SUSTAINABLE WATER AND ENVIRONMENTAL STEWARDSHIP IN THE REGION

PURE WATER PROJECT LAS VIRGENES-TRIUNFO

Bringing Our Water Full Circle

A New Source of Water for Southern California

The Las Virgenes-Triunfo Joint Powers Authority (JPA) is undertaking a visionary project to improve local water supply reliability and drought resilience, and effectively eliminate discharges to Malibu Creek, a current practice that is costly due to new regulations without commensurate public benefit.

The Pure Water Project relies on indirect potable reuse, a water supply strategy now adopted by many cities and water agencies in California and across the United States to provide local, reliable water supplies. The project involves the development of necessary infrastructure to provide for the delivery of recycled water to a proposed advanced water treatment facility where proven technology will be used to purify the water. In addition to stopping the unsustainable practice of discharging recycled water to Malibu Creek in the winter, the Pure Water Project provides an affordable, local water supply that will be cost-competitive with imported water supplies over the long-term. This important effort will require public understanding, regional leadership, and funding to move from concept to reality.

Las Virgenes Reservoir

The environmentally sensitive Malibu Creek Watershed and Las Virgenes – Triunfo Joint Powers Authority communities will benefit from the proposed Pure Water Project Las Virgenes – Triunfo, which will provide a new, local water supply for the region and eliminate discharges of recycled water to Malibu Creek.

Infrastructure for Indirect Potable Reuse

The Pure Water Project will use proven technology to provide safe water through construction of an advanced water purification plant that will treat recycled water from the JPA's Tapia Water Reclamation Facility.

The purified water will be conveyed through a newly-constructed pipeline to the Las Virgenes Reservoir where it will blend with the water stored there. All reservoir water will be retreated to drinking water standards at the Westlake Filtration Plant before it is safely delivered to homes and businesses. A method for brine disposal will also be included in the project. The effort will require public understanding, regional leadership, and funding to move from concept to reality.

Tapia Water Reclamation Facility

Built in 1965, each day the Tapia Water Reclamation Facility treats upward of nine million gallons to Title 22-Tertiary Treated Recycled Water standards.

Long-Term Effort to Bring Our Water Full Circle

Years 1 – 5

- Demonstration Project
- Regulatory/Environmental Compliance
- Financing and Funding
- Pre-Design
- Land Acquisition
- Public Outreach

Years 6 – 8

- Final Design
- Construction Permitting
- Equipment Procurement
- Public Outreach

A Collaborative Approach

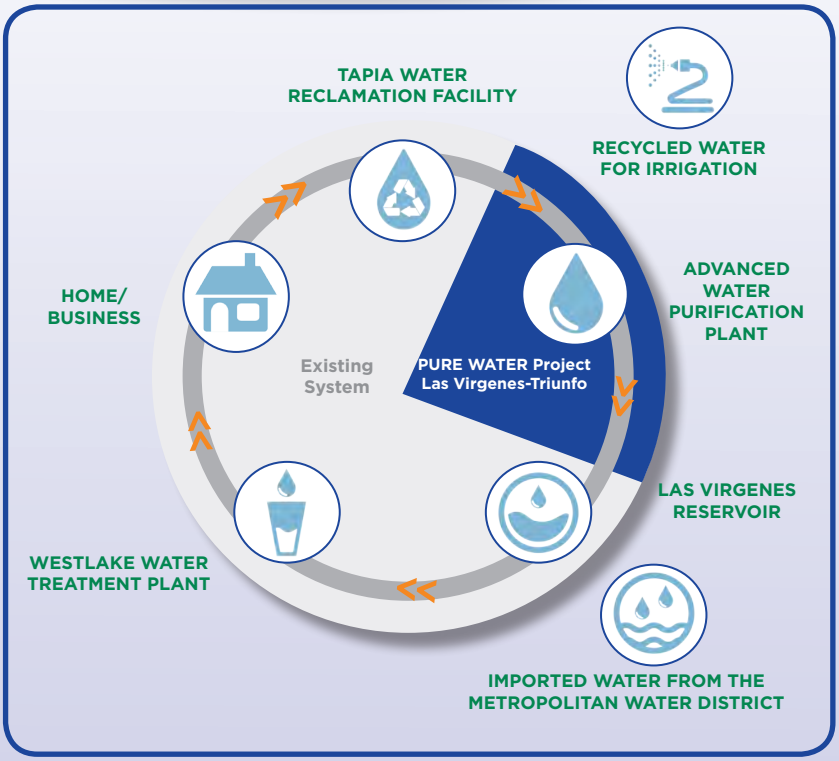
The proposed project stems from the recommendations of a stakeholder group that explored ways to maximize the beneficial use of the region's recycled water. The stakeholders, representing various interested parties in the watershed, conducted an intensive 18-month collaborative process to evaluate the political, economic, social, technical, legal and environmental aspects of a number of alternatives. Of the two options recommended by the stakeholders, the JPA selected ADVANCED WATER TREATMENT for indirect potable reuse over the Encino Reservoir Seasonal Storage alternative.

Advantages

- Reduces demand for imported potable water
- Makes use of an underutilized local resource
- Takes advantage of existing infrastructure
- Is a multi-agency and multi-county collaborative project
- Provides long-term cost benefits

Challenges

- Brine disposal
- Construction cost: $95 million
  (seeking State, Federal and local assistance)
- Pipeline construction in urbanized areas
- Public acceptance



Years 9 – 11

- Construction of Pipelines and Advanced Water Treatment Facility
- Public Outreach

Years 11 – 13 1/2

- Project Start-Up
- Regulatory Compliance
- Public Outreach

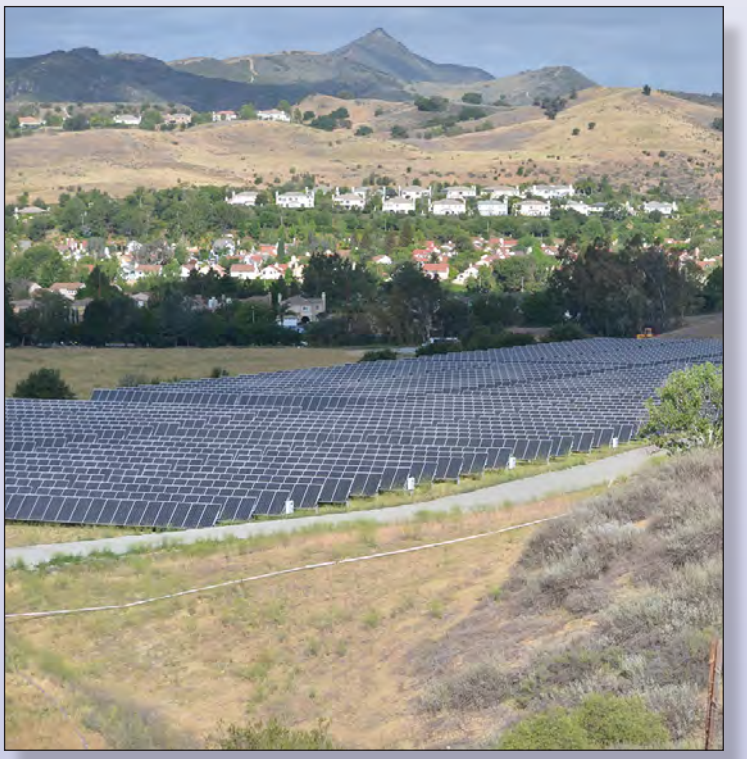
Serving Southern California

The Las Virgenes – Triunfo Joint Powers Authority *(JPA), a partnership between Las Virgenes Municipal Water District and Triunfo Sanitation District, established to cooperatively treat wastewater for these two bordering areas that share the Malibu Creek Watershed.*

JPA's Environmental Stewardship

The Las Virgenes – Triunfo JPA has demonstrated its long-term commitment to a stewardship role in the Malibu Creek Watershed:

- A leader in developing recycled water as a resource since the early 1970s.
- Built $50 million in watershed improvements including a composting facility to eliminate land application of biosolids.
- Maintains stream flow for endangered species protection.
- Invested over $12 million in nutrient reduction facilities.
- Avoids creek discharge for seven months each year at a cost of $1 million per year.
- Contracted for 20 years of solar power to pump recycled water and reduce greenhouse gases.
- Funded creek monitoring and the compilation of 40 years of water quality data.
- Representation in the Santa Monica Bay Restoration Commission.
- Conducts tours and educational programs for elected officials, residents and students on their respective roles.



One megawatt solar power facility used to pump recycled water in Calabasas, CA.

For More Information

David W. Pedersen P.E. *Administering Agent/General Manager | dpedersen@lvmwd.com*

David R. Lippman P.E. *Director of Facilities and Operations | dlippman@lvmwd.com*

Las Virgenes - Triunfo JPA 4232 Las Virgenes Road, Calabasas, CA 91302 818-251-2200

www.LVMWD.com/Pure-Water-Project

PURE WATER PROJECT
LAS VIRGENES-TRIUNFO

Bringing Our Water Full Circle