



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
Executive Director's Office Conference Room – Kearney, NE
July 24, 2012

Meeting Participants

Technical Advisory Committee (TAC) Table

State of Wyoming

Mike Besson – Member (Chair)

State of Colorado

Suzanne Sellers – Member

State of Nebraska

Mike Fritz – Alternate

U.S. Fish and Wildlife Service (Service)

Matt Rabbe – Member

Bureau of Reclamation (BOR)

Brock Merrill – Member

Environmental Entities

Rich Walters – Member

Mary Harner – Alternate

Upper Platte Water Users

Colorado Water Users

Kevin Urie – Member (via conference line)

Downstream Water Users

Mark Czaplewski – Member

Jim Jenniges – Member

Mark Peyton – Member

Executive Director's Office (EDO)

Jerry Kenny – Executive Director (ED)

Chad Smith

Jason Farnsworth

Steve Smith

Justin Brei

Dave Baasch

Other Participants

Greg Wright (Trust)

Bob Mussetter (Tetra Tech)



Welcome and Administrative

Besson called the meeting to order and asked for agenda modifications; none offered.

April, 2012 TAC Minutes

Besson asked the group if there were any changes to the April, 2012 TAC minutes. **Rabbe moved to approve the April, 2012 TAC Meeting Minutes; Harner seconded motion; all approved.**

June 2012 GC Meeting Update

C. Smith updated the group on the GC's decision to approve the Stage Change Study as final and the GC's determination that the tool can be used to evaluate Program actions but is not a statement on Program policy implications for pallid sturgeon.

C. Smith summarized the GC's caddisfly research discussion, David Galat's GC presentation, and the EDO's white paper that outlined GC's decisions on Platte River caddisfly.

July 2012 ISAC Meeting Update

C. Smith provided an update of the discussions/results of the July 2012 ISAC meeting and stated the ISAC's general take home message was to continue to focus on SDHF. C. Smith stated the Service is working on the Annual Operating Plan for 2013 target flow releases. Rabbe stated he felt Program participants generally agreed SDHF magnitudes of 8,000cfs would be needed in order to test the Program's hypotheses so until the choke point issues are resolved the Service would likely use EA water for target flow objectives. Farnsworth stated with the 2012 drought, vegetation is growing near the bottom of the channel so we could learn a lot about vegetation scour by releasing 5,000cfs which would be comparable to monitoring vegetation scour on higher bars under higher flow conditions. Rabbe agreed and stated, but that he didn't feel we could say much about Program flow hypotheses until are able to observe the effects of releasing higher magnitude flows (i.e., 8,000cfs). Peyton stated we had natural flows that exceeded SDHF magnitudes and duration the past 2 years and we didn't observe results predicted by the Service's model. Rabbe said the Program needs to have sediment balance and flow in order to fully test the hypotheses. C. Smith pointed out the AMP states SDHF magnitudes should be 5,000 – 8,000cfs and not 7,000 – 8,000cfs. Wright said historically high flows were likely a recurring event and the effects of one event were additive rather than a standalone action. Rabbe agreed and added we may see a better response to a SDHF release now that the channel has been prepped. Farnsworth stated those views may be correct, but not what is included in the Program's AMP and that SDHF needs to be able to maintain desired channel conditions in the absence of natural high flow events (i.e., during periods of drought).

Besson asked Kenny to provide an update on where the Program was at regarding the North Platte choke point issues. Kenny stated we received proposals for investigating minor flood proofing activities that could persuade the National Weather Service to raise the minor flood stage designations at North Platte from 6 feet to 6.5 feet which would increase the capacity to 2,400cfs. The only way we will be able to pass 3,000cfs through this choke point would be via dredging. The timeline for passing additional water through the North Platte choke point depends on our ability to obtain appropriate permits, implement on-the-ground actions, and time for the National Weather Service to make a determination to increase the minor flood stage designation which will likely be



spring 2014 at the earliest. Besson asked if there are other means to obtain SDHF magnitude flows. Kenny stated there might be opportunities to capitalize on south Platte flows and the Program may be able to negotiate a deal with Central Nebraska Public Power and Irrigation District to draw down Johnson Lake more than originally proposed early in the spring prior to the irrigation and recreation seasons and then refill Johnson Lake quickly thereafter.

Besson asked what group would represent the Program at the October 10th meeting with the ISAC. C. Smith stated the meeting would likely be for the AMWG and the ISAC. Rabbe suggested Eliza, the new Service EA Manager, be present at the October AMWG/ISAC meeting as well.

PRRIP Data Requests

Farnsworth informed the group the EDO had received several requests for Program data and that the EDO has been asking the organizations to provide the Program with a Study Plan. Czaplewski asked Farnsworth to explain the Program's publication policy set. Farnsworth stated the Program's policy set was developed to guide Program publications for work funded by the Program. Kenny stated publications that interpret Program funded data go through the policy set process. Peyton said that anyone should have access to Program data once the final product from the research has been completed.

The group briefly discussed recent data requests has received from Henspeter University of Minnesota; Sanders and Schubert UC Irvine; Triplett, Kettenring, and Tal Gustavus Adolphus College; and Tyre and McFadden University of Nebraska Lincoln.

Jenniges asked if the EDO was documenting data requests so we could track publications in the future. Farnsworth said we were and that we would likely end up placing a folder on the Program database to store the study plans from the data requests.

Scientific Articles

C. Smith provided background information for why the EDO began writing 'response documents' to published research articles that may influence Program decision making in the future and briefly discussed EDO reviews of the Horn et al. publication and the Jorgenson et al. publications.

Besson indicated support for writing response documents to research articles that may be used to guide Program decision making in the future. C. Smith stated EDO staff is concerned about getting overwhelmed by writing these response documents and that the TAC or someone would need to make a decision on which articles warrant Program response and which ones do not. Fritz stated regardless of scientific field there will be conflicting opinions and publications and that the TAC should provide guidance on whether a response document is warranted or not. C. Smith suggested the following 4-step approach for determining whether or not the Program should write a response document to published research:

1. Submit research articles of interest to the Program to EDO staff for distribution to full TAC.
2. Include time in the TAC meeting agenda to discuss submitted research articles
3. If requested by the TAC, EDO develops short response (1-3 pages) on utility of article for the Program
4. Discuss EDO response and other comments at next full TAC meeting; original article, EDO Response, and TAC discussion notes kept on file.



Czaplewski moved to adopt the 4-step approach (above) for responding to published research that may influence Program direction in the future; Rabbe seconded motion; all approved.

C. Smith briefly discussed the Schapaugh and Tyre (2012) publication and the clarification Tyre provide in response to Program concerns about the independence of the work from the Program. TAC members did not feel additional clarification or a response document was warranted for this publication.

Harner provided the group additional background on how the ‘Effects of grazing on Platte River caddisfly (*Isonychia plattensis*) in central Nebraska’ study was conceived, how the project was developed, findings, and potential implications of their work. Harner suggested the Program could fence off areas where trees are removed and caddisfly exist to protect the caddisfly habitat; Jenniges responded the purpose of the Program removing trees would be to increase open water areas for whooping cranes which could benefit from having vegetation of short stature surrounding the water area. Rabbe asked Harner if there was any indication of a grazing intensity or rotation system that would be more compatible with caddisfly; Harner stated the Trust’s stocking rate were within the recommended rates or slightly lower and suggested not grazing while caddisfly are building cases might be beneficial, but that data is not available. Baasch stated he recalled Harner mentioning that the exclosures appeared to funnel cattle and increase cattle traffic in the grazed plot and asked that was correct; Harner indicated it was. Baasch asked if the surfaces of the slough within grazed and ungrazed plots were similar or if there was a possibility they didn’t find as many caddisfly in the grazed plots because of sampling to depths of 2.5cm; Harner stated there were definitely differences between surfaces of grazed and ungrazed plots and that sweep-net methods would not have captured caddisfly that may have been located in the bottom of the depressions. Harner stated the study would benefit from conducting subsequent surveys and additional monitoring at this site as well as other sites that are grazed. Besson asked what the implications of the study would be for the Program; Baasch said the biggest implications of the work for the Program would be using the study to direct management activities, such as tree removal and grazing that are directed at providing better habitat for whooping cranes. Farnsworth stated the Program should be aware that if we are grazing areas with known caddisfly populations we may or may not be causing harm to caddisfly. Kenny stated the ISAC provided the guidance to manage for whooping cranes while monitoring caddisfly response. Farnsworth asked the Service if the Program could be informed when funding is directed toward research projects that could have implications for the Program. Rabbe assumed the Program was aware the Service fund research to learn more about caddisfly during the 12-month finding period. Farnsworth stated the Program wouldn’t want to have a role in these research projects, but that it would be nice to be informed about research projects related to the Program’s target species or species of concern so that we aren’t duplicating the work.

Peer Review

Sediment Augmentation

C. Smith presented results of the Sediment Augmentation Peer Review comments and discussed EDO and Contractor responses to peer review comments that were submitted to the TAC. Rabbe stated he didn’t feel peer reviewers fully grasped that the Sediment Augmentation study was a pilot study, but that many of their comments, recommendations, and issues are useful and valid for a full



scale project design. He recommended that their comments and suggestions should be revisited and incorporated into the full scale project design which would then be re-peer reviewed.

Rabbe moved to recommend the Governance Committee accept the peer review of the Sediment Augmentation Pilot-Scale Management Action Technical Memo and Monitoring Plan and accept the revised versions of the Technical Memo and Monitoring Plan as final; Jenniges seconded the motion; all approved.

Vegetation Research

C. Smith provided an update of the peer review of the Directed Vegetation Research Study and informed the group the peer review will be ready for review in September, 2012.

Publications

Farnsworth asked if the TAC felt the memorandum Chester Watson submitted to the EDO in 2011 should be peer reviewed or published. The TAC suggested a draft of the memorandum/article be reviewed by the TAC and supported having the memorandum published in a journal.

Additional Peer Review Requests

C. Smith asked if the TAC had any recommendations for additional peer reviews during 2012. Sellers and Rabbe stated we should write peer review questions so they are more direct towards 'fatal flaw' rather than editorial issues within study plans or reports we have reviewed for the Program so that reviewers don't reject based on editorial comments. C. Smith stated he felt peer reviewers to date that have focused on editorial issues likely did so because they didn't notice any fatal flaws in the study plan or report, but that we would try to include questions directed at fatal flaws issues.

Jenniges suggested the Program peer review the Geomorphology/Vegetation Monitoring Data Analysis Plan. C. Smith suggested we could have Phillip Dixon (ISAC member) peer review the Geomorphology/Vegetation Monitoring Data Analysis Plan where he is familiar with the Program. Jenniges and others agreed with this approach.

Geomorphology/Vegetation Monitoring Data Analysis Plan

S. Smith provided a brief background on how the Data Analysis Plan was developed and Mussetter presented information contained in plan.

Czaplewski moved to recommend TAC support of the Geomorphology/Vegetation Monitoring Data Analysis Plan with the understanding Phillip Dixon will peer review the Plan; Jenniges seconded the motion; all approved.

Lateral Erosion Research Proposal

Farnsworth discussed the Lateral Erosion Research Proposal the EDO received from Cardno Entrix (Natasha Bankhead and Andrew Simon). Farnsworth pointed out that due to recent conversations about the role lateral erosion may play in removing vegetation and maintaining channel form, he asked Natasha and Simon to reconstitute a proposal to investigate potential effects vegetation management strategies have on lateral erosion rates of bar and bank edges along the Platte River. S. Smith asked if Farnsworth had any indication of how model results may compare to field results to determine if the proposed data collection was necessary or not; Farnsworth stated that Bankhead and Simon indicated the field data could replace some of the higher-order assumptions that feed into



the model which would improve the accuracy of the model. Besson asked how the research was related to sediment augmentation because sediment augmentation could influence lateral erosion rates. Farnsworth stated he didn't specifically ask Natasha and Simon to address sediment augmentation, but instead they were going to look at rates of bar erosion at different flow rates and under different vegetative conditions. Czaplewski said he supported the research project, but was concerned about having no flows in the channel during the fall of 2012. Farnsworth said they would likely use jet tests or other methods to expose sandbars and banks to various flow conditions. Fritz suggested the research should look at live phragmites as well as dead phragmites. Walters and others stated the root systems of phragmites stands that appear to be dead actually have an extensive root system with a lot of live roots. Walters asked if they would select specific banks or areas with specific plants to test. Farnsworth indicated they would likely target areas with targeted species and that the EDO would direct them to areas with the conditions they want to test.

Peyton moved to extend the Directed Vegetation Research contract to conduct the proposed Lateral Erosion Research; Rabbe seconded the motion; all approved.

Fox Tract

Farnsworth and Brei discussed the Fox wet meadow restoration plan and asked for TAC input on the proposed design. Czaplewski suggested the east part of the south spoil pile along the road be placed across the road on the Program's Hostetler Property to maximize lowland areas on the Fox Tract. Brie stated the EDO planned to place the pile along the road to provide a physical barrier to reduce the potential for disturbance. Rabbe asked what the depths of the swales would be at average flows during spring whooping crane migration season. Farnsworth stated the bottom of the swales would have small water areas or at least would be saturated at 1,000cfs. Rabbe suggested we not have the contractor fine grade the swales to provide additional varying micro-topography and water depths during different hydrologic conditions. Rabbe asked if we planned to apply organic material to jump start the process of restoring wet meadow function; Brei stated there would be crop residue and other organic material in the top soil that will be replaced following excavation. Rabbe indicated it may be worth investigating adding additional organic material in the future. Farnsworth stated that anyone that wanted to see the final design document before putting the RFP out for bid should email Brei.

LTPP In- and Off-channel Habitat Availability Assessments

Baasch led the discussion and explained concerns EDO staff have with preliminary results from the tern and plover off-channel habitat assessments that include the water:sand ratio criterion excludes sites that have had nesting the past several years such as Dyer sandpit, Trust sandpit, etc. The TAC was asked if they wanted to adjust the minimum habitat criteria so known nesting sites conform to Program minimum habitat criteria, leave the criterion as is, or remove the criterion with the understanding Program defined suitable off-channel nesting sites would include sand and water. Peyton suggested we could draw a buffer around the bare sand and calculate water:sand ratios off of that area. Jenniges stated we would have no biological basis for where we would draw these lines; Peyton agreed and stated we really don't have any biological basis for the way Rainwater Basin Joint Venture delineated the sites or how the TAC would delineate sites either. Rabbe stated Jeff Runge (Service) was concerned the Program hadn't conducted a habitat selection analysis; Baasch



stated that analysis was planned for 2012 or 2013 and would include an evaluation of all bare-sand areas as well as areas conform to the Program’s minimum habitat criteria.

The TAC supported removing the water:sand minimum habitat criterion with the understanding all Program defined suitable off-channel sites would contain both sand and water areas.

Baasch discussed concerns with in-channel habitat availability assessment results that include differences in timing of when aerial imagery had been captured in 2007, the 50-foot water barrier criterion, the 0.25 acres of bare sand 18 inches above 1,200cfs stage, etc. To date, 35/51 in-channel nests were located in areas that do not conform to the Program’s current minimum habitat criteria. The TAC was asked if they felt we should the 50-foot water barrier should be measured at observed flows (as currently done), 1,200 cfs, or the greater of these 2 measures and what they wanted to about the 2007 in-channel habitat assessment where imagery was collected later than normal (7 – 23 July) and preliminary habitat availability results indicate there were no in-channel nesting islands that conformed to Program minimum habitat criteria; however, 17 nests were observed on sandbars during 2007.

Besson asked how much it would cost the Program to change the criteria in the future rather than now; Baasch and Brei estimated it will likely cost around \$3,000-\$4,000 per assessment so long as we only adjust the criteria and are Rainwater Basin Joint Venture doesn’t have to re-classify imagery or evaluate additional criteria.

After an extended discussion, the TAC supported leaving the Program’s current in-channel minimum habitat criteria as is and consider updating the criteria once we observe more nests on sandbars and have more data to support our decisions. The TAC also supported having EDO staff manually delineate ‘suitable’ tern and plover nesting habitat for 2007 based on known nesting areas and management activities at these sites.

Closing Business

TAC meetings were scheduled for August 21 (Kearney), September 26 (Kearney), and October 17, 2012 with the October 17 meeting being conducted via conference call.

Upcoming ISAC/AMWG meeting is scheduled for October 9, 2012 (ISAC only) and October 10, 2012 (AMWG/ISAC) in Omaha, NE.

Meeting adjourned at 2:30pm Central time.

Summary of Decisions from April 2012 TAC Meeting

- 1) Approved minutes from the April 2012 TAC meeting
- 2) Adopted a 4-step approach (below) for responding to published research that may influence Program direction in the future
 - Submit research articles of interest to the Program to EDO staff for distribution to full TAC.
 - Include time in the TAC meeting agenda to discuss submitted research articles
 - If requested by the TAC, EDO develops short response (1-3 pages) on utility of article for the Program
 - Discuss EDO response and other comments at next full TAC meeting; original article, EDO Response, and TAC discussion notes kept on file



- 3) Recommended the Governance Committee accept the peer review of the Sediment Augmentation Pilot-Scale Management Action Technical Memo and Monitoring Plan and accept the revised versions of the Technical Memo and Monitoring Plan as final
- 4) Recommended support of the Geomorphology/Vegetation Monitoring Data Analysis Plan with the understanding Phillip Dixon (ISAC) will peer review the Plan
- 5) Supported an extension of the Directed Vegetation Research contract to conduct the Lateral Erosion Research Cardno Entrix (Natasha Bankhead and Andrew Simon) proposed
- 6) Supported removing the water:sand minimum habitat criterion with the understanding all Program defined suitable off-channel sites would contain both sand and water areas
- 7) Supported leaving the Program's current in-channel minimum habitat criteria as is and consider updating the criteria once we observe more nests on sandbars and have more data to support our decisions and also supported having EDO staff manually delineate 'suitable' tern and plover nesting habitat for 2007 based on known nesting areas and management activities at these sites
- 8) Scheduled 3 upcoming TAC meetings: August 21, 2012; September 26, 2012; and October 17, 2012 (vial conference call).