AGENDA NO. ___

WEST BASIN MUNICIPAL WATER DISTRICT

JULY 9, 2003 - Water Resources
McDonald, Kwan
JULY 28, 2002 - Board Meeting
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INFORMATION CALENDAR

OCEAN-WATER DESALINATION UPDATE

SUMMARY:

Seawater Desalination Task force

The State Seawater Desalination Task Force had its second meeting on June 24 and 25 in Carlsbad, CA. The two issues that were focused upon were siting issues and concentrate discharge. The next meeting of the Task Force will be in Monterey on July 29 and 30. The main issues will be planning and regulation.

United States (US) Desalination Coalition

The US Desalination Coalition has scheduled a visit to Washington D.C. on July 10 to introduce members of Congress to the proposed desalination legislation. The desalination legislation will provide funding for brackish water and ocean-water desalination. The brackish water funding will be through the Bureau of Reclamation and the ocean water funding through the EPA. The EPA funding is proposed to be $200 per acre-foot delivered for no less than 10 projects. Maximum project size funded will be 50,000 acre-feet.

Four of Florida's largest water agencies have become members of the US Desalination Coalition. The Florida agencies are the South Florida Water Management District based in West Palm Beach, the St. Johns River Water Management District based in Palakta, the South West Florida Water Management District and Tampa Bay Water, both of which are headquartered in the Tampa Bay area.

Ocean-Water Desalination Workshop

Staff is working on an ocean-water desalination workshop scheduled for August 8 at the West Basin Recycled Water Plant. The workshop will focus on national and international experts who have actual operating experience in ocean water desalting.

Pilot Plant Results

The principal purpose of the National Water Research Institute testing was to demonstrate the viability of the microfiltration pretreatment process as a pretreatment to reverse osmosis. The quality of microfiltration product water is characterized by turbidity and, to a lesser degree, Silt Density Index (SDI). The microfiltration pretreatment provided

superior treatment over what would be expected out of a typical conventional pretreatment process.

	Typical Conventional Pretreatment	Microfiltration Pretreatment
Turbidity (NTU):	0.5 to1.0	less than 0.1
SDI:	2 to 5	2 to 4

The better feed water quality provided by microfiltration is anticipated to allow higher flows through the reverse osmosis (RO) membranes, less frequent chemical cleaning, and more reliable operation. This will result in capital cost savings and improved operations.

The RO membrane operated at 12% to 28% higher flows on the microfiltered water than would be expected operating on conventionally treated seawater. The RO membranes showed no signs of membrane fouling over nine months of operation. RO systems operating on conventionally treated seawater typically require periodic chemical cleaning requirements. With the exception of the testing phase using chloramine, the RO membranes have consistently produced water with less than 300 milligrams per liter of total dissolved solids (salts), which following stabilization is well within drinking water requirements.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

None required.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on July 9, 2003 and agendized to the July 28, 2003 Board meeting as information.

RECOMMENDED MOTIONS:

This item is for information only.

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