



Project Benefits

Protect and improve water quality in the Santa Monica Bay by diverting stormwater and urban runoff away from the ocean.

Purify enough water to support over 20% of the City's population each day.

Diversify our water supply portfolio and reduce the City's reliance on imported water.

Comply with State Municipal Separate Storm Sewer System (MS4) and Enhanced Watershed Management Plan (EWMP) stormwater nonpoint source pollution control measures for Santa Monica Bay.

Recharge the City's local groundwater supply with a sustainable, drought resilient source.

Project Timeline

Received funding from the State Water Resources Control Board Clean Water State Revolving Fund

Construction Substantially Completed

Construction Start

2016 2017 2018 2020 2022

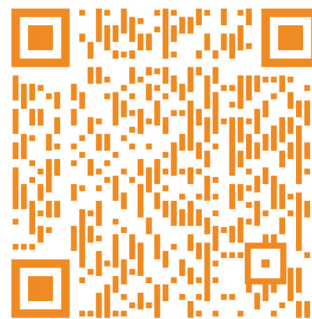
2016 SWIP Feasibility Study Completed

Awarded Design-Build Services Contract

Funding from Prop 1 Stormwater and LA County Measure W Received

Sustainable Water Supply Program

A "one water" approach will increase water conservation efforts, leverage alternative water sources (e.g., stormwater, dry weather urban runoff and municipal wastewater), restore local groundwater supplies, and implement state-of-the-art technologies to produce high-quality drinking water and reduce the City's reliance on imported water.



Scan QR Code to Learn More About SWIP and its Role in Achieving Water Self-Sufficiency



SUSTAINABLE WATER INFRASTRUCTURE PROJECT (SWIP)

First of its Kind Storm Water Harvesting & Water Recycling Facility in California



The City of Santa Monica Sustainable Water Infrastructure Project (SWIP) provides a new, sustainable, and drought resilient water supply for the City. SWIP is a key component of the City's Sustainable Water Supply Program to increase the City's water resiliency by bolstering local water supplies.

The SWIP consists of three integral elements working together to produce up to 1,680 acre-feet per year of high-quality purified water.



1 Million Gallon Per Day Advanced Water Treatment Facility



1.5 Million Gallon Stormwater Harvesting Tank



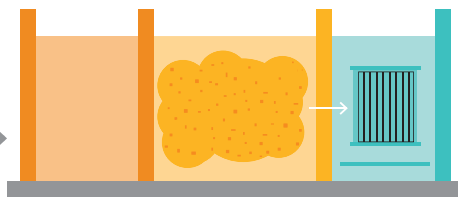
Upgrades to the Santa Monica Urban Runoff Recycling Facility

SWIP Purification Process

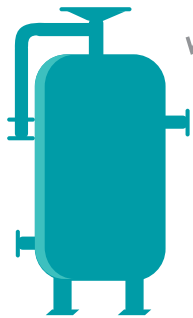
The SWIP Advanced Water Treatment Facility (AWTF) uses a rigorous multi-barrier treatment system to purify stormwater and wastewater to potable reuse standards. The final purified water is high-quality, safe to use, and drought resilient.



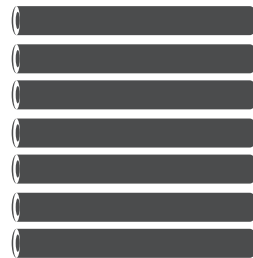
Stormwater, diverted away from the ocean to reduce pollution, and domestic wastewater are blended together and purified at the AWTF through a multi-barrier treatment system.



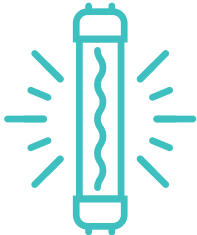
Membrane bioreactors combines biological treatment and membrane filtration into a single treatment process. The biological process uses microorganisms to remove organic pollutants and nitrogen compounds while the ultrafiltration membranes filter out viruses, bacteria, and tiny particles smaller than 1/100 of a grain of sand.



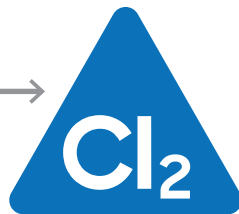
Cartridge filters push water through pleated microfilters to remove particulates and pathogens.



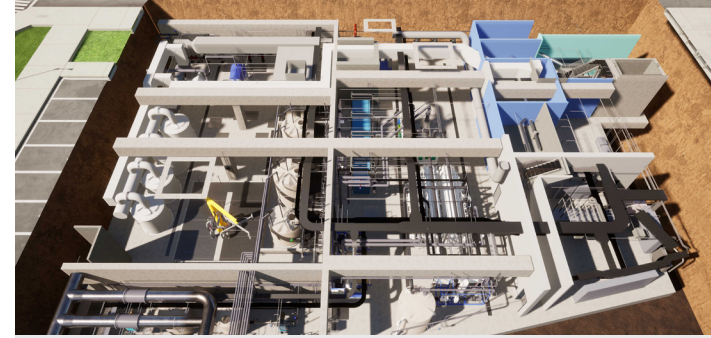
Reverse Osmosis forces water molecules, under high-pressure, through semi-permeable membranes. The water molecules are small enough to pass through the membranes, while larger minerals and contaminants such as salts, pharmaceuticals, and viruses are removed by the membrane.



Advanced Oxidation using high-powered ultraviolet light and chlorine destroys industrial pollutants and removes trace organic compounds.



Chlorine is added as the final treatment step to disinfect the purified water prior to distribution through the City's recycled water system.



Located beneath the Civic Center parking lot, the SWIP AWTF will produce up to one million gallons per day of purified water for non-potable reuse (e.g., irrigation) and potable reuse to recharge our local groundwater aquifers.



First stormwater harvesting project in California to meet potable reuse standards and directly inject the treated stormwater into the groundwater aquifer.



First membrane bioreactor and cartridge filter system in California to be granted pathogen removal credits for potable reuse applications.



First below-grade AWTF designed to treat raw wastewater and stormwater to groundwater recharge standards all within one facility.



Purified water from the SWIP AWTF exceeds all federal and state drinking water regulations.