

**Notes from Joint Meeting of ESA Collaborative Work Group  
Subcommittees and the Upper Rio Grande Basin Water Operations  
Review Interdisciplinary NEPA Team; February 20, 2003;  
9:00 AM; Corps of Engineers Conference Room, Albuquerque**

*In Attendance:*

Marsha Carra, USBR	Jon Kehmeier, SWCA/NMISC
Gina DelloRusso, USFWS	Lewis Munk, Tetra Tech
Ellen Dietrich, SAIC/Corps	Yasmeen Najmi, MRGCD
Linda Fluk, Geological consultant	Claudia Oakes, SWCA/NMISC
Don Gallegos, Corps	Steve Piper, USBR
Chris Gorbach, USBR	Nancy Purdy, USBR
Rhea Graham, ISC	Doug Romig, Tetra Tech
Champe Green, Corps	Tim Seaman, NMSHPO
Susan Goodan, SAIC/Corps	Matt Schmader, City of Albuquerque
Ernie Jahnke, Corps	Gail Stockton, Corps
Julie Hall, Corps	James N. Stuart, NMGF
Deb Hibbard, Rio Grande Restoration	Doug Wolf, Tetra Tech/Corps

- ❖ Chris Gorbach of the ESA Work Group and Gail Stockton of URGWOPS opened the meeting with some introductory remarks.
  - Chris explained that the people in attendance were members of the Habitat Restoration and Science subcommittees of the ESA Collaborative Work Group and technical teams from the Upper Rio Grande Basin Water Operations Review and EIS. Because both groups are working on aspects of the Rio Grande, this meeting was arranged to open up opportunities for information sharing among specialists and projects.
  - Gail commented that technical team representatives would provide an overview of the current status of data collection and plans for analysis. She encouraged ESA Work Group members to share sources if they are aware of data that could be used to fill gaps in baseline information. Gail stressed that the work for URGWOPS is different than the work of the ESA Work Group, but related enough that participants in both projects should be aware of the other. Most technical teams will produce technical reports with the background data and methodology used for analysis.
  - The Upper Rio Grande Basin Water Operations Review is intended to analyze the effects of changes in federal water operations in order to develop an integrated plan for federal operations. There are three Joint Lead Agencies (Corps, USBR, NMISC) and five Cooperating Agencies (BIA, USFWS, NM Department of Agriculture, NM Environment Department, Pueblo of San Juan).
- ❖ The URGWOPS technical team representatives presented the current status of data collection and analysis for their resources, plans for impact assessment, and identified data needs. Posters that were developed for public scoping and draft alternatives meetings were used for illustration. Some key points and questions, answers, and discussion are summarized below.

- URGWOM Integration/Water Operations Technical Team—Don Gallegos
  - The team has been evaluating the operations alternatives for each facility that have some flexibility within existing authorities and are combining them into action alternatives. They have been evaluating the various operations combinations to determine whether they meet the stated purpose and need for the project.
  - Those combinations that have not been eliminated from consideration will be developed into the action alternatives that will be further evaluated through the URGWOM Planning Model. The impacts from the alternatives that can be run using URGWOM for the 40-year sequence of hydrographs will be analyzed by all of the technical teams in the Draft EIS.
  - The 40-year sequence of stochastic hydrographs was developed to represent approximately 300 years of historic flow conditions in the Rio Grande.
  - **Question:** Will there be room or an opportunity to expand on the flexibility identified for a facility? For example, could storage of 200,000 acre-feet of native water be considered at Abiquiu in an alternative?
    - **Answer:** The Water Operations Review will only be evaluating operations within current authorities. For Abiquiu, the City of Albuquerque easement is limited to 6220 feet in elevation. Recommendations that are outside current authorizations will be documented for further study outside of this EIS process.
- Aquatic Systems Technical Team—Ernie Jahnke
  - The team is developing an aquatic habitat model to characterize habitat and evaluate impacts at eight selected locations in the Rio Chama and middle valley of the Rio Grande.
  - Other baseline data have been derived from existing information. The most serious data gap the team has found is for the aquatic food base. They are also lacking reservoir bathymetry but may be able to interpolate that from the old (pre-inundation) USGS quad maps.
  - **Question:** What is the timing on the aquatic habitat study?
    - **Answer:** The report on the pilot study site at Bernardo will be done by March 1 and the rest of the sites will follow this spring/summer.
  - **Question:** How many species will be evaluated?
    - **Answer:** Five species— longnose dace, channel catfish, flathead chub, silvery minnow, river carp sucker.
  - **Question:** Do you have any studies on algae?
    - **Answer:** No existing data are available.
  - **Question:** Will there be a compilation of all references identified?
    - **Answer:** A bibliography is being compiled by the technical teams and will be made available later. The two Planning Aid letters from the USFWS that are available on the URGWOPS web site included a bibliography on aquatic resources.

- Hydrology and Hydraulics Support Team—Doug Wolf
  - Doug gave a slide presentation that summarized the FLO-2D model that will be used to predict flows, velocities, and areas of inundation under the alternatives after they have been modeled by URGWOM.
  - The FLO-2D model of the middle valley from Cochiti to Elephant Butte has been completed. The model of the Rio Grande from Cochiti upstream to the confluence with the Rio Chama is almost done, and development of the grid for the Rio Chama below Abiquiu is underway.
  - **Question:** Are the locations of the diversion dams included in the model?
    - **Answer:** A few major ones like Angostura, Isleta, and San Acacia diversion dams are included by using rating tables that incorporate backwater effects. There are nodes for nine major return flow locations.
  - **Question:** Can you predict how long it would take for head to build up if some gates were closed?
    - **Answer:** Not at the 500-foot grid cell resolution of the model. This FLO-2D model is not good for site-specific analysis.
- Riparian and Wetlands Technical Team—Claudia Oakes
  - The team is providing mapped riparian vegetation for use as baseline data along the river corridor.
  - The resources and issues they plan to address include threatened, endangered, and sensitive terrestrial species, general wildlife, and designated management areas along the river (like refuges).
  - The team needs information on the flow velocity thresholds that would scour existing vegetation to determine possible effects on new seedbeds.
  - The newly acquired color infrared aerial photography of parts of the Rio Grande and Rio Chama should help the team with site-specific analysis.
  - **Question:** What is the extent of the vegetation mapping that has been completed?
    - **Answer:** The recently completed vegetation mapping covers the riparian areas between the headwaters of Elephant Butte up to the Highway 550 bridge at Bernalillo, excluding pueblo land. Also from the delta of Cochiti to the confluence with the Rio Chama and up the Chama to Abiquiu.
  - **Question:** Will you be able to compare your mapping to that of Hink and Ohmart to analyze change?
    - **Answer:** While there are data compatibility problems, especially due to the coarser resolution of the Hink and Ohmart mapping, the team intends to try to do an analysis of the changes between the two datasets.
- Water Quality Technical Team—Jon Kehmeier
  - The technical team plans to use URGWOM discharge data as input to the water quality model to predict how water quality might be affected. The team plans to compare the predicted water quality against the standards they have identified from the many jurisdictions along the river.
  - The lack of reservoir water quality data is a problem.

- **Question:** How did the team select the water quality constituents to consider?
  - **Answer:** The availability of data was a key determining factor.
- **Question:** Do the standards apply to reaches?
  - **Answer:** The standards are based on water quality data obtained at gages and will be used to represent a section of the river.
- **Question:** Will you consider water quality in the Rio Chama?
  - **Answer:** Only at the 4 gages for which data are available.
- **Question:** Is any pueblo water quality data available?
  - **Answer:** All data the team is using is from the USGS or the Corps. No pueblo data has been made available.
- **Question:** Do you plan to use the USFWS water quality data?
  - **Answer:** That data has not been quality checked and will not be available in time for the URGWOPS Draft EIS. The data is still considered preliminary.
- **Question:** Do you have a process for updating the analysis?
  - **Answer:** This would be done during monitoring and the use of adaptive management.
- Cultural Resources Technical Team—Tim Seaman
  - A co-team leader from San Juan Pueblo has been instrumental in arranging meetings with pueblos to discuss the project and to ask for input and participation. The URGWOPS Project Managers and the two team leaders have attended many meetings with various pueblo councils and other tribal organizations.
  - The technical team has been assessing the quality of the recorded archaeological site data they obtained from the SHPO through the Archaeological Records Management Section. In addition to the site locations, ARMS digitized the surveyed space.
  - The technical team plans to evaluate the effects of various flows on archaeological sites and other cultural resources once the FLO-2D model identifies the locations of high flows and flooding. They will also provide recommendations for treatment where cultural resources might be affected.
  - **Question:** Will FLO-2D predict sediment deposition or areas that might be eroded?
    - **Answer:** FLO-2D provides water velocity and depth by grid cell and will also provide information on sediment movement in the channel.
- Land Use, Socioeconomics, Recreation, Agriculture, and Environmental Justice Technical Team—Susan Goodan, Steve Piper
  - The team will address most of the human resources.
  - Land use will be considered to characterize the project area. The team is collecting data to describe the landscape, demographics, and land cover.
  - Recreation and agriculture will be described and potential effects due to changes in water operations will be characterized qualitatively for the most part.

- The description and analysis of economics of commercial agriculture will encompass entire counties, rather than be limited to the river corridor. They will consider tradeoffs between effects on different uses of the river corridor.
- **Question:** Are you considering the economic benefits of farming for wildlife?
  - **Answer:** The data and the analysis will not be that site-specific.
- **Question:** Can you evaluate economic benefits of farming for wildlife through analysis of the willingness of users to pay?
  - **Answer:** This may be done qualitatively but the data are not available for this type of detailed analysis.
- GIS Support Team—Ellen Dietrich
  - The team has been tasked with integrating the data from all of the teams and has provided guidance and assistance to the technical teams to ensure that data acquired or generated are compatible with that from other teams. Members of the GIS Support Team have been assigned to work with the technical teams.
  - Through the efforts of Clay Mathers at the Corps, the team is working on scanning and archiving many of the documents used by the other technical teams. This will be the basis of a searchable file system that can be built upon by all groups involved in data collection and analysis in the basin. The files are small and can be accessible through the web eventually.
  - **Question:** When will the URGWOPS GIS data be available for use by others?
    - **Answer:** All data at this stage is predecisional and would not be available until the draft is published and distributed to the public.
- ❖ Data sharing between groups was discussed.
  - The Habitat Restoration subcommittee is working on a draft plan that is due by July 2003 and they need to find out what information might be available for incorporation into this document. Chris Gorbach commented that the subcommittee needs to consider adding information on cultural resources to the plan.
  - The URGWOPS Project Managers suggested that technical team members contacted could direct ESA Work Group members to publicly available sources that they have identified. All of the Interdisciplinary NEPA Team meetings are open to the public and ESA Work Group members may get some useful information from attending.
  - In many cases, URGWOPS technical teams are using existing information available to all but have developed creative ways to conduct the analysis.
  - The Habitat Restoration subcommittee would be interested in obtaining the riparian vegetation mapping done for URGWOPS. However, this would not be released until the quality assurance process has been completed. URGWOPS technical teams must adhere to the Quality Assurance/Quality Control Plan developed for the project.
  - The Habitat Restoration subcommittee would also be interested in obtaining the results of the aquatic habitat studies when they are available.