# SYPHON RESERVOIR IMPROVEMENT PROJECT OVERVIEW

## MEETING LOCAL WATER SUPPLY NEEDS WITH RECYCLED WATER

Irvine Ranch Water District owns and operates one of the most robust and technologically advanced recycled water systems in the nation. Recycled water is a vital, drought-resilient source of water in the District's diverse water supply portfolio. It is used for:









Since recycled water is most commonly used for irrigation, the need for it fluctuates considerably based on wet- and dry-season weather patterns. IRWD needs more recycled water storage to meet the current and future recycled water demands of the community.

#### A SOLUTION FOR RECYCLED WATER STORAGE

The Syphon Reservoir Improvement Project is an investment to expand the existing recycled water storage reservoir to increase seasonal storage capacity for use throughout the service area, benefiting all IRWD customers.

### PROJECT BENEFITS

The Syphon Reservoir Improvement Project will:

- Significantly enhance our community's water resiliency
- Reduce the District's dependence on imported water
- Enable IRWD to use nearly 100% of the recycled water it produces
- Keep parks, medians, school athletic fields, other public landscaping, and golf courses green and beautiful
- Provide recycled water for agriculture that produces locally grown foods

### SYPHON RESERVOIR FACTS

### **PURPOSE:**

Increase IRWD's recycled water storage capacity

### **STORAGE CAPACITY INCREASE:**

4,500 acre-feet

### **ESTIMATED COST:**

\$291 million, \$45 million of which is expected to come from state and federal grants

- Provide additional water to fight wildfires throughout the region
- Fuel commercial and industrial needs such as mixing concrete and cooling office buildings
- Free up drinking water for use in homes and businesses, rather than for irrigation
- Save money and preserve low customer rates
- Save customers more than \$175 million over
   50 years by avoiding costs associated with sewage disposal and imported water



# SYPHON RESERVOIR SAFETY FIRST





### A STRONG TRACK RECORD

IRWD is an experienced reservoir and dam operator with an exemplary record of construction, performance and dam safety. IRWD operates five reservoirs, including Syphon Reservoir, and built the San Joaquin Reservoir in the late 1960s. All of IRWD's reservoirs are well-maintained and meet or exceed state requirements for safe use.

### Going above and beyond for safety

In addition to receiving annual state-mandated inspections, IRWD:

- Retains dam safety experts to inspect its dams annually or more
- Visually inspects its dams daily
- Uses state-of-the-art technology to measure and analyze drain flows, monitoring wells, groundwater and other fluid pressures

### A legacy of successful projects

The District has a decades-long history of building water infrastructure projects and operating them safely and economically. The District also has a proven ability to complete complex capital improvement projects while minimizing construction impacts in the surrounding area.

Every gallon of recycled water used for irrigation saves a gallon of drinking water.



IRWD carefully analyzed various project alternatives to consider all water-supply, environmental and financial considerations. This project was subject to rigorous state and federal environmental review processes, including extensive opportunities for public input and stakeholder engagement.

### Seeking meaningful community engagement

IRWD welcomes neighbors and community stakeholders to contact us with questions about the project.



### A MODERN RESERVOIR: BUILT AND OPERATED TO THE HIGHEST SAFETY STANDARDS

Syphon Reservoir will be **modernized and upgraded** so it continues to meet and exceed the latest federal and state safety standards. The project also will be peer-reviewed through a rigorous process overseen by a technical advisory panel of respected reservoir experts.

### **SYPHON RESERVOIR FACTS**

- Blends seamlessly with the environment
- Engineered dam, the most common type statewide
- IRWD directly controls the flow of recycled water in and out of the reservoir
- Does not receive any water from rivers or streams, and gets very little from rainfall
- Consistently strong safety record



Irvine Ranch Water District