

**WEST BASIN MUNICIPAL WATER DISTRICT**

**JANUARY 11, 2007 – Water Resources**  
Little, Smith

**JANUARY 22, 2007 – Board Meeting**

Prepared by: Wyatt Won

Submitted by: Paul Shoenberger

Approved by: Rich Nagel

INFORMATION CALENDAR

MEMBRANE CONSULTING SERVICES

SUMMARY:

West Basin Municipal Water District (District) has a substantial investment in membrane technologies at our water recycling facilities. Membranes are used when high-quality recycled water is required by the customer. The District currently uses membranes to treat recycled water for use at the West Coast Barrier, and at three major refineries in the area. Membrane technology that the District uses includes microfiltration (MF) and reverse osmosis (RO).

The District has about 25 million gallons per day (mgd) of RO treatment capacity spread out over three sites. The District also has about 29 mgd of MF treatment capacity that pretreats the recycled water prior to RO. There are about 7,000 RO elements and 5,000 MF elements, worth over \$6 million at the recycled water facilities. These elements generally need to be replaced every four to five years assuming good quality feedwater and proper monitoring, operation, and cleaning.

Moving forward, staff envisions that membranes will play an even larger role in expanding the recycled water program and in developing the ocean as a new source of water. Many industrial processes may require treatment of recycled water by membranes to achieve adequate water quality and membranes are considered the “state of the art” treatment process for ocean-water desalination.

The District uses a consultant to help monitor the condition of the membranes. The District also uses a consultant to help with feasibility level studies for high-quality recycled water that certain industries may require and to help monitor pilot ocean-water desalination RO membrane studies that have been conducted. All three tasks are currently accomplished under one agreement. That agreement has spent most of its funds and will expire early next year. Staff has sent out a “Request for Proposals” to consulting firms to provide the same type of membrane consulting services. Proposals are due in January. It is anticipated that after a selection process a recommendation will be brought to the Board for consideration in February.

FISCAL IMPACTS:

Funds are included in the Operations and Maintenance Budget and in the Ocean Desalination Budget for Fiscal Year 2006-07.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on January 11, 2007 and agendized to the January 22, 2007 Board meeting as information for discussion.

RECOMMENDED MOTION:

This item is for information only.

LIST OF EXHIBITS:

None.