

Appendix O

Recommendations for Future Updates

O.1 Recommendations

The 2009 Regional Water Supply Outlook (2009 Outlook) was developed over a two year period, with input from stakeholders representing water utilities, county governments, state agencies, environmental groups, tribal interests and other public interest groups. Two advisory committees, one focused on water demand forecasting and the other on water supply assessment, provided input through professionally facilitated meetings throughout the process.

The following sections provide recommendations for future Outlooks based on stakeholder observations and input and observations from project consultants.

Overall Process and Stakeholder Participation

- Continue to involve stakeholders in the process, including involvement in scope development and consultant selection
- The next Outlook should continue to be professionally facilitated by an independent consultant
- Streamline the technical process and make it easier for stakeholders to make recommendations and move forward
- Invite more speakers to present hot topics in the region (e.g. conservation, reclaimed water, ASR, etc...) to get clarity on the technical information and lead the debate among the forum participants regarding the subject matter
- Reduce the number of meetings that involve committee review for technical memoranda and draft report chapters. For example, meetings should be used to develop work products, rather than wordsmith documents
- Submit comments on documents electronically at specified points in the document preparation process
- Retain certain elements of the 2009 Outlook for the next Outlook. Elements such as the Municipal Water Forecast Model (Demand Model), the supply evaluation criteria, and climate change models represent good opportunities for fine -tuning rather than completely starting over
- Retain the independent review process and include appropriate time for incorporating changes to the Demand Model after interim result are received from the independent reviewer

Data Collection and Reporting of Information by Utilities

- Distribute future electronic survey forms to utilities for information collection without macros to reduce software version incompatibility and computer security issues
- Encourage water systems to collect and maintain data in standardized formats and units to facilitate more efficient data collection for the next Outlook
- Collected data should include information on billing, total production, and peaking
- Improve the reporting by utilities of billing data by single-family, multifamily, and non-residential categories in water utility comprehensive plans
- Utilities should provide information that would help better understand the breakdown of non-revenue water (between system losses, legitimate unmetered uses, hydrant flushing, and reservoir management) as well as the primary reason for limitations of their supply sources (e.g. well capacity, infrastructure, etc...)
- Standardization of collecting and maintaining data might be achieved by working with the State through the framework for developing required comprehensive plans
- Expand the number of utilities to provide monthly total production data for fine tuning the statistical weather/water use model to enhance understanding of how weather and climate change affect water demands
- Develop and maintain a database of historical information on billing data, accounts, income, price of water and conservation activities for the top 10 largest water utilities to run regional Demand Model verification simulations

Municipal Water Demand Forecast Model

- Focus on updating the data and potential enhancements to the model rather than constructing a new model
- Develop localized water demand elasticities for price of water and income for the region instead of relying on other econometric studies
- Determine weather elasticities for each county, rather than the entire region, because weather and climate differ substantially throughout the region

- Add variables such as family size and potentially housing density to the Demand Model, assuming that predictive data are available for the parameters by the time the next Outlook is completed. For example, the PSRC has indicated that it may be possible to estimate future housing density by planning area as enhancements are made to its demographic modeling
- Thoroughly review and refine water purveyor service boundaries and create a regional GIS database of consistent coverages

Water Supply Assessment

- Continue to focus on identifying potential supply options and their attributes (e.g., supply yields, costs, water quality, impacts to the environment, and implementation issues)
- Seek to refine, not rebuild, the supply evaluation method presented in this 2009 Outlook
- Obtain additional information on the region's self-supplied water for more complete assessment of water use within the region

Climate Change

- Revise climate change inputs for temperature and precipitation forecasts as the climate change models are refined and improved
- As predictive information on climate change impacts to groundwater becomes available, incorporate this impact to the regional groundwater supplies