

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM Technical Advisory Committee Meeting Minutes

Executive Director's Office Conference Room – Kearney, NE September 26, 2012

Meeting Participants

Technical Advisory Committee (TAC) Table

State of Wyoming

Mike Besson – Member (Chair)

State of Colorado

Suzanne Sellers - Member

State of Nebraska

Pat Golte – Member Mike Fritz – Alternate

U.S. Fish and Wildlife Service (Service)

Matt Rabbe – Member

Bureau of Reclamation (BOR)

Environmental Entities

Mary Harner – Alternate

Upper Platte Water Users

Colorado Water Users

Kevin Urie – Member

Downstream Water Users

 $Mark\ Czaplewski-Member$

Jim Jenniges – Member

Mark Peyton – Member

Executive Director's Office (EDO)

Chad Smith Jason Farnsworth Dave Baasch

Other Participants

Greg Wright (Trust) Trevor Hefley (UNL – IGERT)

Eliza Hines – (FWS EA Manager)

Barry Lawrence – (Wyoming)

Gary Lingle (AIM)

Shay Howlin (WEST)

Roger Grosse (RWBJV)

Nicholas Volpe (RWBJV)

Austin Barenberg (RWBJV)



Welcome and Administrative

Besson called the meeting to order and asked for agenda modifications; Smith asked to add 3 discussion items to the agenda: 1) Wind Energy Mitigation Project; 2) Capstone Project; and 3) whooping stopover site evaluation at the end of the agenda.

August, 2012 TAC Minutes

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

PRRIP Data Requests

None available

Scientific Articles

None available

Mitigation and Capstone Projects

Baasch updated the group on the status of the Aransas Winter Census Report and informed the TAC that report should be available during the October TAC meeting.

Baasch stated WEST contacted the EDO and asked if the Program would have an interest or ability to create nesting habitat along the central Platte River to benefit piping plovers and serve as mitigation for a wind energy project in North Dakota. Besson asked what the Service's position was for mitigating a North Dakota project on the central Platte River; Rabbe stated the Service is trying to determine why they couldn't implement the mitigation project in North Dakota. Baasch stated Greg Johnson (WEST) expressed concern about having a reasonable expectation of fledging and providing mitigation for 4 piping plovers if they develop habitat in an area where they currently aren't nesting. Jenniges stated mitigation projects such as this will likely become more common in the future. The group generally agreed the EDO should move forward with a proposal knowing the TAC and GC will provide input on final design and location if accepted.

Farnsworth state the EDO was contacted by UNL to determine if the Program had a project some Biosystems students could work on for their UNL Capstone Project. The EDO will provide UNL an 'RFP' for developing an off-channel sand and water site, in-channel islands, and palustrine wetland on the Program's Wyoming and Blessing properties and the students would develop a proposal, project budget, project design, etc. as if they were a consultant of the Program. The Program wouldn't pay UNL for the work, but could potentially get a useful end product.

2012 State of the Platte Executive Summary

Smith led the discussion and stated the TAC and ISAC being asked to respond to the following 4 questions:

- 1. Are the Big Questions reasonable and do they adequately encompass the intention/meaning of the Broad Hypotheses and associated Tier 1 Priority Hypotheses as noted in the Big Question table on Pages 4-5?
- 2. Are the assessments consistent with what you have learned during your involvement with the Program and logical based on your understanding of Program data?
- 3. Are the assessments technically adequate?
- 4. Is the presentation of each assessment clear and understandable?



Smith said the EDO changed the Big Questions so they were more Yes/NO types of questions and asked if the TAC had any suggestions for changing how current Big Questions are stated, assessments that were conducted, conclusions drawn, etc. The TAC was asked to submit any editorial comments they had to the EDO. Additional comments associated with each Big Questions are contained below.

BQ1 - Will implementation of SDHF produce suitable tern and plover riverine nesting habitat on an annual or near-annual basis?

Besson and Jenniges stated flood stage is reached at 8,000cfs so the Program doesn't have the ability to implement SDHF above this level without creating a flood.

BQ2 - Will implementation of SDHF produce and/or maintain suitable whooping crane riverine roosting habitat on an annual or near-annual basis?

Jenniges suggested the assessment should be a 1-thumb down; Rabbe stated vegetation was removed from the channel during high-flow events the past 2 years although much of it was dead because of herbicide management actions. Farnsworth stated he didn't give a lot of weight to the Vegetation Research since it hadn't been finalized, but he planned to look at additional evidence during 2013 to determine if a different conclusion could be made; Jenniges agreed. Rabbe stated implementing SDHF during 2013 would allow the Program to learn a lot following 2 high-flow years and 1 drought year.

BQ3 - Is sediment augmentation necessary for the creation and/or maintenance of suitable riverine tern, plover, and whooping crane habitat?

Rabbe asked if the Program could consider over-supplying sediment; Farnsworth stated doing so may result in negative impacts to private landowners. Rabbe stated the Program should investigate the possibility of over-supplying sediment during natural high-flow periods when sediment deficits are higher than under normal flow conditions. Jenniges stated over-supplying sediment could plug minor channels and result in land ownership changes.

BQ4 - Are mechanical channel alterations (channel widening and flow consolidation) necessary for the creation and/or maintenance of suitable riverine tern, plover, and whooping crane habitat?

Rabbe stated the Program will need to observe larger changes between baseline and current channel width measures in order to evaluate species response to changes in these measures (Figure on page 16). Rabbe suggested changing "Subsequent high flows lack the stream power..." to "Reduction of high-flow magnitude and frequency resulted in flow events that lack the stream power..." (page 15). Farnsworth stated he was trying to describe the ratchet effect, but could add a statement before that sentence indicating water related development and water shortages changed the hydrology.

BQ5 - Do whooping cranes select suitable riverine roosting habitat in proportions equal to its availability?

Rabbe and Jenniges stated we should include a trend graph showing the proportion of population using the Platte on an annual basis as well as a trend graph for changes in crane use days. Jenniges and others suggested we also include all the data Program has, 2001-2011.



BQ6 - Does availability of suitable nesting habitat limit tern and plover use and reproductive success on the central Platte River?

No comments.

BQ7 - Are both suitable in-channel and off-channel nesting habitats required to maintain central Platte River tern and plover populations?

Jenniges asked what the word 'required' in the big question referred to, how it would be assessed, and what 'population' the question referred to (in-channel, off-channel, or entire population; Baasch stated the wording was taken directly from the Program's Broad Hypothesis and that the EDO planned to answer this question based on selection of in-channel habitat and in-channel nesting success. For example, if terns and plovers select in-channel habitat and productivity was high then the answer would be 'No, off-channel habitat isn't required.' It will be difficult to assess whether in-channel habitat is required because regardless of whether the birds nest on sandbars or not they likely would continue to forage within the channel area. Jenniges stated we need to be able to provide in-channel habitat annually and productivity would need to be high over the long term; Baasch agreed.

Smith stated the question was intended to address Teir-1 Hypothesis TP1. Jenniges stated he wasn't sure how to restate the question, but that the hypothesis was intended to measure if birds would leave sandpits when in-channel habitat was available or if the central Platte population would grow. Farnsworth asked if it would be better if we only link the question to TP3 (Ephemeral nesting areas in the river are/are not needed for long-term nesting success of tern and plover); Baasch stated we could answer that question now where a population has nested on sandpits for over 20 years. We may not have achieved population growth rates people envisioned, but to date no one has been willing to establish benchmarks for success. Jenniges said the TAC needs to discuss the original hypothesis and determine how it can be addressed.

Czaplewski suggested we include a note in the Q&A section of Big Question 7 indicating the TAC needs to determine how to address Teir-1 Hypothesis TP1. The group agreed and asked EDO staff to develop that note; the EDO note included in the State of the Platte Executive Summary is:

"Further work is required in 2013 at the technical level of the Program to address the true intent of Priority Hypothesis TP1 and how best to analyze Program data to evaluate the relationship between in-channel and off-channel habitat selection and use by terns and plovers."

Rabbe suggested we remove "at Program habitat complexes or in close proximity..." from the first statement in the Governance Committee Q&A section so off-channel creation isn't considered only at Program habitat complexes; Jenniges agreed. Jenniges asked if the Program has observed nesting on created off-channel nesting habitat or only at maintained sites. Farnsworth and Baasch stated no nesting had occurred at Cottonwood Ranch OCSW, but terns and plovers did nest on the created area at Newark. Jenniges stated the Program should probably see if terns and plovers nest on the created sites before we build a lot more sites. Smith stated we would change the first Q&A question to "Should the Program maintain existing off-channel habitat..."



BQ8 - Does forage availability limit tern and plover productivity on the central Platte River?

Rabbe asked if we had an estimate of unknown deaths of chicks each year and if these deaths could be related to forage availability; Baasch stated we have no way to link unknown deaths to forage availability, but it appears productivity on the central Platte has been high so it doesn't appear as though forage is limiting. Rabbe asked how good productivity was during 2012 was; Baasch said he wasn't sure yet, but preliminary indications are that productivity was fairly high again. Rabbe stated the Service plans to use the dead chicks the monitoring crew collected to look at stomach content which may be an indication of foraging success. Baasch stated the only way to link tern productivity to forage fish availability would be to weigh chicks on multiple occasions and comparing central Platte River growth rates to observed growth rates in other systems.

BQ9 - Do Program flow management actions in the central Platte River avoid adverse impacts to pallid sturgeon in the lower Platte River?

Rabbe stated the Service feels the program has an obligation to provide benefits to pallid sturgeon and suggested we add a pallid sturgeon question. Besson and Sellers stated Wyoming and Colorado opposed adding a pallid sturgeon question because they didn't feel there was agreement that the Program should benefit pallid sturgeons. Rabbe stated he would be comfortable including a statement/question for the GC to address in the Q&A section of Big Question 9. The group agreed with this approach and asked EDO staff to develop that statement; the EDO statement included in the State of the Platte Executive Summary is:

The U.S. Fish and Wildlife Service maintains the GC needs to address, at the policy level, perceived disagreement between the AMP management objective of "avoid adverse impacts from Program actions on pallid sturgeon populations" and the stated Program goal of "testing the assumption that managing flow in the central Platte River also improves the pallid sturgeon's lower Platte River habitat."

BQ10 - Do Program management actions in the central Platte River contribute to least tern, piping plover, and whooping crane recovery?

Rabbe state the EDO should state we believe the Program is taking management actions that we believe will contribute to species recovery. Jenniges suggested we reword the question "How is the Program contributing to species recovery..." Rabbe stated we could add information showing progress towards reaching Program milestones. Jenniges and Rabbe suggested we change this assessment to a 1 thumbs-up.

BQ11 - What uncertainties exist at the end of the First Increment, and how might the Program address those uncertainties?

Jenniges moved support the Big Questions as written knowing the EDO will make changes to questions as discussed during the meeting; Czaplewski seconded motion; all approved.

Jenniges moved to accept EDO assessments of the Big Questions pending review from the ISAC; Rabbe seconded the motion; all supported. EDO staff will change BQ 10 to a 1 thumbup.



Directed Vegetation Research Report Peer Review

Smith and Farnsworth led the discussion and stated Peer Review comments generally were either related to better documenting statistics and conducting additional research that was not within the scope of the project. The planned next step was/is to implement FSM management experiments in the Elm Creek Shoemaker Island Complexes.

Rabbe asked if we should have the peer review panel review the report now that the contractor feels they have fully incorporated the original suggestions. Smith stated this could become a never ending circle and it is not up to the peer review panel to make the final decision. The TAC should be able to determine if they agree that peer review suggestions were adequately addressed or not and if so, recommend their GC member accept the review and report.

Jenniges moved the TAC recommend the GC approve the Directed Vegetation Research Report as well as the peer review of the Report; Peyton seconded motion; all approved.

Whooping Crane Data Analysis Plan

Shay Howlin (WEST) presented information contained in the draft whooping crane data analysis plan.

Rabbe asked if we would evaluate selection of Program habitat complexes or habitat areas that conform to Program Land Plan Table 1 Habitat Complex Guidelines (Table 1); Baasch said we could evaluate both or we could evaluate proportion of landcover within a 3-mile radius of use and random locations and determine how selection compares to Table 1. Hefley stated we could also compare predicted probabilities of use within and outside habitat complexes or Program defined suitable habitat on a per acre basis. Jenniges asked how we would evaluate whooping crane response to Program management actions such as tree removal. Baasch stated we could apply the final habitat selection model to habitat conditions before and after management actions are/were applied to determine if management the action should influence whooping crane use of the area or not.

Whooping Crane In-channel Habitat Availability Assessment

Volpe and Barenberg presented results from the preliminary 2010 in-channel WC habitat availability assessment. They pointed out that the suitable depth criteria currently used ¼ mile reaches of river and that unobstructed view, unobstructed channel widths, and wetted width currently were calculated on a 10-meter scale, but that 5 meter intervals may be feasible.

Baasch pointed out that bare sand areas should be included in the shallow water area when calculating whether 40% of the area is suitable or not and that trees should be removed from the distance to disturbance filter. Rabbe asked what flow was used in the current analysis; Baasch state they used observed flows when imagery was captured, but that flows of 1,700cfs and 2,400 cfs would also be used in habitat availability assessments when observed flows are lower than these levels.

Besson asked if we could weight minimum habitat criteria so that if an area meets most criteria it wouldn't automatically be excluded. Howlin suggested the Program should weight the criteria when determining if habitat is suitable or not. Baasch said he didn't feel we could weight each criterion because each criteria are pass/fail, but could determine how many criteria an area passes and determine if it passes or not. Baasch said we could plot whooping crane use locations on the



final habitat layers to see how many are within suitable areas, how many are excluded because of more than 1, 2, 3, etc. criteria and can adjust criteria if needed or determine if areas that only fail 1 or 2 criteria should be considered suitable.

Farnsworth and Jenniges said deep water areas should be added back in if the area passes the 40% suitable depth criteria. Farnsworth stated we should use a roving window to determine if 40% of the channel segment passes all filters or not and if so then the channel segment is suitable. Several asked why use 40%; Smith and others indicated 40% channel area of suitable depth was currently a minimum habitat criterion. Baasch and Grosse stated we could look at 10%, 20%, 30%, 40%, and 50% to determine what seems reasonable.

Grosse presented information on how agricultural lands have been classified in the past and the benefits of using Common Land Unit (CLU) classification scheme. Grosse stated habitat classifications should be classified correctly 95-96% of the time. Baasch and Grosse pointed out that classifications are based on majority of landcover class within a given polygon so within a 50-acre patch, there may be 40 acres of corn and 10 acres of grassland, but the entire polygon would be classified as corn. Peyton asked what years we had landcover classifications for; Grosse said 2002-2011 and we could get these classifications for 2012 and beyond. Baasch asked the TAC if it seemed reasonable to use this classification scheme to classify random locations in the habitat selection analyses; the TAC agreed this seemed reasonable. Baasch said the next step would be to have RWBJV update the in-channel assessment based on discussions of the meeting, assess off-channel habitat availability, and present updated results to the TAC in November or December.

Whooping Crane Stopover Site Evaluation Study

Smith led the discussion and informed the TAC about background discussions that occurred which resulted in 3 proposed budgets (Trust-USGS, EDO-USGS, and EDO) for the project. Highlights of the introductory discussion included:

- TAC recommended EDO, Trust, and USGS work together to develop a proposal for evaluating WC stopover sites within the entire migration corridor as well within ½-day's flight of the CPR.
- Trust and USGS submitted a proposal that included a 1-day's flight distance of the CPR (essentially the entire migration corridor within the US; ~\$1,000,000)
- Trust and USGS were asked by EDO staff to also provide a proposal that covered a ½-day's flight of the CPR (mid-South Dakota northern Oklahoma), but declined to do so.
- EDO staff developed 2 alternative budget estimates for the project scale of a ½-day's flight of the CPR; 1 with USGS leading and contributing in-kind time to the project (~\$327,000) and the other for the EDO to hire technicians and lead the project (~\$240,000).
- Methodology would be similar across all three options and would be conducted as described in in the Draft USGS and Trust WC Stopover Site Evaluation Proposal.
- The primary differences between the three proposals were: study area size, organization hiring field technicians, and Program cost.

Besson asked if the total of all 3 budget estimates included everything; Smith and Baasch state everything was included in the Trust-USGS budget and everything except in-kind contributions was included in the EDO budget (except EDO staff time) and EDO-USGS budget (USGS personnel time).



Harner stated the EDO and EDO-USGS proposals do not include the Trust and up until now the Trust has spent considerable time and effort conducting pilot study stopover evaluations and developing the proposal and these proposals don't include the collaborative work USGS and Trust developed to evaluate riverine stopover locations in Nebraska. Harner stated the Trust-USGS proposal includes 2 field crews as well as a designated crew leader because this is a once in a lifetime opportunity to collect this data. Harner suggested the alternative proposals are not of the same quality and do not include money to cover data analysis and reporting; Baasch state the alternative budgets include \$30,000 for data analysis and reporting and reiterated that USGS was lead the lead organization for the EDO-USGS alternative and would be responsible for analyzing and reporting on the data. Harner was concerned that the proposal that USGS and Trust developed could be used by the Program to conduct the work without the Trust which would eliminate the possibility of the Trust finding alternative funding and conducting the work. Baasch stated the original study plan was developed and proposed to the Program by Walter Wehtje in 2011 and at the time the TAC did not see value in evaluating stopover sites because there were only a few sites within Nebraska and that Harner became aware and interested in the project when, while in Texas Baasch mentioned that Walter's proposal was going to be discussed with the TAC again during the fall of 2011. Jenniges stated the stopover site evaluations were supposed to be conducted as part of the original study plan that Felipe Chavez-Ramirez submitted in 2009 when the Program was approached to contribute money to the telemetry project.

Jenniges and Peyton stated this is a one-time opportunity to collect this type of data on whooping cranes. Jenniges stated the biggest issue the GC will likely have with the current proposal is that the Trust and USGS contributions are almost entirely in-kind costs that the organizations would incur regardless of whether the project is conducted or not. Jenniges stated it is going to be difficult to sell the current proposal to the GC as a sole-source contract with the USGS or Trust. Farnsworth stated tasks for everyone involved in the project need to be spelled out so it is clear what everyone is contributing. Golte and Czaplewski suggested the USGS and Trust proposal include a budget estimate for evaluating stopover sites with Nebraska only. Besson suggested the Trust and USGS reconsider the proposed project scale and budget to determine if the Program could fund the project on a smaller scale, if some of the actual costs of the project could be covered by USGS, Trust, or another entity, and that the Trust and USGS re-submit the proposal and budgets at the October TAC meeting.

TAC decided USGS and Trust should refine the budget in their current proposal where possible and develop a budget to evaluate stopover sites within Nebraska only. The updated budget and proposal will be discussed during the TAC conference call on October 17.

Meeting adjourned at 3:30pm Central time.

Next TAC meeting is scheduled for October 17, 2012 WC Data Analysis meeting will be scheduled during the next few weeks



Summary of Decisions from August 2012 TAC Meeting

- 1) Approved minutes from the August 2012 TAC meeting
- 2) The TAC supported the Big Questions as written knowing the EDO will make changes to questions as discussed during the meeting. The EDO will incorporate editorial comments the TAC members provide.
- 3) The TAC accepted EDO assessments of the Big Questions pending review from the ISAC; EDO staff will change BQ 10 to a 1 thumb-up as discussed during the meeting.
- 4) The TAC recommends the GC approve the Directed Vegetation Research Report as well as the peer review of the Report.
- 5) The TAC recommended a few changes to the preliminary whooping crane habitat availability assessment and supported using the proposed methods for classifying agricultural fields.
- 6) The EDO will assemble a working group of interested parties and schedule a workshop with WEST to further discuss and refine the whooping crane data analysis plan.
- 7) USGS and Trust will refine the budget in their current proposal and develop a budget to evaluate stopover sites within Nebraska only. The updated budget and proposal will be discussed during the TAC conference call on October 17.