

Notes from URGWOM Steering Committee Meeting; December 11, 2003; 10:00 AM; Corps of Engineers Conference Room, Albuquerque

In Attendance:

Cyndie Abeyta, USFWS

Dale Rankin, USGS

Charles Braden, BIA

Jesse Roach, Sandia National Labs

Tim Darden, NMDA

Gail Stockton, Corps

Ellen Dietrich, SAIC/Corps

Tim J. Ward, UNM

Conrad Keyes, Jr., Consultant to Corps

Dave Wilkins, USGS

William J. Miller, WJM Engineering,
Inc./Corps

- ❖ Dave Wilkins chaired the meeting and introduced Dale Rankin who will be taking over the groundwater data collection project in the Albuquerque reach that Dave began.
- ❖ Bill Miller reported on the November Technical Review Committee meeting.
 - The meeting was well attended, with technical people who were engaged in the discussions. Some of the questions that could not be answered at the time will be reviewed and added to the notes that will be available on the public web site. The PowerPoint presentations will soon be posted on the public web site.
 - The deadline for comments on the draft documentation for the Planning Model to be submitted to Bill is December 15.
 - Bill will address the comments, make the necessary changes in the documentation, and make the information and revised documents available on the web site.
 - The documentation of the rules is underway by Brad Vickers. Within a few months, this will be provided as a revision to the current documentation. After that, all documentation may be compiled.
 - Conrad Keyes recommended that the dates of the documents be added to the link with the title on the web site, to make it easier for people to select the correct document.
 - **Question:** Do the rules limit the excesses that could occur in the system?
 - **Answer:** The rules have been tested and will shut down under extreme individual situations. On the list of things to do is the development of a decision tree to show how the rules work, possibly for a single reservoir.
- ❖ Dave Wilkins discussed the status of the URGWOM Planning Model and Tech Team activities. The list of Technical Team progress that was distributed is attached to the end of these notes.
 - Don Gallegos and Garret Ross have been assisting with adding multiple Rio Grande accounts in El Vado.
 - New CADSWES functions makes changing accounts easier in the Accounting Model.
 - Planning Model comparisons of 1997 and 1998 data with historic data were reported to the URGWOPS technical teams.
 - The Planning Model was also run using Planning Model years 2023-2032 to evaluate the sensitivity of New Mexico credit in Elephant Butte and conservation storage in Abiquiu to changes in channel

capacities below Abiquiu and Cochiti, waiver dates in Heron, diversions into the Low Flow Conveyance Channel at San Acacia.

- **Question:** Did you rerun the Planning Model to evaluate conservation storage under each scenario?
 - **Answer:** Yes. Ten years were run to evaluate conservation storage for New Mexico credit. Channel capacity below Abiquiu was set to 1,200, 1,500, 1,800, and 2,000 cfs. Then, holding the channel capacity below Abiquiu at 1,800 cfs, the waiver data was set to April 30, August 31, and September 31.
- **Question:** Were the results biased when you validated the rules based on 1997-1998 data?
 - **Answer:** It is hard to say. On the Rio Chama, the mean daily flows were generally higher than the gage data, but that might be due to local inflows not accounted for in the gage data. Above Cochiti on the Rio Grande mean daily flows were generally less than gaged flows.
- **Question:** Does evaporation affect the results? What evaporation rate are you using?
 - **Answer:** The model uses the standard coefficient for 70% of pan evaporation.
 - Tim Ward pointed out that this value is incorrect, but it is used as the standard. It will cause error, especially cumulative error when evaluating a long time period.
 - Conrad Keyes pointed out that, during 1997-1998, the emergency gates at Abiquiu had problems and required pumping approximately 50 cfs over the gates several times. This reduced the flows recorded in the historic data that were used for comparison. Also, there may have been some major changes in how the releases for the minnow were handled in 1998.
- ❖ Dale Rankin updated the group on the groundwater data collection project in the Albuquerque reach.
 - In November, the NM Interstate Stream Commission signed the MOU for the data collection project. Seven of the eight cooperating agencies have now signed.
 - The Rio Bravo site is the only site currently active with all equipment installed. Seven more sites should be completed in the Albuquerque area this fiscal year.
 - Three sites in the Bernalillo County right-of-way must be approved by the county commissioners before permission can be granted for access.
 - The typical site has dual piezometers to measure both shallow and deep groundwater levels at the river and the riverside drains.
 - Data collected from the sites will be posted on the USGS web site after QA/QC has been completed.
 - Dale is looking for help from agencies and organizations to fund this project. Those involved with restoration work may be interested.
 - Tim Ward renewed his offer (made at a previous Steering Committee meeting) to use the site managed by UNM on the west side of the river above Central. It is being used now to conduct bank erosion and other studies.
 - There was a meeting with many of the project managers who are investigating restoration in the bosque and groundwater and surface water interactions in this part of the river to reduce the duplication of efforts. They plan to produce a map of current projects and will share information as they get it.
- ❖ Tim Ward reported that the National Science Foundation requested proposals for planning grants. UNM, New Mexico Tech, and Sandia National Labs are working together to develop an outdoor laboratory with monitoring networks for water resources data, using wireless communications. They plan to monitor urban sites first.

- ❖ Conrad Keyes reported that NMSU is looking into creating a water quality center, possibly in cooperation with New Mexico Tech.
- ❖ Cyndie Abeyta reported on a meeting held on December 10 on the removal of jetty jacks and fire management in the Rio Grande bosque in the Albuquerque reach. There may be \$8 million available for this work over the next 6 months.
- ❖ Ellen Dietrich reported that there will be a presentation on potential indicators that can be used to evaluate the success of bosque restoration by SAIC Senior Biologist, Jean-Luc Cartron, in the Corps conference room on December 12 at 9:00 a.m. Jean-Luc was the first author of a paper on this subject, published in the October 2003 *Environmental Entomology* with Manuel Molles, Jennifer Schuetz, Cliff Crawford, and Cliff Dahm.
- ❖ Conrad Keyes reported on the Paso del Norte Watershed Council's review of Phase 2 of the Coordinated Database project. El Paso Water Utilities will provide funding for this effort. The council will be posting a new proposal related to bosque restoration and education in the El Paso area on their web site.
- ❖ Jesse Roach reported that he has been developing the dynamic simulation model to demonstrate the functioning of the Planning Model to the public. He has been trying to match historic data with URGWOM Planning Model output for the same years. He will demonstrate the model at a future Steering Committee meeting to obtain recommendations on how to best visualize the working of the model.
- ➡ ❖ **The group discussed the possibility of holding quarterly instead of monthly Steering Committee meetings. It was decided that the schedule would be left as is, on the second Thursday of each month. Meetings would be called if assistance or guidance were needed from the Steering Committee. If no meeting were needed, a notice would be sent out two weeks in advance to cancel.**
- ❖ Bill told the group that this would be Dave Wilkins' last Steering Committee meeting because he is retiring at the beginning of January. He wanted Dave to know that all of his hard work on the URGWOM Technical Team has been appreciated.
- ❖ **The next meeting of the Steering Committee will be held in the Corps of Engineers' conference room on January 8, 2004 at 10:00 a.m. unless notified otherwise.**

URGWOM TECHNICAL TEAM STATUS AND PROGRESS—DAVE WILKINS

- Updating WaterOps and Accounting models for 2004 based on improvements and modifications to Planning Model.
- Added capability to have multiple Rio Grande Accounts in El Vado in all models. Need to modify rulesets for the WaterOps and Planning models to move water to/from these accounts. There will be 3 new Rio Grande type water accounts in El Vado: IndianStorage, MRGCDDrought and SupplementalESA.
- Added monthly Rio Grande Compact calculations to Planning, Waterops, and Accounting models and rulesets.
- Modified Rio Grande Reconciliation methods (at all reservoirs) in Accounting model using new CADSWES functions (no longer needing to maintain supply lists).
- Ran Planning Model for 1997 and 1998 and compared results to historic data at selected places in the river system. Mean percent difference between historic and modeled ranged from 130 percent for Abiquiu outflow to 91 percent for Elephant Butte storage.

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- Evaluating sensitivity of conservation storage in Abiquiu and New Mexico credit storage in Elephant Butte in the Planning model to changes in Abiquiu and Cochiti channel capacity, Heron waiver date, plus conservation storage for evaluating New Mexico credit sensitivity.
- Finished all Planning model runs. Base run and 4 selected scenario run results have been sent to ID teams.
- Review comments about the Planning model documentation and last month's presentation have been compiled.