**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM**

**Technical Advisory Committee Meeting Minutes**

**EDO Office, Kearney, NE and Conference Call**

**February 24, 2020**

**Meeting Participants**

**Technical Advisory Committee (TAC)**

**Bureau of Reclamation (BOR)**

Brock Merrill- Member

**State of Colorado**

Jojo La- Member

**State of Wyoming**

Barry Lawrence-Member

**State of Nebraska**

Carol Flaute – Member

**U.S. Fish and Wildlife Service (Service)**

Matt Rabbe – Member

Jeff Runge – Alternate

**Environmental Entities**

Rich Walters-Member

Andrew Pierson – Alternate

**Executive Director’s Office (EDO)**

Jason Farnsworth

Chad Smith

Patrick Farrell

Kari Mohlman

Mallory Irvine

Kaley Keldsen

Kevin Werbylo

Tom Smrdel

Scott Griebling

Justin Brei

**Other Participants**

Andy Caven- Trust

Mike Drain- NPPD

Elizabeth Esseks – Nebraska DNR

Dan Sternkopf – Nebraska DNR

Joel Jorgensen – Nebraska Game & Parks Commission

Melissa Marinovich – Nebraska Game & Parks Commission

**Upper Platte Water Users**

**Colorado Water Users**

Jason Marks - Member

**Downstream Water Users**

Dave Zorn- Member

Mark Czaplewski – Member

Jim Jenniges- Member

**Welcome and Administrative**

Farrell called the meeting to order and the group did roll call. Merrill asked for any agenda modifications. TAC appointed a committee chair. **Jenniges moved to re-appoint Brock Merrill; Zorn seconded the motion; all supported the motion.**

**TAC Minutes:**

Merrill asked if there were any suggested changes for the October 21, 2019 TAC Minutes.

Zorn suggested minor grammatical modifications. EDO acknowledged and will make modifications. **Walters moved to approve October 21, 2019 TAC minutes with modifications; Rabbe seconded the motion; all supported the motion.**

**Inside/Outside LTPP Monitoring Manuscript:**

Farrell led discussion. Tentative acceptance from editor of Waterbirds. Accepted with revisions. No other current manuscripts being considered.

**Fall 2019 WC Report:**

Jaymes provided highlights from the Fall 2019 Whooping Crane Monitoring Protocol. Rabbe inquired about current and previous seasons’ whooping crane location being present on figures. Asked if report will change but ok with leaving the same. Zorn pointed out figure 1 dates and caption dates do not agree, table 4 PRRIP has wrapped text (formatting changes) because additional numbers not showing up, and some figures are confusing and would be easier to read if imagery was taken directly overhead. Jaymes stated changes will be made before finalized.

Rabbe asked about telemetry data. Farrell needs to visit with Wade Harrell. Might get some data this year but needs revisited. Farnsworth mentioned a possible lack of funding for new telemetry database management. Jenniges suggested PRRIP should summarize first telemetry data and how it relates to monitoring efforts. Farnsworth said last of original telemetry project birds probably stopped providing data due to not received billing. Needs checked. Rabbe suggested PRRIP could acquire new telemetry data by only getting latitude or longitude data near Platte. Jenniges asked if we should get the data set because of the worry it would open data set to public if it is given to the Program. Farrell stated the EDO will check current status and specific availability. TAC recommends finalizing report with small changes to GC. **Farrell asked for motion to approve (Pending small changes in text and figures). Rabbe motioned, Jenniges seconded with no opposition. Motion passed.**

**2019 LTPP Report:**

Farrell asked for any modifications and to entertain a motion. Jenniges asked if LiDAR was flown after large pulse and Zorn asked if entire stretch of Associated Habitat Reach was surveyed. Smrdel stated yes for both questions. Rabbe asked about exposed sand observed on LiDAR and Smrdel said it is likely, flow dropped during acquisition**. Rabbe motioned to approve, Jenniges seconded. Motion passed.**

**TAC Sub-Group Recommendations**

**WC Protocol: Timing and Decoys:**

Farrell led the discussion on whooping crane monitoring dates and recommendations from sub-group. Farrell presented the second part of the discussion on decoy placement updated protocol for 2020 based on discussion with sub-group. Walters asked why only conservation land? Jaymes explained private lands are mostly forested where open habitat is widely present on conservation lands. Zorn explained return transects directed to hit conservation ground/known previous areas. Farrell explained ability to place 2 groups of 3 decoys with 7 decoys available.

**Predator Study Update**

Farrell gave an update on the additional predator management that will be implemented as a pilot year in 2020. Jenniges had concerns about visual obstruction/barrier from wood fencing. Caven had seen birds near this type of fence, unsure whether they will go through. Questioned fence placement. Distance from high water mark? Farrell said placement will be determined in field based on topography and other factors. Unclear of implementation issues we will encounter. Farnsworth stated fencing will stick as close to shoreline as possible. Zorn asked if fence will be pulled. Farrell clarified that it will be due to the design of the project. Jenniges suggested having BFS scrape to make flat area. Mesh fence was discussed. Jenniges said they had electrified mesh fence that killed softshell turtles. Jenniges also suggested trying two types of fences. Caven advised testing distance from water and to see how water fluctuations change foraging with the fence up.

Runge suggested discussing deep dive questions about improving production of interior least tern and piping plover along the central Platte River. Runge had concerns with wording of the hypotheses and the possibility of using more recent productivity information as benchmarks of tern and plover productivity.

Runge asked if the turtle fence and trapping is to improve predation on nests or chicks. Farrell clarified that it was for both. Predation of turtle eggs by mammalian predators could cause indirect effect on least terns and piping plovers. Predator lights are primarily for nocturnal avian predation but could deter nocturnal terrestrial predators too. Runge pointed out discrepancy in hypotheses TP1a, TP1b. They specify chick survival, but key metrics include nest success. Farrell explained that it is unknown if we can parse out nest/chick/fledgling success. Fledge ratio is most important. 8 years of data should provide enough data to parse out treatments. Runge directed attention to Table 1. Need to add additional group of combined effects.

Farrell stated that there will be an additional group in long term study. Because of large amount of interactions need large data set. Jenniges indicated wording on AMP table with two objectives may need changed to define 3 year running average and what you are trying to achieve. Suggested using trends. Farnsworth explained that the management statement is political and cannot be changed. However, can define numerically if a better measurement than Lutey objective can be established. Jenniges said hypothesis can be reworded to look at trends. “…will have positive impact…”. Also stated that adult survivorship will have more impact. Rabbe pointed out that we can only control survivorship of adults while they are here. Walters said that we need something to base trend on and have used Lutey objective as trigger. Jenniges stated recent Missouri River numbers are similar to Lutey objective.

Caven put forth concerns that the fence could provide visual barrier that increases chick/fledge predation (cannot see while coming out of it), while still increasing nest success. Could pair lights with predator fence. Incorporate additional metrics. Fence and trapping might work. Need to track turtle numbers to discover this. Need additional metrics like turtle tracks/individuals spotted. Farnsworth explained that a UNK grad student is working on the trapping for a project. Will share student study design when provided. Asked which number to use for definition of metric. Jenniges suggested the Recovery Plan. Runge said new recovery plan has issues with using a ratio. Detection and error rates have big effects in ratio. Population growth rate formula is a possibility to use. Stable to increasing population growth rate is one of objectives.

Smith explained the CEM table-material is on ice right now. Have not had time to make progress, because of issues with AMP including flows, etc. Need more guidance from GC. Have yet to present to GC. Hope for restarting process after June GC meeting. Can address some of these issues, such as hypotheses and metrics, then. Will incorporate any information members can provide. This year the pilot study can continue as it is being used to discover what is feasible. Can continue to modify wording and objectives as wording does not need finalized now. Will be changed once GC meeting is over.

Rabbe asked about fence location on shoreline. It would be good idea to know waterline ranges, so plovers have less restriction in foraging. Farnsworth asked members what they thought the minimum height above water should be. Jenniges suggested 3-4 feet. Turtles will dig down 1 ft, and sand still needs to be warm and dry. Farnsworth asked if at least 2 feet above waterline was acceptable. Committee was in agreeance. Runge pointed out the fence might be a visual obstruction. Asked if plovers on site were consistent in territories and nesting sites and asked how it will be decided if it is affecting them. Mohlman explained the plovers were consistent in nest placement and consistent in nest numbers on site. Will be able to tell if suddenly avoiding previously popular area.

Rabbe asked if the Program still planned to implement Canada goose hazing to prevent nesting. Farrell stated that the program will use a combination of hazing and swan decoys.

**State of the Platte/AMP Tool Progression:**

**2019 State of the Platte Report:**

Smith led the discussion. A final version of State of the Platte has been sent out. Document has not changed substantially since AMP reporting session. Tweaks have been made based on suggestions by ISAC. Changes documented and placed at the front of the document. These changes were also documented in full ISAC report. Both will be presented to GC. Most changes were in wording. Asked for questions/comments. Can address questions in coming weeks. Still have flexibility to change, but in the EDO’s opinion it is final and are asking for approval.

Will give update on tools. Tools useful no matter what changes in AMP document.

**2-D Modeling:**

Smrdel presented information on the 2-D model of the AHR, its benefits, limitations, and other applications. Drain stated that this would be good cross committee info. Especially useful to present to water committee.

**Channel Width Modeling:**

Farrell led the discussion about updated techniques to model flow/channel width relationships as suggested by PRRIP and ISAC during October 2019 reporting session. Caven stated that Random Forest does not give very good parameter estimates. Farrell acknowledged need to consider other methods, but method will depend on questions decided on to answer in AMP update.

**Other Questions/Concerns:**

Jenniges asked and Farnsworth confirmed AMP, take up discussion after GC direction. Concerns over pallid sturgeon contributions- What obligation do we have, what could we do, etc. Smith has committed to managing ISAC science panel. There is a draft being laid out for future plans regarding ISAC management.

**Summary of Decisions from the February 24, 2020 Meeting**

1. **The TAC reappointed Brock Merrill as committee chair.**
2. **TAC approved October 21, 2019 TAC minutes with modifications.**
3. **TAC approved to finalize Fall 2019 Whooping Crane Monitoring Report with modifications.**
4. **TAC approved 2019 Interior Least Tern and Piping Plover Monitoring and Research Report as final.**