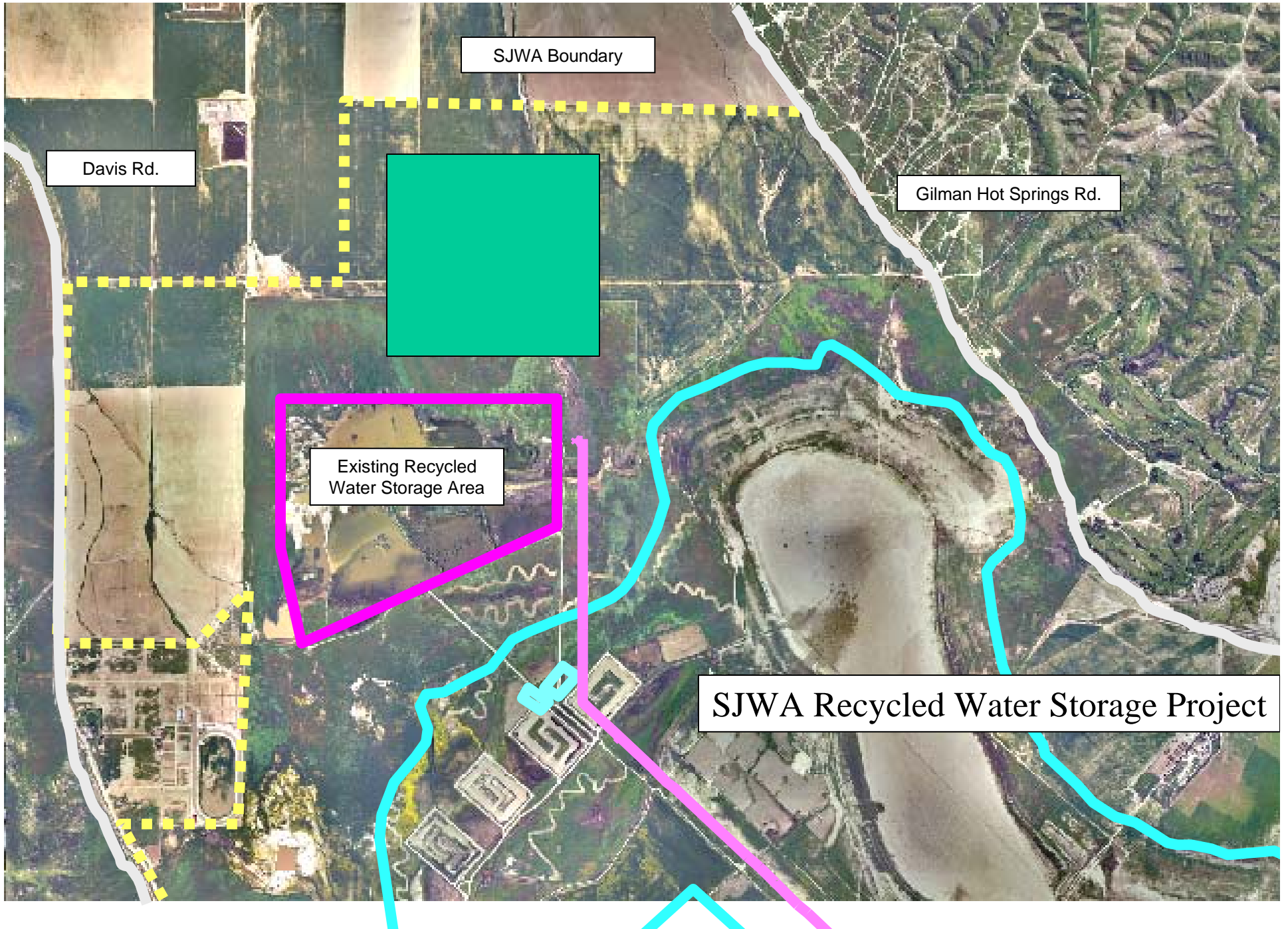
Scott

Bridge St.

Existing Recycled
Water Pipeline

Lauda





SJWA Boundary

Davis Rd.

Gilman Hot Springs Rd.

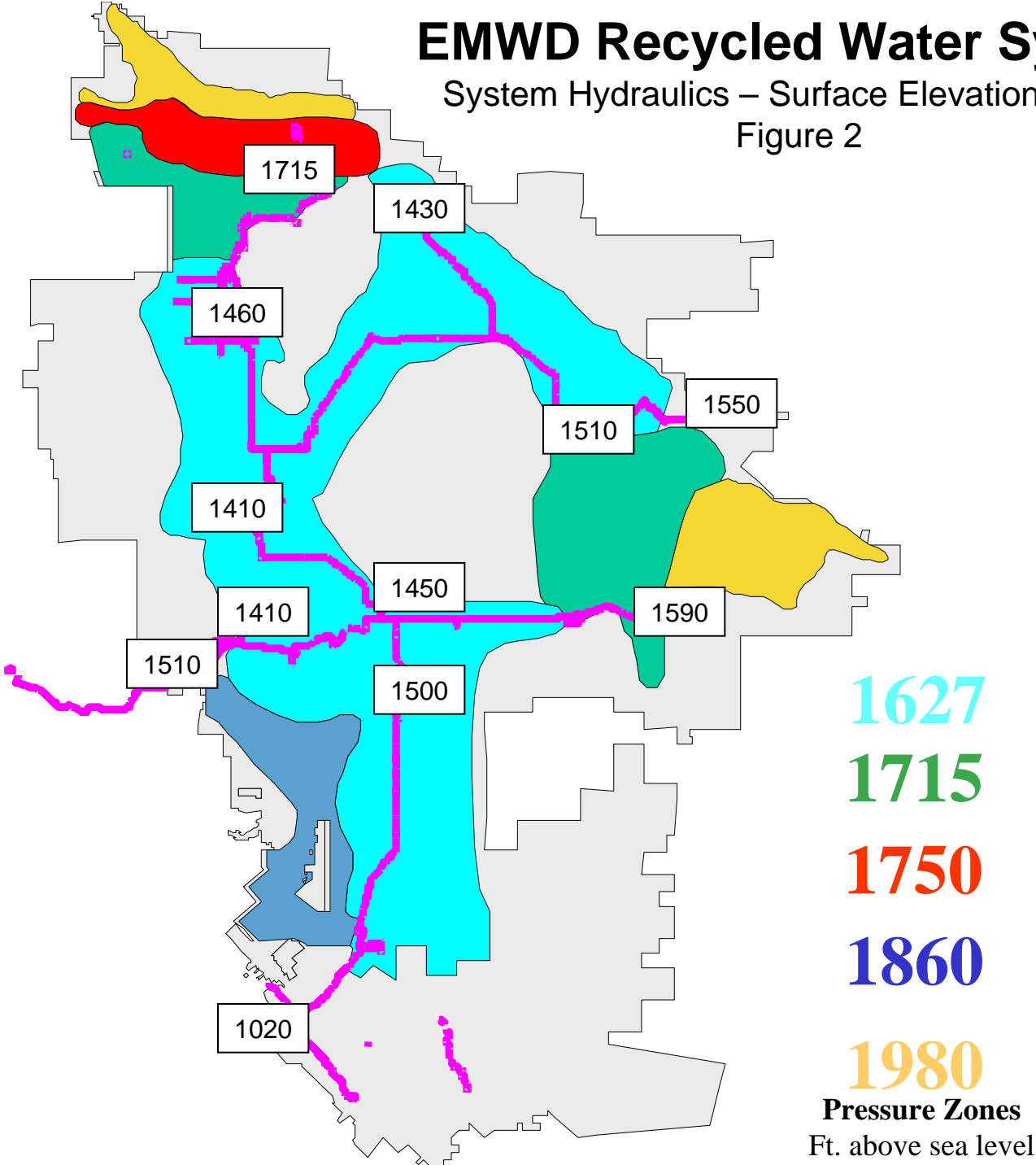
Existing Recycled Water Storage Area

SJWA Recycled Water Storage Project

EMWD Recycled Water System

System Hydraulics – Surface Elevation in Feet

Figure 2



Recycled Water System Pressurization Plan

Phase I - Establish 1627 PZ

- ✓ Strategy - Utilize VFD's and pressure sustaining valves to develop a "continuously pumped" system with constant pressure and variable flow
- ✓ Utilize existing equipment where possible - avoid interim "throwaway" facilities
- ✓ Evaluate operation scenarios for the Santa Margarita Watershed

Phase 2 - Expand 1627 PZ and Add Storage

- ✓ Construct new storage tanks or convert existing potable tanks
- ✓ Integrate SJRWRF into 1627 when tertiary expansion is complete
- ✓ Implement Santa Margarita Operating Plan

Phase 3 - Develop Outlying Pressure Zones

- ✓ Complete Reach 16 and establish the 1715 pressure zone
- ✓ Construct Reach 7 Phase 2 pipeline and pump station
- ✓ Construct additional pressure zones as needed (based on new demands).

Phase 2 – Additional Storage

