

John H. Kerr 216 Study
Executive Committee/Work Group Leaders' Meeting
December 13, 2004
10 am to 1:40 pm
McKimmon Conference and Training Center, Raleigh NC

Welcome and Introduction

John Morris introduced Darren England, a new staff member for the North Carolina Division of Water Resources. Mr. England is an experienced engineer and scientist. This was his first John H. Kerr Section 216 Study meeting.

Attachment 1 is a list of meeting participants and Attachment 2 is the meeting agenda.

Team Work Status

Jim Mead, Downstream Flow Regime and Effects on Riparian Ecosystem Team Leader – Mr. Mead reported that the scopes of work (SOW's) for Tasks 1.C.1 (update floodplain vegetation map) and 1.C.2 (tree cores analysis) were approved by the Executive Committee at the September 27 meeting and the Team is waiting for Executive Committee approval on the SOW's for Tasks 1.A.2 (\$25,000 – workshop to review flood model) and Task 1.B. (\$150,000 – evaluation of flood damages). If approved we will move to develop RFP's for each of the four tasks – depending on the contract approach for each. Terry Brown and Tony Young checked with the Corps Institute of Water Resources (IWR) on the use of the Roanoke River Basin Reservoir Operations Model (RRBROM). The IWR does not typically evaluate third party models and felt that as long as the model is locally accepted they would not have an objection to using it. Sam Pearsall noted the need to identify experts with the USACE to participate in the flood model review workshop.

Jennifer Everett, Water Quality Team Co-Leader – Ms. Everett reported that the modeling oversight group is reviewing the SOW and once comments are received the Water Quality Team will discuss costs via a conference call. The Draft SOW will be ready for Executive Committee approval by late January 2005. Tasks A and B are included in the SOW. Task C is not included as it received a lower priority from the Executive Committee. Other team members other than a North Carolina Division of Water Quality staff member would write the SOW for Task C.

The monitoring for Tasks A and B will take 24 months (18 months minimum with overlap of two growing seasons). The Executive Committee expressed concern with the two years of monitoring and requested the team compress this as much as possible by looking for tasks that can be done in parallel. Ms. Everett suggested that the Contractor could look at strategies to shorten the schedule. Ben Wood requested that adaptive management techniques be included in the SOW. Ms. Everett requested that the Executive Committee provide examples of adaptive management techniques. She also noted that if the USACE could provide a range of flows in a shorter time frame, this

could reduce the time needed for data collection. Mr. Brown noted that this would require a temporary deviation to the Water Control Plan. Study partners, affected stakeholders, and the USACE South Atlantic Division Office staff need to be in agreement with the deviation plan. A deviation request must be submitted to the South Atlantic Division Commander for approval.

The total term of work is estimated at four years from contract signing if the monitoring period cannot be shortened. The Water Quality Team will try to get monitoring started by March 1, 2005 so they will not miss the 2005 growing season.

Sam Pearsall stated that perhaps the first version of the water quality model could be based as much as possible on current data (eg. Weyerhaeuser data from 2002 and 2003). This data may not meet Quality Assurance Project Plan (QAPP) standards, but the initial version of the water quality model would not be used for regulatory purposes. Subsequently, the model would be updated to reflect the growing knowledge from additional monitoring that would take place during adaptive management efforts and with the QAPP procedures in place. A discussion took place on adaptive management and the possibility of initiating adaptive modifications prior to completion of the water quality model.

Ms. Everettt mentioned that for the water quality model to be usable by the State of North Carolina, all data used must have a Quality Assurance Project Plan (QAPP). However, the door was left open for further discussions on using existing data from various sources to develop the model even if the data does not meet current standards as we do not want to just disregard all of the valuable historic data.

Mr. Mead suggested that the hydrodynamic model may not require two growing seasons of data collection, especially if the existing hydrodynamic model (downstream to Scotland Neck) is used as a starting point. If the hydrodynamic model is developed in parallel to the water quality model, the hydrodynamic model could be ready for immediate use as soon as the water quality data collection is completed. Furthermore, if natural flow availability and USACE operations allow an accelerated schedule of water quality data collection – then it may be possible to complete the first version of a water quality model in 24 to 28 months.

The Executive Committee requested that the team consider approaches to shorten the time frame for the SOW – including using existing data, doing tasks in parallel, creating an initial model and revising it with adaptive management monitoring, and selecting a contractor who can hit the ground running.

Hasan Pourtaheri, Sedimentation and Channel Morphology Team Leader – Mr. Pourtaheri updated the group on the Sedimentation and Channel Morphology SOW. The Sedimentation and Channel Morphology Team will coordinate modeling work with the Water Quality Team (hydrodynamic modeling efforts) to ensure that there will be no duplicated efforts or extra costs. Currently the cost is \$236,000 for parts 1 – 4 of the SOW. This SOW is ready for the Executive Committee approval. The Executive

Committee requested that the Modeling Oversight Team look at the modeling and check for any overlap with other work groups. Then the cost breakdown will be redone and the SOW resubmitted to the Executive Committee for approval.

There was a suggestion to wait until after the 216 Study for a channel morphology model. Greg Williams stated that his fear is if we wait until after the 216 Study (adaptive management strategy) to produce a model that we will not have the ability to predict the impacts on bank erosion. We need to be able to predict scenarios and impacts through modeling and collect data, calibrate, and verify the model so that we do not need to collect five years of data. We could collect one year of data and simulate it.

Bud LaRoche, Reservoir Resources Team Co-Leader – Mr. LaRoche reported that the group's work has been on hold as it was not ranked as a high priority at the April 29 work group leaders meeting.

The Executive Committee requested that the team reconvene to establish a SOW with a dollar projection including in-kind work by April 2005.

Mr. Pearsall requested that evaluation of how different lake fluctuation regimes affect recreation, economics, and real estate prices be in the SOW. John Field and others agreed. Mr. LaRoche said that it was the plan to include this in the SOW.

Jim Mead, Downstream Flow Regime and Effects on Riparian Ecosystem Team Leader – Mr. Mead reported that the SOW for \$60,000 is approved and the Draft Request for Proposal (RFP) is done. The team considers the RFP to be final and would like to move forward to circulate this for receiving proposals from contractors.

Greg Williams, Filling in for Salt Wedge Team Leader – Mr. Williams reported that John Hazelton, the Salt Wedge Work Group Leader, participated in the RRBROM workshop to ensure the Salt Wedge Team's needs were covered. No other work has been done since the Salt Wedge Tasks were considered a low priority. Mr. Hazelton will continue coordination with the Water Quality Team on the water quality model. Mr. Williams suggested that the water quality Contractor establish the most downstream monitoring point. This can be used by the Salt Wedge Team.

The Executive Committee requested the Salt Wedge Team produce a draft SOW by April 2005. Mr. Williams stated that Mr. Hazelton should be able to lead the team to complete the SOW by April.

Chuck Wilson, Diadromous Fish and Riverine Aquatic Resources Team Leader – Mr. Wilson reported the work group has three SOW's that are almost ready for approval. The work group has completed their final review and submitted comments. These comments will be addressed and the SOW's should be ready in early January. The \$62,000 listed on the cost spreadsheet only represents one SOW. The costs need to be finalized. The habitat assessment will take one field season so the work duration is within the limits of the other teams' work.

Team Leaders Not Present, Water Supply – Meeting participants indicated that they are not aware of any current work as the team was put on hold since it was ranked as a low priority based on funding. The Executive Committee requested a SOW by April 2005.

John Morris, Operating Policies and Administrative Procedures Co-Team Leader – Mr. Morris reported that the SOW was turned into a draft RFP thanks to Mr. Lewis' work. The RFP needs one last review from all team members. The Modeling Oversight Team provided five comments which will be addressed prior to final distribution of the RFP to the team. Mr. Morris stated that the RFP lists an estimated cost of \$30,000.

Tony Young, Modeling Oversight Team Leader – Mr. Young mentioned the names of the group members. They include: Terry Brown, Carter Edge, Tom Francen, Joe Hassell, Adugna Kebede, Martin Lebo, Jim Mead, Sam Pearsall, Jim Thornton, Terry Wagner, and Tony Young.

The RRBROM Workshop that was held on October 27 provided Brian McCrodden (HydroLogics) with a list of model enhancements. Mr. McCrodden put together a partial draft cost estimate for these enhancements that was received on December 9. The costs thus far are \$108,000. The Modeling Oversight Team needs to meet to prioritize the enhancements. The team has reviewed the Water Quality, Downstream Recreation, Operations and Administrative Procedures, and Sedimentation SOW's, and is reviewing the Riparian Ecosystem SOW. Mr. Young is checking into the HEC model and mentioned that IWR has no objections to adapting RRBROM.

Contracting Methods

Mr. Lewis reviewed available contracting methods which are listed in Attachment 3. He requested that team leaders provide recommendations on the types of contracting needed by mid-January (exception for those groups which will submit SOW's by April). Mr. Lewis will then send these contracting recommendations on to the Executive Committee to review and modify or approve prior to the next meeting (22 February). Mr. Wood mentioned the possibility of having one entity responsible for putting together a single final document from all the separate reports. A comment was made that the Phase III report which includes the Feasibility Report and Environmental Impact Statement would be written by one entity. The whole team will have opportunities to provide input during Phase III. Jim Thornton, Sam Pearsall, and Coleman Long all made comments to the effect that a "committee of the whole" will be needed to integrate the various individual studies into an overall evaluation of alternative operating proposals. Mr. Mead and Pete Kornegay noted that the original team structure included an Integration Team to be convened when we reached that point in the 216 Study process.

Financial Cost Sharing Update and Review of Study Schedule

Lisa Hetherman summarized the content of two cost update handouts which are Attachments 4 and 5. Ms. Hetherman previously requested that the team leaders review their schedules and provide their best time estimate for work with the goal of accelerating the feasibility study schedule to complete the Study by 2006. However, with the

schedules she received from team leaders and the necessary steps in the Corps of Engineers Planning Process, the new estimated completion date is August of 2010.

Planning Process

Coleman Long distributed a hand out that listed the steps in the Corps of Engineers' Planning Process. This is Attachment 6. Mr. Long noted that we are in the Feasibility Phase at step two (Inventory and Forecast Resources) of six.

GIS Discussion

Jim Jacaruso, the Wilmington District Corps of Engineers' expert on GIS standards, offered to work with the team leaders to catalog all existing GIS data and identify data gaps. Mr. Jacaruso stated the need to be sure all work groups are using the same data standards. He mentioned that within the USACE, Districts share Indefinite Delivery – Indefinite Quantity Contracts. Other Districts may have data we need and we can acquire this data through a transfer of funds. It was agreed that Mr. Jacaruso should work with the Modeling Oversight Team and provide a Federal list of data standards.

Executive Committee Comments and Approvals

- The need to shorten the schedules in the SOW utilizing parallel work efforts was emphasized
- Team 1, Downstream Flow Regime and Effects on Riparian Ecosystem, Tasks 1.A.2 and 1.B approved.
- Team 2, Water Quality,
Look at ways to accelerate schedule with parallel tasks. Check for any overlap of work with other teams. Submit new schedule and SOW to the Executive Committee in January, and work to begin monitoring during the summer of 2005.
- Team 3, Sedimentation and Channel Morphology,
Items 1 – 4 approved. Clear breakdown of other costs requested. Team leader will get confirmation on costs from work group. Ms. Hetherman will then e-mail accepted costs to the Executive Committee.
- Team 4, 6, & 8 (Reservoir Resources, Salt Wedge, and Water Supply; respectively)
Will submit SOW's to Executive Committee by April 2005
- Team 5, Downstream Flow Based Recreation,
Approved circulation of RFP for proposals. Mr. Lewis will review contracting proposals and make recommendations on how to issue contracts and proceed.
- Team 7, Diadromous Fish and Riverine Aquatic Resources,
Submit SOW to Executive Committee in January
- Team 9, Operating Policies and Administrative Procedures,
Add five recommendations from the Modeling Oversight Team. Review costs, and submit RFP to Executive Committee in January
- GIS, Mr. Jacaruso will provide a cost estimate through 2006.

- All teams (except 4, 6, and 8) should provide contracting suggestions (approaches, potential contractors, etc.) to Mr. Lewis in January. He will work with each team to determine the best plan

Next Meeting

A conference call will be scheduled in January to discuss the Study progress and prepare for the next Executive Committee/Team Leaders' Meeting which will be February 22 at the McKimmon Conference Center in Raleigh.