

Ground broken on desal facility

Pilot project seen as solution to S.C. water shortages

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Desalination
SANTA CRUZ — Salty ocean water could be turned into fresh drinking water in Santa Cruz by the end of the year.

City leaders and Soquel Creek Water District officials started construction Friday on a \$4 million pilot desalination plant at the UC Santa Cruz Long Marine Lab that will test a water treatment system that would feed homes and businesses across the county if proven acceptable.

The 2,400-square-foot test facility is expected to pump 72,000 gallons of seawater a day, and possibly set the Santa Cruz Water Department and water district on the path to a shared \$40 million permanent desalination facility they say would help shore up the area's water supply.

"I'm hopeful we can demonstrate that desalination will have a less-than-significant impact on the environment," City Councilman Ed Porter said Friday. "We need to take some prudent steps to ensure we have an adequate water supply."

Santa Cruz has been planning since November 2005 to augment its water supply in dry periods by building a desalination plant. The Soquel district has been looking for an alternative to its heavily used underground wells since at least 1997.

The Soquel district's directors worry saltwater may seep into underground supplies in the next few years if they are not given a chance to replenish.

"We've had a difficult 20 years now using more water than the rain provides," said Bruce Daniels, president of the water district's board of directors. "We need a continual new supply to make up for the deficit we've been experiencing."

The pilot plant — to be constructed by global engineering firm Camp Dresser and McKee — should be completed by October and running by November,



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CITY COUNCIL

Water

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according to Heidi Luckenbach, an engineer with the city's Water Department.

The test plant will operate for at least one year to examine details of the energy-intensive reverse osmosis process, impacts on marine life and the resulting water quality.

"We know it will work, it's a fairly proven technology," Luckenbach said. "We want to look at how to optimize treatment."

Treated water from the pilot

plant won't be available for consumption; rather it will be thrown back into the ocean, Daniels said.

The city and Soquel district formed a partnership earlier this year to split the cost of building the pilot plant and the full-scale desalination plant if allowed to go forward.

The Soquel district plans to use desalinated water year-round while Santa Cruz would use the water as a back-up source during drought years when the Loch Lomond Reservoir runs low, roughly every seven years.

If a full-scale desalination plant is constructed in Santa Cruz, with

capacity to produce 2.5 million gallons a day, the district would use an estimated 1 million gallons a day.

The Soquel district, with about 50,000 water customers from Capitola to La Selva Beach, set aside \$1.5 million in its 2007-08 budget to help pay for the pilot plant and other required studies for building a permanent desalination plant.

The city received a \$2 million grant from the state Department of Water Resources to help fund the pilot project.

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Daniel Kriege, a board member of the Soquel Creek Water District, Bruce Daniels; president of the board of directors for the Soquel Creek Water District; and Ed Porter, a City Council member, break ground Friday for a pilot desalination plant at Long Marine Lab.

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