



**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM**  
**Technical Advisory Committee Meeting Minutes**  
Executive Director’s Office Conference Room – Kearney, NE  
January 14, 2013

**Meeting Participants**

**Technical Advisory Committee (TAC) Table**

**State of Wyoming**

Mike Besson – Member (Chair)

**State of Colorado**

Suzanne Sellers – Member (WebEx)

**State of Nebraska**

Brandi Flyr – 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 (WebEx)

**Downstream Water Users**

Mark Czaplewski – Member

Jim Jenniges – Member

Mark Peyton – Member

**Executive Director’s Office (EDO)**

Jerry Kenny (Executive Director)

Chad Smith

Jason Farnsworth

Dave Baasch

Justin Brei

Scott Griebing

**Other Participants**

Barry Lawrence – (Wyoming)

Clayton Derby (WEST; WebEx)

Mike Fritz (NGPC)



### **Welcome and Administrative**

Besson called the meeting to order and asked for agenda modifications; Harner suggested the TAC discuss the possibility of collecting aerial imagery during spring 2013.

Besson asked the TAC for a nomination for the TAC chair during 2013. **The TAC nominated Besson to remain the TAC chair during 2013; Besson accepted and all supported the nomination.**

### **October, 2012 TAC Conference Call Minutes**

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

### **PRRIP Data Requests**

None available

### **Scientific Articles**

Smith mentioned Jeff Runge (FWS) distributed a document titled “Intelligent Tinkering: the Endangered Species Act and Resilience” to the TAC on December 6<sup>th</sup> and asked the TAC if they had any feedback or comments related to that document; no response or comment received.

### **2010 Whooping Crane Habitat Availability Assessment Results**

Brei presented Rain Water Basin Joint Venture’s (RWB JV) in-channel results from the 2010 whooping crane habitat availability assessment. Jenniges asked if the order criteria were applied made any difference; Baasch stated the criteria were mutually exclusive so the order wouldn’t affect the final result. Jenniges and Farnsworth pointed out that a different number of acres would be taken out by each criterion if applied in a different order, but the final result shouldn’t change. Brei pointed out that including the final filter (40% suitable channel area) adds small areas in that didn’t pass all minimum habitat criteria (MCH) and removed small areas that did and the end result was an increase in Program defined suitable habitat by about 1,000 acres. Besson asked what the implications of this would be. Baasch stated the final filter would affect where random locations would be drawn from in one analysis of habitat selection. Justin stated the results would also be used track Program defined habitat availability over time. Rabbe mentioned the final filter seemed to have a larger effect on suitable habitat area near the Dippel area and less effect near the Elm Creek Complex and asked why that would be. Baasch and Brei stated the final filter affects managed areas less than unmanaged areas because the portion of the channel that passes all criteria in the unmanaged areas is lower because of vegetated islands and bank line vegetation. Jenniges stated he didn’t feel adding the final filter would affect year to year comparisons of the availability of what the Program defined as suitable habitat so long as the same filters and criteria are applied each year. Jenniges mentioned that suitable channel area is highly flow dependent, especially in areas such as the Elm Creek Complex where wetted width and percent suitable depth criteria are influenced by timing of aerial image collection and hydro-cycling. Farnsworth stated he felt if >40% of the channel passed all MHC; the entire channel (bank to bank) should be classified as suitable. Baasch stated we could add another step that includes the entire channel if suitable habitat now exists and said this might make sense where it is know that whooping cranes will roost next to



banks during windy condition; however this would result in a lot more acres of Program defined suitable in-channel habitat. Rabbe said his only concern would be the narrow side channel areas that were added back in by the final filter. Brei stated the EDO would work with RWBJV to tweak the final step to address TAC concerns, but the Program needs to settle on the final filters and steps so RWBJV can finalize all 7 assessment years.

Brei presented RWBJV's off-channel results from the 2010 whooping crane habitat availability assessment. Rabbe asked if the channel area currently breaks contiguous gold standard wet meadow acres; Brie stated the channel currently breaks gold standard area calculations. Baasch stated he didn't recall any areas this affected, but that the EDO would make sure this was the case. Smith stated that ~20,000 acres of whooping crane wet meadow habitat was higher than he expected. Brei agreed and pointed out the assessment can't take into account hydrology, vegetative structure, etc. and that potential wet meadow areas were delineated by WMWG members who are familiar with the areas that were delineated. Baasch stated nearly 20,000 acres that the WMWG delineated as potential wet meadow habitat were removed by the gold standard criteria and the general discussion was that most grassland areas still exist because they are too wet to farm; at least during some years. Rabbe added that the WMWG said they would reconvene after the first assessment year was complete to see what areas passed as whooping crane wet meadow and would potentially need to visit some of the sites and make a final determination of whether these areas should be classified as wet meadow or not. Farnsworth stated if we exclude current sites we need to have a reason for doing so (e.g., hydrology, vegetation composition, etc.) and the reasoning would need to be applied to all wet meadow sites. Rabbe stated that the WMWG mentioned there may be a need to distinguish between disturbance features (I-80 vs. gravel road, etc.); Jenniges and Baasch stated the different disturbance buffers would need to be applied to all habitat types and not just wet meadow areas unless there was biological evidence that whooping cranes respond differently to disturbances when in wet meadow habitat.

Baasch asked the TAC if they felt any of the current minimum habitat criteria needed to be adjusted; no suggestions offered. The WMWG will review all the areas that passed as whooping crane wet meadow habitat and determine if any of the areas should be removed; Brie stated those determinations wouldn't affect how RWBJV moves forward because the EDO could reclassify polygons the WMWG determines aren't wet meadows as grassland.

### **1920's Platte River Cross Section Analysis**

Farnsworth presented information on pre-water development channel form that Simon and Associates compiled for the Program and stated the information was being provided to the TAC for information purposes only. Farnsworth said the report would be posted on the Program website. Farnsworth stated if the TAC was interested in having Bob Simon present the information to the TAC that he would try to make the arrangements; Czaplewski stated it might be good to have Simon present his findings at the AMP Reporting Session. Czaplewski mentioned early studies conducted by the various railroad companies were often very detailed and contained a lot of detailed measurements.

### **Preliminary UV Data Collection Information**

Baasch stated the Program included money in the Program's 2012 budgeted to investigate bird cognition as suggested by the ISAC. John Nestler contacted Lee Miller and Clay Blunt at a US



military base in Mississippi and they were interested in investigating this for the Program and took it upon themselves to collect the initial imagery. Fritz stated the UV imagery seemed to highlight sharp breaks in the topography better than standard imagery, but smooth transitions weren't highlighted. Baasch said he would have expected the low, wet areas of the sandbar to stand out more than they did; however, the imagery may have been collected with a low quality lens and camera and, if available, higher quality equipment may provide better results. Baasch asked the TAC if there was interest in expanding the investigation to the Platte River after refining UV lenses, filters and field equipment; the TAC expressed no interest in continuing the investigations on the central Platte River.

### **Wet Meadow Hydrology Monitoring**

Griebeling presented the EDO-UNL proposal for monitoring hydrologic conditions on Program-owned wet meadow habitat areas including Binfield, Fox, Morse, and Johns Tracts. Czaplewski stated comparing results at Binfield and Fox tracts to Johns and Morse tracts may be difficult where Binfield and Fox are in a water losing stretch of the channel and Johns and Morse are in a gaining stretch of river. Fritz suggested we try to account for effects of pooled water leaching into the ground water over a period of time as well as for the possibility of an ice jam resulting in being distributed across the meadow and melting and contributing to ground water levels over a longer period of time. Kenny stated the kinds of things Fritz pointed out are related to an event-based analysis where the proposed water budget analyses and variety of equipment that would be used should allow us to document and contribute changes in ground water levels to the various events. Harner asked how large of an area a Flux Tower covers, how we would account for the influence management actions may have on the data, and if more than 1 Flux Tower should be placed on each property. Jenniges stated USGS just completed a 3-year study on Cottonwood Ranch where burning, grazing, and other management actions had occurred and some of their results may be able to inform questions such as these.

Jenniges asked if \$120,000 was the amount of money in the proposal that would go to support UNL's contribution to the study; Kenny indicated that was correct. Jenniges stated he couldn't vote in support of a sole source with UNL where he felt other organizations could conduct that portion of the work equally well. Jenniges asked if EDO staff had time to commit to the study and asked the EDO to include staff time in the budget; Kenny stated the EDO could commit the time required to conduct the study.

Czaplewski suggested the EDO have the WAC review the study plan. Rabbe agreed and asked if the Program would be better off reviewing the study design prior to implementation or if we should wait until the data had been collected and have the report reviewed. Rabbe also stated the Program would be making decisions based on results of the study and that waiting until 2019 to review the final report may not be the best approach; Jenniges supported peer reviewing the study plan. Smith stated peer reviewing the study plan through normal procedures (Atkins) would mean we wouldn't initiate the study until 2014 or later. Kenny stated Dr. Suat Irmak of UNL would review the overall design of the study, but that it may not hurt to have an external review after a year or 2 of data had been collected to ensure we will be able to fully address the objectives of the study. Kenny stated we could set equipment up and begin data collection at Binfield and Fox (losing reach) during spring 2013 as planned, collect some data to develop and test assumptions of the models, and see if the data is applicable to the Johns and Morse tracts (gaining reach). Jenniges stated if we found the



data from the losing reach are not applicable to the gaining reach we would need to double the study budget; Kenny agreed, but stated initial results and models may allow the Program to avoid spending money on purchasing unnecessary equipment for all sites. Peyton, Rabbe, and Fritz supported setting up monitoring equipment at Binfield and Fox tracts to allow the Program to collect data during the spring release, but stated the WAC should review and provide input into the study design prior to implementation and external peer review would likely be beneficial prior to 2014 data collection efforts or using the data to inform future management actions.

**Rabbe moved to support conducting the Wet Meadow Hydrology Monitoring Study as proposed with the understanding the WAC will review and provide input into the study plan and annual reporting, the study design will be peer reviewed if the WAC feels peer review is necessary, and the GC addresses potential contracting issues; Merrill seconded the motion; all voting TAC members supported the motion; Jenniges abstained.**

### **Wet Meadow Vegetation Monitoring**

Farnsworth provided background information leading up to the development of the potential vegetation monitoring designs that were distributed to the TAC and explained that the EDO asked Kay Kotis (Prairie Legacy, Inc.) to develop some potential monitoring designs and budgets. Baasch described the various monitoring design options Kotis provided the Program for consideration and asked the TAC to provide suggestions of other potential study designs. Farnsworth stated it is important to understand that none of the options were designed to assess cause and affect relationships, only monitoring. Walters asked if other more quantitative options (e.g., document species occurrence rather than percent canopy cover) were considered in our discussions with Kotis; Baasch stated additional options were considered and are still an option if desired by the Program, but Kotis indicated these options would be more expensive. Rabbe asked if ridges and swales would be sampled in proportions that they are available; Baasch said he felt option 1 and 2 would result in samples that would be representative of each pasture. Farnsworth stated we could also use the plot data as training data to classify imagery by vegetative community. Baasch asked the TAC if they felt collecting visual obstruction reading (VOR) within each of the plot; the TAC didn't feel VOR was needed. Peyton asked if we could track changes in vegetative communities over time with the proposed study designs; Farnsworth said we could document if vegetative communities appear to change or not, but would not be able to link changes to specific management actions. Walters and Fritz suggested we shorten the survey window as much as possible. Baasch and Farnsworth discussed the various grassland properties we planned to survey in 2013 and asked for TAC input; the TAC was comfortable with the current list of properties.

Farnsworth and Baasch said the EDO would put together an RFP that included the monitoring objectives that the Program's WMWG compiled in 2012. Harner stated UNL may be interested adding plots to the Program's study design to incorporate the data into their study; Walters stated their study design is more focused on grassland management issues and the Program is more interested in monitoring for target species benefit so the studies may not be compatible.

### **Spring Aerial Imagery Collection**

Smith and Harner asked the TAC if there was interest in collecting aerial imagery during spring 2013 to document water areas in wet meadow habitat. Rabbe stated the Program could collect and use the spring imagery to ground truth model results from the ground water monitoring study.



Farnsworth stated using imagery to document water areas is very difficult and dependent on vegetative structure within the grassland areas. Rabbe asked how much it would cost to collect the imagery; Farnsworth said it would cost approximately \$30,000. Czaplewski asked what the additional costs associated with analyzing the imagery and comparing it to results of ground water monitoring well data might be; Farnsworth estimated those costs might be on the magnitude of \$10,000 if we had RWBJV classify the imagery, but stated he wasn't sure what the objective of collecting the imagery would be so this estimate was very rough. Czaplewski asked if it was possible to collect the imagery during 2013, Farnsworth stated we would need to amend the existing contract with Kucera which would need to be approved by the FC and GC.

**Rabbe moved to collect aerial imagery during spring 2013 if ground monitoring wells are installed and the ground water monitoring study is initiated; Fritz seconded the motion; all supported the motion.**

### **Closing Business**

Sellers informed the TAC that the CWCB has provided Dr. Brian Bledsoe at CSU (and a member of the ISAC) small grants over the last few years for his students to study white water park impacts on fish. It is likely that the CWCB may provide these similar grants in the future. Neither Dr. Bledsoe nor Ms. Sellers believe that this is a conflict of interest. Let Ms. Sellers know if anyone has any questions and she will be happy to provide more information. The TAC didn't feel this represented a conflict of interest for the Program and didn't express any concerns.

Next TAC meeting is scheduled for January 24, 2013.

**Meeting adjourned at 3:30pm Central time.**

### **Summary of Decisions from January 2013 TAC Meeting**

1. The TAC nominated Besson to remain the TAC chair during 2013.
2. The TAC approved the October, 2012 TAC Meeting Minutes.
3. The TAC was comfortable with results of the 2010, whooping crane habitat availability assessment results. The WMWG will review areas that currently pass as whooping crane wet meadow habitat to determine if any of these areas should be removed.
4. The TAC expressed no interest in continuing with UV data collection efforts associated with the bird cognition study.
5. The TAC supported conducting the Wet Meadow Hydrology Monitoring Study as proposed with the understanding the WAC will review and provide input into the study plan and annual reporting, the study design will be peer reviewed if the WAC feels peer review is necessary, and the GC addresses potential contracting issues.
6. The TAC recommended the EDO develop a grassland vegetation monitoring RFP to survey the grasslands proposed.
7. The TAC supported collecting aerial imagery during spring 2013 if ground monitoring wells are installed and the ground water monitoring study is initiated.