



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

2 **Technical Advisory Committee (TAC) Virtual Meeting**

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

4 *Meeting held online via MS Teams*

5

6 **Technical Advisory Committee (TAC)**

7 **State of Wyoming**

8 Barry Lawrence - Member

9

10 **State of Colorado**

11 Jojo La - Member

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14 **State of Nebraska**

15 Elizabeth Esseks - Member

16

17

18

19 **Upper Platte Water Users**

20 n/a

21

22 **Downstream Water Users**

23 Dave Zorn - Member

24 Jim Jenniges – Member

25 Brandi Flyr - Member

26

27 **Executive Director's Office (EDO)**

28 Jason Farnsworth, ED

29 Justin Brei

30 Patrick Farrell

31 Malinda Henry

32 Mallory Jaymes

33 Kaley Keldsen

34 Kari Mohlman

35 Tim Tunnell

36 Kevin Werbylo

37 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



38 **WELCOME & ADMINISTRATIVE**

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

40
41 **AGENDA MODIFICATIONS**

42 No agenda modifications were made.

43
44 **MINUTES**

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

47
48 [04_14_21_PRRIP_TAC_Virtual_Meeting_Minutes_APPROVED](#)

49
50 **LAND MANAGEMENT**

51 *Ft. Kearney Complex, Speidell Tract*

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

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

73
74 EDO Project Maps: [P21-009 DRAFT SHEETS SPEIDELL TREE CLEARING](#)

75
76 **TAC MOTION:** *Rabbe moved and Caven seconded to approve plan for tree clearing on the Speidell Tract*
77 *leaving a 100-foot buffer beside the hike/bike trail. Motion approved.*
78 *Jenniges opposed the motion stating that even with UV-A markers there are still risks associated with the*
79 *transmission lines.*

80
81 *Proposal for Violet Planting on PRRIP lands*

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



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

90
91 Henry presented background information on violet species distribution and Regal presence within the
92 AHR. A description of habitat compatible to support both species was provided. Options for Program
93 properties with suitable habitat for both species and that provide opportunities for connectivity with
94 existing Regal populations were presented. Tunnell gave an overview of how violets fit into existing
95 PRRIP land management. Henry presented a potential timeline for decision making and implementation
96 involving PRRIP committees in the process.

97
98 Rabbe asked for clarification on differences between *V. sororia* and *pedatifida* in terms of when to plant
99 and habitat characteristics. Henry replied that Prairie Plains suggested planting *V. sororia* in the fall.
100 Caven has planted in both the spring and fall with success. *V. pedatifida* may be more appropriate under
101 wetter conditions. Caven added *V. sororia* occurs in sub-irrigated lowland prairie with bluestem. Best
102 suited for areas in transition between wetland and upland ridges. Flyr asked about success rates for plug
103 planting. Henry stated that both the Crane Trust and The Nature Conservancy note high success rates
104 and resiliency, though no monitoring to quantify success has been done. Will need to ask Sarah Bailey of
105 Prairie Plains Institute since they have done more planting to see if they have followed up on success
106 rates. Caven said Mid-June – July is best for observing males during Regal surveys and late August into
107 September is best for female Regal surveys. Caven said State agency and Crane Trust have regal survey
108 methodologies. Caven added that vegetation surveys at Binfield have registered both *V. sororia* and
109 Regal presence. For this reason, he does not recommend planting at Binfield. That tract is also on the
110 wetter end of habitat tolerance for *V. sororia*. Caven suggests Speidell as better habitat for the violet
111 and the butterfly, and because it would add important habitat to the western end of Rowe with very
112 high documented Regal densities. Rabbe recommends distributing plugs over multiple properties to
113 make a larger contribution to connectivity.

114
115 While La agrees this is a good opportunity to provide benefits to other species of concern, she does not
116 think the Regal as a non-listed species (not federally threatened or endangered) fits into the Program's
117 requirements for compliance. La said that contrary to our Program document, this action takes
118 resources away from target species. Rabbe cited the original Program document that specifically
119 mentions the Regal. All other documents (EIS) tier off of this. He said the Regal may be considered for
120 listing by the Service. A case may be made that Platte grasslands are more important Regal habitat than
121 they are for migratory Monarchs. Rabbe noted that any action for other species will have costs. Here we
122 are talking about a \$9,000 investment for a highly beneficial contribution to meet original Program
123 document objectives for other species of concern. La noted that this amount does not include follow-up
124 monitoring. Expenses on non-target species need to be justified. Rabbe said given the success he has
125 seen with other violet planting projects, perhaps monitoring is not necessary. Merrill asked whether the
126 Program invested money in the Platte River caddisfly? Farnsworth said yes, for monitoring. Rabbe said
127 this monitoring contributed data to the decision not to list the caddisfly. Merrill asked if there is any
128 potential for an agreement on whether Program investments prior to Regal listing could count toward
129 Program ESA compliance if and when Regals are listed? Rabbe will check into this. Flyr asked what the



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

138
139 Merrill asked if we needed a TAC recommendation on this at this point. Henry said no, just looking for
140 TAC feedback at this time. La stated that her original concerns had not yet been addressed. Farnsworth
141 asked what is Colorado's position on funding for other species of concern? La said she wants more
142 discussion on this item before a TAC recommendation. La repeated her concerns about resources being
143 used for non-target species. Rabbe and Farnsworth said the discussion today is in response to the
144 Service's request to put this option before the TAC. The timeline was developed knowing that we would
145 need to place an order far enough ahead of time to allow plugs to grow. Farnsworth said we could add
146 this line item to the 2022 budget for your review, and it can be stricken from the budget if it does not
147 receive approval. Merrill asked whether this item should be elevated to the GC level in September?
148 Rabbe said this was more than a single species issue. Guidance from the GC is needed on how they want
149 to deal with non-target species? Are they willing to allocate resources to non-target species? La asked
150 whether there was a strategic or opportunistic approach to deciding which species to address, when,
151 and why? Is there a pecking order? Rabbe said there is a long history of trying to incorporate violets on
152 Program property. It currently coincides with the Service's focus on pollinators in the Great Plains. La
153 asked if violets were ever in the seed mixes? Rabbe explained that they were included, but the plants do
154 not establish well from seed. Merrill suggested we tee up this discussion with the GC. It is more of a
155 policy issue relevant to the AMWG and development of the Extension Science Plan for which more
156 guidance from the GC is needed. Rabbe said he would obtain more information on the CCAA options for
157 the Program, as this would be good information to present for the GC to consider. Merrill stated that
158 depending on our ability to get everything together to present to the GC in September, it may not be
159 possible to put this action into place in 2022.

160
161 EDO Presentation: [07 14 21 Violets to support Regal Fritillary on PRRIP land](#)

162

163 **SPRING 2021 WHOOPING CRANE UPDATE**

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

169

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

171

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

174

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



176 **2021 LEAST TERN & PIPING PLOVER PREDATOR MANAGEMENT ACTIONS AND MONITORING UPDATE**

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

183
184 Caven noted that his owl surveys indicate that Great Horned Owls stay close to woodlands. He asked if
185 the Program is considering more tree removal around OCSW sites? Keldsen mentioned that Broadfoot
186 South, where there have been a lot of owl registers this year, is open and lacks trees close to nesting
187 areas. Leaman, also with heavy losses to owls, has trees on neighboring property, but Program property
188 is clear. Keldsen said the EDO is thinking about ways to decrease owl nesting opportunities near OCSW
189 sites. Mohlman and Keldsen noted that owls nest in mining equipment and human built structures as
190 well. Jenniges suggested asking mining operators to push over old dredge towers onto their side during
191 the off season. Runge suggested the use of nest cages. Henry said the pros and cons of using nest cages
192 is something discussed in detail at the AMWG and by the biologist at the EDO. The data suggest that the
193 use of nest cages may have both positive and negative outcomes. Benefits are short lived as predators
194 learn to associate these with nests. Nest cages may increase risk to adults which would have a greater
195 impact on future productivity. Runge noted that costs should be considered for management. Removing
196 trees also has a cost. How much return on investment is possible? Henry said that for this year, we will
197 continue to gather data and reevaluate at the end of the nesting season. For example, we have learned
198 with nest cameras this year that we may be able to limit the use nest cages to right before hatch to
199 reduce losses. Henry reminded the group that the plan is to keep the existing management and
200 monitoring in place for 5 years so we can gather systematic information we can interpret. The
201 information we gather will add to our toolbox and inform management so when we implement changes,
202 they have a greater likelihood of being targeted, effective, and efficient.

203
204 EDO Presentation: [2021 July TAC presentation LTPP update](#)

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

206

207 **PALLID STURGEON RESEARCH UPDATE**

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

214

215 EDO Presentation: [07_14_21 TAC Pallid Update](#)

216

217 **EXTENSION SCIENCE PLAN UPDATE**

218 Henry gave a review of the potential questions to be addressed in the Extension Science Plan. She
219 outlined a plan for moving forward with this document to have a GC approved Science Plan by March of
220 2022.



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

226

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

228

229 **MS TEAMS CHAT**

230 Caven: UV-A Avian Collision Avoidance System Contact

231 James F. Dwyer, Certified Wildlife Biologist

232 UAS Services

233 EDM International, Inc.

234 4001 Automation Way | Fort Collins CO 80525 U.S.A.

235 P: 970.204.4001 | F: 970.204.4007

236 jdwyer@edmlink.com | www.edmlink.com

237

238 Runge: Has there been a baseline survey for violets? I saw a violet plant on Johns this spring between
239 the big slough and the channel. No clue on species. Only saw one, but was not actively looking.

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

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

244 Runge: Certainly once it becomes a candidate.

245 Runge: Once.

246

247 Brei: The monarch CCA is specific to energy/RoW companies, but here is some information:

248 https://www.fws.gov/savethemonarch/CCAA_faq.html

249

250 Caven: This article outlines the nation wide declines of regals: Swengel et al. 2016

251 <https://www.hindawi.com/journals/scientifica/2016/2572056/>

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

253 Caven et al. 2017. Journal of Insect Cons.

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

255 La: Thanks, @caven!

256 Runge: Excellent work.

257

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

259

260 Caven: You are welcome Jojo!

261

262 Caven: Cheers everyone be well!

263

264

265

266



267 **TAC MEETING REVIEW & WRAP-UP**

268 No action items resulted from the meeting.

269

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

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

274

275 **TAC MEETING END**

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