

# Santa Cruz starts study of new water sources

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SANTA CRUZ — The key to solving Santa Cruz's future water problems may lie in the past, says city Water Director Bill Kocher.

Development of a diverse source of supply over the past 100 years has allowed the city to weather — so far — its second drought in the past 15 years. "We're reaping the benefits of 100 years of planning," Kocher said Tuesday. He believes it will take development of a new array of sources to allow the city to meet the demand until 2005.

The City Council last week directed Kocher to have engineering and environmental studies begun on 12 new alternatives, ranging from a change in operating rules and increased preventive maintenance on the north coast water main, to building a new reservoir in the upper San Lorenzo River watershed.

The biggest flaw with the current system will not, and cannot be solved, Kocher said. That flaw is the lack of significant groundwater supplies. Exhaustive searches have failed to locate any significant sources of groundwater. Scotts

Valley and the Soquel Creek water districts sit atop giant springs, insulating them from drought.

Santa Cruz's major supply is water diverted from four major streams, including the San Lorenzo River. Levels in those streams, of course, depend on the yearly rainfall.

"If we had average rainfall every year, we wouldn't have to do anything to meet demand in 2005," Kocher said. "If someone could guarantee me average rainfall until then, my job would be a breeze."

Without that guarantee, Kocher has to come up with a billion gallons of new water in the next 15 years.

Kocher said he was pleased with the council's direction to proceed with engineering and environmental studies of alternatives. "We have charted a course," he said. Kocher estimated the cost of the studies at about \$350,000.

Among alternatives will be means of boosting the water diversion from the major streams to the department's reservoirs.

Engineers also will study the possibility of diverting water from certain streams into Scotts Valley's

underground aquifers during the winter months.

That would help Scotts Valley by recharging its aquifers, and would help Santa Cruz by banking water there which could be sent back to the city during the summer months, when supplies are lowest.

Enlarging Newell Creek Dam at Loch Lomond and building new reservoirs on the north coast or the upper San Lorenzo River watershed also will be studied.

No single alternative will meet the demand, Kocher said.

A new reservoir on the north coast, for example, would meet the ultimate demand of year 2005, but would not help the department keep up with the increasing demand during the 15 years of construction.

"If one thing is clear, it is that there is no way to sit here today and say let's do this one project. We're talking about doing a number of projects over a period of time to keep up with demand," Kocher said.

Somewhere in the list of 12 alternatives is the right combination. "What we will have to do is sit down with all the engineering studies and say, 'Now what projects will keep us ahead of demand,'" Kocher said.