

# MEMORANDUM

**To:** Saqib Shirazi, Ph.D., P.E., Innovative Water Technologies, Texas Water Development Board (TWDB)

**FROM:** Justin Sutherland, Ph.D., P.E., Carollo Engineers

**SUBJECT:** Developing Practical Alternatives to Pilot Plant Studies for Innovative Water Technologies Quarterly Report – December 2011

**DATE:** December 1, 2011

**CONTRACT:** 1148321310

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## **Recent Project Activities:**

Since the Kick-off Meeting on September 1, 2011:

- 1) Collection and analysis of information from various sources (journal articles, conference proceedings, personal contact with membrane manufacturers) for the literature review is ongoing
- 2) Attended Progress Meeting 1 on November 11, 2011
- 3) Revised draft outline for literature review (presented at Progress Meeting 1)
- 4) Writing Draft Component A of the Final Report is ongoing.

## **Issues Encountered:**

A draft outline for the literature review was presented to the project team during the kick-off meeting. The draft outline included a subsection on ‘discussion on the accuracy of [pilot alternative (models, bench testing, etc.)] to predict full- scale performance’ for each alternative to pilot testing. Based on a preliminary literature search, insufficient information was available to complete these subsections. Therefore, the outline was revised to remove these sections and replace them with subsections providing a ‘description of industry practice’ for each alternative to pilot testing.

## **Items to be Addressed and Anticipated Project Activities:**

The following are anticipated project activities over the next quarter:

- 1) Continue collection and analysis of information for the literature review
- 2) Continue writing Draft Component A of the Final Report to be submitted to TWDB by December 30, 2011.
- 3) Develop data acquisition and analysis guidelines for the pilot alternatives performance comparison.
- 4) Attend review meeting for Draft Component A in March.