

WRF/SWF/EWS QUICK FACTS

E-CDP: ZON2013-00259 effective MAY 15, 2014
CDP: DRC2013-00112 application filed JUNE 12, 2014;
Revised FEBRUARY 27, 2017; Revised JULY 15, 2020



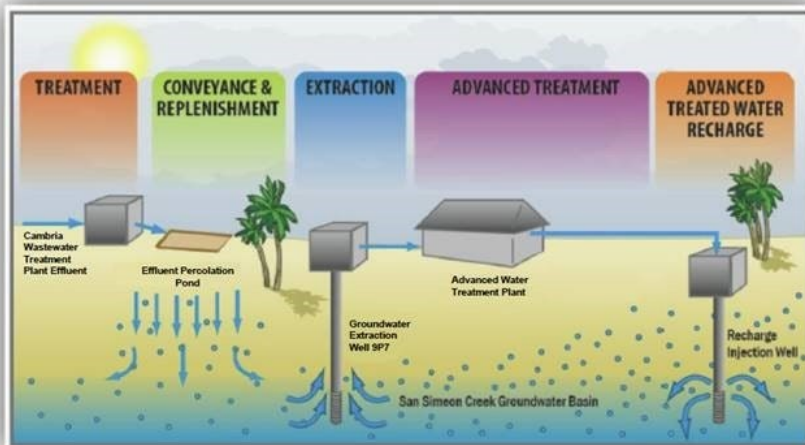
How it Works

The Advanced Water Treatment Plant located off San Simeon Creek Road treats a combination of brackish groundwater from a deep aquifer saltwater wedge, treated wastewater effluent from the percolation ponds, and groundwater from creek underflow.

Plant influent, or source water, is first pumped from an existing District well. The treatment process starts with micro-filtration, which removes fine particles from the water. Next comes reverse osmosis, which removes salt and other complex organic matter. The water then goes through an advanced oxidation process. Here, UV light and hydrogen peroxide are used to remove trace organic compounds that are not fully removed by the RO membranes.

Final post-treatment stabilizes the water to prevent corrosion of the conveyance pipeline and pumping equipment. The treated water is then injected back into the ground upstream where it travels a minimum of 60 days prior to blending with the District's potable water supply. Injection also provides an immediate gradient control benefit which slows the outflow of groundwater to the ocean and protects the potable well field from saltwater and wastewater intrusion. Because product water from the AWTP is injected into the aquifer to augment existing supply, the project is considered "indirect potable reuse" and is permitted under Title 22 of the California Code of Regulations.

The AWTP is capable of producing 250 acre feet per year, plus 81 acre feet per year of MF water for San Simeon Creek Lagoon recharge. The purpose of the plant is to enable the CCSD to continue pumping from the San Simeon Creek Aquifer during periods of drought. Prior to construction of this facility, dry years resulted in water rationing with penalty surcharges and reduced production of potable water from the San Simeon Well Field to limit the risk of saltwater intrusion.



What's with the Name

During the development of the SEIR, the District revised and expanded the original Emergency Water Supply project to include components to provide a reliable dry season water supply to serve 4,650 existing and future residential units, pursuant to the current North Coast Area Plan and mitigations set forth in the CCSD's certified Water Master Plan Program EIR. These project changes resulted in adoption of the Sustainable Water Facility project name.

The SWF name change was hotly debated in the community. To better describe the core purpose of the project, the CCSD Board of Directors took action on March 11, 2021 to formally change the project name to Water Reclamation Facility (WRF).

Learn more at our website:
www.cambriacsd.org/water-reclamation-facility

ACRONYMS

AWTP: Advanced Water Treatment Plant
CDP: Coastal Development Permit
E-CDP: Emergency Coastal Development Permit
EIR: Environmental Impact Report
EWS: Emergency Water Supply
RIW: Re-injection well
SEIR: Subsequent Environmental Impact Report
SWF: Sustainable Water Facility
MF: Micro Filtrate
RO: Reverse Osmosis
UV: Ultra Violet
WRF: Water Reclamation Facility

The Final Project Description

The original project description for the 2014 emergency permit application was specific to the EWS project and reflects what was actually designed and constructed in that same year. Subsequent project modifications were required to address the closure of the brine evaporation pond, and further modifications were completed to incorporate SWF project components included within the SEIR. The primary WRF project goals and objectives remain unchanged, including providing Cambrians with a reliable water supply to address current and future water shortages. Important modifications include relocating the lagoon discharge point to more efficiently augment streamflow and operating the facility to prevent, rather than respond to, extreme water shortage emergencies.

Questions? Please email us at engineering@cambriacsd.org or call (805) 203-5803.