







'What do we do if we have a period where it doesn't rain for three years?'

Desal plant on tap

By SHANNA McCORD SENTINEL STAFF WRITER

to pursue an expensive backup planto keep faucets flowing when the rain

Plans are on the table to build a temporary \$3.5 million desalination plant that would strain salt out of ocean water and purify it for drinking, showering and gardening in times of drought.

A location for the test project has not been determined, though a site near the UCSC Long Marine Lab has been suggested.

But critics say desalination is an "extremely energy-greedy process," and the city would be better off with a strict recycling policy for conserving water.

"If we don't do something now, we'll have more events where people are forced to curtail their water use," Bill Kocher, Water Department director, said. "And, it'll be more severe.

"We see absolutely no reason why desal wouldn't work."

City officials say they've spent more than five years doing exhaustive studies related to curtailment

Desal

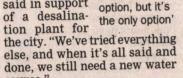
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and conservation, hoping to find a way for residents and businesses to simply cut back on water use when rain falls short.

However, they've concluded the only way to weather future

dry years is to tap a new water supply — and new dams, drilling and underground streams haven't panned out.

"To me, it's the last and worst option, but it's the only option," Mayor Mike Rotkin said in support of a desalination plant for



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source."
A test plant, though, is required before constructing a permanent, full-scale desalination plant.

A recently released draft environmental impact report for the city's integrated water plan

includes a permanent desalination plant that shows no significant adverse impacts on marine life and the quality of ocean water from either intake or discharge of brine back into the bay. If the environmental impact

report is approved by the council, the city would begin a pilot project.

The desalination test project would cost about \$3.5 million, which would be funded with a \$2 million grant from the state Department of Water Resources and the balance paid with the monthly rates charged to the city's water customers. No money would come from the city's general fund, city officials said.

The pilot project would run for a year, including ongoing tests and water samples, and produce 72,000 gallons of water a day.

A permanent desalination plant costs \$40 million and would pump 2.5 million gallons a day of salt-free water.

Though several other California coastal towns — Marin, Long Beach, Carlsbad and Marina — already have begun using the desalination technology, each site varies slightly and must be tested separately to win approval from the California Coastal Commission.

"Temperature and salinity are

the two biggest factors," said Linette Almond, engineering manager with the city Water Department. "We need to run tests to make sure this is the optimal treatment for our temperatures and salinity."

In Santa Cruz, a permanent desalination plant would be used only in drought years — roughly once every 10 years — and not be a tool for encouraging new growth.

Still, critics take issue with the amount of fuel and energy required to push the salt water through the membranes. The high price of that energy, they say, is off the charts.

Patricia Matejcek, an officer in the local Sierra Club chapter, said the city should be more assertive about recycling water, especially for use at parks and golf courses.

"When you start the desalination process, your costs are so high you might as well be using Gray Goose Vodka to wash your car," Matejcek said. "The energy costs — you can't imagine what that's going to be like."

Rotkin expects a political struggle as the City Council decides whether to approve the pilot project after the final environmental impact report comes out in October.

"Have we looked at alternatives? Yes, we have," he said.
"We can't afford to do nothing and have a crisis in a drought."

The City Council will hold a public hearing July 26 for citizen input on the draft environmental impact report.

If approved by the council, the pilot project could be in place by early 2006, Almond said.

Councilman Ed Porter said

desalination is a viable option because it would help sustain the economy during dry years.

"Without a backup plan, which we don't have now, what do we do if we have a period where it doesn't rain for three years?" Porter asked. "We'd be in trouble, and the first things to go would be the businesses."

Currently, the city's 90,000 water customers — between Davenport and 41st Avenue in Capitola — use 14 million gallons of water a day during the summer. Use drops to 9 million gallons a day in winter, Kocher said.

A severe drought in 1977 forced Santa Cruz residents to cut water use 38 percent because of depleted supplies. Kocher said some people racked up \$1,000 water bills for two months use during that time.

Desalination talks on tap

Public meetings will be:

Thursday — 7 p.m. at Police Department, 155 Center St., Santa Cruz.

July 11 — 7 p.m. City Water Commission, City Council chambers.

July 26 — 7 p.m. City Council public hearing.

To reduce the cost of desalination, city officials are considering a partnership with Soquel Creek Water District if the project proceeds.

A meeting between the water

A meeting between the water district's board and city officials is planned for July 11 to discuss shared desalination options.

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