



**WEST BASIN MUNICIPAL WATER DISTRICT**  
17140 S. Avalon Blvd., Suite 210  
Carson, CA 90746

**AGENDA NO. 32**

**MARCH 11, 2010 – Water Resources**  
Little (Chair), Gray  
**MARCH 22, 2010 – Board Meeting**  
Prepared by: Uzi Daniel  
Submitted by: Joe Walters  
Approved by: Rich Nagel

## ACTION CALENDAR

### WEST COAST SEAWATER BARRIER TRACER STUDY CONTRACT

#### SUMMARY:

West Basin Municipal Water District (West Basin) was required per the precedent setting 2006 Seawater Barrier Permit to reconvene an Expert Panel (Panel) to review the Barrier operations and water quality results following one year of operation at 75%. As noted at the February 2009 Board meeting, the Independent Expert Panel recommended:

***Travel Time.** The Panel recommends that the draft technical memorandum by Dr. Motzer on the intrinsic tracer study and travel time determination be finalized and expanded. Specifically, the technical memorandum should address the anticipated directions and travel times of recycled water injected into the Barrier (i.e. from the point of injection to the intake of potable water supply wells). A groundwater monitoring program and ongoing data assessment to track future recycled water should also be included in Dr. Motzer's final report.*

In addition, the West Basin Barrier Permit from the Regional Water Quality Control Board (RWQCB) contains language from the California Department of Health Services (CDPH) Groundwater Recharge Regulations that state:

*The initial operating period shall be defined by injection of blended water that has reached at least one Barrier monitoring well for at least one year with an average [recycled water content] of at least 60% reverse osmosis recycled water.*

West Basin retained Todd Engineers in May 1, 2009 to conduct a Tracer Study (Study) to verify travel time of recycled water to various groundwater wells, as well as recycled water content. The nature of groundwater basins makes this task challenging, but not impossible. West Basin met with CDPH on November 24, 2009 to review a draft Tracer Report. CDPH was satisfied with the travel time determination; however felt that the recycled water content percentages did not satisfy the groundwater recharge regulations and should be higher. CDPH suggested modifications to the Study and Barrier operations. Currently, approximately 40-47% recycled water content has been observed at nearby monitoring wells – 60% is required.

Todd Engineers is a small highly specialized groundwater resource firm with a staff whose expertise includes hydrology, geo-chemistry, and engineering. They have completed the first tracer study and have provided a new scope (Exhibit "A") on recommendations, per CDPH discussion, to continue the Study so that West Basin may fulfill the requirement for detection of 60% recycled water for one-year through at a nearby groundwater well. Todd Engineers current contract will expire on December 31, 2010. In order to complete this study, staff is recommending amending their existing contract for

two years through May 2012 in the amount of \$43,600 plus 10% contingency for a total not-to-exceed contract amount of \$47,960.

STRATEGIC BUSINESS PLAN IMPLEMENTATION:

Goal 1: Water Reliability – West Basin is committed to innovative planning and investments to provide water supply reliability and drought protection.

Goal 2: Water Quality – West Basin is committed to providing safe, high quality water by meeting current and anticipated water quality requirements.

FISCAL IMPACTS:

Funds are included for Expert Panel consulting services in the Fiscal Year 2009-10 Operations and Maintenance Budget for panel recommendations.

ENVIRONMENTAL COMPLIANCE:

Required per the 2006 West Coast Barrier Injection Permit from the Regional Water Quality Control Board and the 2008 DPH Letter of Expert Panel Recommendation Approval to initiate 100% Barrier Water Project.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on March 11, 2010 and recommended for approval at the March 22, 2010 Board meeting.

RECOMMENDED MOTION:

That the Board authorizes amending the existing contract (W2059) term to May 31, 2012 with Todd Engineering in the amount of \$43,600, plus a 10% contingency, for a not-to-exceed amount of \$47,960 and a total not-to-exceed contract amount of \$101,946 to complete the recommended West Coast Seawater Barrier Tracer Study.

LIST OF EXHIBITS:

Exhibit "A" – Todd Engineers Scope, Schedule, and Cost