

Clouds may be in water's future

Low lake levels could affect LV area's tap water

By Mary Manning

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■ Every year, about the time that Thanksgiving rolls around, Lake Mead rolls over.

And this fall, residents and visitors to Las Vegas may be tasting something a little different in their drinking water.

As lake waters warm on top in the summer, they mix with cooler lower layers, explained Joe Monscvitz, chief of the Southern Nevada Water System that pumps water reserved in Mead to Las Vegas.

The turnover is a natural process called destratification. This year as lake levels drop and continue to plunge, drinkers may notice cloudy water or a slight difference in odor or taste.

While the water may have an "earthy" taste, it won't be unsafe or cause illness because scientists will treat it, he said. Estimates of a problem this year range from mild to mediocre.

Odors build as dissolved oxygen at the bottom of the lake drops. The higher the oxygen, the less odor from stagnant water trapped at the bottom.

As oxygen is used up, sulfides rise and create the earthy odor as their molecules pop up from tongue to nose after tasting the water.

Since the late 1970s Lake Mead's level has risen until 1983, when the Colorado River flooded and spilled over Hoover Dam. Lake Mead remained at very high levels from 1983 through 1988, Monscvitz said.

"The last time we had an odor problem was in 1978," he said.

The lake is gradually dropping. In 1989 and 1990 the lake dropped to around 1,180 feet, about the same level found in 1978 when the last odor episode occurred during destratification.

In the next year Mead could drop another 12 feet, but that isn't as low as 1971 when it

measured 1,158 feet. As the water level drops, the odor will rise.

Local lake expert, Dr. James Deacon, said he would be surprised if people detect an odor from the lake. "I would be surprised unless it was in Las Vegas Bay," he said.

In 1971-72 algae blossomed in Lake Mead, spawning federal and state research. The result was a \$52 million Clark County Advanced Wastewater Treatment Plant to remove phosphorous.

"By the late 1970s, it was exceptionally clean," Deacon said.

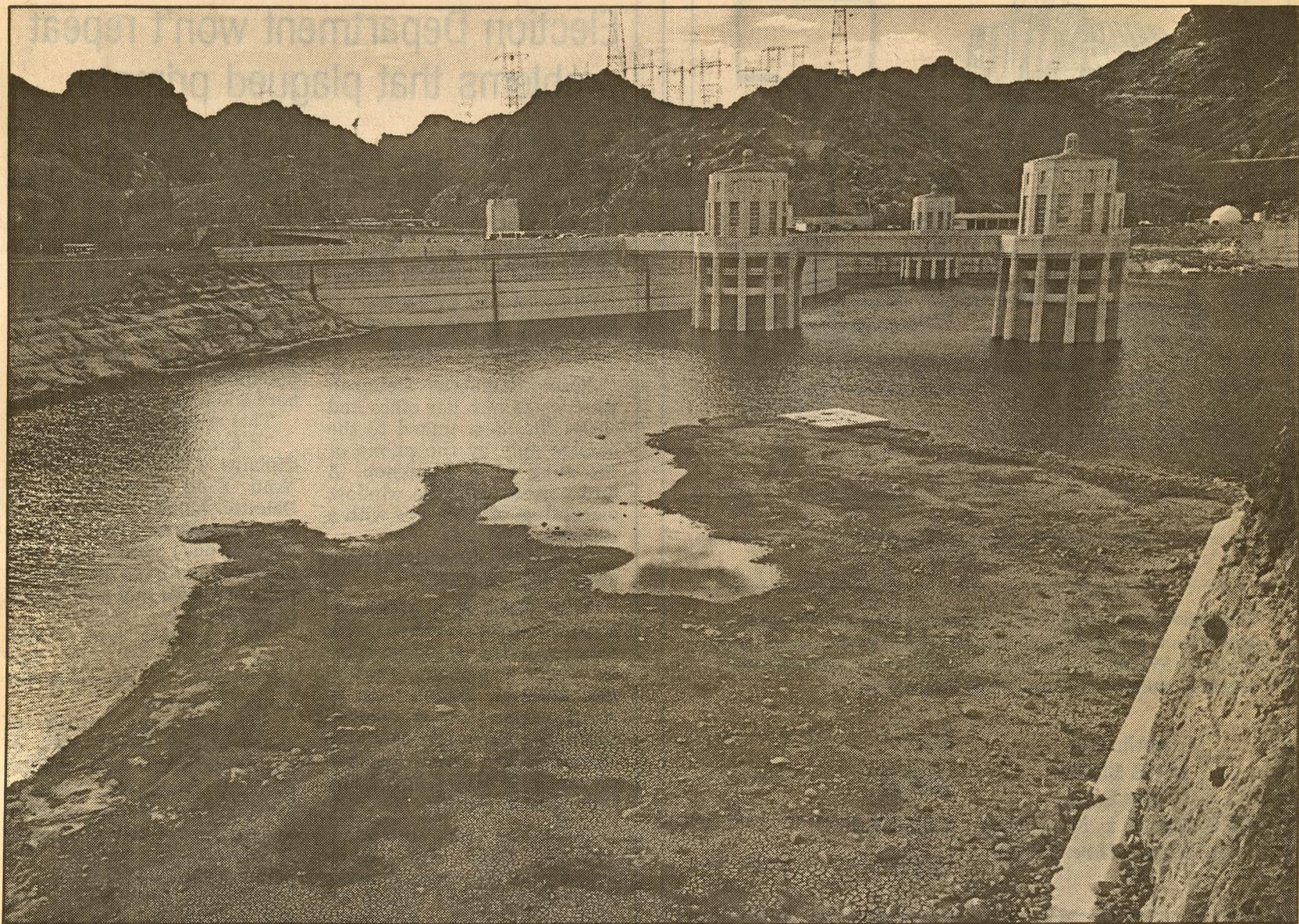
Scientists monitoring Mead

this spring and summer found oxygen disappearing on the bottom part of the lake at the same rate as in 1978.

Test results show areas in Lake Mead as low as 2 milligrams per liter or less of dissolved oxygen. Current dissolved oxygen before treatment registers 4.4 milligrams per liter.

The water district has signed contracts to purchase carbon and sulfur dioxide, chemicals used to treat odor, said Dr. Linda Littell, director of communications and public relations.

Two factors could increase the problem. The Water District has not had an opportunity to test the system for taste and odor control since the treatment plant was expanded in 1983 and each odor has a special chemical mix that will take research before treatment operators can apply a remedy.



BY TONY BLEI / STAFF

THIS RECENT PHOTO of Hoover Dam shows the water level dropping. Low lake levels could mean an earthier taste from tap water.