PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
Executive Director's Office Conference Room – Kearney, NE
August 21, 2012

Meeting Participants

Technical Advisory Committee (TAC) Table

State of Wyoming
Mike Besson – Member (Chair)

State of Colorado
Suzanne Sellers – Member (conference line)

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
Rich Walters – Member
Mary Harner – Alternate

Upper Platte Water Users

Colorado Water Users
Kevin Urie – Member (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
Dave Baasch

Other Participants
Greg Wright (Trust)
Trevor Hefley (UNL – IGERT)
Aaron Pearse (USGS-NPWRC)

Welcome and Administrative

Besson called the meeting to order and asked for agenda modifications; Farnsworth stated the TAC would need to provide guidance on grassland vegetation monitoring.

July, 2012 TAC Minutes

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

PRRIP Data Requests

Baasch updated the group on EDO involvement in Corps Off-channel Habitat creation report which included a site visit during 2011, tables from the Program's 2011 LTPP Report, and reviewed the draft Report. Smith mentioned Jenniges is scheduled to give a presentation to Missouri River Least Tern Task Force.

Scientific Articles

Baasch briefly discussed The Aransas Project's Whooping Crane State of the Flock Report and mentioned there were errors throughout the report; however, the EDO had not received the response document Brad Strobel (USFWS) is preparing so we would discuss this document at the September TAC meeting. Rabbe stated the methods Tom Stehn (USFWS) used weren't reproducible so there was a need to change methodology and people have to understand the results may be different. Peyton stated he forwarded the report to Felipe Chaves-Ramirez and asked if he was aware he was quotes in the report and he said he was not. Peyton asked how one could obtain a population size estimate for 2011 where the methodology changed. Baasch said one could use marked birds to obtain an estimate of the number of birds that wintered outside the survey area and inflate USFWS estimate by that amount or add the documented number of birds known to be at Granger Lake and other areas outside the survey area to the USFWS estimate As Stehn had in the past to obtain a number that would be more comparable to past estimates. Baasch added people shouldn't be alarmed to hear the population may have declined slightly during 2011 given the severe drought in Texas, etc. Pearse added the number Strobel was pressured to report quickly should not be considered the final population estimate where the data had not yet been analyzed to obtain a more accurate estimate. Peyton asked if surveys at Wood-Buffalo indicate lower nest counts or not. Baasch stated the surveys at Wood-Buffalo do not cover all areas where WC are known to nest, but he hadn't heard any indication there was a sharp decline in the population size. Pearse stated nest counts during 2012 appear to be similar to counts obtained during 2011, but the report for that work isn't available yet; Baasch stated this report would be included in the September meeting packet.

ISAC Membership

C. Smith provided an update on the pool of candidates Atkins provided to fill the 2 ISAC committee positions. C. Smith mentioned David Galat (ISAC) recommended the Program consider adding Adrian Farmer to the original pool of candidates Atkins provided so Atkins obtained information from him and he was included as a potential candidate in the final list. C. Smith said the EDO suggested Adrian Farmer and Brian Bledsoe be considered and asked the TAC for other suggestions or support.

Rabbe moved to recommend the GC approve Adrian Farmer and Brian Bledsoe for the ISAC committee; Jenniges seconded motion; all approved.

C. Smith stated he would ask the GC to allow the Program to keep John Nestler and Kent Loftin on the ISAC committee for a few months to mentor the new ISAC members. Besson supported the idea of having Nestler and Loftin remain on the ISAC for a short time during 2013. Farnsworth and C. Smith mentioned having 2 additional ISAC members for a short time during 2013 would probably cost the Program about $10,000.

Czaplewski asked C. Smith if he felt the process of having Atkins identify candidates to conduct various work for the Program was going and if he felt costs for this service were reasonable. C. Smith stated he didn't feel it was very expensive for Atkins to identify candidates and strongly supported having a neutral third party organization identify highly qualified candidates. C. Smith said he felt Atkins has done a very good job at identifying highly specialized and qualified people to conduct the reviews/work the Program has needed.

Tern Model Development

C. Smith provided background information on the development of a meta-population model for interior least terns and asked the TAC for feedback on the 3 questions the EDO proposed.

Czaplewski suggested we ask the group to evaluate productivity numbers Lutey (2002) suggest are required to maintain population numbers on the central Platte. Jenniges stated he wasn't sure the population model the group was developing would be able to incorporate habitat acres, nesting densities, etc. Baasch suggested we also ask what maintaining different levels of productivity would do for the central Platte and surrounding populations.

The TAC supported providing the tern modeling team Program data. The revised set of questions to be posed to the tern modeling team for the Program will include:

1. How would achieving productivity ratios of 0.60, 0.70, 0.80, 0.90, or 1.00 fledglings/pair affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?
2. How would achieving and maintaining 150 breeding pair on in- and off-channel nesting habitat along the central Platte River (Lexington – Chapman, Nebraska) affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?
3. How would a complete loss of in- and off-channel nesting habitat along the central Platte River (Lexington – Chapman, Nebraska) affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?

Winter/Spring Whooping Crane Monitoring Reports

Baasch discussed edits and comments he and the Service had regarding the Winter and Spring WC Monitoring Reports (e.g., include additional photos, GPS location and Crane Group ID in Tables, all organizations involved in the monitoring efforts didn't observe harassment, additional summary figures, consistent crane use days, etc). Walters suggested the reports have consistent habitat classifications (e.g., Ag-corn and corn). Jenniges suggested they use SAE units throughout the report rather than switching between SI and SAE units. Peyton asked what the colors meant in the

summary figures; Baasch said the colors meant nothing; Kenny and others suggested the colors be removed. Baasch asked if the group wanted any additional changes in format, content, etc. Wright asked if there were additional measures taken at roost locations that weren't summarized; Baasch said wetted width and unobstructed channel widths weren't summarized and WEST would be asked to add that information as well.

C. Smith stated he would like to see information related to Program Big Questions and Tier-1 Hypotheses included in the reports. WEST is working on a data analysis plan for analyzing the 2001-2012 WC data that will be presented to the TAC at the September 2012 TAC meeting. C. Smith mentioned the WC database has several errors that WEST are aware of and we are trying to determine who will fix the database and how much it will cost the Program when there has been a QA/QC requirement in the contract since the Program began, but fixing the database will likely require additional funding. Besson said he didn't have a problem paying to fix the database, but wondered if the data was good enough to address Program questions. Baasch stated the data was good, but there are several typos and missing data and locations that need to be corrected. For example, the telemetry bird that used the Platte during spring 2012 has a profile in the database, but no additional information that is required to be included in most of the assessments. Baasch stated one of the changes going forward would be to assign the same crane group ID to a group of birds that use the Platte River for multiple days rather than assigning a different ID each day they are observed. Tracking data from one day could be used to help determine if the crane group migrated of if the group observed on subsequent days is the same group or not. Jenniges said the FWS crane group ID should allow us to discern crane groups; Baasch stated some of the crane groups the monitoring crew observed do not get assigned a FWS crane group ID. Jenniges said there should always be a FWS crane group ID to go along with the Program ID so we should be able to discern crane groups. Baasch said data from observations missing a FWS crane group ID could be interpreted as observations of multiple groups rather multiple observations of the same group and could be analyzed inappropriately by someone not familiar with the data. Harner stated how the data are interpreted have serious implications for determining statistical independence of the data and the summary charts would be statistically meaningless if multiple uses of the same site are included in the summaries. Hefley stated there are ways to deal with autocorrelation in the data so that all observations of a single crane group could be included in a single analysis. Jenniges and Smith indicated information such as this should be included in the data analysis plan so it is clear how the data are to be analyzed.

Rabbe asked if FWS reported all crane groups observed by the public to the monitoring crew; Baasch and Jenniges said they believed they were and Jenniges stated the data should be analyzed separately. Baasch said the database has a column to distinguish systematic and opportunistic observations and that the forms would include this information as well so that it gets into the Program database. Peyton asked why Program monitoring crew observations are not getting transmitted to the Service and into the FWS database; Baasch said he believed the information was getting transmitted to the Service, but that all observations were not getting included in the database. Farnsworth and Baasch said the Service database starts out as files of observation reports and AIM generally has not been asked to fill out reports so if reports are not filled out then some of the information may not get into the FWS database. Hefley said some of the groups AIM tracks are

initially observed by the public so they may be included in the database, but not necessarily linked directly to Program monitoring efforts.

Whooping Crane Monitoring Protocol Updates

Baasch stated the Service and EDO felt it was important to continue to monitor and track whooping cranes observed in the Program area outside the timeframes of the current monitoring protocol and that including $25,000 in future budgets would allow for 15-20 days of targeted survey and monitoring effort per year as well as seasonal reports. Czaplewski asked if the money would be considered a retainer; Baasch stated the monitoring crew would be paid for time spent while conducting these additional surveys. Harner asked if it was logistically too much to coordinate this effort internally; Baasch said the effort would require a lot of EDO staff time to coordinate the effort as well as 'volunteer' effort by Program participants to track the birds all day to get the additional information that could be pretty valuable. Baasch asked the group if anyone was opposed to conducting this additional monitoring; no one was opposed.

Baasch stated the EDO looked into placing decoys in 2 habitat types to determine if there was a difference in detection and found we would have enough power to detect a 2-fold difference in detectability if we were to place 40 decoys in each habitat type. Baasch suggested we place 10 decoys in cornfields and 10 decoys in wet meadow/lowland grassland habitats over the next 4 migrations seasons and that decoys be placed within ½ mile of the flight path. Jenniges asked it the decoy trials would occur during return flights; Baasch said we would attempt to place decoys so that they were detected on return surveys, however, decoys placed in areas such as Mormon Island or Binfield may be detected during the river survey. Jenniges said we should be careful that monitoring crews aren't distracted by trying to locate decoys and miss birds in the channel. Baasch stated we would avoid placing off-channel decoys during the typical peak periods when whooping cranes are observed on the Platte River so this risk is minimized. Wright asked if there was a need to continue to place decoys in the channel; Baasch said he felt placing decoys in the channel was necessary where it appears detection has declined since we started placing decoys more randomly and now include locations off of conservation lands. Jenniges stated placing additional decoys may allow us to include important parameters such as channel width, etc in our detection analyses. Baasch asked the group if anyone was opposed to placing additional decoys; no one opposed.

Baasch and Rabbe suggested we look into condensing the land cover classification scheme into fewer categories so the data would be less subjective and open to interpretation (e.g., lowland grassland vs. emergent wetland, vs. palustrine wetland). Farnsworth stated land classifications should have specific definitions for each category. Wright asked if it would be possible for AIM to include additional information in the datasheet to help with interpretation in the future; Baasch said there was not a place in the datasheet for this information, but it could be included in the notes section. Besson and others suggested we have the monitoring crew include information in the notes about whether or not birds were standing in water or not regardless of habitat type; the group agreed. Farnsworth stated the EDO would look through habitat classification definitions to determine if some categories could/should be merged to ensure the definitions are clearly articulated so habitat classifications are the same through time.

IGERT Study Update

Hefley discussed the data, methods, and analyses he plans to use to evaluate the Program's state-wide whooping database as well as issues he has found in the database that will limit the number of observations he will be able to include in his analysis.

Farnsworth mentioned that conducting a courser scale analysis (habitat within a 1.41 mile buffer) due to data precision may be beneficial where the Program is interested in whether or not whooping cranes select habitat complexes or specific points of habitat. Farnsworth and Jenniges stated that it will be interesting to see how expert opinion compares with model results based on the data. Harner asked where Hefley was the first person to try to evaluate the compiled database, how confident he would be that the database would be in working order once he finalized his analysis. Hefley said he planned to build his dataset from the database and was not planning to update the database. Farnsworth said it may be useful to visit with the database manager for the Service to see if there are ways to improve the accuracy of locations in the database.

Whooping Crane Stopover Site Evaluations

Wright and Harner gave a presentation that included photos of stopover sights visited during spring 2012 as well as some basic statistics for the measurements that were taken. Harner asked the TAC if additional measures should be considered. Besson asked what the purpose of collecting this data was; Baasch said it was to evaluate conditions on other river systems and in areas where whooping cranes stop to determine if there were conditions we could manage for on the central Platte. Aaron Pearse (USGS) mentioned USGS is putting money towards evaluating stopover sites with an emphasis on collecting information on riverine stopover sites in Nebraska and non-riverine stopover sites near the Platte River to determine if stopover sites are similar to conditions found on the Platte River or if there are unique features that are not available on the Platte River. Besson asked how important timing was for visiting stopover sites; Baasch said he felt timing was critical because conditions can change very quickly. Besson asked if we had an estimate of how much conducting this work might cost; Baasch stated cost would depend on the scale or area we would want to cover. Pearse provided a rough estimate to evaluate stopover sites in North Dakota, South Dakota, Nebraska, and Kansas with 2 crews operating out of North Dakota and the Trust may cost around $150,000/year. Jenniges and others stated this is a unique opportunity to collect real time data at whooping crane stopover sites. C. Smith pointed out that the telemetry data appears to be critical for the Program so moving forward we need to justify the additional expenditure for evaluating stopover sites. Rabbe asked if we had an estimate of the number of day-use sites that were associated with stopover locations and suggested we focus Program dollars on stopover and day-use locations closer to the Platte River before we commit to evaluating stopover sites within a larger area.

C. Smith suggested the project team (USGS, Trust, and Program) develop a study scope that outlines how long the study will occur, how much it would cost, how the Program would benefit from conducting such study, etc so the Program can decide whether or not spending the additional money is warranted. Baasch stated additional funding sources needed to be identified to ensure the project doesn't end up being a 100%, Program funded effort. Jenniges and others suggested that if we decide to collect data off the Platte River we should look at stopover sites throughout the entire migration corridor. Farnsworth and Kenny suggested the study area be centered on the Platte River

and include approximately ½ days flight (~300 miles) north and south of the Platte River. The group suggested the project team come up with a study scope that includes a budget estimate for evaluating stopover sites within the entire migration corridor within the US as well as within a ½ day's flight distance of the Platte River.

2011 Tern and Plover Monitoring Report

Baasch asked the TAC if there were additional comments/edits for the 2011 tern and plover; none offered. Baasch proposed the Program use breeding pair as a metric for evaluating Program hypotheses and big questions and discussed how breeding pairs were calculated as well as assumptions (below) made when making these calculations.

1. Tern/Plover nests hatch at 21/28 days, respectively
2. Plovers don't re-nest within 5 days of losing nest or brood or fledging brood
3. Terns don't re-nest within 5 days of losing nest or brood and don't re-nest after fledging brood
4. Terns/plovers fledge at 19/25 days
5. 2009-2011 nests documented from inside and outside the nesting colony were paired accurately

Baasch asked if these assumptions were reasonable and if any changes were needed. Jenniges and Fritz suggested we use 21/28 days for the fledging age for terns and plovers, respectively, to coincide with what is included in the Program monitoring protocol.

Baasch asked if the 2011 tern and plover report should be updated to include these additional metrics or not; the group agreed to make the changes to 2011 Executive Summaries and the 2012 report, but not to change the 2011 tern and plover report.

LTPP & WC In- and Off-channel Habitat Assessment Update

Baasch provided an update on the progress Rain Water Basin Joint Venture (RWBJV) has made on the tern and plover and whooping crane habitat availability assessment results (outlined below).

2007-2012 LTPP Habitat Availability Assessments

- RWBJV should have 2007-2011 LTPP habitat availability assessment results, methods document, and geo-databases to ready for review by the September TAC meeting, although Baasch may not have the 2007 in-channel assessment completed.
- We need to provide RWBJV imagery so they can perform the 2012 assessment, but once they get the data it will require a few months to complete this task. The 2012 results will not be available until after October 2012.

2007-2012 WC Habitat Availability Assessments

- For in-and off-channel WC habitat, RWBJV has:
  - classified imagery (trees, vegetation, sand, shallow water (<8"), & deep water);
  - identified suitable channel areas (>40% shallow water or sand),
  - identified disturbance features and created buffers; and
  - created visual obstruction (tree) buffers.
- In-channel WC habitat
  - RWBJV is working on identifying obstruction features

- RWBJV developed methods for discerning unobstructed channel widths, unobstructed view widths, and wetted widths and will test these methods when they have obstructions identified.

- Off-channel WC habitat they/we need to figure out
  - how to identify out-of-channel obstruction features where we don't have LiDAR data in these areas (i.e., off-channel habitat may be more inclusive than I/we originally envisioned)
  - how to classify 'vegetation' by type (corn, soybean, grassland, etc)
  - how to identify suitable wetland area by depth (may not be possible)
- Draft 2010 WC habitat availability assessment results and methods document should be available for TAC review in September
- Additional 5 assessments will take ~30 days/assessment to complete so realistically were looking at April 2013 for preliminary results from the past 6 years

Grassland vegetation monitoring

Farnsworth led the discussion about the level of vegetation monitoring the Program should conduct on Program grasslands. Jenniges suggested if the Program implemented a management action to affect vegetation communities then we should monitor to detect and document changes that occur. C. Smith recommended the Wet Meadow Working Group determine how Program grasslands should be monitored; the group agreed.

Closing Business

Scheduled AMWG meeting for 18 September, 2012 at 9:00 in Kearney

Upcoming TAC meetings scheduled for 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 August 2012 TAC Meeting

1) Approved minutes from the July 2012 TAC meeting
2) Recommended the GC approve Adrian Farmer and Brian Bledsoe for the ISAC committee.
3) Supported providing the tern metapopulation modeling team Program data as well as the following revised set of questions:
   - How would achieving productivity ratios of 0.60, 0.70, 0.80, 0.90, or 1.00 fledglings/pair affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?
   - How would achieving and maintaining 150 breeding pair on in- and off-channel nesting habitat along the central Platte River (Lexington – Chapman, Nebraska) affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?

- How would a complete loss of in- and off-channel nesting habitat along the central Platte River (Lexington – Chapman, Nebraska) affect persistence and growth of subpopulations within the Niobrara, Platte, & Upper Southern Missouri population (4); or the entire ILT metapopulation?

4) Supported accepting the winter and spring whooping crane monitoring reports as final after comments/suggestions (above and in the documents) are incorporated

5) Supported conducting targeted monitoring efforts to document whooping crane habitat use within the Program area outside the timeframe of the current monitoring protocol.

6) Supported placing decoys in cornfields and lowland grassland/wet meadow areas to determine if detectability differs

7) Supported including additional information (standing water, etc) about whooping crane use areas in the notes section of the datasheets

8) Supported EDO staff reviewing landcover classifications and definitions to determine if some categories could/should be merged

9) Supported Trust, USGS, and EDO staff developing of a scope of work and proposal for evaluating whooping crane stopover sites

10) Supported accepting 2011 tern and plover report as final with the understanding the 2011 Executive Summary figures would include breeding pair metrics

11) Supported the Wet Meadow Working Group determining how Program grasslands should be surveyed and monitored

12) Scheduled upcoming AMWG meeting for September 18, 2012.