COMMUNITY WATER PLAN
Our Path to a Reliable Water Supply
SOQUEL CREEK WATER DISTRICT
The intent of this document is to share information with customers about our water challenge and current actions and activities as we move forward with our long-range planning to achieve sustainability by 2040. It is a living document that will be updated as new information becomes available, and we welcome community input.

For More Information, Contact:
Matt Orbach
Public Outreach Specialist
Soquel Creek Water District
5180 Soquel Drive, Soquel, CA  95073
(831) 475-8501 ext. 118
matto@soquelcreekwater.org

More information is available at: www.soquelcreekwater.org

Esta información está disponible en español. Por favor llame al (831) 475-8500

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Soquel Creek Water District

Who We Are

The Soquel Creek Water District is governed by a five-person Board of Directors elected to four-year terms by registered voters throughout the District’s service area. The District provides water to approximately 38,000 residents within Aptos, La Selva Beach, Soquel, and the City of Capitola. Water is not only important to have in our homes, it also supports our thriving community that includes 18,000 jobs, 22 parks, and 18 schools.

What is the Community Water Plan?

To protect our endangered groundwater resources, ensure water supply reliability and resiliency to our customers, and prepare for climate change and other future challenges, the District has developed an action-oriented Community Water Plan. This long-range plan is based on community input, and shall serve as the District’s roadmap to meeting our goal of sustainability by 2040. Working together, we can protect our limited and precious water supply today and for future generations.

Our Community Water Plan includes:

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This document was prepared by Ron Duncan, Interim General Manager; Melanie Schumacher, Special Projects/Community Dialogue Manager; and Matt Orbach, Public Outreach Specialist
Our Water Challenge

The Soquel-Aptos area groundwater basin that we rely on for 100% of our water supply is a shared resource. It provides thousands of District customers with water and is also used by other pumpers (public agencies and private wells).

Despite extensive conservation efforts, the basin is in a critical state of overdraft because more water has been historically pumped out than is naturally recharged through rainfall.

76% of District customers called “protecting our drinking water from being contaminated by salt water from the ocean” a serious or very serious problem.*

Seawater intrusion occurs when groundwater levels drop so low that seawater creeps in underground and contaminates the groundwater basin. Once contamination occurs, it could result in either abandoning affected wells or requiring costly treatment. The effects of climate change will only make this problem worse over time.

If we do not take action and address this overdraft condition, seawater intrusion will continue to threaten our drinking water wells (and those of other pumpers in our basin) and potentially contaminate our region’s only source of supply.

Seawater intrusion is already occurring along our coastline (as shown by the red and orange dots on the map above). 250 mg/L is the chloride threshold recommended by the Environmental Protection Agency (EPA).

District staff take samples at one of our coastal monitoring wells. These wells play a critical role in tracking the movement of seawater intrusion.

*Data from 2015 Community Phone Survey
Recent estimates from hydrologists put the historical basinwide cumulative deficit at approximately 28,500 acre-feet (af)*. We need to reduce pumping or inject water back into the ground to eliminate this shortfall.

In October 2015, the Board established a maximum annual pumping target of 2,300 acre-feet per year (red line on graph above) to reduce its groundwater withdrawals and protect the basin from further seawater intrusion. The resulting shortfall between the projected demand and the pumping target indicate that additional water supplies will be needed to achieve basin sustainability.

This pumping level will need to be maintained for at least 20 years for the basin to recover the current deficit. The Board also established a post-recovery maximum annual pumping target of 3,300 afy, which is the amount the District will be able to sustainably pump after full recovery without creating another deficit.

Continued conservation, climate change, and demand forecasting are important to consider when calculating pumping targets that will allow the basin to recover. As illustrated above, even with continued conservation, a supplemental water supply will be necessary to achieve a full basin recovery.

**Basinwide Deficit and Recovery**

Projected Community Water Demand in 2025: 3,750 acre-feet per year (afy)

Supplemental Supply Needed: 1,450 afy

Maximum Annual Groundwater Pumping Target: 2,300 afy

* One acre-foot of water is approximately 325,851 gallons, which is enough to cover an acre of land with one foot of water. One acre-foot provides enough water for four homes for an entire year.
Customers are helping to protect our limited groundwater supply by making conservation a way of life, when rain is plentiful and in times of drought. We offer many tools and programs to help customers use water efficiently at home and at work.

For more conservation information, please visit: [www.soquelcreekwater.org/conserving-water](http://www.soquelcreekwater.org/conserving-water)

- **Rebates** - The District offers a wide variety of rebates for things such as turf replacement and toilets.
- **Home Water Reports** - Single-family residential customers receive monthly, personalized, information-only reports, which include water saving tips and rebate information, so that they can better understand and manage their household’s water use.
- **Free Water-wise Home and Business Calls** - One of our trained conservation staff can visit homes and businesses to identify simple actions that can result in significant water savings, as well as answer questions about rebates.
- **Education Programs** - The District offers FREE educational programs to schools, organizations, social groups, and families in the District’s service area.
- **Rules of Water Waste** - We have rules prohibiting water waste such as irrigation run-off, unrepaired leaks, etc. These year-round rules are always in effect, regardless of drought conditions.
- **Water Neutral Development** - The Water Demand Offset (WDO) program requires all new development, from granny units to commercial projects, to offset the amount of water they are expected to use by 200% as a condition for water service. This allows development to continue without increasing water demand on our groundwater basin. Projects must meet their 200% water offset requirements by paying into a fund that is used for conservation projects that reduce water use elsewhere in the District.

{how to} **DO MORE TO USE LESS**

“After attending one of the SCWD workshops, I purchased 2 rain barrels and collect rain to water my outdoor plants. And, I received a rebate from the District for the barrels!”

**Karl Forest, Capitola**

“We took advantage of the turf replacement rebate and we LOVE our new yard and have saved a great deal of water and money.”

**Carm and Howard ‘Boots’ McGhee, Aptos**

Over the last 12 years, District customers have reduced their water usage, on average, by 50%.
Groundwater Management Program

In addition to conservation, we are working to protect our groundwater resources by maintaining a proactive groundwater management program that includes:

- **Monitoring Well Network Program**: Over 80 monitoring wells are sampled for water quality and water levels each month to track seawater intrusion at our coastline.
- **Well Master Plan**: A comprehensive plan to redistribute pumping away from the coast to slow down seawater intrusion, as well as to better operate our wells to ensure reliability in case of emergencies.
- **Groundwater Model Project**: A robust computer model is being developed to help better understand the basin and determine sustainable yield.
- **Freshwater-Seawater Interface Project**: Work by Stanford University is underway to reconfirm the coastline location of the seawater interface within our basin.
- **Soquel-Aptos Groundwater Management Committee**: A partnership among the City and County of Santa Cruz, Central Water District, Soquel Creek Water District, and three private well representatives that will allow us to work together on regional groundwater management in the Mid-County area.

The Well Master Plan redistributes pumping away from the coast to slow down seawater intrusion. The O’Neill Well, completed in 2015, is one of the projects that will help us accomplish this. New wells do not increase our overall pumping out of the basin.

Sustainable Groundwater Management Act

Landmark legislation, passed in 2014, requires statewide groundwater management in California for the first time ever. It mandates that our groundwater basin be managed by a Groundwater Sustainability Agency (GSA) by 2017, that the GSA create a Groundwater Sustainability Plan (GSP) by 2020, and that our basin be sustainable by 2040. Our community is working together to meet the state’s timeline. For more information, please visit [www.midcountygroundwater.org](http://www.midcountygroundwater.org).
Taking Action Toward Developing New Supplies

In the fall of 2013, after seven years of evaluating and pursuing a joint seawater desalination project, our partner agency, the City of Santa Cruz, decided to step back from the project, which forced the District to restart the process of evaluating supplemental water supply options.

Community Values

One of the most important parts of that process has been seeking ongoing community input on our proposed water supply options through phone, online, and in-person surveys about what qualities are most important to our customers in terms of a new source of supply. The three qualities that have consistently rated highest are: timeliness, water quality, and reliability.

Where Are We Now?

Using the best available science and input from the community, the District has selected advanced water purification for groundwater replenishment as its preferred alternative. In addition, the District is carrying forward the other two options, river water transfers and desalination, until a final decision is made.
This proposed project would consist of taking municipal wastewater from the Santa Cruz County Sanitation District and purifying it to produce high-quality water that would be injected into the ground to recharge the aquifer. As part of this project, an advanced recycled water treatment facility, piping, and injection wells will be required.

In June 2015, the District kicked off a feasibility study to evaluate siting, treatment, cost/funding, and preliminary environmental issues. This study received state grant funding and is anticipated to be completed in Spring 2016.

There are several communities in California that are currently operating or are looking at this type of project to meet their water needs, including: Orange County Water District, West Basin Municipal Water District, Santa Clara Valley Water District, City of Santa Diego, and Monterey Peninsula Water Management District (MPWMD)/ Monterey Regional Water Pollution Control Agency.

This project was selected by the District Board as the preferred alternative because it can produce high-quality, reliable water, and may be able to be constructed in a more timely manner than other alternatives.

**A feasibility study is currently underway, and will be completed in 2016.**
The proposed project would involve purchasing water from a desalination facility operated by Deep Water Desal in the Moss Landing area. A 15 mile pipeline would be needed to bring desalinated water to the District.

In May 2015, the District Board of Directors entered into a Memorandum of Interest with Deep Water Desal (a non-binding, non-financial statement) that expresses interest in potentially purchasing 1,500 acre-feet per year.

This drought-proof project is currently undergoing environmental review and a draft Environmental Impact Report (EIR) is anticipated to be released in Spring 2016.

In September 2015, the City of Santa Cruz and the District entered into a five-year Purchase Agreement to pilot test the transfer of water between the two agencies. Transfers could begin this winter after the environmental review is completed.

River water transfer projects are dependent on rainfall and available water from the City of Santa Cruz, and a long-term project will require the District to acquire surface water rights.
Moving Forward...

Between now and mid-2016 several important documents and projects will provide us with the information we need to continue moving forward with our supplemental water supply options. These include:

- **Urban Water Management Plan (UWMP)** - A long-range planning document that assesses current water demand, projects future demand over a 20-year planning horizon, and identifies a mix of water resources and conservation efforts to meet future demand through 2035.
- **Feasibility Study for Groundwater Replenishment with Advanced Water Purification**
- **Pilot Study for River Water Purchase**
- **Environmental Impact Report for Deep Water Desal Project**
- **Groundwater Model** - A complex tool used to evaluate groundwater conditions and solutions to various scenarios and problems while incorporating pumping by all basin users and climate change.

In Summary:

1. Stay informed by signing up for District E-blasts on our website.
2. Call 831.475.8501 x146 for information on our rebates or to schedule a water-wise home visit.
3. Attend a Board of Directors meeting. See calendar on the District website for dates.

**www.soquelcreekwater.org**
Find Information Inside About:

- Our Water Challenge
- Actions Toward a Supplemental Supply
- How You Can Get Involved in the Process