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PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Virtual Meeting – Microsoft Teams
August 1, 2023

PRRIP Water Advisory Committee Meeting Attendees		
Name	Affiliation	Member or Alternate
Department of the Interior		
Brock Merrill	U.S. Bureau of Reclamation	Member
Jeff Runge	U.S. Fish and Wildlife Service (USFWS)	Member
Matt Rabbe	USFWS	Alternate
State of Wyoming		
Jeff Cowley	Wyoming State Engineer's Office (WY SEO)	Member
Bill Brewer	Wyoming Water Development Office	Alternate
Michelle Hubbard	WY SEO	
State of Colorado		
Kara Scheel	Colorado Water Conservation Board (CWCB)	Member
State of Nebraska		
Jennifer Schellpeper	Nebraska Department of Natural Resources (NDNR)	Member
Jesse Bradley	NDNR	Alternate
Kari Burgert	NDNR	Alternate
Justin Ahern	NDNR	
Mike Archer	Nebraska Game and Parks Commission	
Avery Dresser	NDNR	
Caitlin Kingsley	NDNR	
Jim Ostdiek	NDNR	
Shuhai Zheng	NDNR	
Upper Platte Water Users		
Dennis Strauch	Pathfinder Irrigation District	Member
Colorado Water Users		
Jon Altenhofen	Northern Water	Member
Kyle Whitaker	Northern Water	Member
Joe Frank	Lower South Platte Water Conservancy District	Alternate
Jason Marks	Denver Water	
Downstream Water Users		
Cory Steinke	Central Nebraska Public Power and Irrigation District (CNPPID) – 2023 WAC Chair	Member
Brandi Flyr	Central Platte Natural Resources District (CPNRD)	Member
Jeff Shafer	Nebraska Public Power District (NPPD)	Member
Nolan Little	Tri-Basin Natural Resources District	
Tyler Thulin	CNPPID	
Randy Zach	NPPD	



PRRIP Water Advisory Committee Meeting Attendees		
Environmental Entities		
Jacob Fritton	The Nature Conservancy (TNC)	Member
Melissa Mosier	Audubon Great Plains	Member
Executive Director’s Office (EDO)		
Jason Farnsworth	Executive Director	
Seth Turner	Water Plan Coordinator	
Malinda Henry	Science Plan Coordinator	
Justin Brei	Engineering/Colorado Coordinator	
Libby Casavant	Hydraulic Engineer	
Kristen Cognac	Hydrogeologist	
Other Participants		
n/a		

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Welcome and Administrative: *Cory Steinke, 2023 WAC Chair*

Meeting participants were identified from Microsoft Teams. Turner noted two agenda modifications: (1) he would be presenting the Platte Basin hydrology update, and (2) analysis of the temporary hydrologic condition is still in progress, so no motion would be requested from the WAC. Minor revisions to the original draft of the May 2023 WAC meeting minutes were reviewed. Mosier made a motion to approve the minutes, second by Marks. No objections, minutes approved.

Brief Water Updates: *Seth Turner, EDO*

Platte Basin Hydrology:

Turner reviewed year-to-date flow at the Grand Island gage. River flows tracked below target flows for much of the year through mid-May. However, data for most of January and the first half of February are now showing flows above targets, indicating potential excess flows. This was unknown in real time due to ice conditions at the gage, and USGS did not publish estimated flows until a few months later.

Initial rains in Colorado resulted in a brief period of excess flows in mid-May. This was followed by a lull in late May before rains continued and streamflows at Grand Island increased throughout the month of June. Nearly all of the observed high flows were due to rainfall along the Front Range of Colorado and resulting flow down the South Platte River. The Denver metro area had the wettest May-June on record, and rainfall from Colorado Springs to the north was from 150-300% of normal over the May-July period. Much of the South Platte Basin, including in Nebraska and southeastern Wyoming, received 9-18 inches of precipitation during the May-July period, with some of the highest amounts concentrated over the Bijou Creek basin in the counties just east of metro Denver. The frequent and extensive rainfall was reflected in several “waves” traveling down the South Platte River.



34 The result of all this precipitation is that nearly all of eastern Colorado, eastern Wyoming, and
35 the Nebraska panhandle are no longer under abnormally dry or drought conditions, and drought
36 conditions in central Nebraska improved compared to late April.

37

38 ***Leasing, Recharge, and Recapture Projects:***

39 The Program's 8 recapture wells collectively pumped about 1,018 AF from the start of 2023
40 through May 16. Most of that pumping was after March 31, translating to about 10-12 cfs
41 continuously pumped to the river through April and the first half of May. Two wells were
42 operated for a week in July due to lower high groundwater levels, and all wells resumed
43 pumping on July 27 after flows at Grand Island dropped to shortage levels (below the 1,200 cfs
44 target flow at the time).

45

46 Nebraska DNR declared excess flows available from May 16-24 and again from June 9-July 24.
47 During those periods, deliveries to Elwood Reservoir for Program recharge totaled 3,346 AF. A
48 total of 1,741 AF was delivered to the Cottonwood Ranch broad-scale recharge (BSR) project,
49 including 897.4 AF to the recharge cells north of the Peterson Drain and 843.6 AF to the
50 recharge cells south of the Peterson Drain. This was the first opportunity to operate the project
51 over an extended time period after brief test fills in 2020 and a week of deliveries in 2022.

52

53 The Program leased the full 9,600 AF from the Pathfinder Municipal Account. This was
54 released for delivery to Lake McConaughy earlier than usual, in late June, due to the high
55 volume of runoff into Wyoming reservoirs from spring runoff. About 7,170 AF reached the
56 Lake McConaughy EA, representing about 25% transit losses. The Pathfinder Environmental
57 Account filled to capacity (33,493 AF) on June 11. That water, minus accrued evaporation
58 losses over the summer, is expected to be released in late August or early September.

59

60 ***North Platte Chokepoint Study:***

61 The project team led by Anderson Consulting Engineers and including subcontractors River
62 Works, ERO Resources, and Dr. Peter Nelson of Colorado State University was selected for the
63 study. Contracting was completed and a kickoff meeting with the project team was held in late
64 May. Task Order #1 is underway, including review of prior chokepoint documentation and
65 preparation of a comprehensive list of alternatives, initial existing conditions model updates, and
66 scoping for the detailed alternatives analysis (Task Order #2). A meeting with the Chokepoint
67 Planning Workgroup to review and discuss the list of alternatives is anticipated in late August.
68 The Anderson project team will present an initial progress update at the September GC meeting.

69

70 ***Expanded Recapture Reconnaissance Study Contractor Selection:***

71 Four proposals were submitted in response to the RFP for the Expanded Recapture
72 Reconnaissance Study. The Proposal Selection Panel met on July 31, and a decision on
73 contractor selection was expected in early August. Contracting and a project kickoff meeting
74 will likely proceed by early September, and a project site visit may be scheduled to coincide with
75 the September GC meeting.

76



77 **Germination Suppression EA Release:** *Seth Turner, EDO*

78 Turner first reviewed the 2022 germination suppression release to help illustrate how different it
79 was from the 2023 release. This year was the 4th consecutive year in which an EA release for
80 germination suppression was made. As noted in the hydrology discussion, Platte River flows at
81 Grand Island were tracking below target flows for much of the year through mid-May. When
82 planning for the 2023 germination suppression release started in early May, flows at Grand
83 Island were averaging less than 150 cfs. It was anticipated at that time that 2,000 cfs releases
84 from the Lake McConaughy EA were potentially necessary just to reach the 1,500 cfs
85 germination suppression flow target while accounting for expected significant transit losses from
86 the dry river channel.

87
88 With the 8-day travel time from Lake McConaughy to Grand Island, the EA release was initiated
89 on May 24, right at the end of a brief period of excess flows, and as the flow at Grand Island was
90 in a steep decline. Given the uncertainty of the magnitude, timing, and duration of rising South
91 Platte River flows, the EA release was ramped up to 1,500 cfs over a couple days and held there
92 for another 10 days. Once it became apparent in early June that the rainfall in Colorado was
93 persisting, the EA release was steadily reduced starting June 5 and ended on June 14, after which
94 the flow at Grand Island continued to increase throughout the rest of June. EA water was
95 released down the North Platte River for a few days at the start of the release to accommodate
96 acceptable ramping rates in the Sutherland Canal, but after that all water from this EA release
97 was routed through the Sutherland Canal. Unlike in June 2022, the North Platte chokepoint was
98 not a constraint on the EA release this year.

99
100 The duration of the 2023 EA release for germination suppression was 22 days, with 49,870 AF
101 released. Of that volume, 40,342 AF (81%) reached Grand Island based on Nebraska DNR
102 tracking. For the first time during a germination suppression test, flow at Grand Island exceeded
103 1,500 cfs for all 30 days of June (and actually continued for 51 days, from May 31-July 20).
104 Flow at Grand Island averaged about 3,300 cfs for the month of June.

105
106 Schellpeper asked about the Annual Operating Plan (AOP) for the Lake McConaughy EA, since
107 there was not one for 2023. It was noted that typically the USFWS coordinates with the EDO
108 and sets EA release priorities based on Program priorities. Rabbe said that the fall EAC/RCC
109 meeting is when EA release priorities are discussed, but there is currently not an official USFWS
110 EA Manager and no AOP. He added that with full reservoirs in Wyoming, USFWS does not
111 want to risk an EA reset if there is another big winter, but planned fall maintenance by CNPPID
112 and NPPD limits EA release opportunities in October. However, there may still be a couple
113 weeks for a fall release after maintenance is completed, then there could potentially be a spring
114 release and another germination suppression release in 2024. Hubbard asked what it means for
115 the EA to reset. Rabbe said if Lake McConaughy fills to its effective capacity, the EA
116 automatically resets to 100,000 AF regardless of how much more or less was in the account
117 previously.

118



119 Rabbe was asked if USFWS was close to hiring someone to fill the EA Manager position, and he
120 said potentially late in 2023 or early 2024. Mosier asked about scheduling for the fall EAC/RCC
121 meeting. Turner said it was scheduled for Tuesday October 24 at 9:30 a.m. mountain time,
122 preceding the October WAC meeting. Scheel inquired about the timing for there to be an AOP,
123 and it was proposed that the date of the fall EAC/RCC meeting should be moved to earlier in
124 October in advance of a potential fall whooping crane release from the EA. Farnsworth added
125 that there should at least be a temporary AOP documenting a potential fall release. Schellpeper
126 emphasized the importance of the AOP and said there should be a draft for the EAC/RCC to
127 review and react to. Rabbe said this request was noted.
128

129 **CNPPID Irrigator Lease:** *Seth Turner, EDO*

130 Turner reviewed the history of the CNPPID irrigator lease Water Action Plan project, which
131 began with a lease agreement in the fall of 2015 for a pilot project during the 2016 irrigation
132 season. Terms of the agreement included that (1) CNPPID has to be making full allocation
133 irrigation deliveries to its customers (so the Program is the only customer for leasing); (2)
134 CNPPID customers enroll parcels in the lease program and do not irrigate, but may fallow the
135 land or grow dryland crops; and (3) the Program receives 9” (0.75 AF) per enrolled acre, which
136 is credited to the Lake McConaughy EA in October. One-year agreements for the first 3 years of
137 the project (through the 2018 irrigation season) included maximum enrollment of 2,000 acres.
138 The Program paid \$220 per enrolled acre (effectively \$293/AF) plus a \$10,000 administration
139 fee to CNPPID. A 5-year agreement was reached for the 2019-2023 irrigation seasons, with
140 maximum enrollment increased to 3,000 acres. The Program initially continued to pay \$220 per
141 acre but reduced that to \$100 per acre (\$133/AF) starting in 2021. The current agreement
142 expires December 31, 2023.
143

144 Initial enrollment in 2016 was 1,037 acres and added 778 AF to the Lake McConaughy EA.
145 Enrollment increased each of the first 5 years, reaching nearly 3,000 acres in 2019 and 2020.
146 With the drop in price starting in 2021, enrollment declined by nearly 2/3 but has increased
147 slightly each year since then. Enrollment for 2023 was 1,320 acres, with an expected 990 AF to
148 be credited to the EA in October.
149

150 A project score of 1,900 AF for the CNPPID irrigator lease was approved by the GC in June
151 2019. The score analysis assumed that CNPPID makes full allocation irrigation deliveries in all
152 years, i.e., the Program can lease from CNPPID irrigators in all years, and that enrollment would
153 consistently remain near 3,000 acres. The final score memo included the caveat that the
154 recommended score is “subject to review and modification at the end of the current 5-year lease
155 agreement, or sooner if there is a substantial change (increase or decrease) in project enrollment”
156 and specified the basis for any future revisions to the project score.
157

158 Turner identified 3 general options for the future of the CNPPID irrigator lease for the WAC to
159 discuss: (1) renew the lease agreement through the end of the Extension and revise the score; (2)
160 renew the lease agreement for a shorter duration and revise the score; or (3) end the lease
161 agreement and eliminate the score.



162 Steinke said that CNPPID has no comment. Bradley recommended against eliminating the
163 project, as it still represents a useful measure of the water market and the Program has not yet
164 met its water objective. Whitaker asked if there is verification that enrolled parcels are not
165 irrigated. Turner explained that the parcels enrolled are typically those that are difficult to
166 irrigate, such as pivot corners or other odd-shaped parcels. CNPPID verifies that they are not
167 irrigated, and there have been a few instances of enrollment being reduced because parcels were
168 irrigated. Steinke confirmed that this was correct and added that CNPPID makes sure that
169 enrolled parcels were in fact irrigated previously. He added that the initial years of the irrigator
170 lease were wet, and very good dryland crops could still be produced. At this point, the \$100/acre
171 payment is probably not covering yield losses, and farmers don't like to be the one with poor
172 yields.

173
174 Cowley asked if consumptive use (CU) is the basis for the yield credited to the EA. Steinke said
175 yes, it is basically CU, and that the 9" per acre is less than regular irrigation deliveries. Whitaker
176 emphasized the importance of not incentivizing taking land out of production. Cowley
177 mentioned the system conservation program in the Colorado River Basin, which has a
178 considerably higher price point. But Green River irrigators are mostly growing hay to feed their
179 own cattle, and maybe hay vs corn is too different. Whitaker added that there is no dryland
180 option in the Colorado River Basin.

181
182 Farnsworth said that unresolved issues with other proposed long-term water leasing agreements
183 complicate this decision-making process, but the irrigator lease could potentially be extended for
184 just one year. Whitaker asked if there was anything to be learned from increasing payment to
185 \$150 per acre. Farnsworth said economic analyses were completed before the irrigator lease
186 began, and \$220-\$250 per acre was where the risk curve for irrigators inverted. Altenhofen
187 noted that early in the project the price for corn was \$3 per bushel; now it is around \$6 per bushel
188 but coupled with high fuel and fertilizer costs.

189
190 Mosier asked if there was a strategy behind reducing payment to \$100 per acre. Farnsworth said
191 it was to bring the unit cost closer to that of other lease water purchased by the Program, but also
192 somewhat of an experiment to see what the response would be. Mosier asked if there are other
193 acres that could be enrolled, Steinke said yes if the price was increased.

194
195 Farnsworth proposed to extend the irrigator lease for 1 year at the current terms and potentially
196 have George Oamek (former EDO) take another look at the economics. Steinke said CNPPID
197 would probably go along with that. Mosier asked about revising the score, and Turner said that
198 could be done based on the scenario and data specified in the original score memo. Farnsworth
199 stressed the importance of continuity in Program water projects. Bradley agreed and added that
200 if we lose some score but identify an inflection point for cost, this ultimately becomes a policy
201 decision for the GC to make about the project over the long term. Farnsworth said the price
202 would be viewed differently if this was the last water needed to reach 120,000 AF. Merrill
203 offered support for a one-year agreement with the same terms for continuity but did not want to
204 start changing the price paid by the Program.



205 Merrill motioned and Whitaker seconded to extend the CNPPID irrigator lease for one year at
206 the current price and terms. There were no objections, so the motion will advance to the GC in
207 September.

208

209 **Temporary Hydrologic Condition:** *Seth Turner, EDO*

210 Turner reviewed the wet-normal-dry hydrologic condition concept and its development by
211 USFWS for the Program, how it is used to set target flows at Grand Island, and the differences
212 between real-time and annual hydrologic conditions. The real-time hydrologic condition is set
213 several times throughout the year, is used to help determine the availability of excess flows, and
214 guides water project operations. Annual hydrologic condition is set retroactively based on the
215 average flow at Grand Island over the entire calendar year. Information about current and past
216 hydrologic conditions and target flows is available on the Program website under the “Flow
217 Conditions” menu.

218

219 The Anderson and Rodney (2006) journal article that introduced the method for calculating the
220 hydrologic condition index is also available on the website. Their approach resulted in a series
221 of regression equations that utilize variable combinations and weights of 7 parameters including
222 average monthly flows at Grand Island and Julesburg; end of month storage in North Platte
223 Basin (Wyoming) and Upper South Platte Basin (Colorado) reservoirs and Lake McConaughy;
224 April 1 snowpack at SNOTEL sites in Wyoming; and the previous month’s Palmer Drought
225 Severity Index (PDSI). The hydrologic condition is evaluated 7 times each year at intervals of 1
226 to 3 months.

227

228 The monthly PDSI data is typically not available until the 2nd week of the month, which can
229 create uncertainty at the start of a new hydrologic condition period. In 2015, the EDO and WAC
230 agreed to use a temporary hydrologic condition based on the most recent weekly PDSI in order
231 to reduce this uncertainty. Most of the time, the final hydrologic condition ends up the same as
232 the temporary hydrologic condition. However, since October 2015 the final and temporary
233 hydrologic conditions have differed in 8 of 39 periods that use PDSI in the calculations (about
234 20% of the time). The EDO is exploring new approaches to improve the temporary hydrologic
235 condition and will report back to the WAC if a viable alternative method is identified.

236

237 **NPPD Sutherland System Virtual Flyover:** *Jeff Shafer, NPPD*

238 As a follow-up to several stops that were made during the May 2023 water projects tour, Shafer
239 presented a “virtual flyover” that offered the WAC a bird’s eye view of the entire NPPD
240 Sutherland system. This started at the Keystone diversion and progressed through various
241 control structures, the Paxton siphon, the junction of the Sutherland and Korty canals, Sutherland
242 Reservoir, Lake Maloney, all the way to the penstocks and tailrace of the North Platte
243 hydroelectric plant. Shafer also showed the recently constructed sedimentation basin at the
244 upper end of the Korty Canal, which settled out a large volume of sediment during diversion
245 operations while South Platte River flows were high from mid-May to late-July.

246



247 Altenhofen asked about NPPD vs CNPPID irrigated acres. NPPD has about 45,000 acres, most
248 of which is downstream of the Sutherland system under the Gothenburg and Dawson County
249 Canals. CNPPID has about 110,000 irrigated acres in their system.

250

251 **Additional Business:** *Cory Steinke, 2023 WAC Chair*

252 2023 WAC Meeting Schedule: October 24. Location TBD (in-person or virtual). Timing will
253 be adjusted if the EAC/RCC meeting is rescheduled.

254

255 Altenhofen asked about the status of the Perkins County Canal study. Bradley said the initial
256 focus is on the route through Colorado, which would determine the route in Nebraska. Project
257 proponents are currently awaiting new guidance on the permitting process from the Corps of
258 Engineers as a result of the Supreme Court’s *Sackett v EPA* decision, which could impact nexus
259 questions, wetlands, etc. It is premature to know specifically what permitting will look like,
260 whether the project would be covered by the Program or require an Environmental Assessment
261 (EA) or Environmental Impact Statement (EIS). Altenhofen said it is hoped that Program
262 agreements are honored and that this project does not affect target flow shortages or other states’
263 contributions to the Program.

264

265 **Action Items**

266

267 General WAC

- 268 • N/A

269

270 ED Office

- 271 • Coordinate with CNPPID, USFWS, and others on potential rescheduling of Fall
272 EAC/RCC meeting.