

Santa Ana River Enhanced Recharge Phase 1B Project



In partnership with the Riverside Entities and the Conservation District



Project Partners



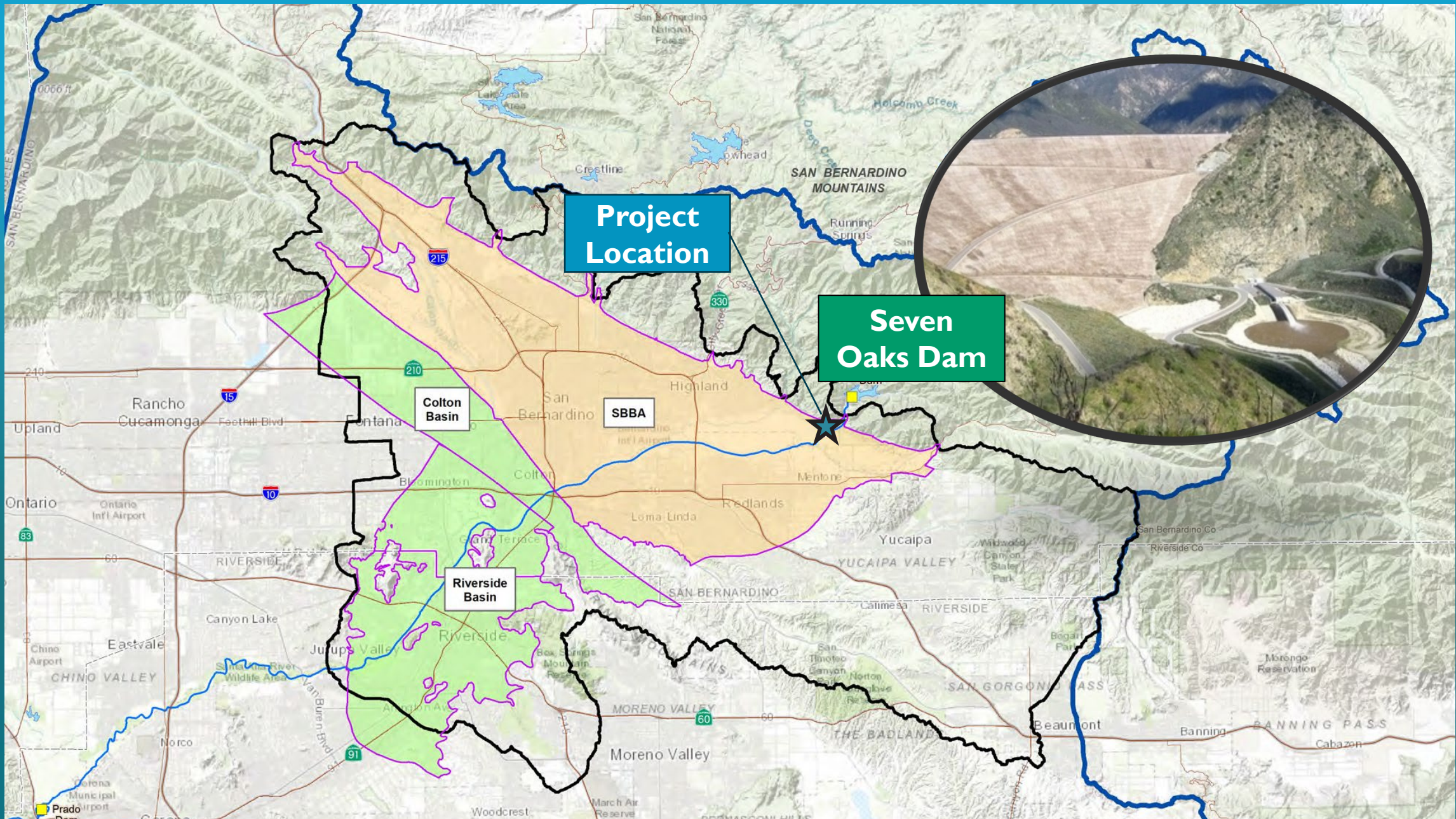
Building Water Supply Resiliency



Santa Ana River Water Rights

- Petition process started in the early 1990's
- Permits obtained in 2010
- Water Conservation resulting from Seven Oaks Dam along the Upper Santa Ana River
- San Bernardino Valley and Western Entities
- Divert up to 198,000 AF a year





Stormwater Capture: Enhanced Recharge Project – Phases



SARER I B PROJECT

What is the Enhanced Recharge in the Santa Ana River Basins Phase I B (SARER I B)?

- ✓ Wet Year recharge of up to 78,500 af/yr.
- ✓ Instantaneous Capture of 500 cfs.
- ✓ “New Conservation” of approx. 11,000 af/year.*

New facilities under construction:

- ❖ 20 new recharge basins
- ❖ 1.2 miles improved main channel
- ❖ 50 Inlet & Outlet Structures
- ❖ 7 New Basin Inlet Diversions
- ❖ Improved recharge metering throughout basins



*“New Conservation” is water over and above what would have recharged naturally in the channel downstream

SARER Project Phase I B Facts

20

new recharge basins with levees, access roads, canals, inter-basin pipelines connectors, and flow control structures.

200

acres of enhanced habitat created

26

Billion gallons of water Recharge per year

33,000

Approx. cubic yards of concrete installed

1 million

About cubic yards moved

500 CFS

Instant diversion Capacity

600

Project Area Acres

4.9

million lbs of steel

Project done in partnership with the Western Entities.



APR 2023



MAY 2023



JUN 2023



JUL 2023



AUG 2023



SEP 2023



OCT 2023



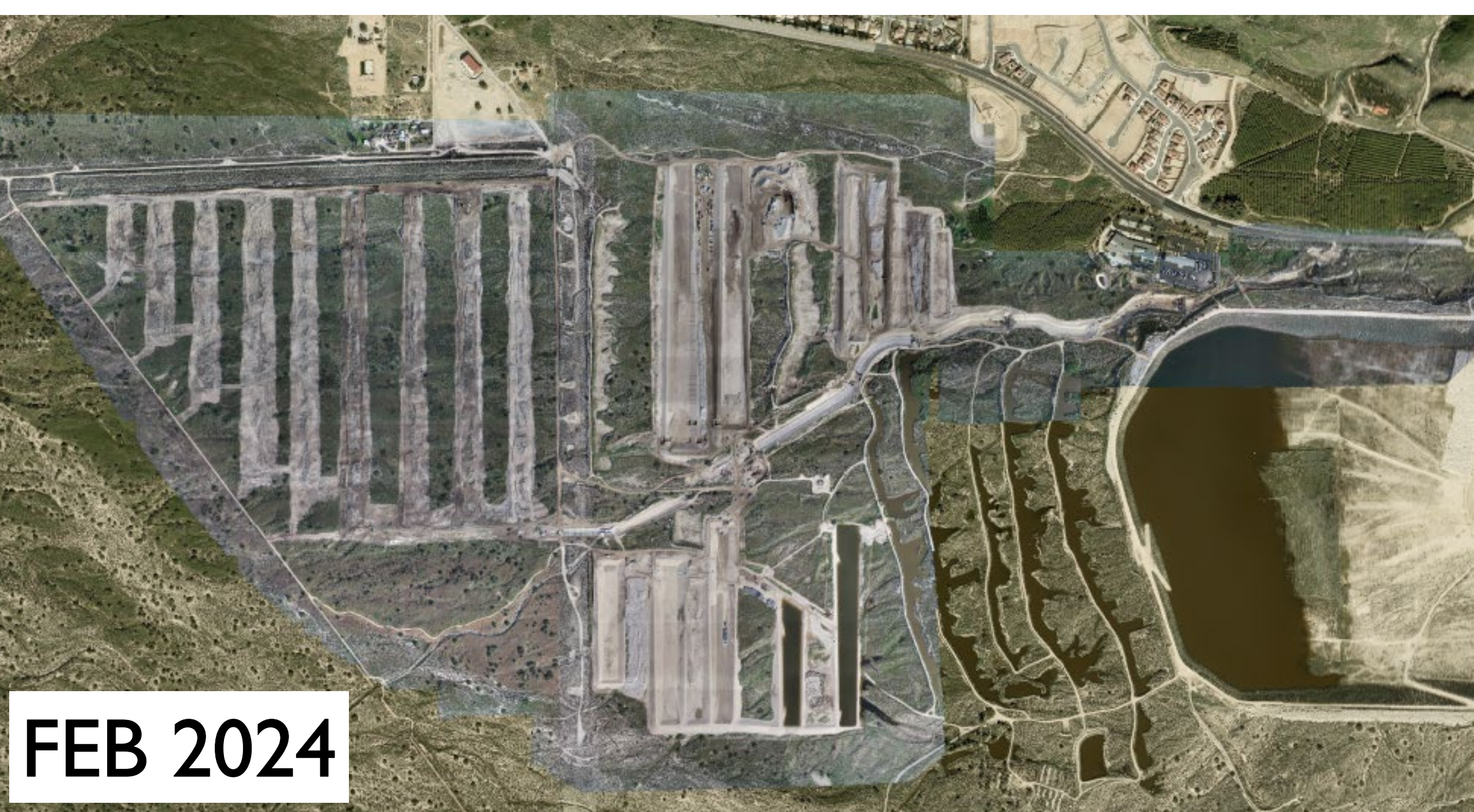
NOV 2023



DEC 2023



JAN 2024



FEB 2024



MAR 2024



APR 2024



MAY 2024



JUN 2024



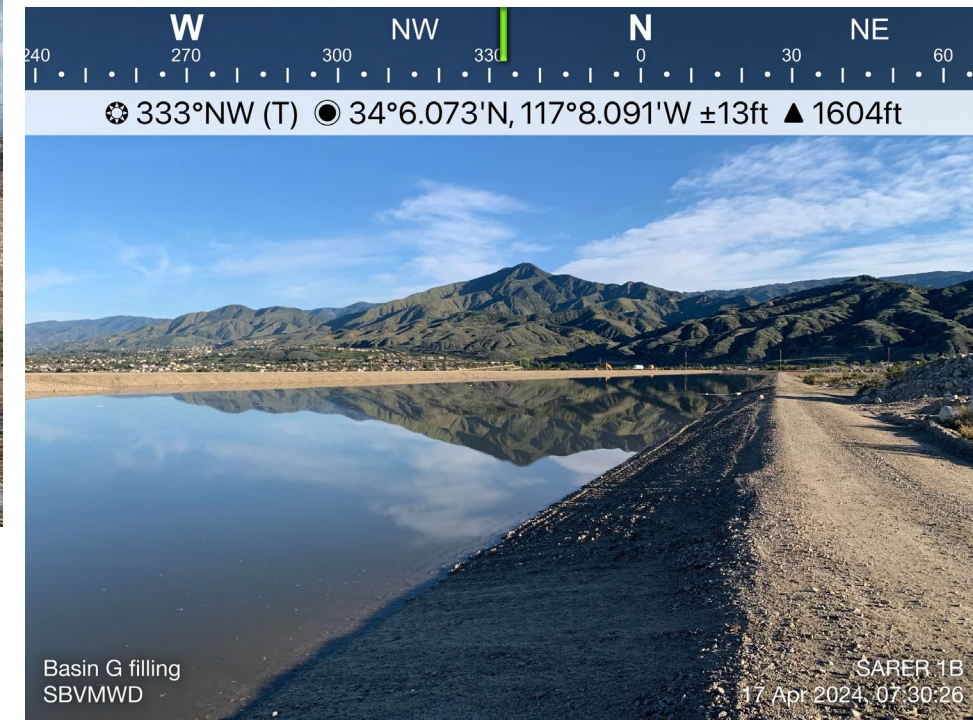
JUL 2024



AUG 2024

SARER 1B PROJECT

- CONSTRUCTION PROGRESS
 - BASINS GRADING



SARER 1B PROJECT

- CONSTRUCTION PROGRESS
- MAIN CHANNEL



SARER IB PROJECT

- CONSTRUCTION PROGRESS
 - STRUCTURES & PIPING



ENVIRONMENTAL PERMITTING

1. Current project is an environmentally superior design
2. First Covered Activity to be implemented under the Wash Plan HCP (first to be issued a Certificate of Inclusion)
3. US Fish and Wildlife Service applauded Valley's redesign efforts: Permanent impacts reduced by 30%
4. Largest acreage project to be issued an Incidental Take Permit (ITP) for impacts to San Bernardino kangaroo rat from California Department of Fish and Wildlife (CDFW)
5. There were 70 (!) active bird nests within the site in 2023. Nesting least Bell's vireo in 2024.



PROJECT ENHANCEMENTS & VALUE ENGINEERING

- Original contract of \$54,859,335
 - PCO \$2.28 Million
- Redesign of Main Channel, Drop Structures, and Low Flow Crossings
- Redesign of Weir Inlet Structures for Basin Inter-Connections
- New Basin 14 Seepage Cut-off Walls
- Redesign of EVWD Main Channel Culvert Crossings
- Redesign Confluence of Main Channel
- Added HoboConnect Flow Measuring Devices to Project

REASONS FOR CHANGE:

- ✓ Constructibility
- ✓ Hydraulic improvements
- ✓ Environmental impacts avoidance
- ✓ Operability and reliability