

The EDO office asked for a single set of comments from the TAC on the State of the Platte Report. The following comments are not a consensus document but rather a compilation of TAC thoughts on the State of the Platte Report.

TAC Discussion Questions Related to the 2024 SoPR:

- 1) **General Question Related to the SoPR:** Do the format and content of the 2024 SoPR appropriately communicate Program progress toward addressing the Extension Big Questions (EBQs) for the intended audience (primarily the GC)?
 - a. The format is ok and the approach of keeping things as concise and simple as possible is appreciated. The TAC does recognize it can be difficult to include all relevant information and present it in a document which is concise enough to be readable.
- 2) **Specific Question Related to the EBQs:** Are the 2024 EBQ assessments logical based on your understanding of Program data and consistent with what you have learned during your involvement with the Program? If not, why (i.e., assessment not supported by accumulated data, etc.)? *The EDO requests the TAC respond to this Discussion Question for each of the ten (10) EBQs.*
 - a. All TAC members do not agree with EBQ assessments or each other and at least have alternate opinions on what the data says. That is addressed in specific response to each EBQ.
 - b. There was a reoccurring theme that response to EBQ should incorporate at least a little information on Program actions relative to other factors if that information is readily available. For example.
 - i. How do sediment augmentation amounts compare to calculated total sediment amounts passing the Overton gauge?
 - ii. What role does ongoing phragmites management play in maintaining channel width?
 - iii. Is the flat line of plover response to new habitat unique to the Platte or being seen in other areas.
 - iv. While whooping crane use may not be significantly greater than in the past due to variation year to year it is obvious that there is much greater use in some years. Whether an individual bird chooses to stop on the Platte or not includes many factors outside Program control.
 - c. While the TAC has suggested additional conversation on some of the EBQ there was no need to change the conclusions at this time.

Intro key observations and summary-

The introductory paragraph indicates the document uses footnotes to identify key documents or data sets. However, except for page 5, footnotes do not occur throughout rest of the document. They could be utilized more.

PRRIP has objectives and goals related to “other species of concern.” These could somehow be incorporated into this document as appropriate. A small standalone section could describe past, ongoing or future science or management actions related to species of concern.

Channel Morphology and Vegetation-

There still seems to be a lack of clear understanding on the definitions for “Total unvegetated width vs. Maximum Unobstructed channel width- please improve upon the description in that footnote and include a link to a diagram.

The influence of other outside factors (phragmites spraying and mechanical management) affecting the MUCW and TUCW should be recognized.

Figures have explanation in the label that should be in the text instead. Page 16 as an example, the 2nd and 3rd sentence should get moved to the discussion or text. This was a recommendation to consider throughout. Focus the Figure description on a title of what is displayed on each axis, not trends in the data itself.

It was suggested we also consider using median channel widths or at least explore both to see which is more informative.

Plover habitat, Use and Productivity

Piping plover use of recent increases in habitat have not followed the past trend of increased use and productivity. The TAC suggests we explore why and evaluate how much habitat is enough. This could lead to agreement that we are content simply managing what we have and concluding that we’ve acquired and managed enough habitat and that additional habitat is not expected to have as much of an increase in use. This description was largely silent on recent flat-line trends of piping plover use and productivity. The TAC felt this could be described better.

It was suggested we look at use and productivity at the regional (lower Platte, Missouri, Lake Mac) or population level to get insight on what stable use and productivity on the AHR means. This may be challenging at the population level given gaps in data and survey methodology.

WC habitat and use

This write up suggests there was no relationship between the proportion of the AWB population stopping over on the AHR through Spring 2023. It was suggested (not agreed upon) that the data also be graphed from 2001 when Platte aerial surveys began, Pre-PRRIP. WC use related to variability should consider what conditions were associated with use of that habitat pre-PRRIP through present. Additionally, it was suggested that we combine spring and fall calendar year or multi-year averages to reduce the impact and variability (not agreed upon). Use (proportion of the population using Platte) from pre-PRRIP and early PRRIP years compared to the most recent decade demonstrate the average proportion of the population using the Platte has doubled on average (from ~5% to >10%), though this assessment indicates there is no trend in WC use of the AHR. However, it was also brought up that analyses combining spring and fall may double count the same birds on multiple migrations (issue of denominator). This information in its current state does a poor job of relaying that on average over the longer period of time, WC use has increased on the Platte during the same period of time when management increased and habitat conditions improved.

It was suggested we also use 3-5-year running average in addition to individual years.

It was pointed out that there is little information explaining the high variability (impact of drought, etc.).

Pallid sturgeon habitat and use- No comment

Big Questions

Questions aren't yes or no but the TAC was split on whether they needed or should be. Many felt that the "thumbs up/down" reflect an answer to "do we have what we need to answer the questions definitively". TAC not necessarily supportive of re-writing to specifically narrowly define toward flow, etc. May not be what we want to investigate. TAC should re-visit why we decided to set these questions up in this manner when they were created. In general, the TAC responded to the TAC questions on page 10 by indicating they were mixed feelings or in agreement with the format and content addressing the questions. As for the specific questions, the TAC was mixed and provide the following specific comments:

EBQ#1)

Phrag spraying was not described well as a variable that has had a significant impact on WC roosting habitat maintenance. The TAC would like that and other variables better expanded on and described. We may want to look at external influences like phrag in early 2000's vs now.

Many felt the maintenance of WC habitat (UOCW, etc.) represents a positive signal, while others don't believe it can be maintained at these levels. There appeared to be an acknowledgement that the current germination suppression is successful in reducing the amount of mechanical vegetation work required to maintain suitable whooping crane habitat. Most felt we should stick with what we are doing until it doesn't work.

Comparing current trends to the previously derived model predictions implies the previous model would be good at making those predictions, it appears it could be totally wrong in what is useful to predict channel width.

EBQ#2)

TAC wanted to re-iterate that it's not a foregone conclusion that we will continue phrag research beyond year one and that wasn't clear. There was a general consensus that we have a sufficient understanding of the phrag relationship and can passively learn how successful germination suppression is through existing monitoring.

EBQ#3)

Sorting out our impact is difficult as we don't see other data such the scale of our sediment management relative to deficit, balance, etc. at this and other locations. Effort, intensity, and location has varied throughout the AHR over time. Sediment augmentation has occurred at Cottonwood Ranch downstream of Overton (prior to 2017) and upstream of Overton (prior to and after 2017). The variability and fluctuations year to year make it difficult to conclude there is or is not a trend of incision downstream of Overton, only that there is high uncertainty with no easily detectable trend of incision from 2009 to present.

There was no explanation as to why this went from one thumb up in the First Increment to a question mark in this version. Explain how we reduced our certainty with the augmentation management action being applied and researched over the last 6 years.

Many felt we were doing good where we were putting in sediment but that we are unsure what is happening downstream. Given the positive whooping crane signal (measured by increase in use), it could be argued that sediment augmentation efforts to date were a win-win (positive WC signal, positive sediment signal). Other TAC members felt there was no detectable change (positive or negative) downstream of Overton and uncertainty is high which supports the “?” and suggests there is low risk to stopping sediment augmentation while we continue to collect monitoring data.

The TAC agreed that the assessment should include the recent decision by the GC to take a pause on sediment implementation and try and learn from not doing it.

EBQ#4)

There was a fair amount of discussion on EBQ 4,5,6 on what we are attempting to show and how it affects management decisions. There is not TAC consensus on these issues and future discussion on these questions will be required at the TAC.

Some TAC members feel the preliminary analysis and manner in which data are being compared to each other are not biologically meaningful. Correlation does not necessarily equate to causation. Weather, time of day, and other external factors can affect when whooping cranes are more likely to make decisions related to habitat availability and use. However, the assessment as written appears to suggest whooping cranes aren't making habitat selection decisions but instead are simply using the landscape because it is the latter part of the day which is not a biologically sound conclusion. It is well known whooping cranes migrate during the day and as such typically look for stopover habitat toward the end of the day. These factors should not be evaluated against each other as they are different decisions (when to look for habitat, and what habitat to use). The analysis could better explain that the information could be used to evaluate when WC's are making habitat decisions and what those decisions were affected by (e.g., whooping cranes migrating at high altitude during the middle of the day are not making habitat decisions so our management will not influence them). That could be tied to the management implications section that would relate to the question on the “expected scale of response to our management actions” posed for the Second Increment SDM process.

If the decision was made to change the questions to be answered in a yes/no manner, the TAC suggested the question be rephrased to “Do controllable factors influence....”

There is no need to point to delays in acquiring telemetry data in this write up and we may still need to wait longer until more data is generated (whooper data in future migrations). It is suggested that the assessment state that the first round of telemetry data was acquired in 2024 and the assessment will begin in 2024 (update as necessary since it indicates telemetry data is anticipated in February of 2024). The TAC needs to weigh in on when the appropriate time to complete the analysis as we will need the appropriate sample size of WC stopover/flyovers during different seasons and conditions (flow, drought, UOCW, etc.) and the largest amount of data is likely to come from the period we are currently in (the last couple years through the next couple years).

EBQ#5)

Similar to #4, the TAC suggested this could be changed to “Do controllable factors influence...”

Delete “starting by filling data gaps for WC tolerance to low flow” - this is not an agreed upon approach and this report is not an appropriate avenue for proposing this. Other stakeholders may want to “fill in the data gaps for WC tolerance to high flows” or simply rely on the natural variability we get.

EBQ#6)

Same comment as above related to Delete “starting by filling data gaps for WC tolerance to low flow”

The TAC generally agreed we could probably scrap this one all together, and questioned whether it matters to the PRRIP at all? Other factors maybe more important- drought, fall staging in Canada, etc. and we are already evaluating flow and other habitat metrics in previous WC EBQ's.

EBQ#7)

The TAC had no comment on this assessment.

EBQ#8)

The TAC agreed we are getting good data that has reduced unknown fates. However, we need to figure out when to stop the monitoring effort (TAC decision after 2024 monitoring season). Human presence and monitoring equipment is believed to increase the potential for predators to key in on plovers, nests, and chicks. The TAC would like to evaluate when we can stop monitoring and what data would we lose? The TAC also inquired whether the monitoring has created issues with comparability. Fledge ratios are primarily the only data using this using the additional predator monitoring. Do we have any indication from monitoring why fledge ratios declined and why they have increased again over the last few years, or do we simply know a higher percent of the “unknown losses.”

EBQ#9)

The TAC generally agreed that increased predator management appears to have been successful, particularly where fencing was installed. This suggests we may want to focus on land-based predator management and eliminate avian predator focus. This may not be a question of science, but effort.

EBQ#10)

No comment other than agreement that peer review be completed, and the report finalized.

Appendix A- 5 year check ins

Is “2024 Assessment” the right timeframe? This appears to be the results of the previous assessments. The 5-year check in information is stated under the “what the science says in 2024”. How are these two sections the same date?

Some TAC members felt that the overlapping confidence intervals is not a reason to ignore differences in the data due to “statistical similarity” as that is not necessarily biologically meaningful. USFWS population monitoring of WC’s at Aransas NWR had overlapping confidence intervals but the population estimates are still the best estimate and are widely used. Multiple TAC members questioned whether the statistical explanation is being used to disprove the relationship instead of simply stating what the results and conclusion are.

Other TAC members felt there is a high degree of uncertainty, and they had little confidence in whooping crane habitat selection within the range of overlapping confidence intervals. There is not agreement within the TAC on whether whooping crane habitat is improved by increasing UOCW beyond ~500’ or whether relative selection is maximized at 1000’+ as the model indicates. The basic difference is interpretation of data relative to management goals when half of all roost sites are in channels narrower than the 700 foot but maximum relative selection is 1,000 foot and is mostly driven by an exceptionally high roost%/available% ratio in the 1200 to 1300 foot range.