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## **Looking West for Water**

LOS ANGELES- California's classic quest for water, made more pressing by a persistent western drought and a severe cutback in Colorado River supplies, is turning to what many have regarded as an obvious source: the ocean that forms the state's western border.

New technology has made it cheaper to squeeze freshwater from the ocean and other states' demand for more Colorado River water has made it a near necessity.

"There's only so much you can conserve," said Steven Erie, political science professor and water expert at the University of California, San Diego. "The future is recycling and desalination."

The Metropolitan Water District of Southern California, which serves 18 million customers in six counties, is in the process of approving plans to subsidize five desalination plants, proposals that were submitted by local water agencies. Together, the plants could supply up to 7 percent of MWD's customers by 2007.

MWD tentatively approved the proposals in December and expects construction to begin by 2005, pending environmental reviews.

"Even though it only represents a small portion of the water we use, it's an additional supply," MWD Board Chairman Phillip Pace said, "It's something everyone has an interest in."

Elsewhere in the nation, desalination is being considered as a way to supplement dwindling groundwater supplies.

In Florida, a Tampa Bay plant is scheduled to open this month, with a second one in the works. Texas also is researching desalination sites, while landlocked New Mexico wants to produce drinking water by wringing salt from its brackish, underground aquifers.

Critics said desalination remains too expensive, in large part because of the power required to run the plants, and that the process damages local coastal environments.

For every two gallons of water filtered, one gallon of drinking water is produced. The highly concentrated salt water known as brine goes back to the sea. In heavy concentrations, that brine can kill small sea creatures, according to the California Coastal Commission. Scientists are still studying its effects on dolphins and other mammals.

“It’s always easier to seek new sources than to conserve,” said Jane Kelly, state director for the consumer group Public Citizen, which has long worked on California water issues.

Supporters, however, say desalination is a crucial part of California’s search for new water supplies.

The state’s population is expected to grow by 6 million people by 2010, according to the California Department of Finance. They also note a federal order requiring California to cut its use of the Colorado River to fulfill a decades-old agreement with six other western states.

The Interior Department ordered the cutback when the state missed a Dec. 31 deadline to forge an agreement saying how it would reduce its over-reliance on river water. The deal fell apart when an Imperial Valley utility district rejected it. A last-minute attempt to salvage the agreement failed.

Since then, the Metropolitan Water District has said it has access to ample water supplies for the next 20 years, even without the extra Colorado River water it has received for decades.

”It’s expensive,” the MWD’s Pace said, referring to desalination. “but if you have the difference between additional expense and no water, you go with expense.”

The basic process of desalination is not new. Salt water is pumped through filters under high pressure, squeezing out minerals. Israel and Kuwait have relied on desalination for decades, as have military vessels and cruise ships.

More than a dozen small plants were built along California’s coast during the early 1990s when the state faced its last drought, but most were for industry. Nearly all were shut down or dismantled because of high operating costs and because water agencies found cheaper water elsewhere.

The Coastal Commission must give final approval for most desalination proposals along the state’s 1,100-mile coastline and is finishing a study of existing and potential sites.

More projects are on the works. The commission counted about 13 proposed domestic desalination sites from Marin County to San Diego and another six that could be reactivated.