

WEST BASIN MUNICIPAL WATER DISTRICT**OCTOBER 12, 2006 - Water Resources**

Little, Baker

OCTOBER 30, 2006 - Board Meeting

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INFORMATION CALENDAR

OCEAN-WATER DESALINATION
DEMONSTRATION PROJECT DEVELOPMENT SERVICES

SUMMARY:**Demonstration Project Services**

In August 2006, West Basin Municipal Water District (District) procured the professional engineering services of MWH, Inc. to provide a multi-tasked assessment for implementation of the District's Temporary Ocean-Water Desalination Demonstration Project. This Project contains a wide scope of services, which includes a water source assessment, process analysis, siting and feasibility study, environmental and permitting evaluation, cost estimating, and operational protocol analysis. This work will be used as the basis to formulate the next phase of work that will include the actual design and permitting of the District's Temporary Ocean-Water Desalination Demonstration Project.

The initial MWH "Scope of Work" identified two potential sites that were to be evaluated for placement of the future Temporary Ocean-Water Desalination Demonstration Project. Recent conversations with AES management and the City of Redondo Beach have identified The Sea Lab is another potential site for consideration of placement of the Temporary Ocean-Water Desalination Demonstration Project. The Sea Lab functions as a marine rescue and occupational learning center funded by the Los Angeles Conservation Corps and is housed in the old AES pump house adjacent to the AES Power Station. AES has committed to funding Sea Lab's mission for the long-term at this location. However, as a non-profit organization, Sea Lab is continuously looking for industry partners to share in the financial and environmental message of sound marine ecology and has suggested that the District consider placing the Temporary Ocean-Water Desalination Demonstration Project at the Sea Lab location. Co-location with the Sea Lab provides a mutually synergistic benefit to both the District and Sea Lab as it allows the local community to not only learn about marine ecology and the environment but also about Ocean-Water desalination technology and the District's role as a regional water supplier.

Co-location of the Sea Lab site would require a detailed assessment of the viability of this option. This evaluation would include an addition to the MWH "Scope of Work" for permitting, siting feasibility, and process layout viability. Staff is in the process of obtaining a cost proposal from MWH for these services and will bring this to the Board for future consideration.

Pilot Plant Permitting

In May 2002, the District commissioned one of the first Temporary Ocean-Water Desalination Pilot Plant on the West Coast. This pilot plant was established to assist in assessing the feasibility of whether Ocean-Water desalination could play a role in the District's regional water supply portfolio. The District's pilot plant has provided tremendous value towards the advancement of Ocean-Water desalination technology. It has provided the operational and research foundation for implementation of the District's Temporary Ocean-Water Desalination Demonstration Plant. As the District continues towards the development of the Temporary Ocean-Water Desalination Demonstration Project, staff believes it is critical to maintain operations of the pilot plant facility. Continued operation of the pilot plant will provide an avenue to allow the District to continue research on several operational and water quality issues that have not yet been studied while the Demonstration Project is being developed.

Additionally, the pilot plant provides a cost-effective arena to evaluate emerging technologies and other process technologies that would not be suitable or cost-effective for implementation at a full scale level.

Implementation of the pilot plant was originally permitted by a waiver from the Regional Water Quality Control Board. The Board granted the waiver in May 2002 and subsequently it was renewed in December 2005 for operational approval through June 2007. The District is initiating the procurement of a waiver past June 2007 for the continued operation of the pilot plant. However, the Regional Water Quality Control Board in the last waiver extension indicated that an actual National Pollutant Discharge Elimination Permit would be required if further operation of the pilot plant was desired in-lieu of another waiver extension. Given the long timeframe in procuring the desired permit prior to the expiration of the existing waiver, staff is recommending that the District amend MWH's existing contract to assist the District in procuring this permit. MWH is experienced in permit procurement and has close relationships with many of the Regional Water Quality Control Board staffers and regulators that would provide a critical element in obtaining the permit. Staff has requested a cost proposal for this service and will bring this to the Board for future consideration.

FISCAL IMPACTS:

Funds for this project are available from the PAYGO fund.

ENVIRONMENTAL COMPLIANCE:

Environmental requirements for this project will be evaluated as part of the permit application.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on October 12, 2006 and agendaized to the October 30, 2006 Special Board meeting as information for discussion.

RECOMMENDED MOTION:

This item is for information only.

EXHIBITS:

None.