

MEMORANDUM

From: Susan Aragon-Long, Robert Mace and Robert Gulley
To: Expert Science Subcommittee Work Group
Date: March 2, 2009
Re: Evaluation of the Peer Review Process Utilized for the Edwards Aquifer Recovery Implementation Program's Science Subcommittee's Recommendations on the "k" Charges

Peer review is a scientific quality-control system that serves as the major means by which scientists establish and maintain professional standards. If a document has received impartial and independent peer review, it is likely to be well written and to represent the best available science. Peer review is useful to scientists by ensuring the quality of their work. It is also very useful to decision-makers and the public, who can have more confidence in a peer-reviewed report, even if they may not be familiar with all the technical material.

In regards to the Edwards Aquifer Implementation Program (EARIP), bids were solicited for the independent peer review of the EARIP's expert Science Subcommittee's recommendations on the "k" charges, "Evaluation of Designating a San Marcos Pool, Maintaining Minimum Spring Flows at Comal and San Marcos Springs, and Adjusting the Critical Period Management Triggers for San Marcos Springs". Three bids were received by the EARIP program manager and, after evaluation of all bids, the EARIP Steering Committee selected, on the recommendation of the program manager, the most cost effective bid. The winning bid was submitted by Sustainable Ecosystems Institute (SEI).

Based on the criteria provided by the Steering Committee, SEI selected 3 hydrologists and 1 biologist to peer review the EARIP's Expert Science Subcommittee's "k" charge report. The reviewers were all well-respected scientists. Each SEI peer reviewer provided the Expert Science Subcommittee with a draft peer review of the k charge report. The four peer reviews ranged from a very cursory review by one hydrologist that was more editorial in nature to reviews that were technically very thorough.

SEI in its proposal had emphasized the advantages of its "wiki" site that would allow real-time monitoring of the review process. This did not actually add much to the process. Probably because of the nature of the document being reviewed, there was not any back-and-forth among the reviewers. Moreover, the number of access passwords were limited, making access difficult.

After the draft peer reviews were submitted to the Expert Science Subcommittee, the Expert Science Subcommittee met to consider the comments and prepare a draft response. A joint peer reviewer/Expert Science Subcommittee teleconference was held. This was an important part of the process as it allowed both sides to clarify questions and issues, such as the limited scope of the Subcommittee's tasks and the intent of the reviewers' comments. SEI will provide a digital recording of the conference for the record.

Subsequent to the joint teleconference, the Expert Science Subcommittee will complete a response to SEI's peer review at its next meeting on March 9. SEI was supposed to submit to the EARIP a summary peer review report that included the individual reviews on March 2, but, to date, we have not received this report.

Overall, SEI did a professional, timely job in managing the peer review process. With the exception of the one editorial review, the reviewers did a thorough job and appeared to understand the issues. While the Expert Science Subcommittee and reviewers did not completely agree on all of the comments, the Subcommittee believes that the comments were fair and useful. The Subcommittee believes that some of the comments were outside the scope of the "k" charges but that the comments would be useful for the "j" charges or future scientific studies. The process SEI followed was effective and could be used for more complex issues.

When this process is used in the future, it would be good to let the reviewers know that the review needs to be focused on the scientific issues and not on editorial issues. The reviewers should also be told that the reviewers' comments will be addressed in an addendum to the documents delivered by the Expert Science Subcommittee and not in a revised report.