COMMUNITY WATER PLAN
Our Path to a Reliable Water Supply
Conservation • Groundwater Management • New Water Supplies

2017 Progress Report

SOQUEL CREEK WATER DISTRICT
Dear Soquel Creek Water District Customers,

The rains this season came as a welcome relief from the drought of the past 5 years. You may be surprised to learn we still have a way to go before our long-term water supply needs are met. It's critical to secure a supplemental water supply to protect our overdrafted groundwater basin from further seawater intrusion and to ensure water reliability for current and future generations.

This is an ongoing challenge for the District and for our community. Each of you is an essential part of this process and your involvement is a significant factor in solving our water supply challenge. We’re hopeful that you will continue to be involved and take the opportunity to gain a full understanding of the various supplemental supply options the District is exploring: water reuse, river water transfers, desalination and stormwater capture.

The effort to protect our water source is guided by the District’s following core values: fairness; honesty and ethics; customer service; environmental stewardship; collaboration; and dedication. These values are more than just words as we live and work in this community too. They are demonstrated in how we operate, how we interact with the community we serve, and how we plan for the future.

Please do not hesitate to contact me with your questions or ideas.

Sincerely,

Ron Duncan, General Manager
Who We Are
The Soquel Creek Water District provides water to approximately 40,400 residents within Aptos, La Selva Beach, Soquel, and the City of Capitola. In addition to providing water to homes in these areas, the water delivered by the District helps other parts of our community to thrive, including businesses supporting 18,000 jobs, 22 parks, and 18 schools.

Mission
We are a public agency dedicated to providing a safe, high quality, reliable, and sustainable water supply to meet our community’s present and future needs in an environmentally sensitive and economically responsible manner.

What is the Community Water Plan?
It’s an action-oriented, multi-faceted roadmap to achieve water supply sustainability by 2040. The District recognizes the need for a Plan to protect our endangered groundwater resources, ensure water supply reliability, ensure resiliency for our customers, and prepare for climate change and other future challenges. This long-range Plan reflects a great deal of community input and involvement — we know that working together we can protect our limited and precious water supply for today and for future generations.

Community Values
Our actions are guided by three qualities that have consistently rated most important to our customers for a future water supply source: high-quality water, timeliness to develop a project, and year-round reliability.
Protecting the Environment and Meeting Community Water Needs

Even though the multi-year drought is over, our water shortage challenge persists and may be intensified when the next drought occurs. The Santa Cruz Mid-County Groundwater Basin, from which we draw 100% of our water supply, is classified by the State of California as a “Critically Overdrafted” groundwater basin.

The main challenges we face are:

- **Seawater intrusion and contamination** at the coastline
- Meeting the **State mandate** of basin sustainability by 2040
- Addressing stricter **water quality standards**
- **Future climate change impacts** including sea level rise and reduced groundwater recharge

Our groundwater basin is overdrafted and seawater contamination is occurring at our coastline.
Maximizing Conservation

Our customers embrace water conservation and have made it a way of life. In 2016, the District was recognized as one of the top water-saving agencies in California. Many thanks to you, our water customers, for doing your part to save water every day!

The District’s 2016 conservation accomplishments include:

• **Replaced old, less water-efficient toilets** with new ultra-high efficiency models resulting in an estimated **water savings of 175,000 gallons per year**

• **Eliminated** over **120,000 square feet** of water-thirsty turf, saving about **730,000 gallons of water a year**

• **Conducted over 150 free on-site water-wise surveys** for District customers offering tools and tips for saving water every day

• **Responded to** and **resolved** approximately **2,000 leak alerts** detected by our automated metering system, and worked with customers to ensure leaks were fixed

• Our customers have **decreased** their water usage from **71 gallons per day** in 2013 to **50 gallons per person per day** in 2016

Despite this past winter’s major storms and the lifting of the statewide drought emergency, the District’s groundwater basin remains overdrafted. A groundwater emergency and stage 3 water shortage emergency are still in effect. The District asks customers to continue conserving water by not using sprinklers between 10am – 5pm, repairing irrigation and plumbing leaks within 72 hours, using a shutoff nozzle on all hoses (free to District customers), and no hosing down hard or paved surfaces. For more information, visit soquelcreekwater.org/stage3-2017.

Doing Our Part to Save Water

The Water Demand Offset program ensures new development does NOT impact the aquifer.
With groundwater being the sole source of supply for the District, proactive groundwater management continues to be a critical component of the District’s ongoing efforts.

In 2016, we **continued to protect our groundwater resources** in a number of ways:

- **Maintained our Monitoring Well Network Program**, consisting of **over 80 monitoring wells** which are sampled for water quality and tracked for water levels in order to track seawater intrusion at our coastline

- **Constructed a new well on Granite Way in Aptos** that will aid in **redistributing pumping away from the coast** — spreading out pump locations in this way helps reduce seawater intrusion from moving farther inland

- **Development of a Groundwater Model for the Santa Cruz Mid-County Groundwater Basin** continues; it will help us to better understand the basin and determine its sustainable yield

- **Formalized the creation of the new Santa Cruz Mid-County Groundwater Agency** — a partnership among the City and County of Santa Cruz, Central Water District, and the District—for the purpose of collaborating to meet the California state mandate of sustaining the groundwater basin by the year 2040

Groundwater is currently the sole source of supply for the District.
Exploring New Water Supplies

Developing new water supplies as part of a diversified water supply portfolio takes many years. Water supply projects require thorough evaluation with technical studies and environmental analyses, detailed exploration of funding mechanisms, and extensive outreach and input processes to gain public understanding.

The Board identified three water supply options to evaluate in 2015 and added a fourth in 2017.

The following section provides an update on the various water supply options under consideration and evaluation. **As public input and the evaluation process actively continues, the Board has not yet approved or made any final decisions.** Cost estimates for projects are shown, but continue to evolve. The District is actively seeking state and federal grants to help offset overall project costs.

- **Water Reuse - Pure Water Soquel**
- **River Water Transfers/Purchase**
- **Desalination**
- **Stormwater Capture**

Our water solution may involve a combination of supplemental water supply options.
This project, known as Pure Water Soquel, would involve recycling already-treated wastewater, purifying it through a multi-step process, and then replenishing the groundwater basin using recharge wells.

Orange County Water District, which serves over 2.4 million customers, operates a Groundwater Replenishment Project which has produced over 200 billion gallons of purified water to recharge its groundwater basin. Disneyland theme park promotes its participation in this type of water recycling and purification program and boasts “...almost all the water used at the Resort is recycled in this manner.”

The District Board identified reuse as an option to further consider due to it being a drought-proof and reliable water supply that must meet stringent, high-quality water standards. Many other communities such as Monterey, San Diego, Ventura, and Santa Clara are currently operating or evaluating this type of project to diversify their water portfolios.

**Status:** The project is currently undergoing environmental review and a draft Environmental Impact Report (EIR) is anticipated to be released in early 2018. Public outreach on project component locations, public perception, and water quality is on-going during project evaluation.

**Lead Agency:** Soquel Creek Water District

**Estimated Cost:** $60–70 Million (per District’s Feasibility Study)
In wet winters river water would help meet the District’s water supply needs.

These projects would take treated winter river water (from Santa Cruz North Coast Water Supplies and potentially the San Lorenzo River) and deliver it to the District system which would allow the District to reduce groundwater pumping (also known as in-lieu).

**Short-Term North Coast Water Pilot Purchase Project**

**Status:** This 5-year pilot project will research water quality issues related to blending river water within our existing pipeline system which is accustomed to groundwater. Such blending from different sources of water can cause pipeline corrosion issues. This pilot may offset one-fifth of the District’s water shortage needs. Santa Cruz relies on this water, so the amount available to the District may vary and is not guaranteed.

**Lead Agencies:** City of Santa Cruz and Soquel Creek Water District

**Estimated Cost:** $650,000 (for pilot project, 2015-2020)

**Long-Term River Water (In-Lieu) Exchange Project**

**Status:** The City is currently conducting a feasibility study for a full scale in-lieu water exchange. This type of project would allow larger volumes of water to be transferred to the District so it would pump less groundwater. The amount of water is not drought-proof and may have limits due to future drought conditions, habitat protection issues, the City’s own water needs, and acquiring water rights.

**Lead Agency:** City of Santa Cruz

**Estimated Cost:** $131 Million (per City’s Water Supply Advisory Commission report. The cost split is unknown.)
**Desalination**

This project would involve purchasing water from Deep Water Desal, LLC (DWD), a private company currently evaluating the development of a desalination facility in Moss Landing.

**Status:** The project is currently undergoing environmental review and a draft EIR is anticipated to be released in late 2017. DWD is proposing to seek formal water purchase agreements in 2017/2018 from prospective water agencies, which would financially commit the District into purchasing the water, if constructed. Based on the status of other water supply options that are also currently underway, timing could be an issue.

**Lead Agency:** Deep Water Desal, LLC

**Estimated Cost:** $33 million for construction of 15-mile pipe, plus $66 million to purchase water (based on unit cost of water from DWD)

**Storm Water Capture**

Capturing available storm water may provide some water to aid in recharging the groundwater basin.

**Status:** The District is examining this option by exploring potential sites and technologies for stormwater recharge. The District is investigating geological factors, rainfall runoff patterns, and potential water quality concerns. Once potential locations are identified, the District will investigate what methods and technologies would be most appropriate to facilitate the clean up of stormwater to recharge the aquifer.

**Lead Agency:** To be determined

**Estimated Cost:** Unknown at this time

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**Evaluation of supplemental supply options will continue through 2018.**
As the District moves forward to secure supplemental water to protect our overdrafted groundwater basin and ensure water reliability for current and future generations, we know that:

- Conservation will continue to be important and ongoing
- Solutions involve collaboration and regional partners
- Preventing seawater intrusion is our main goal
- The solution may involve a combination of supplemental water supply options
- Community input and involvement is vital, and the District will continue to actively engage the public

**HOW YOU CAN PARTICIPATE**

- Sign up for our email updates at soquelcreekwater.org
- Attend and participate in Board meetings — see website calendar for dates
- Follow the District on social media
  - Facebook: Soquel Creek Water
  - Twitter: @soquelcreekH20
  - Instagram: @soquelcreekwater

**CONTACT US**

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