



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM (PRRIP -or- Program)

Technical Advisory Committee (TAC) Virtual Meeting

Wednesday, July 14, 2021; 1:00-4:00 PM CST

Meeting held online via MS Teams

Technical Advisory Committee (TAC)

State of Wyoming

Barry Lawrence - Member

State of Colorado

Jojo La - Member

State of Nebraska

Elizabeth Esseks - Member

Upper Platte Water Users

n/a

Downstream Water Users

Dave Zorn - Member

Jim Jenniges – Member

Brandi Flyr - Member

Executive Director's Office (EDO)

Jason Farnsworth, ED

Justin Brei

Patrick Farrell

Malinda Henry

Mallory Jaymes

Kaley Keldsen

Kari Mohlman

Tim Tunnell

Kevin Werbylo

Julia Grabowski

Bureau of Reclamation (Reclamation)

Brock Merrill - Member

U.S. Fish and Wildlife Service (Service)

Matt Rabbe - Member

Tom Econopouly - Alternate

Environmental Entities

Rich Walters – Member

Andy Caven - Member

Melissa Mosier - Alternate

Colorado Water Users

n/a

Other Participants

Jeff Runge - USFWS

Michelle Koch - NGPC

Joel Jorgensen – NGPC

Melissa Marinovich – NGPC

Dan Sternkopf – NE DNR

Mark Coleman – Northern Water \ Northern CO

Water Conservancy District



WELCOME & ADMINISTRATIVE

Merrill called the meeting to order at 1:05 PM Central Time.

AGENDA MODIFICATIONS

No agenda modifications were made.

MINUTES

TAC MOTION: *Lawrence moved and La seconded to approve the April 14, 2021 TAC Virtual Meeting minutes. Minutes approved.*

[04 14 21 PRRIP TAC Virtual Meeting Minutes APPROVED](#)

LAND MANAGEMENT

Ft. Kearney Complex, Speidell Tract

Tunnell gave a short background presenting some history of boundary agreements with neighbors. 2021 Budget included money for tree clearing on this site to clear site lines for WC. Tunnell discussed the bid package for tree removal on the Speidell tract. This was not included in the Management Plan, so wanted to bring it up for TAC review. NPPD also has a power line in the area that should be considered. Farnsworth asked for TAC input on two items: 1) Will it be an advantage to clear trees adjacent to hike bike trail or would that cause more disturbance than if we left them in place? 2) Is there a benefit to clearing the 7.5 acres on northern island?

Jenniges said it is a bad idea to encourage WC use of this piece of land giving the transmission line that is present. Rabbe asked for clarification on extent of clearing. Were we planning on leaving trees as a buffer right next to the hike/bike trail bridge? Caven asked and Tunnell and Jenniges clarified where the transmission line is located. Merrill asked if Rabbe shares Jenniges' concern about the transmission line. Rabbe understands the concern, but still thinks Speidell should be managed for whooping crane habitat. Rabbe suggested new UV-A (Avian Collision Avoidance system) markers to reduce potential for negative interactions with transmission lines. Caven said initial results of studies on the effectiveness of these markers have been positive. Rowe will be using these on some of their lines. EDO could cooperate with power company to get those markers implemented. Technology advances have increased the viability of UV light usage and a commercial product is in development. Zorn asked about tree composition on all three islands. East island has smaller, less mature forest with some previous effort to clear in the past. The northern 7.5-acre island is mature forest, having large cottonwood and cedar trees typical of riparian forest. Rabbe suggested a 100-foot buffer of forest remain on the island to the east bordering the hike/bike trail.

EDO Project Maps: [P21-009 DRAFT SHEETS SPEIDELL TREE CLEARING](#)

TAC MOTION: *Rabbe moved and Caven seconded to approve plan for tree clearing on the Speidell Tract leaving a 100-foot buffer beside the hike/bike trail. Motion approved.*

Jenniges opposed the motion stating that even with UV-A markers there are still risks associated with the transmission lines.

Proposal for Violet Planting on PRRIP lands

Rabbe started off the topic with a brief history of previous attempts by the Program to integrate violets into their land management by including them in seed mixes. Over time it was learned that violets do



not establish well from seed. Efforts to introduce violets into prairies through plug installation have shown good results. Recent focus by the Service on grasslands and especially pollinators have brought emphasis on monarch, bumble bees and regal conservation efforts. Regals were included in the original First Increment Program Document as Tier 1 species on the state list. Regals are a species the Service is interested in managing for, and it fits within the Program objective of benefitting non-listed or other species of concern. Together these present an opportunity for the Program to contribute.

Henry presented background information on violet species distribution and Regal presence within the AHR. A description of habitat compatible to support both species was provided. Options for Program properties with suitable habitat for both species and that provide opportunities for connectivity with existing Regal populations were presented. Tunnell gave an overview of how violets fit into existing PRRIP land management. Henry presented a potential timeline for decision making and implementation involving PRRIP committees in the process.

Rabbe asked for clarification on differences between *V. sororia* and *pedatifida* in terms of when to plant and habitat characteristics. Henry replied that Prairie Plains suggested planting *V. sororia* in the fall. Caven has planted in both the spring and fall with success. *V. pedatifida* may be more appropriate under wetter conditions. Caven added *V. sororia* occurs in sub-irrigated lowland prairie with bluestem. Best suited for areas in transition between wetland and upland ridges. Flyr asked about success rates for plug planting. Henry stated that both the Crane Trust and The Nature Conservancy note high success rates and resiliency, though no monitoring to quantify success has been done. Will need to ask Sarah Bailey of Prairie Plains Institute since they have done more planting to see if they have followed up on success rates. Caven said Mid-June – July is best for observing males during Regal surveys and late August into September is best for female Regal surveys. Caven said State agency and Crane Trust have regal survey methodologies. Caven added that vegetation surveys at Binfield have registered both *V. sororia* and Regal presence. For this reason, he does not recommend planting at Binfield. That tract is also on the wetter end of habitat tolerance for *V. sororia*. Caven suggests Speidell as better habitat for the violet and the butterfly, and because it would add important habitat to the western end of Rowe with very high documented Regal densities. Rabbe recommends distributing plugs over multiple properties to make a larger contribution to connectivity.

While La agrees this is a good opportunity to provide benefits to other species of concern, she does not think the Regal as a non-listed species (not federally threatened or endangered) fits into the Program's requirements for compliance. La said that contrary to our Program document, this action takes resources away from target species. Rabbe cited the original Program document that specifically mentions the Regal. All other documents (EIS) tier off of this. He said the Regal may be considered for listing by the Service. A case may be made that Platte grasslands are more important Regal habitat than they are for migratory Monarchs. Rabbe noted that any action for other species will have costs. Here we are talking about a \$9,000 investment for a highly beneficial contribution to meet original Program document objectives for other species of concern. La noted that this amount does not include follow-up monitoring. Expenses on non-target species need to be justified. Rabbe said given the success he has seen with other violet planting projects, perhaps monitoring is not necessary. Merrill asked whether the Program invested money in the Platte River caddisfly? Farnsworth said yes, for monitoring. Rabbe said this monitoring contributed data to the decision not to list the caddisfly. Merrill asked if there is any potential for an agreement on whether Program investments prior to Regal listing could count toward Program ESA compliance if and when Regals are listed? Rabbe will check into this. Flyr asked what the



Program has done to quantify and monitor species diversity on its properties? Tunnell cited vegetation surveys performed in 2013, 2016, and 2019, but no systematic surveys for butterflies. No plans have been made to continue those surveys into the future thus far. So we have a good idea where violets are present and where they are not, basically on remnant prairie but not on restored cropland. Caven suggested planting on these restored croplands. Any vegetation survey data that the Crane Trust has can be shared with the Program. Zorn brought up the possibility of Program participation in a Candidate Conservation Agreement with Assurances with the Service, like what Merrill had suggested. Rabbe said the Regal is not listed yet.

Merrill asked if we needed a TAC recommendation on this at this point. Henry said no, just looking for TAC feedback at this time. La stated that her original concerns had not yet been addressed. Farnsworth asked what is Colorado's position on funding for other species of concern? La said she wants more discussion on this item before a TAC recommendation. La repeated her concerns about resources being used for non-target species. Rabbe and Farnsworth said the discussion today is in response to the Service's request to put this option before the TAC. The timeline was developed knowing that we would need to place an order far enough ahead of time to allow plugs to grow. Farnsworth said we could add this line item to the 2022 budget for your review, and it can be stricken from the budget if it does not receive approval. Merrill asked whether this item should be elevated to the GC level in September? Rabbe said this was more than a single species issue. Guidance from the GC is needed on how they want to deal with non-target species? Are they willing to allocate resources to non-target species? La asked whether there was a strategic or opportunistic approach to deciding which species to address, when, and why? Is there a pecking order? Rabbe said there is a long history of trying to incorporate violets on Program property. It currently coincides with the Service's focus on pollinators in the Great Plains. La asked if violets were ever in the seed mixes? Rabbe explained that they were included, but the plants do not establish well from seed. Merrill suggested we tee up this discussion with the GC. It is more of a policy issue relevant to the AMWG and development of the Extension Science Plan for which more guidance from the GC is needed. Rabbe said he would obtain more information on the CCAA options for the Program, as this would be good information to present for the GC to consider. Merrill stated that depending on our ability to get everything together to present to the GC in September, it may not be possible to put this action into place in 2022.

EDO Presentation: [07 14 21 Violets to support Regal Fritillary on PRRIP land](#)

SPRING 2021 WHOOPING CRANE UPDATE

Jaymes gave a brief presentation of results from the Spring 2021 whooping crane monitoring efforts. She pointed out changes to the Report for 2021 and asked for TAC feedback. Zorn noted crane use days includes FWS sightings. He asked if crane use days has always included FWS sightings? Jaymes said all reports in recent years have included FWS sightings in the calculation of crane use days.

EDO Presentation: [2021 July TAC WC Update](#)

TAC MOTION: *Lawrence moved and Rabbe seconded to approve the Implementation of the Whooping Crane Monitoring Protocol – Spring 2021 Report. Report approved.*

[Implementation of the Whooping Crane Monitoring Protocol - Spring 2021 Approved](#)

**2021 LEAST TERN & PIPING PLOVER PREDATOR MANAGEMENT ACTIONS AND MONITORING UPDATE**

Mohlman and Keldsen gave presentations to update the TAC on 2021 LT/PP additional predator management actions and monitoring efforts implemented in 2021. Though the season is ongoing, Mohlman provided a summary of LT/PP nesting and brooding through July 1st of this year. Keldsen summarized nest losses due to predation as documented on camera through the current date and provided examples of predation events captured on video cameras placed at nests as well as predators present on nesting peninsulas captured on site and shoreline trail cameras.

Caven noted that his owl surveys indicate that Great Horned Owls stay close to woodlands. He asked if the Program is considering more tree removal around OCSW sites? Keldsen mentioned that Broadfoot South, where there have been a lot of owl registers this year, is open and lacks trees close to nesting areas. Leaman, also with heavy losses to owls, has trees on neighboring property, but Program property is clear. Keldsen said the EDO is thinking about ways to decrease owl nesting opportunities near OCSW sites. Mohlman and Keldsen noted that owls nest in mining equipment and human built structures as well. Jenniges suggested asking mining operators to push over old dredge towers onto their side during the off season. Runge suggested the use of nest cages. Henry said the pros and cons of using nest cages is something discussed in detail at the AMWG and by the biologist at the EDO. The data suggest that the use of nest cages may have both positive and negative outcomes. Benefits are short lived as predators learn to associate these with nests. Nest cages may increase risk to adults which would have a greater impact on future productivity. Runge noted that costs should be considered for management. Removing trees also has a cost. How much return on investment is possible? Henry said that for this year, we will continue to gather data and reevaluate at the end of the nesting season. For example, we have learned with nest cameras this year that we may be able to limit the use nest cages to right before hatch to reduce losses. Henry reminded the group that the plan is to keep the existing management and monitoring in place for 5 years so we can gather systematic information we can interpret. The information we gather will add to our toolbox and inform management so when we implement changes, they have a greater likelihood of being targeted, effective, and efficient.

EDO Presentation: [2021 July TAC presentation LTPP update](#)

EDO Presentation: [LTPP-Pred Update TAC July 2021 7-12](#)

PALLID STURGEON RESEARCH UPDATE

Henry gave a brief overview of the research approved by the GC in June of this year to address pallid sturgeon habitat and spawning on the Lower Platte River and its tributaries as well as that designed to establish new genetic baselines for discriminating between pallid sturgeon, shovelnose sturgeon, and hybrids that ensures learning on the Lower Platte is tied to pallid sturgeon. She also presented a timeline for moving forward with both projects including contracting, PRRIP committee approvals, equipment purchases, student recruitment and training, and project start-up coordination meetings.

EDO Presentation: [07 14 21 TAC Pallid Update](#)

EXTENSION SCIENCE PLAN UPDATE

Henry gave a review of the potential questions to be addressed in the Extension Science Plan. She outlined a plan for moving forward with this document to have a GC approved Science Plan by March of 2022.



Caven asked if there were any areas of struggle in developing the science plan? Henry said there has been a focus on pallids recently which helped move that forward, but she needs to get back to developing hypotheses for WC. She said what was really needed for the August 23rd AMWG meeting is that group's input on prioritization of uncertainties. The group needs to come to a consensus on priorities for learning in the Extension.

EDO Presentation: [07_14_21 TAC Extension Science Plan Update](#)

MS TEAMS CHAT

Caven: UV-A Avian Collision Avoidance System Contact
James F. Dwyer, Certified Wildlife Biologist
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Runge: Has there been a baseline survey for violets? I saw a violet plant on Johns this spring between the big slough and the channel. No clue on species. Only saw one, but was not actively looking.

Runge: Regarding ESA, there are benefits from just planting, and there are benefits from supplemental monitoring. It would be beneficial to discuss in detail. As Brock said, this is more of a policy discussion and not technical.

Runge: Regals are not a candidate at this point in time. Monarchs are.

Runge: Certainly once it becomes a candidate.

Runge: Once.

Brei: The monarch CCA is specific to energy/RoW companies, but here is some information:
https://www.fws.gov/savethemonarch/CCAA_faq.html

Caven: This article outlines the nation wide declines of regals: Swengel et al. 2016
<https://www.hindawi.com/journals/scientifica/2016/2572056/>

Caven: Here is a Regal Fritillary habitat model we published for extra information for Jojo et al.

Caven et al. 2017. Journal of Insect Cons.

<https://link.springer.com/article/10.1007/s10841-017-9968-0>

La: Thanks, @caven!

Runge: Excellent work.

Caven: I am sure your engagement in the projects will be useful Malinda.

Caven: You are welcome Jojo!

Caven: Cheers everyone be well!



TAC MEETING REVIEW & WRAP-UP

No action items resulted from the meeting.

September 14-15th GC Quarterly Meeting will be ***IN PERSON***, held in **Kearney, NE**.

Fourth Quarterly TAC Meeting of 2021 has been scheduled for **October 13th**. Calendar invites were sent out when quarterly meeting dates were established. Please refer to the website for agenda and supporting documents.

TAC MEETING END

The TAC meeting concluded at 3:33 PM Central Time.