PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
Conference Call
August 29, 2017

Meeting Participants

Technical Advisory Committee (TAC) Table

State of Colorado
Suzanne Sellers – (Chair; phone)

State of Wyoming

State of Nebraska
Carol Flaute – Alternate

U.S. Fish and Wildlife Service (Service)
Matt Rabbe – Member

Bureau of Reclamation (BOR)

Environmental Entities

Upper Platte Water Users

Colorado Water Users

Downstream Water Users
Dave Zorn – Member
Mark Czaplewski – Member

Executive Director's Office (EDO)
Jerry Kenny (ED)
Chad Smith
Jason Farnsworth
Dave Baasch
Patrick Farrell

Other Participants
Mike Fritz – NGPC

Welcome and Administrative

Sellers and Smith called the meeting to order and asked for any agenda modifications; no agenda modifications offered

TAC Minutes

Sellers asked the group if there were any suggested changes for the March 8, 2017 TAC Minutes. **Czaplewski moved to approve the March 8, 2017 TAC minutes; Fritz seconded the motion; all supported the motion.**

WC Synthesis Chapter and WEST Report Peer Review

Smith updated the TAC on the Peer Review process and results and informed the TAC that all peer reviewers accepted the documents as final as revised; though Doug Shields accepted the documents 'Pro Forma'. Smith stated Jenniges submitted a few reflective comments and the Service provided the comments/questions as stated below. Smith stated Kevin Urie, Jim Jenniges, Rich Walters and Barry Lawrence all voted via email in support of the 2 motions that were sent out in the original email that read as follows:

Motion #1 – The TAC recommends moving this peer review packet and the revised final WEST report and whooping crane habitat synthesis chapters on to the GC for review and approval.

Motion #2 – The TAC recommends the GC approve development and publication of manuscripts for Chapters 2 and 3 of the whooping crane habitat synthesis chapters. These manuscripts will be subject to TAC and GC review and approval before submission to a refereed journal.

Service Comments/Questions related to WC synthesis chapters and West Report

1) The UOCW value that "optimizes" WC use according to the model has changed from over 600 at one point, down to 500, and now to about 460 ft in this version for systematic, unique, use locations according to the different versions of the reports. Can you explain the most recent drop in value from 510 to 460? Have the data measurements changed or methods?

> Baasch and Farrell informed the TAC that the original measure of 600 ft included all systematic observations while the change from 500 to 460 was associated with updating channel width measures as per the Service's request to double check all measurements for accuracy.

2) The current data extends through 2013. We have now accumulated a quite a lot more data since that time that should be incorporated into the analyses and re-run one more time before we finalize this whole thing. With only 55 data points over 20+ migrations, I think we would be wise to get the most up to date numbers currently available using all the available data through spring 2017. If the TAC comes to a consensus that the methods surrounding the reports are good based on the peer-review, this shouldn't cause any issue to the validity of the reports themselves if our FINAL version has different numbers than that which was peer-reviewed. I'm aware this is a bit time intensive as it would require doing measurements for every new use point and 20

corresponding available points but I think it should be done. Telemetry analyses already had 150 points so I'm not sure it's worth updating that with more post-2013 data.

> Baasch explained the EDO would collect measures on systematically collected locations between Fall 2014 and Spring 2017 and that those locations would be included in the publication. Rabbe asked if model selection would be conducted again with the new data; Baasch said we would select the best model based on all systematic unique locations and develop models based on all systematic data as was done in the WEST Report and WC Synthesis Chapters. Rabbe suggested we update the Chapters and WEST Report based on the additional data as well. Baasch informed Rabbe the peer review process has taken an extensive amount of time and including data up through 2017 in the Chapters and WEST report would require an additional 8 months and $30,000 - $60,000. Smith and Farnsworth suggested we include a cover letter stating analyses would be conducted with the additional data and that the updated data would be published to be referenced; Rabbe supported the idea of including a cover letter.

3) Unique vs. non-unique - I think the chapters could go into detail on the fact that secondary observations were a bit larger and possible reasons for that. I understand the logic behind not using them for the first analyses as it was meant to answer the question of what they select for first when flying over the Platte. However, if secondary sightings are occurring more often on wider channels (over 100ft. wider), it stands to reason that they may be choosing to extend their stay longer when their first choice selection had wider UOCW (i.e. better habitat). This is not to say that they selected that over the other habitat available (as they did the first time), just that when their initial selection was that of wider channels, they may have felt it was more secure or better habitat which caused them to stay longer. Given that we are managing for Crane use days as well, knowledge that WCs are more likely to stay for additional days if they initially have a wide channel available is information helpful in guiding our management. This is still consistent with using 600 ft. (selection ratio maximized at 618 for unique/non-unique combined) as our minimum target to manage for.

> Baasch stated results presented in the Chapters were based on all systematic data and including speculative comments in the discussion section was concerning to the EDO as the difference in results may be related to 'better habitat' or simply the fact sub-adults arrive early and stay extended periods with large groups of sandhill cranes typically in wider channels. Rabbe indicated he was fine with leaving the chapters as is, but wanted to state the Service's perspective on the fact channel width was wider when we included non-unique observations.

4) General comment after looking in detail at the circumstances of the use locations- The smallest UOCW measurement (68 ft) occurs where we typically have our widest, best habitat conditions - Binfield. Not real sure how that happened but this wasn't an anomaly. There were a number of "use" locations at areas like Rowe, Crane Trust, PRRIP properties that are traditionally the "1000" ft. channel habitats we think of in our head but they corresponded to very small UOCW's in the data due (I assume) to veg encroachment during drought years. Those areas with the widest of channels seemed to be selected for even under the worst of conditions and account for some of the smaller UOCW's.

Rabbe said he used the recent imagery ad noticed a few of the use locations were located in areas of the channel where there were densely vegetated islands which made the unobstructed channel widths very narrow. Baasch stated the use locations were placed where they were observed and that one has to be careful to use imagery that was collected near the time of the observation to determine what the channel actually looked like when use occurred.

5) Based on what I could tell, the median of paired "available" points (for unique use locations) was 329 ft, whereas the median of "use" locations was 460 ft (systematic unique) and 547 ft (combined w/ non-unique) - if selection ratios are "statistically similar" from 287 up to 889, then maybe statistically similar isn't a good way to characterize what's "biologically important" to a WC. I don't believe that characterization is pertinent to a WC as the numbers tell a different story. Additionally, the median and mean "available" measurements were not reported in chapter 2- I'd like to request those get put in there (they are there for the telemetry analysis section).

Baasch said he added mean and median values associated with random locations to the Chapters. Rabbe said 'statistically similar' may not be biologically important to whooping cranes.

6) Proportion of WC use on the Platte - Any discussion or depiction of "use" on the Platte over time needs to be appropriately caveated to explain that this is detected use and ACTUAL use likely far exceeds this. Even now with our monitoring, decoy detection and number of days with missed flights indicates we are missing a lot of birds (detection will never be 100%). Obviously, we are detecting more with today's survey efforts than in the past. To the comment from the peer reviewer on the amount of WC use on the Platte and our resources spent- we have already had over 20% of the population use the Platte this spring and surpassed 20% annually in 2010 as well. The Service requests page 71 reflect this as opposed to capping the top at 10%. Further, a caveat should be added about not detecting all use - as stated now, it's states 5-10% use as ACTUAL, which it isn't (its detected). I've attached a chart which shows annual WC's by proportion of the population, detected on the Platte from our database- which is the best for assessing total combined detected use on the Platte. It's reasonable to think that's probably only ¾ of actual use. The graph on page 10 (figure 3) doesn't tell the whole story as we've only recently (post-2010) started seeing the proportionate response in use on the Platte now that conditions were improved. The comments from peer reviewers questioning the Platte, FWS critical habitat designation and the species use is an outdated, old narrative, and unprofessional given their task at hand. These arguments are the same recycled material thrown out pre-PRRIP and are not supported- as National Academy of Sciences has already performed an exhaustive investigation which supported the need for the PRRIP, the Platte's value to the species' and FWS designation of critical habitat on the Platte for WC. Off topic, uneducated and unsolicited comments such as those made by a peer reviewer for these chapters reflects predisposed opinions that can affect their ability to provide an unbiased review of the products. Not much we can do about it at this point but it's disappointing to see those comments.

Baasch acknowledged the Service database included more observations than the Program database, but that the Chapters were only based on the Program database and data collected during the spring and fall monitoring season. Baasch said he included the range in the percent of birds detected during the monitoring seasons in Chapter 2 and up to 20% have been detected using the Platte River on an annual basis.

7) Unit discharge - there appears to be a HIGH amount of uncertainty surrounding unit discharge and the relationship with WC use, as evidenced by the peer reviewers' comments. The Service had voiced concern with the unit discharge calculation early on in this effort as well. There doesn't appear to be agreement that this modeling approach or method of calculating unit discharge is a great tool for assessing the relationship between flow metrics and WC selection. Given the variability out there and uncertainty surrounding the science, the Service doesn't support the statement "the lack of a strong relationship between flow metrics and whooping crane use location can be interpreted 2 ways: 1) flow is not important in whooping crane selection of a roost location, or 2) sufficient areas of suitable depth and wetted area were equally available and adequate at use and available locations on use days". On any given day containing WC use, numerous more WC's could have chosen that flow conditions were unsuitable for use on the Platte and continued migration. As pointed out in the chapters, we don't know how many birds flew over because flow conditions were insufficient. A lack of a strong relationship could also be caused by an inability to accurately calculate and model this complex and highly variable relationship with currently available data and scientific tools (it's possible the relationship exists but we can't detect it with this method). Given this, we are unable to conclude flow isn't an important determining factor when we know that (water) is the one constant at virtually every roost location. How much is best, remains to be determined.

Farnsworth stated Doug Shield pointed out the EDO calculated UD incorrectly so we re-calculated UD and re-ran the analyses with both the original metric as well as the updated UD metric. Farnsworth said we only have data to determine what UD WC select during the day(s) they were on the Platte River because we don't know when/if birds chose not to select the Platte River based on flow. Rabbe said Shields didn't seem to be overly satisfied with how the EDO did/didn't address some of his comments. Farnsworth said his biggest concern seemed to be that the EDO responses to some of his comments were accidentally not included in the spreadsheet. Another concerned seemed to be that the EDO didn't discuss Phragmites in Chapter 4 and that we should have developed simulation models rather than basing results and conclusions on empirical data. Smith stated this is a good example of the difficulty in selecting a peer review panel that is independent from the Program and yet informed about what the context of the peer review process is.

Rabbe said the Service still believes there is a relationship between flow and whether whooping cranes use the Platte River, but that the target flow of 2,400 cfs may or may not be the right number. Farnsworth stated all the Chapter says is that we did not find a relationship between flow and where whooping cranes that chose to use the Platte River landed. Rabbe asked if that point could be made clearer; Farnsworth said we would ensure to make that change.

8) Page 73 - I don't believe the characterization "conservation organizations own over 30,000 acres in the AHR" is an accurate or useful statement. Public Power and Irrigation companies are not "conservation organizations", they are what their name suggests- public power and irrigation organizations. Given the differing opinions on how much land is out there that may count toward the long-term objective for the PRRIP, suggesting there is over 30,000 in conservation in this document doesn't seem appropriate as no decisions have been made on that at this time and this could be pointed to as an agreed upon statement in the future (which it isn't). Stating how many miles have partial or complete management isn't as big of a deal and could be left in.

> Baasch stated we changed the text to state "Overall, various organizations perform conservation on more than 30,000 acres for various species within the AHR, which encompasses approximately 47% of the channel within the ninety-mile reach."

9) The EDO has concluded FSM will not produce or maintain suitable habitat. However, as we have stated before, the Service is committed to on the ground implementation and testing this strategy with implemented flow releases between 5000-8000 cfs during the extension, once the choke point capacity has been increased. The synthesis chapters present a line of evidence that indicate the success of FSM may be limited and unlikely to achieve the full suite of benefits envisioned in the AMP. It also indicates the science appears to support the idea that peak flows in excess of SDHF range are critically important to maintaining suitable habitat reach-wide and that supplemental disking and herbicide will increase these effects more. This information will all be used in combination with a field test of FSM in the extension to guide what channel maintenance flows are best for managing the Platte River into the future. Until such time, the Service does not consider the FSM fully tested and does not support changing this hypothesis/big question to conclusively answered, though we must manage our expectations and be prepared to shift strategies if necessary at some point in the future.

> Farnsworth said he would ensure it is clear what the modelling indicates and how that relates to the goal of maintaining channel widths for whooping cranes. Smith and Farnsworth said they would ensure it states FSM is 'unlikely to produce whooping crane habitat' rather than stating 'FSM would not produce whooping crane habitat'.

Czaplewski moved the TAC recommend moving the peer review packet and the revised final WEST report and whooping crane habitat synthesis chapters (with a cover memo and edited as discussed) on to the GC for review and approval; Rabbe seconded the motion; all supported the motion.

Rabbe recommended the GC approve development of publications for Chapter 2 (with additional data through spring 2017) and Chapter 3 of the whooping crane habitat synthesis chapters.

<u>Upcoming 2017 TAC Meeting Schedule</u>

No future TAC meetings were set.
The AMP Reporting Session is scheduled for October 17-18, 2017 in Omaha

Summary of Decisions from the August 2017 TAC Meeting

1. **The TAC approved the March 8, 2017 TAC minutes as final**
2. **The TAC recommended moving the whooping crane peer review packet and the revised final WEST report and whooping crane habitat synthesis chapters (with a cover letter and edited as discussed) on to the GC for review and approval.**
3. **The TAC recommended the GC approve development of publications for Chapter 2 (with additional data through spring 2017) and Chapter 3 of the whooping crane habitat synthesis chapters.**