

DWP: Rationing Unlikely but Conservation Essential

Agency Seeks to Cut Drain on Storages

BY KEN LUBAS
Times Staff Writer

Although the prospect of the city Department of Water and Power having to impose water rationing this year is unlikely, says a DWP engineer, "That does not mean water conservation isn't necessary. The picture we are really looking at is next year."

If the drought continues and voluntary efforts fail, the DWP believes there is little chance mandatory controls can be avoided next year.

According to Duane Georgeson, engineer in charge of aqueducts, the conservation push is aimed at reducing the drain on underground water supplies and State Water Project storage facilities.

Georgeson said the DWP will be able to obtain enough water to meet its needs this year, but the Metropolitan Water District (MWD), principal purveyor of State Water Project water, will not be filling storage facilities currently being drawn on and will severely curtail its program of replenishing underground water.

State Water Project water is collected primarily from the Feather River at the Oroville Dam in the upper Sacramento Valley and shipped to the San Joaquin Valley and Southern California by the California Aqueduct and a series of canals for storage and distribution.

"To put it simply, another dry year against the two we've already had could result in some real problems," Georgeson said.

The DWP normally gets 80% of its water from the Owens Valley, 15% from wells and 5% from the MWD.

Because of the drought and litigation involving the Owens Valley wells, Georgeson said, "we anticipate being able to draw only 60% of the water we need from the Owens Valley, thus forcing us to increase well production to 20% and the MWD percentage to 20% also."

Water from the MWD will come from the Colorado River as a result of the MWD decision to free water for the northern part of the state by ending use of Northern California water by May 1.

David Kennedy, MWD assistant manager, said the agency also foresees no difference in being able to meet this year's user needs, but that another year of drought would make water rationing almost inevitable.

Kennedy said the key to preventing rationing is voluntary cooperation in water conservation.

The MWD views rationing as a last resort simply because of its economic impact.

In January, the drought had already ranked as the nation's fourth worst disaster in terms of economic impact, with losses set at more than \$800 million. The three disasters preceding it in ranking were hurricanes. Officials anticipate that before the dry spell is over, the drought may rank second behind Hurricane Agnes, which devastated the East Coast in June of 1972, causing losses of \$4.5 billion.

If the drought continues, depletion of water storage at Pyramid, Castaic, Silverwood and Perris lakes, as well as underground supplies relied on heavily by cities in such areas as the San Gabriel Valley, would reduce the MWD's ability to serve its customers seriously, according to an MWD spokesman.

The MWD has increased its draw on the Colorado River by 400,000 acre feet this year to 1.2 billion acre feet, the maximum it can take. The increase makes up half of the water the MWD was projected to receive from the north. The agency will make up the rest of its customer needs through curtailment of its underground replenishment program.

The dry weather causing the drought has been caused by an unusually high pressure ridge between California and Hawaii which has persisted from early November, 1975. Weather fronts from the Pacific Ocean either are funneled north or weakened by the ridge.

Georgeson is sensitive regarding criticism over Southern California use of Northern California water and the statements made by Northern California legislators relative to the lack of mandatory controls on water use in Southern California.

"It's kind of the old story," Georgeson said. "You get what you pay for. What the MWD is doing is helping Northern California areas that don't have a right to receive the amount of water they need."

"Southern California has paid about \$500 million for the right to State Water Project water, while the agricultural customers in the San Joaquin and Sacramento valleys spent about one-tenth of that."

"More than 50% of the state's population is in Southern California, yet we use only 9% of the water."

Georgeson said many of the areas hardest hit by the drought were among those to shun water planning in the past.

He said that in Marin County, where mandatory controls are in effect, a measure to construct a pipeline to the Russian River was soundly defeated.

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BATHTUB RING—High water mark on Castaic Lake is starting to look like a bathtub ring as the water level



continues to drop. The level is down 108 feet already and is expected to drop another 120 feet as a result

of a recent state decision to stop delivering Northern California water to Southern California users.

Times photos by Ken Lubas



HIGH AND DRY—A boat passes the launching ramp on Castaic Lake's western shore. The

ramp has been rendered useless because of receding water. A second ramp is still in use.

DWP Expects Full Effect From Drought Next Year

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Addressing himself to the DWP's own sources, Georgeson said if the DWP had full use of its Owens Valley wells instead of the half it is limited to because of litigation, "we would not find ourselves in the unfamiliar position of being quite dependent upon the MWD."

Georgeson said the legal battle over well use in the Owens Valley followed DWP Commission approval of an environmental impact report last July which concluded the department could live without new wells in the Owens Valley.

"Inyo County challenged the report," Georgeson said, "and filed with the Third District Appeals Court. In what we believe is a highly unusual action, the Appeals Court retained jurisdiction instead of referring the case to Superior Court and further ordered the department to cut its pumping rate to half."

"If the Owens Valley well production hadn't been cut in half, we would be receiving another 120,000 acre feet a year."

Georgeson said that would be more than enough water to supply the normal needs of a half million people annually.

An acre foot is roughly equivalent to 326,000 gallons, enough to cover one acre, one foot deep.

"If you take all the water we sell in Los Angeles for residential, commercial-industrial, park, cemetery and golf course use and divide by the number of people in the city, you come up with 179 gallons per person each day," Georgeson said. "Now about 55% goes for residential use, which means that about 100 gallons goes to each person each day."

Georgeson said that last year the DWP received about 475,000 acre feet from the Owens Valley.

In terms of local well production, Georgeson said the department has 95 wells drilled into the underground San Fernando Basin. Of the 95, there are typically 80 in operating order since six of the wells are not ordinarily used because of high mineral content and others are periodically shut down for maintenance.

In the past, especially when plans were announced for the reconstruction of Lower Van Norman Dam which nearly collapsed in the 1971 earthquake, the DWP has been criticized for not tapping the basin to a larger extent.

However, water districts in the Santa Clarita and Antelope valleys, which have over-pumped, today are facing the chance that wells will go dry.

All of the Valley's wells are tied into the city's water system and can be used at any time, but Georgeson said the trade-off is higher electrical costs.

The Valley wells have a maximum capacity of 82,000 acre feet a year, and, when combined with other city wells, can yield 100,000 acre feet.

Last year the city pumped 10,000 acre

feet of Owens Valley water into the San Fernando Basin and the 1977 pumping draw is projected at 20,000 acre feet.

The city could pump the wells at full capacity but doesn't plan on it. The reasoning in part is tied to a 20-year legal battle involving Burbank and Glendale.

The lawsuit was over who has pumping rights and how much each is entitled to. Los Angeles won the suit in the state Supreme Court and is currently resolving minor problems with Burbank and Glendale over peripheral claims that were filed during the 20-year fight.

"We don't feel we can pump those wells flat out without some discussion with Burbank and Glendale," Georgeson said.

"Besides, you don't want to use up everything now. Normally we pump wells heavily during the summer. The aqueducts run at a near-uniform flow year-round, so in essence the underground basin provides a resource for meeting summer peak demands and emergencies."

When it comes to DWP reserves, the drought couldn't have hit at a worse time.

The DWP has 29 storage reservoirs, 22 of them major—Encino, Franklin, Stone, Hollywood, Silverlake, Eagle Rock, Santa Ynez, Upper Van Norman, Van Norman Bypass, Los Angeles, Green Verdugo, San Pedro, Ascot, Sawtelle, Chatsworth, Bouquet, Fairmont, Haiwee, Timmenaha, Pleasant Valley, Crowley and Grant.

Of these, however, Chatsworth, Franklin and Los Angeles (the replacement facility for Lower Van Norman) are empty and Upper Van Norman is at half capacity as is Bouquet. Fairmont and Haiwee are at two-thirds capacity.

Georgeson said that to the DWP's water storage reserve this means an absence of about 70,000 acre feet.

Los Angeles Reservoir is empty because it is still under construction, but all other reservoirs empty or down are attributable to new seismic safety standards which call for extensive re-analysis and, in the case of at least Chatsworth, modern reconstruction.

Georgeson added that in addition to the loss of these storage facilities, reserves at Crowley and Grant Lakes are down about 100,000 acre feet.

Los Angeles Reservoir, in Granada Hills, is scheduled for completion by April and the DWP is going to go ahead with plans to fill it, not with new water, but with water from Bouquet.

Bouquet has been drawn down to about 22,000 acre feet and will be lowered to about 14,000 acre feet.

"There are a couple of reasons for transferring the water," Georgeson said. "The Van Norman Basin has always been a key storage location in our system, with the two Owens Valley aqueducts coming in and huge distribution pipelines leaving."

"If there were to be a disruption to the

supply lines such as an earthquake along the San Andreas Fault, the reserve would give us the ability to maintain a near-normal supply for a few days to a few weeks.

"One of our goals has always been to have emergency supplies on this side of the San Andreas."

"A second reason is that we have been under-the-gun to comply with federal safe drinking water guidelines which have set new standards for water turbidity. Passing the water through the Van Norman site would give us additional settling."

Georgeson said that while the inspection of Bouquet has not been completed, the draw will allow for construction of a buttress fill on a natural embankment that has a narrow ridge.

"This work has been planned for some time," he said. "The rate at which we will be able to refill Bouquet will depend on the water picture next winter. The water filling Bouquet comes from the Owens Valley."

PWS-0181-0002