PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
February 24, 2015

Meeting Participants

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<td><strong>State of Colorado</strong></td>
<td>Jerry Kenny (ED)</td>
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<td>Suzanne Sellers – (Chair)</td>
<td>Chad Smith</td>
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<td>Jason Farnsworth</td>
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<td><strong>State of Wyoming</strong></td>
<td>Dave Baasch</td>
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<td>Barry Lawrence – Member</td>
<td>Scott Griebling</td>
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<td>Jeff Geyer – Alternate</td>
<td>Kevin Werbylo</td>
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<td>Jesse Bradley – Member</td>
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<td><strong>U.S. Fish and Wildlife Service (Service)</strong></td>
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<td>Matt Rabbe – Member</td>
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<td><strong>Bureau of Reclamation (BOR)</strong></td>
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<td>Brock Merrill – Member</td>
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<td><strong>Environmental Entities</strong></td>
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<td>Rich Walters – Member</td>
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<td><strong>Upper Platte Water Users</strong></td>
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<td>Kevin Urie – Member</td>
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<td><strong>Downstream Water Users</strong></td>
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<td>Mark Czaplewski – Member</td>
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<td>Jim Jenniges – Member</td>
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<td>Mark Peyton – Member</td>
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Other Participants
Andrew Caveny (Trust)
Andrew Pierson (Rowe)
Pat Engelbert (HDR)
Eliza Hines
Mike Fritz
Welcome and Administrative
Sellers and Smith called the meeting to order and asked for agenda modifications; Sellers recommended the TAC set the upcoming TAC meetings first thing. A TAC meeting was scheduled for Monday May 11, 2015 in Ogallala at the visitor center.

Jenniges moved Sellers remain the TAC chair during 2015; Rabbe seconded motion; all supported the motion.

TAC Minutes
Sellers asked the group if there were any suggested changes for the November 5, 2014 TAC Conference Call Notes or the January 9, 2015 Conference Call Notes. Urie moved to approve the November 5, 2014 TAC minutes and the January 9, 2015 conference call Notes; Czaplewski seconded the motion; all supported the motion.

PRRIP Peer Review and Publication
Tern and Plover Chapters
Smith provided the background on EDO response to Peer Review comments, the commentary from Peer Reviewers following their initial review and responses, and if accepted by the GC what it means for the Program (change BQ 1 to 2 thumbs down). Jenniges asked if the GC approves the chapters as final would the Program be able to use them in the decision making process; Smith said the Program would. Jenniges suggested the summary of the chapters be moved to the beginning of the document and be titled an Executive Summary.

Rabbe asked the EDO to elaborate on Matt Dr. Kondolf’s comments regarding sediment balance. Farnsworth initially thought he was suggesting the EDO conduct several additional analyses regarding sediment balance, budget, etc. that had already been conducted so the EDO response was to included references to the documents; Dr. Kondolf agreed that was sufficient. Rabbe said he recalled specific comments from Dr. Kondolf about bar and bank erosion during high flow events which would indicate a sediment deficit. Farnsworth said the 150,000 ton deficit a year was an average that was heavily driven by 2 high flow events during the timeframe of the analysis. Farnsworth went on to say he wasn’t sure where the notion that sediment balance is required for the formation of sandbars for tern and plover nesting given the Lower Platte, Loup, Niobrara, and other River systems are degradational and yet build sandbars. Caven asked if there was much research on how removing vegetation from the bank line and creating a sort of blowout condition would increase sediment augmentation; Farnsworth informed him the Program routinely disks bank lines and considerable channel widening occurs during high flow events.

Jenniges pointed out the Dr. Wiley stated that it wasn’t just channel width that made sandbars suitable for nesting, but distance to predator perches was important also. Jenniges asked if we were analyzing data to see if distance to trees appears to be an important effect on the central Platte River. Baasch said we plan to do an off-channel habitat selection analysis during 2015, but he didn’t feel we had enough nests on the channel to do a similar in-channel analysis. Baasch added that all
in-channel nesting that has occurred to date has been at managed sites where trees have been removed and channels widths are wide and in order to conduct such an analysis we would need habitat built within wide and narrower channel to detect a difference.

Jenniges asked if anyone had any serious concerns with the peer review and comments and responses. Rabbe said given the evidence, he didn’t feel there was any reason to continue to believe FSM and short duration high flows would build suitable nesting bars, but that he still had questions regarding historic nesting on the central Platte River.

Czaplewski moved to recommend the GC approve the tern and plover chapters and the peer review of those chapters after moving the summary to the beginning of the document as suggested by Jenniges; Peyton seconded the motion; all supported the motion.

Breeding Pair Manuscript
Smith said in 2014 the Program discussed peer review and publication with the ISAC and they suggested documents that would likely influence Program decision making be peer reviewed and methods and other documents be published without peer review. Baasch said the plan was to attempt to publish the manuscript in Methods in Evolution and Ecology and if not accepted consider publishing in a sister journal that also has a high impact factor. Baasch said the Primary value to publishing on the method the Program is using to calculate breeding pairs would be if others used the same methods than Program breeding pair counts and fledge ratios could be compared apples to apples. Farnsworth added if another system used a different method for calculating breeding pairs we would at least have an idea how their fledge ratios compared to the Program’s BPE methods.

Jenniges said he was concerned about the fact weren’t able to find a statistical difference between any of the methods used in the analysis. Baasch agreed and said one of the biggest advantages was that other methods seemed to be more sensitive to survey intensity, catastrophic nest loss events, survey timing, etc. and the result is unpredictable inflated and/or conservative estimates where the BPE seemed to be consistently slightly conservative and more stable (i.e., less sensitive to annual differences). Jenniges said being consistent would result in optimistic fledge ratios; Baasch agreed. Jenniges suggested he and Baasch get together and discuss a few concerns he has with some of the statements in the discussion that may not be supported by the data; Baasch agreed we should.

Peyton said Mark Sherfy (USGS) indicated terns and plovers on the central Platte River renested around 3 days after losing a nest or brood. Baasch agreed some birds have, but on average it is more like 4-6 days and 5 days is supported by the literature for both species. Jenniges said he didn’t feel the TAC was ready to support a motion, but thought the EDO should continuing to edit the manuscript so it could be discussed again at the May 11 TAC meeting.

Wet Meadow Hydrology Monitoring Approach Peer Review Panel
Smith provided the background on the peer review process and said the peer review candidates had been identified and the EDO has provided the TAC a recommendation of 3 potential candidates. To
serve on the panel. Griebling said the EDO added a question to the scope of work that was “To what degree is the assumption that precipitation can act as a surrogate for overland application of water appropriate?” Rabbe asked if the groundwater model would accurately capture snow events where it would melt and be absorbed by the soil. Griebling said he would add a question to the peer review scope of work asking something along the lines of “Is the delay in the way snowfall percolates into the aquifer accounted for by the groundwater model appropriately?” Rabbe the question seemed correct but said he would work with Griebling on developing the question to be added to the scope of work. Fritz added ice jams during snow events would provide a periodic, but more concentrated volume of water when ice is pushed onto wet meadows. Griebling agreed and said the model isn’t intended to simulate every event perfectly, but rather to capture the change from the baseline to evaluate the various hydrologic components.

Jenniges moved to recommend the GC approve the peer review panel suggested by the EDO that included Drs. David Cooper and Venkat Sridhar as well as Xun-Hong Chen and the peer review scope of work with the addition of the 2 questions or 1 combined question discussed during the meeting; Czaplewski seconded the motion; all supported the motion.

Forage Fish Document
Smith led the discussion and said the EDO use a TAC recommendation to write up a document that could be peer reviewed and ultimately cited and used in Program decision making process. Trevor Hefley wrote a draft manuscript that was formatted for publication last fall and the ISAC suggested the EDO also use a bioenergetics approach to evaluating the hypotheses. Baasch reformatted the information into the current document with various sections and stated we planned to add a preface and a summary section to the end of the document. Rabbe said he supported the process of peer reviewing the document, but that he had several comments and concerns he would address with Baasch at a later date. Jenniges stated the foraging habitats study report really didn’t arrive at many conclusion and he would be interested in knowing if there were differences between sites where terns plunged and random sites. Baasch said one of the conclusions in the document was that there was no difference between foraging and random sites. Farnsworth stated the Program collected productivity data during the extreme drought of the 2000s and productivity was fairly high. Baasch added productivity was actually higher during the drought period then it has been during the higher flow years.

Smith stated the EDO would send a version of the report to the ISAC once Rabbe’s comments were addressed, develop a scope of work for the peer review process, and have Louis Berger start identifying candidates to review the document.

Whooping Crane Discussion Items
Baasch discussed some potential modifications to consider making to the whooping crane monitoring protocol to save the Program money and yet continue to collect the most valuable data for the Program. The reasons the considerations are being made now is that the Program will be issuing an RFP for the monitoring work by this summer to identify a contractor for the next 3 ½ years. Baasch expressed concerns with ever being able to analyze the continuous use monitoring
data and come to any conclusions about whooping crane selection of off-channel habitat and suggested that portion of the monitoring protocol be dropped. Baasch said a potential implication for dropping continuous use monitoring data collection would be we wouldn’t be able to evaluate habitat selection of wet meadows. Baasch suggested a better evaluation of that hypothesis may come from analyzing stopover study data. Baasch also informed the TAC the plan was to reduce the number of decoys placed in the field from 40 to 20 that would include 10 river, 5 wetland, and 5 randomly placed decoys.

Peyton asked if a ground crew would still confirm whooping cranes; Baasch said we could consider that, but his suggestion was to eliminate ground crews all together. Jenniges expressed concern with not confirming birds on the ground and said it could result in different data than has been collected in the past. Baasch stated, if not observable when on the river, about half of the birds observed on the river are not observed by the ground crew. Furthermore, it would be more likely the air crew would classify an egret or pelican as a whooping crane than it is they would misidentify a whooping crane as another bird. Egrets and pelicans rarely leave the river to forage in cornfields where the ground crew could identify them. Peyton said he would hate the possibility of not being able to confirm whooping cranes. Baasch reiterated the ground crew never sees about half of the whooping cranes confirmed from the air. Farnsworth added there are issues with analyzing continuous use monitoring data given the data is so correlated. Sellers said we need to make sure we collect the data needed to evaluate the wet meadow use by whooping cranes given the Program is spending a lot of money on a wet meadow study and there are considerations of applying water to wet meadows to make them wet. Caveny said there appears to be a fidelity component to wet meadow use so when you create a wet meadow you shouldn’t expect use for a while. Baasch said the telemetry data appears seems to refute the notion of site fidelity. Baasch expressed concerns that the continuous use monitoring data may never be able to answer those hypotheses. Jenniges said that a vast majority of use has been in cornfields so a few more years of data likely won’t change the results.

Rabbe suggested the Program consider looking at the wet meadow hypotheses to determine how close we may be to evaluating them. He added there are some wet meadows seem to get used more regularly than others. Rabbe asked if we could use the telemetry data to evaluate the wet meadow hypotheses; Baasch said we would be better off using the stopover data given the landcover classifications for the telemetry data will be more course than stopover study data. Rabbe said he thought we primarily collected data at the nocturnal locations; Baasch said we have collected data at a few diurnal use sites, but that even where we don’t have that data landcover within 1 mile of all stopover locations is still classified so we could do a use/availability analysis with all of the telemetry data.

Farnsworth asked if the changes would take effect by spring 2015. Baasch said the potential changes would be incorporated in the RFP for fall 2015-spring 2018 or whenever not this spring. Jenniges said the Program needs to consider what monitoring rather than research needs to be
conducted long term. Farnsworth and Baasch stated WEST should have a draft of the in-channel and off-channel habitat selection analysis by late March so the TAC could consider making changes at the May meeting so the RFP could be out on the street by late May or early June. Baasch said he would write up the RFP assuming continuous use monitoring will be eliminated and if the TAC decides in May to continue the ground monitoring we would add it back in before releasing the RFP.

Telemetry Project Update
Baasch informed the TAC we currently have 22 active transmitters and 1 transmitter that is providing intermittent data. Sellers asked if all the radio-marked birds were still at Aransas; Baasch said they were.

Smith informed the TAC late in 2014 the partnership team discussed data use within the partnership and came to an agreement raw data points wouldn’t be released to the public in any form. The partners also agreed core partners could form collaborations with outside entities and use the data for management and publication purposes so long as the group reached consensus to do so. This spurred a discussion about the definition of consensus which has since been resolved and means everyone agrees or no one disagrees strongly. This lead in to a disagreement about other language in the partnership agreement and what the wording:

“We recognize that partners may have institutional requirements to review and approve scientific products and reports authored or co-authored by the partners and their employees before products are submitted for publication or are otherwise disseminated to the public. Authors shall notify core partners before submitting an information product to allow for completing these requirements if they exist.”

The other 4 core partners interpret this language to mean core partners have the ability to review documents only if they are a coauthor and if their review indicates there are factual errors in the document they could remove their name from the authorship list, but changes need not be made to document. The EDO felt the language meant everyone has the ability to review documents and only approved information could be released to the public. The EDO felt the GC wanted to retain the ability to peer review documents that could have implications for the central Platte River and Program and could require changes be made to documents that included statements that weren’t supported by the data.

Smith ensured the TAC were all aware all technical meeting were recorded. Smith stated Baasch also recorded Telemetry Partnership calls to ensure accuracy in the information that was presented to the TAC and GC. Smith went on to say the latest issue with the partnership team arose from the fact the team was made aware of the recorded discussion indicating the intent of consensus and the language above included by the GC was to allow for the review and approval of documents by all partners. The current resolution to these issues is that all communications with the partnership team would go through Smith and the EDO would no longer record partnership calls. The issue with what the language above means still has not been resolved. The other core partners are now drafting a letter for the GC to consider during the discussions in March, but we have not received the letter yet. Baasch reiterated the current language in question was actually included by the GC to ensure a Program funded research project did not lead to false information about the Program area being
released to the public. Also, when the Program spends $20,000-$30,000 on a peer review, the Program expects the authors to address the comments brought up by our peer review process.

Farnsworth said our understanding was the data is draft and shouldn’t be used by anyone. Baasch stated the agreement says partners can use the data for management purposes. The position of the partnership now is that collaborations with outside entities is possible so long as the partnership maintains control of all raw data. Rabbe said the FWS Grand Island Field Office is definitely interested in using the telemetry data for section 7 consultations. Baasch said the telemetry team suggested they contacted the FWS representative(s) (Kris Metzger or Wade Harrell) and if they chose to do the analysis then they could use the data in their consultation; if not they could contact another partner. Urie said the GC and Program has always supported the use of the data for informing management, but did not support the release of data outside of the partnership. Rabbe said the use of the data as ‘best available science’ would make the data available to everyone once a biological opinion that used the data is released to the public. Fritz said Aaron Pears made the point at a TAC meeting that once the data was used to make decisions, it becomes available for everyone. Kenny pointed out Headwaters Corporation only has access to the data through its role for the Program and the EDO has no intent to attempt to make money off the sale of data or results.

**Shoemaker Island Ice Jam Overview**

Farnsworth showed several photos and discussed the neighbor concerns associated with the recent ice jam that occurred near the Binfield tract the first week of February.

**AMP Implementation Activities**

Werbylo presented information on the Morse wetland structures where there were 3 structures installed this winter to back water up and allow the Program to fill all 3 wetlands on the Morse Tract. We are considering using and inactive well to fill the east wetland and are investigating whether we can back water up into the Peterson ditch and let it flow down an existing channel to fill the middle wetland so we don’t have to operate the well continuously. Farnsworth added that at this time no one claims the water in the Peterson ditch, but it would take some investigations to determine if this was a viable option. Czaplewski said we would need to be careful because the water could be considered natural flow.

Werbylo discussed several options for enhancing the wetland on the DeBoer property and concerns we have with some of the options causing issues with a neighboring landowner. We currently plan to install 5 groundwater monitoring wells with data loggers to track ground water levels through time. Three enhancement options were discussed. We have considered building a berm along the north side of the wetland to pond water about a foot deep which would allow us to fill the wetland with a well when needed. A problem with this options is there is no way to get the water out of the wetland during rain events which could lead to issues with surrounding landowners. Everyone seemed to agree this is not a very good option given the potential for conflicts with neighbors.

Jenniges asked if we were sure water wouldn’t leach out of the wetland rather than ponding; Farnsworth said the soils are comprised of clay which should allow them to hold water. Walters said he believed the soils were scott soils, but that we would do a soil profile before starting any project.
to ensure water would indeed pond in the wetland. Werbylo said the wetland currently is full of cattails and reed canary grass; Rabbe said that may be an indication it historically has been a semi-permanent wetland. Another option being considered would be to excavate a foot or 2 out of the bottom of the wetland that could be filled. Walters said another option would be to ensure the layer below the silt would pond water and excavate down to that layer to design the wetland. Werbylo said a forth option would be to remove invasive species and reestablish native grasses; Jenniges said herbicide won’t remove reed canary grass so we should graze it heavily to control vegetation.

**AMP Documents**

*LTTP Monitoring Report*

Baasch asked the TAC if anyone had suggestions for changes to the report and asked if they were ready to accept the report as final. Jenniges offered several changes including: include tables 3-6 from Resource Allocation memo with summaries and means at the bottom of tables as an executive summary; include text to indicate breeding pairs are calculated on a specific date; correct maximum adult counts in table 5 to match graphs; and ensure visits and survey times in Table 4 are cored (e.g., 220 site visits to Blue Hole and 448 hours). Jenniges suggested the TAC review the report and finalize it during the May TAC meeting; no one voiced opposition; Baasch agreed.

Baasch asked if anyone had any modifications for the Fall 2014 Whooping Crane Monitoring Report; none offered. Peyton moved to accept the Fall 2014 Whooping Crane Monitoring Report as final; Jenniges seconded motion; all supported the motion.

Baasch asked if anyone had any modifications for the Fall 2014 Whooping Crane Stopover Study Report; none offered. Urie moved to accept the 2014 Whooping Crane Stopover Study Report as final; Jenniges seconded motion; all supported the motion.

*Tern and Plover Proposal Selection Panel Update*

Baasch informed the TAC we only received 1 proposal for the work and that was from the USGS. The selection panel has several modifications that need to be made to the proposal including: 1) reduce the banding effort from 4 to 2 years and include 2 years of band resighting in 2017 and 2018 and 2) find ways to reduce the budget to better match reduced efforts from 2014.

**PRRIP Tern/Plover Resource Allocation Memo**

Farnsworth presented information provided in the memo regarding anticipated costs associated with in- and off-channel nesting habitat creation and maintenance efforts as the Program moves forward. Jenniges asked if the $10,000 estimate to create off-channel nesting habitat was an average across of all methods used to date to build nesting habitat. Rabbe asked if the average cost to create and maintain in-channel habitat included water releases or not; Farnsworth said it did not and if flow augmentation was included the construction and maintenance costs would go up to millions of dollars. Rabbe asked why in-channel habitat is so much more expensive to maintain than off-channel habitat; Farnsworth said it is because you continually have to rebuild in-channel habitat. Rabbe asked how the 0.2 plover pair per acre and 1.0 tern pair per acre compares to other systems; Baasch said the plover pairs per acre are similar to published literature, but there is so much variability in tern densities that we just used what has been observed on the central Platte River over
the years. Czaplewski asked if Farnsworth could to do a shortened version of the presentation for the GC; Farnsworth said he could.

Closing Business

Upcoming 2014 TAC Meeting Schedule
TAC meeting scheduled for Monday May 11, 2015 in Ogallala at the visitor center

Meeting adjourned at 12:00pm Central time.

Summary of Decisions from the August 2014 TAC Meeting
1. Next TAC meeting scheduled for Monday May 11, 2015 in Ogallala at the visitor center
2. The TAC accepted the November 5, 2014 TAC conference call Notes and the January 9, 2015 conference call Notes as final
3. The TAC recommended the GC approve the tern and plover chapters and the peer review of those chapters after moving the summary to the beginning of the document as suggested by Jenniges.
4. The TAC accepted the Fall 2014 Whooping Crane Monitoring Report as final.
5. The TAC accepted the 2014 Whooping Crane Stopover Study Report as final.