WATER TRANSFERS/PURCHASE
Receiving/purchasing excess treated surface water from the City of Santa Cruz

Project Update: In April 2019 we completed the second phase of the water purchase 5-year pilot project. We purchased treated surface water November 2018—April 2019 and served it to District customers in a select area. This effort supports our evaluation of water quality and operational considerations of blending surface water into our water distribution system which has traditionally always been groundwater. This project is intended to take more water from the City in the winter months, if available. Purchasing surface water would allow us to reduce pumping from our wells. Currently, this would be a limited quantity of water available to purchase; larger volumes would require new or amended water rights. Water would allow us to reduce pumping from our wells. This project is intended to take more water from the City of Santa Cruz and served it to District customers in a select area. We are evaluating the feasibility of small-scale stormwater capture projects in Mid-County. At this time, testing is focused at two potential sites: Seascapes Golf Course and the 38th and Brommer Avenue retention basin. This evaluation will help us better understand the feasibility and costs should we continue to develop this as a long-term option. This evaluation is being conducted in partnership with Santa Cruz County and partially funded with $35,000 through a California Proposition 1 Grant. The City is currently conducting its pilot testing and feasibility analysis for its water supply planning efforts. The plan guides our actions in line with our Community Water Plan: Our Path to a Reliable Water Supply. Our top priority is to ensure a reliable, safe, sustainable water supply for both today’s community and for the generations to come. Through community workshops, the Community Water Plan was created in 2015 to be our roadmap for achieving water supply sustainability by 2040. The Plan guides our actions in line with our Community Values. Three key qualities that have consistently rated most important to our customers are:
- providing high-quality water
- timeliness to develop a project
- long-term reliability

The Community Water Plan is a diversified portfolio of:
- Water Conservation – is the “new normal” to help preserve our water supply
- Groundwater Management – we monitor and adaptively manage our pumping away from the coast
- Developing New Water Supplies - to supplement, recharge, and protect the groundwater basin

Unhealthy Aquifer Due to Seawater Contamination

“...we are proud to be water stewards of conserving, recycling, and protecting the environment and creating a thriving community.”

Toni Castro & Carrie Arnone
Capitola/Soquel Chamber of Commerce

The problem of saltwater intrusion and ongoing overdraft must be addressed. I am pleased the water District is responding to this serious issue before it is a full-scale crisis.

Craig Wilson
Public Safety Official & District Customer

What People Are Saying
Community Members Share Their Opinions

Estimated cost of Water: $5,400 per af (long-term)
Project Partner: City of Santa Cruz
Reliability: May be available during winter months
Scalability: Large volumes of water would require acquiring new or amended water rights
Timeliness: The City is currently conducting its pilot testing and feasibility analysis for its water supply planning efforts

Stormwater Capture Project Update: We are evaluating the feasibility of small-scale stormwater capture projects in Mid-County. At this time, testing is focused at two potential sites: Seascapes Golf Course and the 38th and Brommer Avenue retention basin. This evaluation will help us better understand the feasibility and costs should we continue to develop this as a long-term option. This evaluation is being conducted in partnership with Santa Cruz County and partially funded with $35,000 through a California Proposition 1 Grant.

Desalination Project Update: Deep Water Desal (DWD) is currently working on preparing necessary studies for their environmental impact report and is awaiting state comments on its preliminary feasibility study. We continue to monitor the project, but we are not actively involved in the project’s development.

Our On-Going Challenges
An Overdrafted Groundwater Basin and Seawater Intrusion

- Our basin is classified as “critically overdrafted” by the California (CA) Department of Water Resources
- Critically overdrafted means our freshwater supply is threatened by active seawater contamination
- As part of the local Santa Cruz Mid-County Groundwater Agency (MGA), we must meet the CA State mandate of basin sustainability by 2040

Even with recent rainfall and extraordinary conservation efforts, groundwater levels are too low to protect seawater from creeping further inland and ruining our aquifers.

In 2017, scientific data was collected and confirmed that seawater contamination is not just occurring in Pleasure Point/Live Oak and Aptos/La Selva Beach areas, but the basin’s entire coastline is at-risk.

The map above shows seawater contamination actively occurring along our entire coastline (red line) and contamination onshore in our coastal monitoring wells (red dots).

Deep Water Intrusion

Groundwater Intrusion
Thank you for being amazing conservers!

Water conservation continues to be the cornerstone of our Community Water Plan. Using water efficiently is the “new normal” to preserve our precious resource. Even though we have had some wet winters, since 2014 we’ve been in a Stage 3 water shortage due to the historical overdraft of the basin. We maintain the “Biggest Water Rebates Program in the County” and encourage you to check out the nearly 30 types of rebates for homes and businesses that will save you water and money at soquelcreekwater.org/rebates.

Our groundwater hydrologists have calculated we need 1,500 acre feet (af) of supplemental water per year to bring our portion of the basin out of overdraft. To put that in perspective, one acre foot of water covers a football field one foot deep.

The solution will likely involve a combination of regional supplemental water supply options in collaboration and partnership with others. The pie chart below shows how reducing groundwater pumping with conservation and new water supplies will help us to provide reliable water to our customers in an environmentally, sustainable manner.

We are working hard to manage our groundwater resource to meet increasingly stringent water quality regulations and our goal of water supply sustainability. Our monitoring well network helps us understand how much water is in the aquifers and where seawater intrusion is occurring. We also measure how much water we pump, monitor water quality, and are shifting well pumping away from the coast. Together, the MGA which includes local agencies and private well owners who pump water from the same basin, we are developing regional solutions to protect our shared water supply. The MGA released the draft Groundwater Sustainability Plan in July 2019. You can read it at midcountygroundwater.org.

The solution will help us to provide reliable water to our customers in an environmentally, sustainable manner. A diverse water supply portfolio reduces pressure on our groundwater basins and provides security during times of drought.

The solution will likely involve a combination of regional supplemental water supply options in collaboration and partnership with others. The pie chart below shows how reducing groundwater pumping with conservation and new water supplies will help us to provide reliable water to our customers in an environmentally, sustainable manner.

Groundwater Pumping with Conservation
2,300 af/year

Storm Water Capture
~10–100 af/year

Water Transfer/Purchase
~300–500 af/year

Pure Water Soquel
~1,200–1,500 af/year

Project Update: In December 2018, the District Board certified a project-level Environmental Impact Report (EIR) and approved Pure Water Soquel (PWS) to move forward with design and permitting. PWS will reduce ocean discharge and increase water recycling at the Santa Cruz Wastewater Treatment Facility. The recycled water will then be purified at a water purification treatment facility on the corner of Soquel and Chanticleer Avenues. The purified recycled water will be used to create a seawater intrusion barrier, replenish the groundwater basin, and allow us to reduce pumping at wells near the coast.

We have received over $2 million dollars in grant funding and are actively seeking additional grants and low-interest loans from state and federal resources to help reduce costs to our customers.

Estimated cost of Water:* $4,600 per af

Project Partner: City of Santa Cruz

Reliability: Available year-round, even in times of drought

Scalability: Ability for expansion and adjust to changing needs and climate change

Timeliness: Currently in design and permitting and is scheduled to be operational by the end of 2022

*Based on technical memo presented to the Board of Directors on December 4, 2018. This does not include any reductions if additional grants are awarded.

Many communities with long-term water shortages have either implemented or are currently evaluating purified water projects. Utilities in San Diego, Los Angeles, the San Francisco Bay Area, Monterey, and Silicon Valley are including purified water as a part of their water supply portfolios.

Since 1979, the MGA has been focusing on regional solutions to protect our shared water supply. Utilities in San Diego, Los Angeles, the San Francisco Bay Area, Monterey, and Silicon Valley are including purified water as a part of their water supply portfolios.

DID YOU KNOW? Orange County Water District has been purifying recycled water to use as groundwater replenishment for over 40 years.

WHY PURIFIED WATER?

A diverse water supply portfolio reduces pressure on our groundwater basins and provides security during times of drought.

SIX QUICK FACTS ABOUT PURE WATER SOQUEL

- PROVIDES SEAWATER INTRUSION BARRIER
- PRODUCES HIGH-QUALITY WATER
- REDUCES OCEAN DISCHARGE BY 25%
- RELIABLE AND DROUGHT-PROOF WATER SUPPLY
- USES 100% GREEN ENERGY
- GRANTS CAN PROVIDE UP TO 50% OF PROJECT COSTS