

# Los Angeles Groundwater Replenishment Project Initial Phase

January 2019

### Replenishing Groundwater in the San Fernando Valley

The City of Los Angeles is taking an important step to reduce dependence on imported water by increasing our local water supply.

The groundwater supply beneath the City is at risk after decades of overdrafting and years of drought. The initial phase of the Los Angeles Groundwater Replenishment Project at the Donald C. Tillman Water Reclamation Plant (DCTWRP) in Van Nuys will begin to replenish LA's groundwater and create a new local drought resistant source of water.

### Ozone Demonstration Project

The Ozone Demonstration Project is the initial phase of an effort to replenish LA's groundwater in the San Fernando Groundwater Basin using enhanced recycled water from DCTWRP. Regulations allow spreading of current DCTWRP supplied recycled water in spreading basins to replenish groundwater supplies.

The City of Los Angeles is adding ozone treatment to further enhance the water quality of recycled water. This project will address the immediate need to replenish the groundwater basin as well as show the effectiveness and benefits of an added step of ozone treatment.

#### **Groundwater Replenishment Process**



As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

The Ozone Demonstration Project involves adding ozone to the existing, multi-step cleaning process at DCTWRP. Up to 3,500 acre-feet per year (3.1 million gallons per day) of this treated water will be delivered through an existing pipeline to the Hansen Spreading Grounds where it will soak into the ground through soils, providing additional highly effective natural treatment through filtration and microbiological activity. The water will remain underground in the San Fernando Groundwater Basin for several years and will add to LA's future drinking water supply.

The Ozone Demonstration Project will become active and begin spreading of recycled water in 2019.

### **Ozone Demonstration Project Treatment Process**



## **Definitions**

#### Los Angeles Groundwater Replenishment Project:

This project will take highly treated recycled water from the Donald C. Tillman Water Reclamation Plant and deliver it to spreading grounds in the San Fernando Valley where the water can soak into the soil and percolate into the groundwater basin.

**Acre-foot:** One acre-foot equals about 326,000 gallons, or enough water to cover an acre of land, about the size of a football field, one foot deep.

**Groundwater:** Water that is naturally stored underground in the soil or in cracks and crevices between rocks.

**Groundwater Basin:** An aquifer that stores groundwater and is used for drinking water or other purposes.

**Groundwater Replenishment:** The process of refilling water stored underground in naturally occurring basins or aquifers with water that can eventually be used for drinking. **Spreading Grounds:** Shallow, football-field sized basins filled with soils that allow water to soak into the groundwater.

**Ozonation:** The application of ozone, a powerful oxidizing gas, to the treatment of recycled water. Used to treat organics and chemicals.

**Soil Aquifer Treatment:** Natural treatment that occurs when water travels through the soil into the groundwater basin.

This project is a collaborative effort between Los Angeles Sanitation and Environment and Los Angeles Department of Water and Power.



