



KERN FAN GROUNDWATER STORAGE Project

January 7, 2021

PARTNERSHIP OF ROSEDALE AND IRWD







Rosedale-Rio Bravo Water Storage District (Rosedale)

Provides water replenishment to over 27,500 acres of irrigated agricultural lands. A CVP water user.

Irvine Ranch Water District (IRWD) Established in 1961

Established in 1959

Provides retail water, sewage and recycled water service to over 181 square miles in Orange County



Rosedale & IRWD have a long, successful history of jointly developing groundwater storage projects in Kern County – <u>Formed Joint Powers Authority in 2020</u>



The Kern Fan Groundwater Storage Project:

- A new 100,000-acre-foot groundwater storage facility
- Stores "new" water otherwise lost to ocean
- Improves operational flexibility and resiliency
- Reduces pressure on the Delta ecosystem
- Provide water supply, fish and wildlife benefits
- Strategically located near federal, state, and local water conveyance facilities

Implemented by Groundwater Banking Joint Powers Authority

PROJECT OVERVIEW







PROJECT FACILITIES AND CAPACITIES

New Conveyance from California Aqueduct

- New turnout
- New 10-mile canal with 500 cfs capacity
- 3 lift stations

1,050 Acres of Recharge Basins

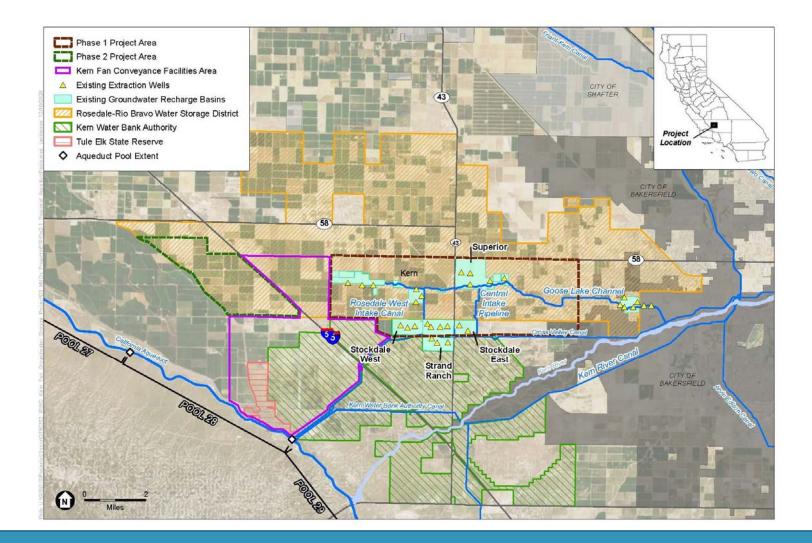
- Wet year recharge capacity of 100,000 AF
- 100,000 AF storage capacity

12 Recovery Wells

- Combined capacity up to 70 cfs
- Stores "new" water otherwise lost to the ocean
- Article 21 water and other supplies

Improves flexibility in operation of State's water systems

• No negative impacts to the SWP or CVP

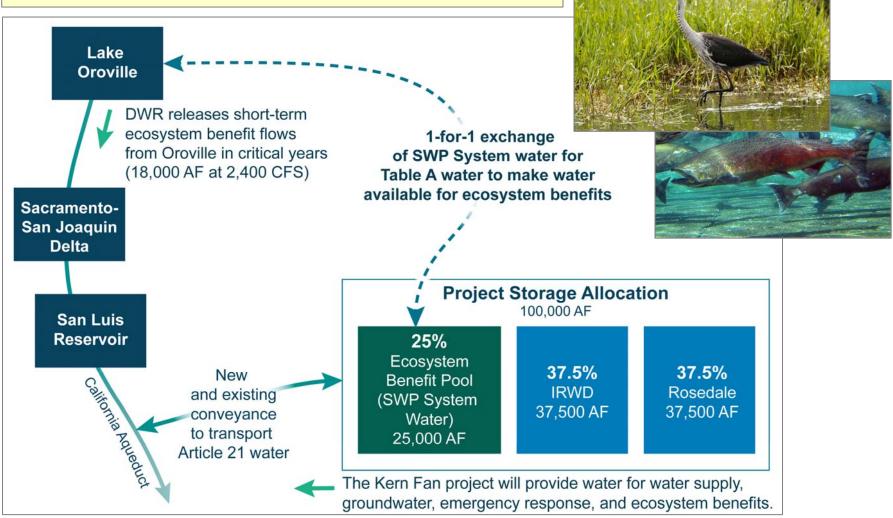


PROJECT LOCATION MAP

PROJECT OPERATIONS

Water Releases Coordinated to Benefit Species

(e.g. chinook salmon & green sturgeon)



PROJECT COSTS & BENEFITS





NPV of \$410 M in Benefits



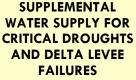
M&I AND

INTERMITTENT

WETLAND HABITAT







IMPROVED

GROUNDWATER

LEVELS



HABITAT FOR DELTA FISH SPECIES



PERMANENT CROP **PRESERVATION &** ECONOMIC BENEFITS

PROJECT STATUS

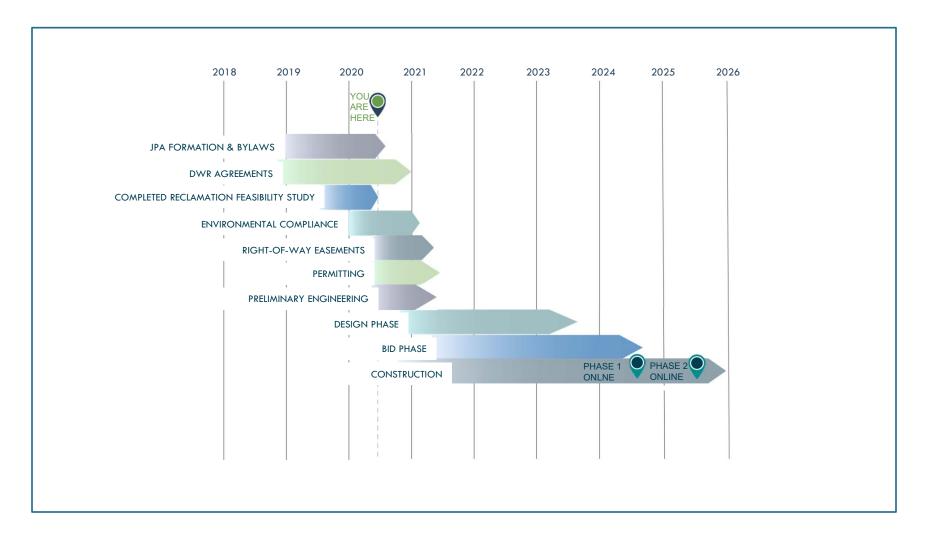
 Awarded \$67.5 million in California Prop. 1 Water Storage Funding
30% Design / Feasibility Report in

progress

- Working with DWR and KCWA on:
 - Hydraulic modeling of California Aqueduct
 - Ecosystem exchange concepts
 - Aqueduct subsidence and availability of Article 21 water
- Land search ongoing
- Environmental compliance
- EIR Certified in December 2020
- NEPA Compliance in early 2021
- DWR taking lead an environmental compliance for ecosystem pulse and SWP related operations



PROJECT SCHEDULE



CONTACT INFORMATION





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