

Cost of desal test plant soars

Desalination plant 11/21/07

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Testing the waters on desalination will run \$624,000 more than city water officials anticipated when setting out two years ago to build a pilot plant, bringing the total price to \$4 million.

SANTA CRUZ Higher costs for construction, labor and operation of a 2,400-square-foot pilot desalination plant by Camp Dresser and McKee, the Walnut Creek engineering firm hired to build the facility, forced the City Council on Nov. 13 to approve a budget increase of \$624,000 for the project.

"I'd be surprised if this were the end of the cost increases. These things tend to cost more than you think going in," city Water Director Bill Kocher said. "I'm not sure we have a handle on that."

The price hike is about 20 percent more than the original \$3.3 million agreement with Camp Dresser and McKee in November 2005 for designing, constructing and operating the pilot plant.

Cost increases are largely due to conditions that the California Coastal Commission and UC Santa Cruz — which is allowing the plant to be built near Long Marine Lab — are placing on the project to get a permit.

For example, the city is required to make paving improvements around the pilot plant, install a fire alarm system and make plumbing upgrades to the area.

Also, the state Department of Public Health added to the project's water monitoring costs by requiring the city to conduct a \$337,000 watershed sanitary survey with the pilot study.

"That was money we were going to

spend anyway," Kocher said. "It just moves that cost forward."

The higher project costs tallied nearly \$1 million, but the Water Department trimmed about \$300,000 from other areas of the project to help save money.

The \$624,000 will be split between the Soquel Creek Water District, which is partnering with the city on desalination, and the Water Department's capital improvement budget, which is funded by rates customers pay.

The two water agencies supply the majority of Santa Cruz County homes and businesses with water.

Construction started in July on the pilot plant, and is expected to be complete within the next couple of weeks, Kocher said.

The test plant will run until spring 2009, pumping out nearly 72,000 gallons of fresh water each day. The water, not

for consumption, will be returned to the ocean.

The pilot desalination plant will study how the local ocean water responds to reverse osmosis — an energy-intensive process for removing salt from ocean water — before the city decides whether to build a permanent \$40 million desalination plant to shore up the area's water supply in times of drought.

Local ocean temperatures, usually in the mid-50s, will be one of the main factors in determining the suitability of reverse osmosis in Santa Cruz.

"We know we can do it," Kocher said. "The question is, what is the most effective and efficient way that uses the least amount of energy? Can the plant handle what's coming at it?"

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