

ACOE / NMISC MIDDLE RIO GRANDE WATER SUPPLY STUDY PHASE 3
Minutes of the Executive Steering Committee Progress Meeting
September 27, 2002, 1:00 p.m. – 4:00 pm

In attendance:

Bob Grant, Interstate Stream Commission
Carolyn Brumfield, US Army Corps of Engineers
Charles Wilson, US Army Corps of Engineers
Chris Gorbach, Bureau of Reclamation
Cyndie Abeyta, US Fish and Wildlife Service
Dagmar Llewellyn, S.S. Papadopulos & Associates, Inc.
Debbie Hathaway, S.S. Papadopulos & Associates, Inc.
Frank Titus, New Mexico Bureau of Geology
Joseph Quintana, Middle Rio Grande Council of Governments
Karen Lewis, S.S. Papadopulos & Associates, Inc.
Kevin Flanigan, Interstate Stream Commission
Mary Helen Follingstad, Interstate Stream Commission
Mike Velasquez, US Army Corps of Engineers
Norm Gaume, Interstate Stream Commission
Nyleen Stowe, Socorro Soil and Water Conservation District
Peter Burck, New Mexico Office of the State Engineer
Rob Bowman, Socorro Soil and Water Conservation District/ New Mexico Tech.
Rolf Schmidt-Petersen, Interstate Stream Commission

PRESENTATION

S.S. Papadopulos & Associates, Inc.

- a. Summary of Kickoff Meeting decisions and resulting actions
- b. Work completed since last meeting
 - Reviewed statistical distributions used for flows (memo available)
 - Finalized study of past climate and implications for modeling (memo available)
 - Met with Sandia modeling group to assess model being used by MRG water planning group (joint statement available)
 - Assessment of Socorro-Sierra preliminary planning alternatives (memo available)
- c. Work in progress
 - Hydrologic assessment of preliminary planning alternatives submitted by Socorro-Sierra
 - Incorporation of antecedent conditions into model
- d. Upcoming work
 - Assessment of MRG planning alternatives
 - Joint assessment of Socorro-Sierra and MRG final alternatives

DISCUSSION

Schedule:

- SSPA proposed to extend their deadlines by a full year to accommodate the regional planning groups' schedules.
- The group discussed whether a full year extension was required if the planning work is scheduled to be finished by mid-summer. SSPA indicated that they only require 2 months to complete a draft report once the planning work is completed. However, SSPA wishes to build ample time into the schedule so that if the planning groups fall behind their proposed schedules, the SSPA schedule will not have to be altered again.
- Socorro-Sierra planning region is on schedule to finish their alternatives in April. The Middle Rio Grande planning region is behind schedule.
- The proposed revised schedule was considered reasonable.
- SSPA commented that adding time to the schedule involves additional costs, due to increased time spent on communication and coordination. SSPA also proposed the ESC consider whether a fourth ESC meeting should be added to the revised schedule to allow for feedback on the regional planning work next summer. Both of these would necessitate modest cost increases.
- Norm Gaume agrees that an additional steering committee meeting should be added to the schedule, to meet once the regional planning alternatives are finalized.
- The technical tasks in the Phase 3 work are near completion; SSPA is holding off finalizing them until the planning work is substantially done to allow for inclusion of data or information relevant to specific planning alternatives; and if possible, to allow for inclusion of data not yet available.

Incorporating the Jemez y Sangre alternatives into the joint regional planning alternatives assessment:

- The scope of work for Phase 3, as it stands, does not call for the Jemez y Sangre planning region alternatives to be considered when assessing the MRG and Socorro-Sierra alternatives.
- The ESC proposed the Jemez y Sangre alternatives be included. Jemez y Sangre are finalizing their plans now – SSPA would not need to be involved in the planning work, they could simply review the available public documents and adjust model assumptions as needed.
- The SSPA report on the regional planning alternatives is likely to be a primary reference for the foreseeable future and should therefore incorporate all regional plans relevant to the Middle Valley. The ISC could be criticized if all the available planning region information for the Middle Rio Grande region is not included in the SSPA assessment.
- SSPA estimated that about a week of additional work would be required to review the Jemez y Sangre plans to see how they affect SSPA modeling assumptions. It is expected that modeling assumptions would not be dramatically changed, and that these could be incorporated without a large additional work effort.

- Consideration of the Jemez y Sangre plan would necessitate a modest increase to the budget.
- Norm Gaume recommended that work related to the Jemez y Sangre plans be proposed to the Corps as part of the contract modification to address scheduling needs.

Other discussion points:

- Multi-year dependencies are being incorporated into the modeling. With respect to Elephant Butte, these dependencies will take into account increased delta depletions due to riparian colonization as well as changes in open water area.
- The bank storage effect at Elephant Butte is not quantified or evaluated in this model. Bank storage and other transient effects will be commented on in the final report.
- Representation of San Juan – Chama water in SSPA model is currently represented as a flat function of 75,844 acre-feet per year, based on the 1990-1998 period; SSPA indicated that this would be reviewed for reasonableness under drier climate conditions, and in light of Judge Parker’s recent court decision.
- Norm Gaume suggests SSPA consider two baselines for alternatives, one with San Juan-Chama water at the full firm yield, and one with it at zero.
- SSPA reported that they see a decline in Albuquerque municipal wastewater returns to the river since 1998. Norm Gaume suggests this is due to a greater re-use of wastewater within Albuquerque, as well as water saving adaptations such as low-flow toilets.
- If Albuquerque were to stop all groundwater pumping, what would be the effect? There would still be an impact on the river, but it would diminish over time as seepage from the river filled the cone of depression created by pumping that has occurred to date.
- Groups are looking into recharging the aquifer with water that would otherwise be spill water over Elephant Butte. This would be difficult to engineer and tough to get RG Compact Commission approval.
- The tree ring analysis utilized by SSPA, based on trees near Grants, has utility in analysis of conditions in the Middle Valley. Although there is significant variability in weather across the state, there is a reasonable annual correlation, and a strong decadal correlation, between the Grants tree rings and Otowi flow.
- SSPA is using the climate work developed here in a spin-off study for the URGWOPS EIS. Climate patterns reflected in the tree ring analyses are being used to develop a 40-year synthetic sequence of flows, representative of the long-term regional climate patterns, for alternatives analysis with the URGWOM planning model.
- Norm Gaume inquired regarding reports that Mike Kernodle has been critical of the MRGWSS in some communications within the water planning community and asked if the issues underlying the criticism have been addressed with Mike. The reported concerns related to an impression that the study is based on averages, does not include extremes, and has not predicted the current drought. SSPA indicated that those types of concerns don’t reflect what the MRGWSS study provides – in fact, the MRGWSS specifically addresses variability and was

the first systematic study to take this approach, as opposed to working with averages. Regarding predictive capabilities of the model, the MRGWSS model has not been nor was intended to project conditions for a near-term sequence of years. Rather, the model provides a statistical distribution of expected outcomes under a wide range of climate conditions for specific alternative-based development conditions. SSPA has discussed these topics with Mike and believes that some of these points have been clarified. There also may have been some confusion between the MRGWSS study and the SNL modeling work; and some of the criticism may have related to the SNL model.

- Concern about the MRG Water Assembly use of the Sandia model was discussed, particularly a concern that it oversimplifies some issues to the public. It was noted that the MRGWSS ESC does not have a role in that process at present; and that when the planning region completes their initial alternatives analysis, the resources of the MRGWSS will then be used to review the analyses.
- Bob Grant offered the information that dewatering of mines in Grants in the 1970s contributed water to Rio Grande tributaries that may (or may not) be relevant to understanding historical conditions.
- Communication channels between planning entities and the MRGWSS team were described. Requests from regional planning groups for technical analyses by the MRGWSS team are routed through the ISC.

ACTION ITEMS RESULTING FROM MEETING

SSPA will prepare a letter to the ACOE and the ISC describing the proposed changes to the MRG WSS Phase 3 scope of work. These changes will include extension of the schedule by one year, the addition of a fourth Executive Steering Committee meeting, the addition of the Jemez y Sangre planning alternatives to the joint alternatives analysis, and the additional costs associated with these tasks.