



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
 ED Office Conference Room – Kearney, NE
 September 29, 2009

Attendees

- Mark Peyton – Central Nebraska Public Power & Irrigation District (Chair)
- Jerry Kenny – ED Office
- Chad Smith – ED Office
- Dave Baasch – ED Office
- Jason Farnsworth – ED Office
- Steve Smith – ED Office
- Jeff Runge – U. S. Fish and Wildlife Service
- Chester Watson – Consultant
- Jim Jenniges – Nebraska Public Power District
- Pat Engelbert – HDR
- Tom Riley – Flatwater Group
- Bob Mussetter – TetraTech
- Mark Pegg – University of Nebraska-Lincoln (teleconference)
- Mike Besson – State of Wyoming
- Brock Merrill – Bureau of Reclamation
- Martha Tacha – U.S. Fish and Wildlife Service
- June Deweese – U.S. Fish and Wildlife Service
- Jennifer Schellpeper – Nebraska Department of Natural Resources
- Mark Czaplewski – Central Platte Natural Resource District
- Mike Fritz – Nebraska Game and Parks Commission
- Rich Walters – The Nature Conservancy
- Kevin Urie – Colorado Water Users (teleconference)

Welcome and Administrative

Peyton called the meeting to order and the group proceeded with a roll call.

Agenda modifications – None

Brock Merrill moved to approve the April TAC meeting minutes; Jim Jenniges seconded. **April 2009 TAC meeting minutes approved.**

Lower Platte River Stage Change Study Update

Engelbert from HDR provided an update and presentation on the Lower Platte Stage Change Study. Mussetter presented information on modeling.

Engelbert provided example of how models could be used and opened up the discussion session. Farnsworth inquired about how change in habitat type relates to habitat for sturgeon. Pegg related Peter’s study to current study and stated pallid sturgeon were found mostly in plunge pool



and run habitat. Engelbert asked Pegg to elaborate on species habitat relations. Pegg commented on predator/prey and other biological responses that can't be predicted with models. Tacha asked whether sturgeon were associated with dune habitat and Pegg stated they were most highly associated with plunge habitat found along bank or in scour area. Mussetter explained what creates plunge areas.

Pegg asked about how our flows will affect lower Platte River and how much water reaches lower Platte and Engelbert indicated flows varied by month but were fairly predictable. Runge asked about if model will be used by the Program and Mussetter and Smith indicated input files belong to Program (public) and that 1-D models will be applied to middle Platte and we will incorporate 2-D models.

Runge talked about long term ability of model to predict habitat as things change with high flow events. Engelbert described their findings after high flow events and stated habitat gets moved down stream and models could be used there. Mussetter added habitat stays fairly stable through high and low flow events and that through a 2-year period (2006-2008) the distribution of habitat didn't change much. Engelbert added that after 2008 high flow the lower flows changed habitat back to the norm for the area. Mussetter indicated models could be applied at smaller or larger scales. Model area of interest with 2-D model, compare to 1-D model, and extrapolate across area. Farnsworth talked about using LiDAR and other data to create models.

Smith explained the reason we undertook this project was to determine how Program actions will affect the lower Platte and to test viability of model. General notion is that flows from middle to lower Platte don't affect lower Platte in terms of statistical significance. Smith said the information from the study and use of the modeling tool should help to guide next steps at the GC level.

Tacha stated that a missing part of study is the affect of the storage component of Program work on the lower Platte; storing water could be seen as negative effect of the Program on water in the lower Platte if peak flows are shaved to divert water for storage. The final stage change study needs to evaluate the effects of the storage component on model. Runge indicated this was still uncertain. Engelbert said we could use flow models to estimate the reduction of water in the lower Platte. Engelbert stated that if 1,000 cfs of water was stored by the Program it would result in a decrease in flows of 900 cfs in the lower Platte, but potential effects of reducing flows this much are minimal given the input of other flows in the lower Platte and the percentage of total flow that central Platte water comprises in the lower Platte. Riles said if water was withheld over a longer period the effects would be undetectable. Mussetter said we need to decide how much water the Program will store first and then we could determine/predict the effects. Farnsworth asked if we need to use all figures (models) together; Engelbert agreed. Jenniges pointed out how the report needs to emphasize they found minimal effect of the Program on pallid sturgeon habitat in lower Platte.

Next steps – Smith said the HDR Team should revise the draft stage change summary report to provide a clearer statement on the statistical significance of the detectability of Program flows in



the lower Platte and the resulting impact on habitat, and add an appendix on how to use the tools in report. A revised report will be reviewed by the TAC one more time for final review in November (November TAC meeting) before presentation to GC in December in Denver. Jenniges suggested presenting the scientific findings to GC in December and let them decide on next steps. Smith agreed. Smith will also give the report to the WAC for review.

Schellpeper asked for clarity on the 10% loss of water from Grand Island to the lower Platte and wanted the report to better explain that 90% actually gets there. Besson stated that the water that reaches or fails to reach lower Platte did not seem to significantly affect pallid sturgeon habitat. Riley said they can't use the model to tell if 3-4% change in habitat will affect sturgeon. Farnsworth stated institutional limits will regulate how much water we could remove or add to the system so it is unlikely our work would affect the lower Platte.

AMP & IMRP Activities Updates (10:30)

Smith led discussion:

• LETE/PIPL monitoring – 2008/2009 annual report; 2010 field work

Smith stated Baasch is combining 2007-2009 data and drafting annual report. Protocol/data collection 2010 may change (more data) for resource/nest-site selection work.

• LETE/PIPL Foraging Habits Study

Smith provided summary of Sherfy's report. Discussed data collection/man power would change in 2010 to collect a more complete set of data. Smith will update budget after he gets an estimate from Sherfy and may add a third year to this study. Jenniges asked why Sherfy had trouble getting access to land. Smith said a draft report from the first year of field work is expected by the end of December.

• WC, Forage Fish, Geomorphology/Vegetation, Water Quality Monitoring

Smith has 2009 WC Report and will post it to site. Jenniges stated final reports should be posted to website library. Farnsworth indicated the current website has file size limits, but updates will allow for larger files.

Ayres and Olsson finalized field work implementing the geomorphology/in-channel vegetation monitoring protocol and are working on data processing. Data will be provided to Flatwater for sediment augmentation work. Smith will provide everyone with their report when it's available.

• Water quality

Monitoring protocol implemented in 2009 and field work complete. EA will provide a draft report from the first year of implementation soon and it will be presented to the TAC for review.

• Peer Review comments – future meetings?

All peer reviews are in as of last week. Program staff are making minor changes and summarizing more substantial concerns to discuss with the TAC. We will send all comments



and our suggestions and changes to TAC so updated protocols can be provided to GC in December. Need to schedule a meeting soon to discuss peer review comments.

• Final ISAC report; AMP Mock Report

Smith provided a summary of the final ISAC report sent out to everyone. Smith said he is beginning to develop the Mock Report and will continue to work on it over the next several months. TAC input will be critical to developing the report, and it will be discussed with the GC once a solid draft has been developed and reviewed by the TAC. ISAC suggestions such as revising the Conceptual Ecological Models will be tackled in the Mock Report and discussed with the TAC.

Smith feels ISAC report was a reasonable first report. Tacha indicated we have not looked at affects of the Program on non-program lands. Smith said the Mock Report will include a summary of potential Program impacts. Smith said we may enter agreements so we can build islands as needed and sample more habitat. We will lay out details in mock report. Schellpeper asked if anything in ISAC report shocked Smith, and he answered no. Mock Report will help answer GC questions as to whether what we’re doing will answer questions they have to wrestle with at the policy level.

Farnsworth indicated we need to visit with GC about how we approach modeling. Jenniges stated we need to explain implications of models and how they will be used to make decisions and develop decision trees for guidance. Runge stated GC hurdles of CEM could potentially be addressed without changing actual CEM.

• Sediment Augmentation Feasibility Analysis

Team on board and project is up and running.

• “Data Mining” projects – LETE/PIPL nest initiation and flow; WC and wet meadows

Entering data and preparing to dive into data mining projects. Felipe Chavez-Ramirez is ready to capture birds and put transmitters on for the whooping crane telemetry project.

• Wet Meadows Info Review and Refinement of CEM

A RFP for the wet meadows information review will be drafted and discussed with the TAC at the next meeting.

Program Modeling Strategy

Steve Smith led a discussion of 1-D and 2-D hydraulic/sediment/vegetation modeling options. Farnsworth pointed out the Bureau of Reclamation is no longer supporting the SedVeg model. Besson asked how difficult it would be to input HEC-RAS model data into the Corps’ model. Watson said he didn’t think it would be too difficult.

Jenniges asked how many site-specific 2-D models we would use. Farnsworth suggested using habitat complexes for 2-D model areas. Jenniges said it may be more important to look between complexes. Farnsworth said we could use LiDAR data and obtain 1-D and 2-D model for the



entire study area if we have computing power. Farnsworth said we need to make sure model covers wide, shallow, deep, etc. river areas.

Smith presented time line for GC approval in presentation. Smith said time line for GC approval appeared realistic. Kenny said we have money in budget to conduct work in 2010. Kenny stated that we need to discuss the concept of modeling with the GC in October; a RFP for modeling could be approved by the GC in December but it would not be issued until January 2010. Merrill suggested we include an estimate of costs. Czaplowski said he was curious about WAC buy-in and Kenny said they appeared to be fine with it as long as money comes from adaptive management budget line items.

Schellpeper asked if an example could be provided for the GC meeting on how models will address questions laid out in the Program document. Jenniges said initial work could be done at Cottonwood. Smith suggested a 1-D model would be tackled first and 2-D modeling would come later, probably beginning around the Elm Creek Complex. Tacha asked what flows would be used in models to address hydro cycling. Farnsworth said the model would be capable of running a range of streamflow including hydro cycling, and we could model different scenarios from Overton all the way to GI.

Farnsworth said we should look at scour first and look at other effects later. Tacha asked how we would model vegetation scouring (lab or field). DeWeese asked what we were modeling in the lab/field and if we need two RFPs. Farnsworth and Smith said we need two RFPs and we are interested questions such as determining how much scouring is necessary to remove six-month-old plants from islands.

Draft FY2010 Program Budget

Smith presented the draft FY2010 budget and led discussion about AMP-related line items. Jenniges asked about terminology (Model ID & Development) and suggested change wording to “Model Application”. Smith agreed. Kenny pointed out system-wide anchor points entry in budget illustrate Program staff are meeting objectives.

Kenny said money in the Water Action Plan budget line items will clear phragmites biomass from Grand Island to North Platte. By 2011, Lake McConaughy to Chapman will be cleared of biomass. Kenny said we used the SEH model to test theory that phragmites is choking river channel, but didn't fully capture everything. Kenny said we might need to look at disking and ripping along with flows to remove phragmites. The FY2010 includes \$400,000 to remove biomass between North Platte to Grand Island. Kenny thinks actions this fall should get us to a 3,000 cfs capacity. Kenny and Smith said the draft budget and FY2010 work plan will be submitted to the GC for review with the agenda and other supporting documents for the GC meeting in October.



Closing Business

The TAC set two future meetings:

- October 20th, 2009, 9:00 a.m.-4:00 p.m. Central time – discuss peer review of tern and plover and forage fish monitoring protocols
- November 23rd, 2009, 9:00 a.m.-1:00 p.m. Central time – TAC meeting

Meeting adjourned at 12:30 p.m. Central time.

Summary of Action Items/Decisions from September 2009 TAC meeting

- 1) Approved minutes of April 2009 minutes.
- 2) Set meeting on October 20th to discuss peer review comments on the tern/plover and forage fish monitoring protocols.
- 3) Set TAC meeting on November 23rd.