

\$7 million diversion

Midcounty's growth rate outpaces water potential

By BOB SMITH

If the midcounty continues to grow at its present rate for the next 20 years, the Soquel Creek County Water district may never be able to completely solve its water problems.

That conclusion was part of the long-awaited report by James M. Montgomery Engineers on the feasibility of diverting water from Soquel Creek to meet the district's current water deficit in the midcounty groundwater basin.

Water district directors, reacting to the report and the growing public concern over the midcounty's future water supply, slapped a hold on all new water service agreements until the board decides if it is going to order a moratorium on new water hookups.

The engineer's report recommends that the district reduce the amount of water it presently pumps from the groundwater basin by approximately 30 percent to meet the U.S. Geological Service's estimates of a "safe annual yield," giving it a fair share yield of 2,540 acre feet a year to serve its customers.

Similar reductions would be asked of the other major pumpers in the area, including the city of Santa Cruz, Central Santa Cruz County Water

district, farmers and others with private wells.

It will cost \$7.2 million to build a diversion dam in Soquel Creek near Bridge Street by 1984, and then construct a 5.9 million-gallon-a-day water treatment plant near the entrance to Soquel Creek.

But that won't give the district enough water to meet the consumer demands if the district continues to add 300-400 new service connections a year — its historical rate of growth.

If the district spends another \$11.8 million to build the Glenwood dam and reservoir on the west branch of Soquel by 1995, it will have surplus water for only a couple of years before the demand for potable water catches up with, and then exceeds, the groundwater-Soquel Creek supply, the Montgomery report showed Monday night.

The district's board room was filled to overflowing Monday night with as many people, including Supervisor Marilyn Liddicoat, sitting and standing in the lobby as were able to crowd in.

There was no public discussion on the Montgomery presentation however, as water board president Ken Izant informed the audience that Monday night's meeting

was not a public hearing, and only board members would be permitted to question Montgomery engineers.

Izant promised a full public hearing on the report before the board makes any decision on the engineers' recommendations. That hearing will probably be held in September.

Montgomery engineer Mark Moser said the firm looked at three alternatives for using the Soquel Creek water. The first followed the 1976 study by Montgomery and called for construction of a diversion dam at the confluence of the east and west branches of Soquel Creek, the Glenwood Dam on the west branch, construction of a water treatment plant near the confluence, and a pipeline running several miles down the creek to the district's mains under Soquel Drive.

The second alternative, provided the cheapest water, included the Bridge Street diversion dam, the treatment plant near the high school, and the Glenwood dam complete with a small hydroelectric plant.

The third alternative put a diversion dam on the east branch of Soquel Creek, Glenwood Dam on the west branch, the treatment plant at the junction of the two

branches, and pipelines to Soquel Village.

The combination of the Bridge Street diversion dam and the Glenwood reservoir, Moser said, produced the greatest amounts of water at the least cost and with the minimum environmental damage.

Moser cited comparative costs per acre foot for the three alternatives of \$152, \$142, and \$162, but cautioned that the true costs would be three to five times higher because of financing costs.

"Alternative II is the apparent best alternative," Moser told the board, "it has the lowest cost per acre foot, the greatest supply and the least environmental impact."

Moser at first contended that the Bridge Street diversion, coupled with Glenwood project to produce 5,600 acre feet of water a year, would give the district sufficient water until the year 2000.

But he backed down, and apparently contradicted himself under questioning from water director Dan Kriege, who is also operations manager of the Santa Clara Valley Water District.

Pointing to one of Moser's slides, Kriege pointed out that it showed the diversion dam going into operation in four years "and we'll be at a

deficit."

Moser said that was correct, adding that the engineers assumed that the district would continue to add connections at the rate of 300-400 per year.

Kriege also questioned Moser on the water yields from Soquel Creek if Glenwood was never built.

"Making the assumption that the dam is not feasible," Kriege said, Alternative II (the Bridge Street diversion) would still yield 2,300 acre feet?"

"Right," agreed Moser. The consultant then told Kriege that the diversion dam-treatment plant cost at \$7.2 million in 1980 dollars.

"That's a lot of money," Kriege said. "Would you size the (treatment) plant any differently if you weren't to build a dam?"

"I would think so," said Moser. "There are ways to trim it down (size and cost) by optimizing the plant size."

"Even with Phase I (diversion dam and treatment plant), we will still be in an overdraft condition and the first to feel it would be the people at Pot Belly Beach," added Kriege, referring to the New Brighton Beach area residents who are worried about salt water intrusion ruining their private water wells.

REFERENCE

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