

✓ WATER SUPPLY 1990-

SJM 11-3-92 B-1

Firm gives Santa Cruz seven water alternatives

■ **Top story:** A desalination plant is one choice Santa Cruz will consider.

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Engineers looking for ways to expand Santa Cruz's water supply by 2005 have narrowed their search to seven options, ranging from a desalination plant to building dams near Davenport and Boulder Creek.

The alternatives, which are expected to be a major issue for the next city council, are listed in a study this week from Camp, Dresser & McKee, a Walnut Creek consulting firm hired by the city last year.

"We're trying to keep it on a technical basis right now," water director Bill Kocher said. "Leave the politics out until later."

In July 1991, the city council paid the

The consultant's proposals don't seem to include any single ideal solution.

firm \$370,000 to conduct a comprehensive review of 13 choices presented in the city's 1988 Water Master Plan.

Some options were discounted because they would not bring in enough water. Others were judged geologically unworkable.

In the coming months, the engineers will analyze the seven alternatives further. They are scheduled to present a final report to the city council by next fall, Kocher said.

Santa Cruz's future water picture is best summed up as too many people, not enough water, according to the study.

Last year, 80,000 customers were served by the Santa Cruz Water Department. By 2005, there will be 105,000.

Engineers predict water use will increase 23 percent, from the current 4.2 billion gallons a year to 5.17 billion gal-

lons in 2005.

"I think people feel that we need to go ahead with some new supply," Mayor Don Lane said. "Without doing anything, rationing could get much worse when there is another drought."

The city has not built a major new water project since 1962, when Loch Lomond — still its only reservoir — was constructed.

A major new project such as a dam almost certainly would eliminate the need for future rationing. But many locals say a new dam would open the door to rampant growth, San Jose-style.

"It's touchy," said Lane, who would prefer other options, such as using reclaimed water for irrigation.

The seven choices:

■ Drilling new wells. The city has found groundwater below Harvey West

Park and near Thurber Lane in Live Oak. The water could be pumped cheaply and with little environmental impact. But its quality is poor and the amount moderate.

■ Reclaim wastewater. Facilities at Scotts Valley or Santa Cruz would have to be updated to treat sewage to a higher level. Water would be pumped onto golf courses and cemeteries, freeing up more for drinking. Costs would be high and yield would be moderate.

■ Enlarge Loch Lomond. Engineers say that raising the dam on the 2.8 billion-gallon reservoir by 4 feet would increase capacity by 260 million gallons. An increase of 14 feet would provide another 1 billion gallons. But recreation facilities would have to be relocated, and it is unknown yet whether the dam could structurally hold more water.

■ Work with Scotts Valley. Santa Cruz

would pump water into Scotts Valley's underground aquifer in the winter, then buy or trade it back in the summer. Cost for new pipes and pumps would be less than \$5 million. But no one knows whether the water would "bank" underground or seep away.

■ San Lorenzo Valley dam. Two sites being studied are on the upper San Lorenzo River, in remote forests at Kings Creek and Waterman Gap. A dam holding 4.6 billion gallons would end rationing but would disrupt wildlife, cost up to \$50 million and require relocation of Highway 9.

■ North coast dam. Two creeks between Davenport and Wilder Ranch appear feasible, Yellow Bank and Lidell. High costs, salmon runs and impact on endangered species would come into play, however.

■ Desalination plant. Because the ocean is so salty, it takes 10 gallons of seawater to create one gallon of fresh. Costs could total \$60 million. But if water were pumped from under the beach, where salt content is lower, a plant could be built for substantially less.

SJM 11-3-92