

Irvine Ranch Water District

IRVINE RANCH WATER DISTRICT OVERVIEW

MAY 21, 2025

AGENDA

- About IRWD
- Water Supply Resilience Projects
- Doing Things Differently
- Questions



Irvine Ranch Water District

ABOUT IRWD



ABOUT IRWD

A not-for-profit local public agency serving residents and businesses throughout central Orange County.

181 square miles
20% of Orange County

445,000
Residents served

670,000
Daytime population

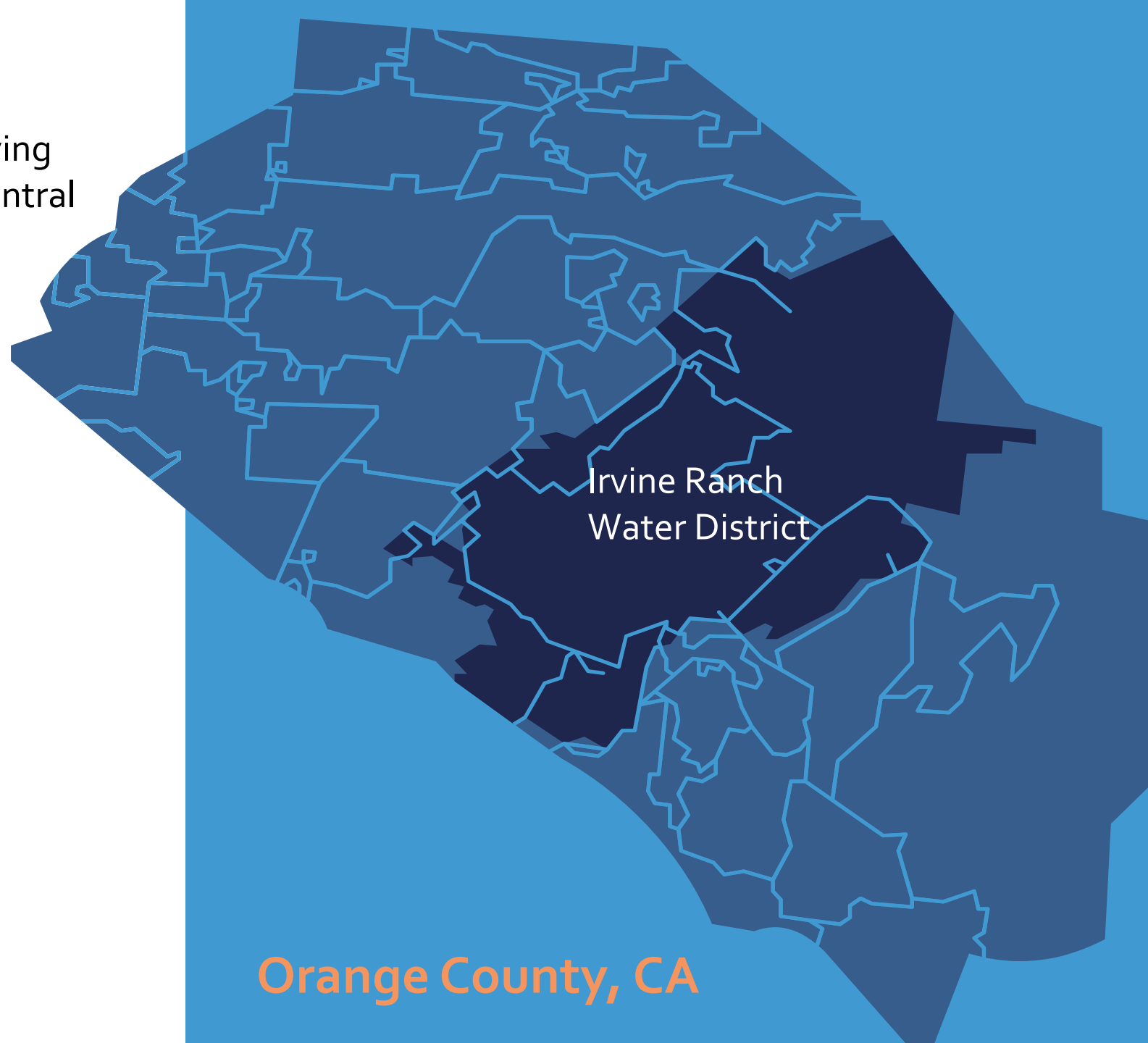
125,000
Service connections

425
Employees

Serving all or parts of:

Irvine
Lake Forest
Newport Beach
Tustin
Costa Mesa
Orange
Unincorporated Orange County

Irvine Ranch
Water District



IRVINE RANCH WATER DISTRICT SERVICES



DRINKING WATER

6 water treatment plants

27 wells

37 closed reservoir tanks

1,976 miles of pipeline



SEWER COLLECTION

2 sewage treatment plants

1,374 miles of collection pipes

Sewer water treated and reused for nondrinking purposes



RECYCLED WATER

4 recycled water reservoirs

25 million gallons per day

576 miles of pipeline

130+ dual-plumbed buildings

6,400+ metered connections



URBAN RUNOFF

45 wetland treatment sites

Removes nutrients

Cost-effective

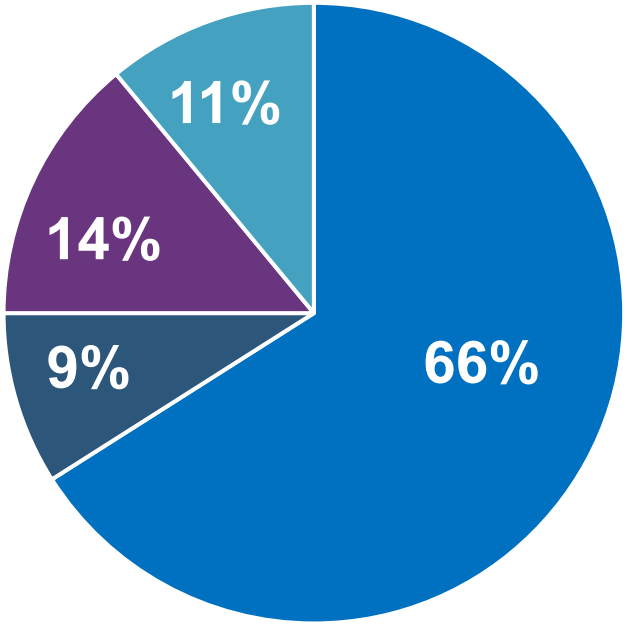
Environmentally sound

Modeled after natural treatment ponds

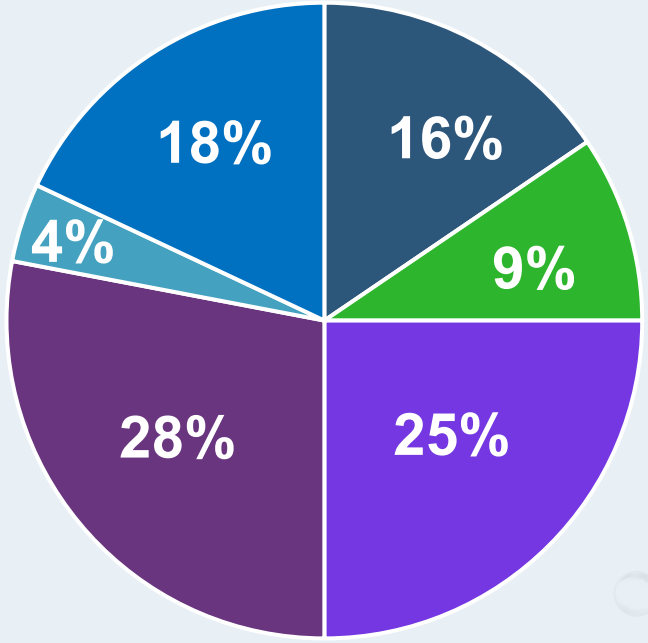
Irvine Ranch Water District

IRWD WATER SOURCE PORTFOLIO

1990



Today



Over 50% of IRWD's total water supply is from potable reuse or IRWD-produced recycled water.

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GROWING COMMUNITY, GROWING EFFICIENCY

1990



Water provided:
70,000 acre-feet

Population served:
114,000

IRWD customers are among the most efficient in California

2023



Water provided:
87,000 acre-feet

Population served:
453,000

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WATER SUPPLY RESILIENCE



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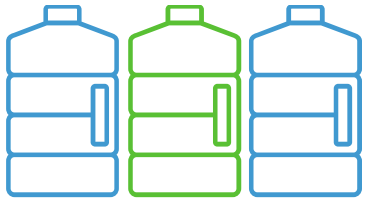
SYPHON RESERVOIR IMPROVEMENT PROJECT



Prepares IRWD for the future by adding 4,500 AF **of storage of drought-proof recycled water**



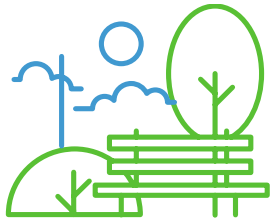
Enables IRWD to **use nearly 100%** of the recycled water it produces



Provides water to **fight wildfires** throughout the region



Saves IRWD $85 million over 50 years and **preserves low customer rates**



Keeps parks, medians, athletic fields, public landscaping, **Green and beautiful**



Project Summary:

- Total Project Cost: $291 million
- Project Completion: 2031

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SANTIAGO CREEK DAM IMPROVEMENT PROJECT

Increased water supply resiliency

- The project will improve IRWD's ability to capture more local water, thereby reducing imported water purchases.
- A higher spillway crest will restore the storage capacity Irvine Lake to its original capacity of 28,000 acre-feet.



Improved efficiency and seismic performance

- Replacing the dam's spillway will account for larger maximum flood events.
- Improving the dam outlet tower and dam face will increase performance during seismic events.
- Adding valve locations on the new outlet structure will improve IRWD's control of the flow from the reservoir.

Project Summary:

- Total Project Cost: $470 million
- Public Benefits: $4.2 billion
  (e.g., public safety / flood reduction, water storage, habitat, etc.)
- Project Schedule: Complete in 2031



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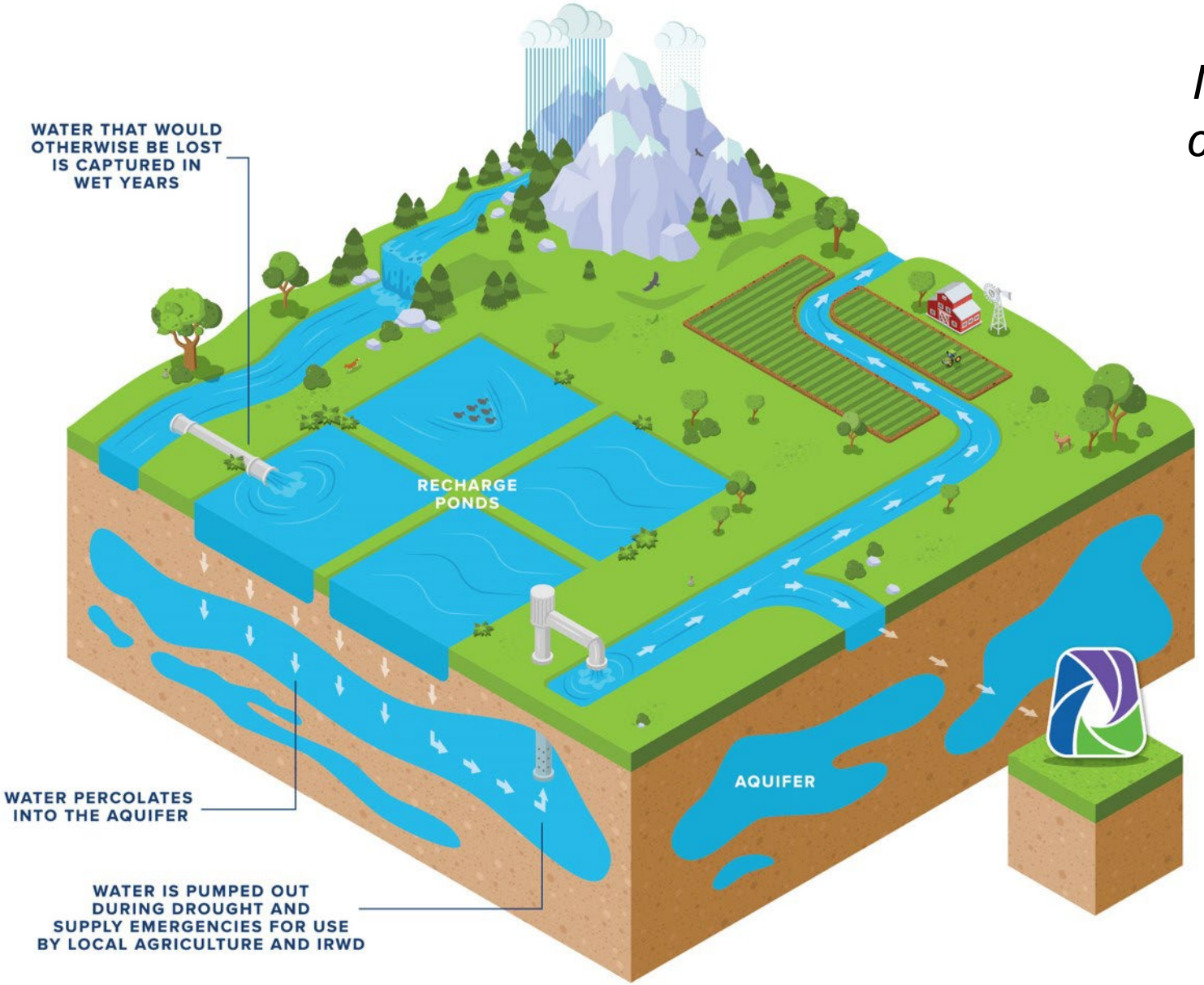
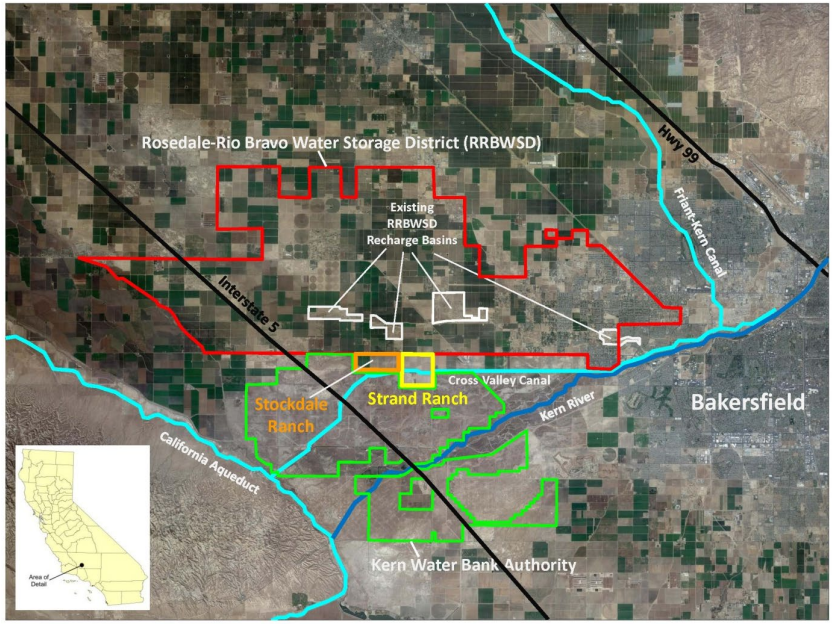
INNOVATION: WATER BANKING FOR DRY-YEAR USE



IRWD's water banks in Kern County capture and store water in wet years for use during droughts and supply interruptions.

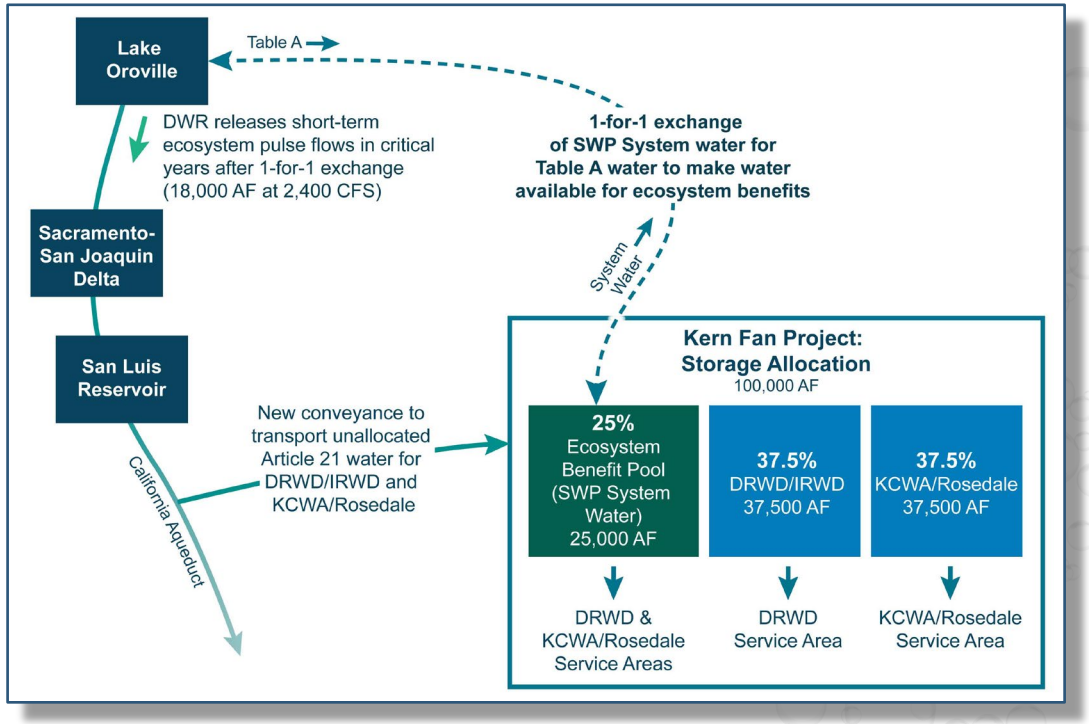


WATER SUPPLY RELIABILITY THROUGH EMERGENCY SUPPLY DEVELOPMENT



IRWD's Water Banking Program:

- Provides 15% of IRWD water demands though a shortage period of up to three years.
- Stores wet-year supplies for dry-year use.
- Partnerships with urban and agricultural water agencies (State Water Project Contractors) for mutual benefit.
- Kern Fan Groundwater Storage Project will expand IRWD's water banking and recovery capacities.
- The Kern Fan project will also benefit agricultural partner(s) and the State (DWR) by providing environmental benefits.



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DOES IRWD HAVE ENOUGH WATER FOR OUR COMMUNITY NOW AND INTO THE FUTURE?

YES!

NO PROJECTED SHORTAGE- IRWD had no projected shortage during any of the recent droughts, even if they had continued for an additional five years

IRWD IS PREPARED FOR THE FUTURE- IRWD invests and will continue to invest in climate and drought resiliency to ensure our community has sufficient water supplies well into the future.

- Water Efficiency
- Water Recycling
- Emergency Supply Development
- Infrastructure Replacement & Investment

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DOING THINGS DIFFERENTLY

- District-wide recycled water system;
- IRWD rate structure;
- Watershed protection;
- Water banking in Kern County;
- First-priority Colorado River rights;
- Water treatment on a regional basis;
- Biosolids drying and energy recovery;
- Renewable energy and battery-storage facilities;
- Financial preparation for replacements;
- Real estate investment;
- Policy leadership and advocacy;
- Capital Asset Management; and
- Developing Climate Action Plan and updating IRWD's Embedded Energy and Greenhous Gas Master Plan



Irvine Ranch Water District

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