# SYPHON RESERVOIR IMPROVEMENT PROJECT OVERVIEW

## MEETING LOCAL WATER SUPPLY NEEDS WITH RECYCLED WATER

Recycled water is a **vital**, **drought-proof source of water** that has been safely treated for reuse after going down the drain. While it is not used for drinking, it is an abundant, affordable and reliable part of the Irvine Ranch Water District's diverse water supply portfolio. It is used for:









Recycled water helps us prepare responsibly for the future as demand for drinking water is growing, droughts are more common, and wildfires are becoming bigger and more frequent. That's why it is important that we increase our recycled water supply and ability to store it for times of high demand.

#### A SOLUTION FOR RECYCLED WATER STORAGE

The Syphon Reservoir Improvement Project is an investment to expand the existing recycled water storage reservoir. The project will help to reduce our dependence on costly imported water, making us more self-sufficient by allowing us to swap out an expensive source of water for one that is less expensive and more reliable, ensuring we use the right water for the right purpose.

#### SYPHON RESERVOIR FACTS

**Purpose:** Increase IRWD's recycled water storage capacity.

Storage Current: 578 acre-feet capacity: Proposed: 5,000 acre-feet

Dam height: Current: 59 feet

Proposed: 136 feet

Environmental The project is undergoing review: a thorough California

Environmental Quality Act environmental review.

**Timeline:** The environmental review

process is expected to be complete by the fall

of 2021.

### PROJECT BENEFITS

The Syphon Reservoir improvement will help IRWD meet the community's need for increased recycled water storage. It will:

- Provide an additional drought-proof source of 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 additional water to fight wildfires throughout the region
- Fuel commercial and industrial needs such as cooling office buildings and mixing concrete
- Save \$85 million over 50 years, preserving low customer rates



## SYPHON RESERVOIR IMPROVEMENT PROJECT OVERVIEW



#### A STRONG TRACK RECORD

IRWD is an experienced reservoir operator with an exemplary record of reservoir construction, maintenance, performance and safety. IRWD operates five reservoirs, including Syphon Reservoir. All of IRWD's reservoirs are well-maintained and meet state requirements for safe use.

#### Going above and beyond for safety

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

- Monitors its dams daily
- Conducts rigorous monthly inspections
- Measures and analyzes drain flows, monitoring wells, groundwater and other fluid pressures

#### **OUR PROMISE: TRANSPARENCY**

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

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

#### Seeking meaningful community engagement

IRWD welcomes neighbors and other community members to provide input and share their questions and comments about the project.



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

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

#### SYPHON RESERVOIR FACTS

- Blends seamlessly with the environment
- Engineered dam, the most common type statewide
- Off-channel reservoir receives no water from rivers or streams, and very little from rainfall
- IRWD directly controls the flow of recycled water in and out of the reservoir
- Consistently strong safety record

