



Update on IRWD Water Banking Projects

MWDOC Policy and Operations
Committee Meeting

April 2, 2018



Presentation Agenda

1. IRWD's Existing Water Banking Projects
2. The Kern Fan Groundwater Storage Project
3. Banked Water for Orange County
4. Next Steps



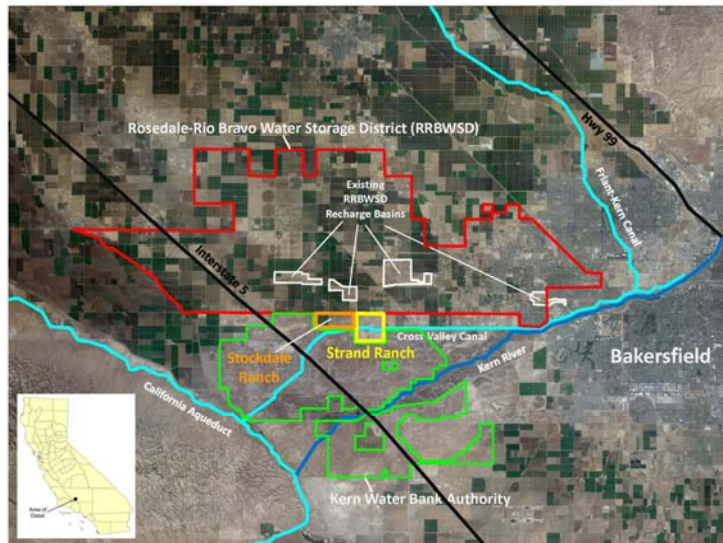
IRWD Water Banking Projects



IRWD Water Banking Projects Objective

Water Banking Objective:

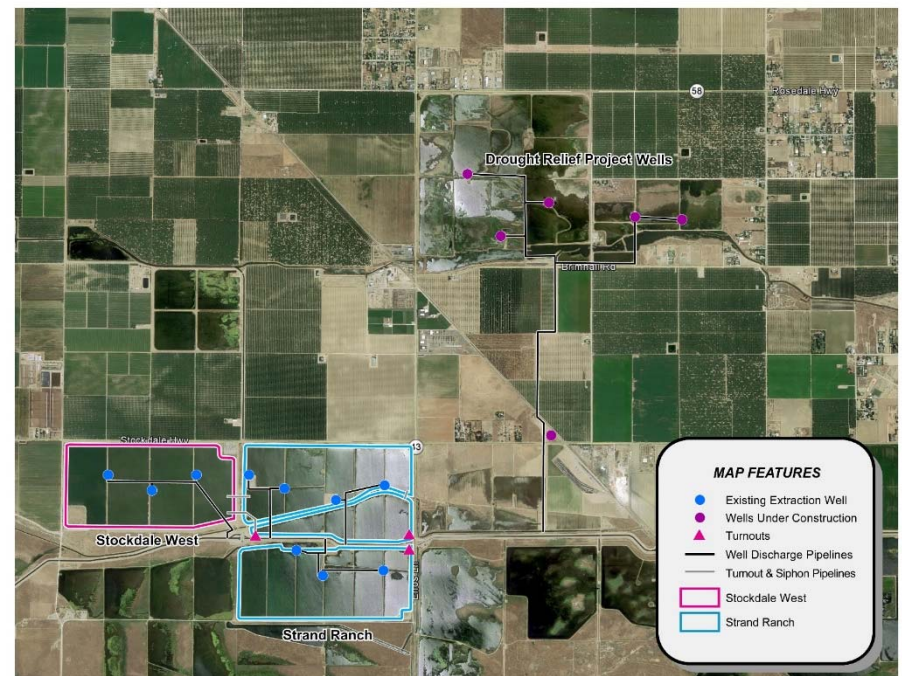
Capture and store water available in wet years for use in droughts and periods of supply interruptions.



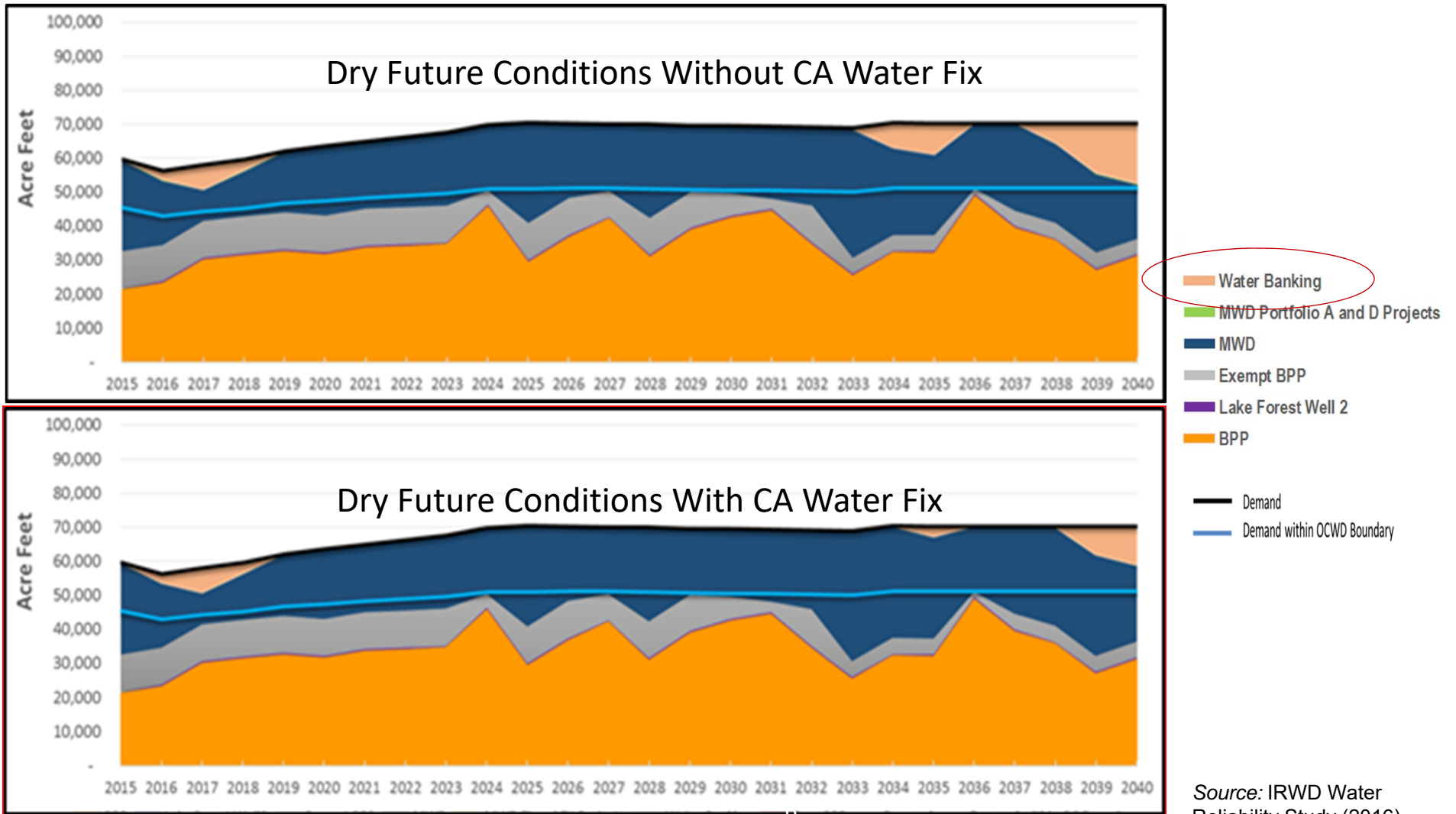
IRWD Water Banking Projects

Banking Components and Facilities:

- ✓ Aquifer
(126,000 AF of storage)
- ✓ Land: 761 acres for recharge
(45,000 AFY)
- ✓ Water Supply
(Unbalanced exchanges, etc.)
- ✓ Recovery: 13 wells
(70 cfs; 29,000 AFY)
- ✓ Conveyance: three turnouts
(access to the California Aqueduct and Cross Valley Canal)

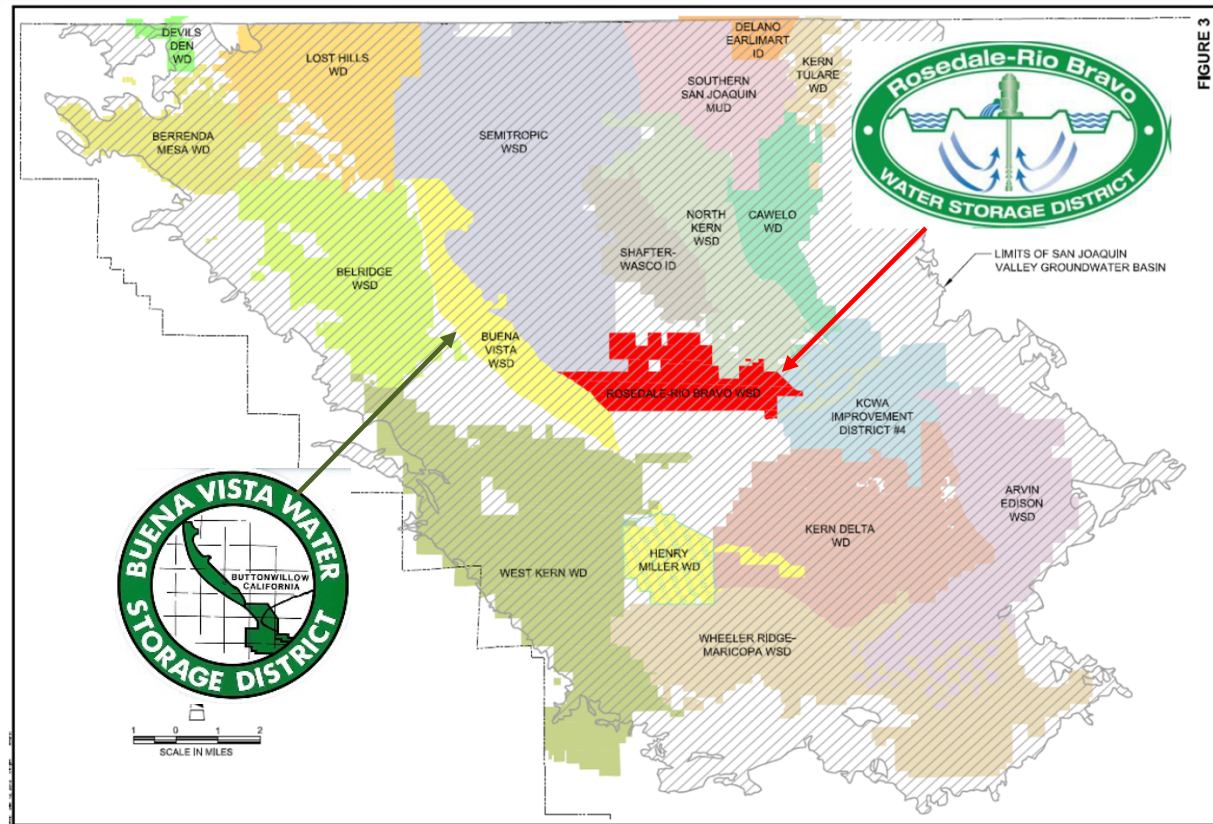


Water Banking Benefits: Reliability



Source: IRWD Water Reliability Study (2016)

Long-Term Partnerships Make it Work



Dudley Ridge Water District

Kern Water Bank Authority



Sources of Water

Water from the State Water Project (SWP):

Unbalanced Exchange Programs for Table A Water:

- Carpinteria Valley Water District
- Antelope Valley East Kern Water Agency
- IRWD's Jackson Ranch in Dudley Ridge Water District
 - 883 acres with 1,748 AF of annual Table A Entitlement
 - Participation rights in the Kern Water Bank (9,500 AF of storage)



Water from Non-SWP Supplies:

- Kern River Flood Flows via Rosedale; IRWD retains up to 50%.
- Kern River Pre-1914 High-Flow Water via BVWSD; IRWD retains 50%
- Other Wet-Year Exportable Supplies (as available)

Conveyance: IRWD / MWDOC / MWD Agreements

The *Coordinated Operating and Exchange Agreement* (2011):

- Allows IRWD to secure SWP water to store in IRWD Water Banks *or* in Southern California;
- MWD can borrow SWP supplies from IRWD; and
- Water qualifies as **Extraordinary Supply**.



The *Template Wheeling Agreement*:

- Allows access to MWD facilities to transport non-SWP water;
- Must be executed for each transaction;
- Water qualifies water as **Extraordinary Supply**.



Note: A pilot wheeling agreement was executed in 2014.

Water Stored in IRWD Water Banks

Supplies in Storage as of March 2018:

Owner	Water in Storage (AF)
IRWD	30,559
IRWD Partners	9,844
TOTAL	40,403



Kern Fan Groundwater Storage Project

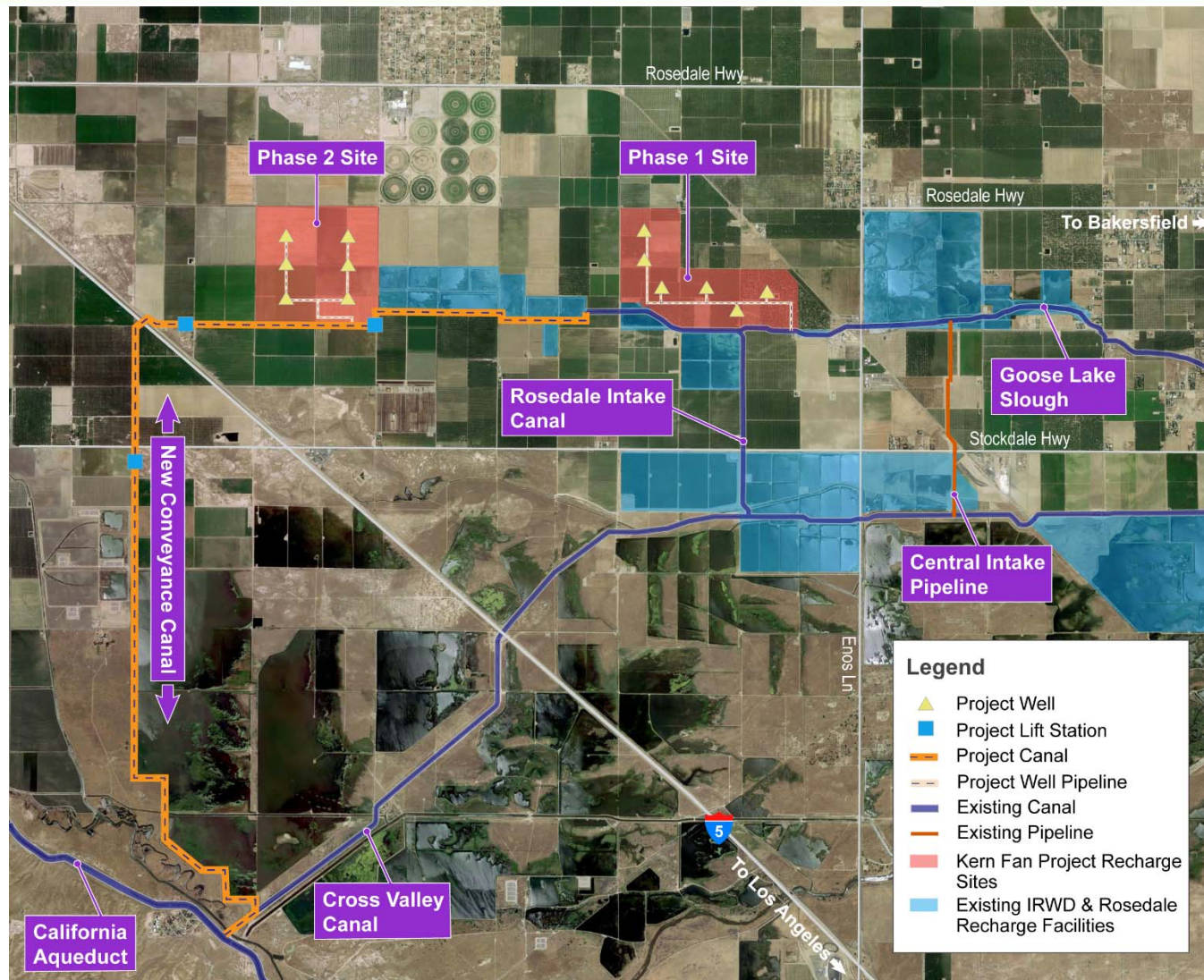


Kern Fan Project Highlights

- Groundwater storage project to be implemented jointly by IRWD and Rosedale-Rio Bravo Water Storage District
- Grant application submitted to California Water Commission for \$86 million in Prop 1 funding from the Water Storage Investment Program
- Significant water supply and environmental benefits:
 - Up to 100,000 AF of annual recharge capacity.
 - Up to 50,000 AF of annual recovery capacity.
 - Up to 100,000 AF of storage capacity.
 - Benefits shared with State for ecosystem purposes.
- Online as early as 2023.
- Water supplies available.



Proposed Kern Fan Project (Preliminary Locations)





Banked Water for Orange County



Proposed Pilot Program: Banked Water for OC

Purpose: Provide retail agencies with Extraordinary Supply when MWD declares a Water Supply Allocation or during emergency conditions.

Benefits: Increased water supply reliability.

Responsibilities: IRWD manages facilities and provides banked water and MWDOC administers pilot program with its member agencies.

Proposed Term: Seven years

Pilot Program Water: 5,000 AF

Options: MWDOC secures annual option for right to call on water



Proposed Next Steps for MWDOC and IRWD

1. IRWD / MWDOC Joint Meeting.
2. Presentation to MWDOC Member Agencies.
3. Develop Banked Water for Orange County program costs and terms.
4. Prepare and execute Program agreement between IRWD and MWDOC.





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