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PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Petrified Wood Gallery, 418 East 1st Street, Ogallala, NE (with Virtual Meeting Option)
May 7, 2024

PRRIP Water Advisory Committee Meeting Attendees		
Name	Affiliation	Member or Alternate
Department of the Interior (DOI)		
Brock Merrill	U.S. Bureau of Reclamation	Member
Matt Rabbe	U.S. Fish and Wildlife Service (USFWS)	Alternate
State of Wyoming		
George Moser	Wyoming Water Development Office (WWDO)	Alternate
Jeremy Manley	Wyoming State Engineer’s Office	
State of Colorado		
Kara Scheel	Colorado Water Conservation Board (CWCB) – 2024 <i>WAC Vice Chair</i>	Member
Emily Zmak*	CWCB	Alternate
Amy Ostdiek*	CWCB	
Don Baggus*	Colorado Parks and Wildlife	
State of Nebraska		
Jennifer Schellpeper	Nebraska Department of Natural Resources (NeDNR)	Member
Jesse Bradley	NeDNR	Alternate
Kari Burgert	NeDNR	Alternate
Justin Ahern*	NeDNR	
Avery Dresser	NeDNR	
Jeremy Gehle*	NeDNR	
Ryan Kelly	NeDNR	
Caitlin Kingsley	NeDNR	
Jack Mensinger	NeDNR	
Jim Ostdiek*	NeDNR	
Mike Archer*	Nebraska Game and Parks Commission	
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
Nathan Baker	Northern Water	
Rich Belt	South Platte Water Related Activities Program	
Jason Marks	Denver Water	
Kevin Urie		



PRRIP Water Advisory Committee Meeting Attendees		
Downstream Water Users		
Brandi Flyr	Central Platte Natural Resources District (CPNRD)	Member
Kent Miller*	Twin Platte Natural Resources District	Member
Jeff Shafer	Nebraska Public Power District (NPPD)	Member
Scott Dicke*	CNPPID	
Nick Lee*	NPPD	
Kyle Liebig*	NPPD	
Nolan Little	Tri-Basin Natural Resources District (TBNRD)	
Scott Shaneman	North Platte Natural Resources District	
Tyler Thulin	CNPPID	
Randy Zach*	NPPD	
Environmental Entities		
Jacob Fritton	The Nature Conservancy	Member
Melissa Mosier	Audubon Great Plains	Member
Executive Director’s Office (EDO)		
Justin Brei	Engineering/Colorado Coordinator	
Libby Casavant	Hydraulic Engineer	
Jason Farnsworth	Executive Director	
Nicole Fijman	Geospatial Analyst	
Malinda Henry	Science Lead	
Quinn Lewis	River Scientist	
Seth Turner	Water Plan Coordinator	
Ed Weschler	Water Resources Engineer	
Other Participants		
Michelle Martin*	Anderson Consulting Engineers	
Brian Murphy*	River Works	
George Oamek	Honey Creek Resources	

* Denotes virtual meeting participant.

Welcome and Administrative: *Kara Scheel, CWCB – 2024 WAC Vice Chair*

Introductions were made. There were no agenda modifications.

Two versions of the February 2024 WAC meeting minutes were presented, with the revisions and discussion focused on the Perkins County Canal project. WAC members offered opinions on the appropriate level of detail to include in the minutes and whether the WAC was the appropriate venue for these discussions. Nebraska representatives restated their position that while there may be some synergistic benefits, the proposed Perkins County Canal is not a Program project. Farnsworth offered to draft compromise language to the effect that the WAC cannot agree on the content of the minutes. This was discussed again at the end of the meeting, no consensus was reached, and the issue of the February 2024 WAC meeting minutes was tabled and left unresolved.



21 **North Platte Chokepoint Geomorphology:** *Michelle Martin, Anderson Consulting Engineers*
22 *and Brian Murphy, River Works*

23 Turner gave an overview of the project schedule for the North Platte Chokepoint Study.
24 Alternatives modeling under Task Order #4 is underway. There will be a total of 3 draft reports
25 for the WAC (and the North Platte Chokepoint Planning Workgroup) to review over the next few
26 months: first will be the Draft Geomorphology and Sediment Transport report, followed by
27 modeling and alternatives reports. Given that there will also be a report forthcoming for the
28 Expanded Recapture Reconnaissance Study, the hope is to spread out the report reviews in order
29 to not overburden the committee/workgroup members. It is expected that there will be
30 presentations on the North Platte Chokepoint Study to the WAC in October and the GC in
31 December, with the project completed by the end of the year.

32
33 Martin and Murphy gave an extensive presentation of their assessment of hydrology, hydraulics,
34 sediment transport, and geomorphology at the North Platte chokepoint. Presentation slides were
35 made available to the WAC following the meeting. The overall objective of the study is to
36 identify means of providing additional conveyance capacity through the chokepoint reach or
37 bypassing flow around the chokepoint for delivering water from the Lake McConaughy EA
38 upstream to the Program's Associated Habitat Reach (AHR) downstream. The geomorphic
39 assessment informs potential alternative solutions for future consideration by the GC.

40
41 The study focused on the time period subsequent to the completion of Lake McConaughy and
42 the Tri-County Diversion Dam (TCCD) in the early 1940s and involved data collection and
43 technical analyses to explain the post-1940 river response. The primary study area is the lower
44 11 miles of the North Platte River upstream of the TCCD but there was some investigation as far
45 upstream as Keystone.

46
47 Martin discussed the variability of post-1940 hydrology and the decline in conveyance capacity
48 at the North Platte chokepoint from about 5,400 cfs in the 1980s to around 2,000 cfs or less by
49 the early 2000s. Rabbe asked about the changes in capacity at flood stage between the 1980s and
50 early 2000s. Turner said there is a frustrating lack of information from the 1990s when the
51 changes were occurring. There is a 2002 letter from the National Weather Service that specifies
52 capacity at 6.0 ft flood stage as about 3,800 cfs in 1994 and less than 2,600 cfs in 2002. It is
53 assumed that flood stage was at 6.0 ft prior to 1994 but there is no documentation. Likewise,
54 there are no rating curves for the North Platte River at North Platte gage from the mid-1980s
55 until 2003.

56
57 Martin continued, noting that 2D hydraulic modeling was completed to assess several
58 characteristics of the river channel. Results for specific gage analyses at the Sutherland and
59 North Platte gages were shown to illustrate changes in stage at specified discharges. Murphy
60 discussed aggradation in the lower North Platte River, particularly downstream of the Highway
61 83 bridge. In their study for the VESPR group, River Design Group identified a sediment wedge
62 upstream of the TCCD, and all evidence of the current geomorphic assessment confirms that.



63 Murphy presented channel bed profiles to illustrate the degradation just below Lake
64 McConaughy and the aggradation at the downstream end of the river.

65
66 There was discussion of how the system appears to be in a state of semi-equilibrium over the last
67 20 years, with relatively stable bed elevations and conveyance capacity at flood stage fluctuating
68 within a certain range but not trending downwards or upwards. This state of the river system is
69 expected to continue assuming consistent flow characteristics and sediment supply trends and the
70 continuation of CNPPID’s dredging operations at the TCCD. Martin identified several
71 alternatives that will be modeled based on the findings of the geomorphic assessment, including
72 various permutations of channel widening, dredging, and modification of the TCCD.

73
74 **Brief Water Updates:** *Ed Weschler, Libby Casavant, and Seth Turner, EDO*

75
76 ***Platte Basin Hydrology:***

77 Weschler showed a figure of 2024 flows at Grand Island. Except for a period of excess flows in
78 early February, flows have been below the USFWS targets for most of the year. The real-time
79 hydrologic conditions for March-April and May were normal. As of April 30, very little of the
80 Platte Basin was in drought or even abnormally dry. Snowpack in the South Platte basin in
81 Colorado was generally below median until early March then increased; as of May 1 it was just
82 over 100% of median. The Upper North Platte, Laramie, and Sweetwater basins in Wyoming
83 were at or just above 100% of median as of May 1. The Lower North Platte basin in Wyoming
84 was at 60% of median.

85
86 ***Wyoming Property Flow Split:***

87 Casavant gave an overview of the project, which involves constructing a berm to restore a
88 connection between two mid-channel islands in the Platte River. The berm will be constructed
89 of sand moved from the river bed, stabilized with trees harvested on site, and seeded. The RFP
90 for construction was approved and released for bid; Whiskeyboard Construction was selected
91 and construction is getting underway. Altenhofen asked about cost for the project. Casavant
92 said the winning bid was \$76,000 but there was an \$8,000 change order related to tree harvest
93 location.

94
95 ***Leasing, Recharge, and Recapture Projects:***

96 Turner reported that there were excess flows February 2-12, with about 1,500 AF diverted into
97 Phelps County Canal. Of that, 544.6 AF was delivered to Cottonwood Ranch from February 4-
98 15. The balance of water that was left to recharge from Phelps County Canal will be split
99 between the Program (75%) and Nebraska (25%) so the Program share is estimated to be about
100 715 AF. With continuous target flow deficits at Grand Island since then, most of the Program’s
101 recapture wells have been on since mid-February. Total pumping for the 8 wells through April
102 29 was just under 1,400 AF.

103
104
105



106 ***Expanded Recapture Reconnaissance Study:***

107 Turner said there are several tasks for this study proceeding in parallel. Inter-fluve is wrapping
108 up an assessment of Plum Creek, with a final report expected any day. They completed field and
109 desktop assessments with the intent of identifying potential impacts from increased streamflows
110 from a potential gravity outlet from Elwood Reservoir. RJH is evaluating both open channel and
111 pipeline outlet options with 50 cfs and 100 cfs release capacities. LRE Water is proceeding with
112 the recapture well siting analysis including potential locations in both the Platte River floodplain
113 and areas south of the Phelps County Canal. This provides for well locations in different stream
114 depletion factor (SDF) zones and a range of net benefits that can be achieved by adding
115 additional recapture pumping capacity. LRE Water will proceed with a tradeoffs analysis,
116 looking at different combinations of Elwood outlets and recapture wells. The study is expected
117 to wrap up in late summer, with a presentation to the WAC in August and the GC in September.
118

119 ***Lake McConaughy EA Releases:***

120 Turner reported that an EA release for the spring whooping crane migration was made from
121 March 14-April 9. Total volume released was about 35,700 AF at an average rate of 667 cfs
122 (releases were 700 cfs for the first couple weeks, then increased to 950 cfs around April 1 to
123 compensate for CNPPID's pumping into Elwood Reservoir, followed by a week of drawdown).
124 100% of this EA release was routed through NPPD's Sutherland Canal system, so the North
125 Platte chokepoint was a non-factor. About 97% of the EA release reached Overton at the upper
126 end of the AHR and about 86% (30,600 AF) reached Grand Island from March 21-April 16.
127 Turner said more information about the spring EA release would be presented during the TAC
128 meeting later in the day.
129

130 USFWS, CNPPID, NPPD, NeDNR, and the EDO will soon begin coordination of the
131 germination suppression EA release. This will be the 5th year making this release, with the goal
132 of achieving 1,500 cfs at Grand Island from June 1-30. Accounting for travel time and ramping
133 rates, the release will start on or around May 24. Altenhofen asked if the germination
134 suppression releases are effective. Henry said a detailed analysis will begin soon, but that initial
135 review suggests benefits in the channels that are wet and differences in channels that receive less
136 water because of flow splits.
137

138 **CNPPID Irrigator Lease: *George Oamek, Honey Creek Resources***

139 Oamek was contracted by the EDO as a Special Advisor to update economics information and
140 assess potential alternative approaches to the CNPPID irrigator lease. Turner said that after a 5-
141 year agreement between the Program and CNPPID ended in 2023, the GC elected to extend the
142 irrigator lease by one year. The EDO is not soliciting specific recommendations from the WAC
143 at this time but wanted to start the conversation in advance of the June GC meeting. The GC will
144 need to make a decision how to proceed in September.
145

146 Oamek reviewed the history of the irrigator lease from 2015-2023. The price paid by the
147 Program dropped from \$220/acre to \$100/acre starting with the 2021 irrigation season.
148 Enrollment dropped and has remained much lower than in 2019-2020 when full enrollment of



149 3,000 acres was nearly achieved. Enrollment in 2024 is 1,053 acres, which will result in 790 AF
150 credited to the Lake McConaughy EA in October.

151
152 A workshop was held with CNPPID and irrigators on April 2 to gather feedback on the irrigator
153 lease program. The consensus among participants was that the \$100/acre price is too low to
154 compensate for lost production. Irrigators indicated that annual leases are OK and that longer-
155 term leases are less favorable because of the risk from crop price volatility. The suggestion was
156 also made to move the enrollment period from the fall to March.

157
158 Oamek noted much higher prices paid for similar lease-following programs in the Colorado
159 River Basin and in New Mexico, then reviewed alternate methods for determining an appropriate
160 price for the Program to pay for the irrigator lease including cropland rental prices and reverse
161 auctions. Based on the cropland rental market approach, there was incentive to participate in the
162 irrigator lease prior to 2021 (when the Program paid \$220/acre) but not since. Examples
163 suggested the price should be on the order of \$150-\$160/acre. There was also discussion of how
164 prices might be adjusted in the context of multi-year lease agreements. Options put forth for
165 2025 include eliminating the irrigator lease program, continuing for another year at \$100/acre,
166 continuing for another year at a higher price (criteria TBD), or extending the irrigator lease
167 program for multiple years with multi-year options for irrigators.

168
169 There was discussion of crops planted in pivot corners (corn) and how corn prices affect the
170 price irrigators are willing to accept. Altenhofen asked about the price paid for irrigator lease
171 water relative to the Program’s other surface water leases. Turner said this water is effectively
172 \$133/AF (the Program gets 0.75 AF per enrolled acre), making it the Program’s most expensive
173 and lowest yielding lease. The leases with CPNRD and NPPD pay \$90/AF and the Pathfinder
174 Municipal Account Lease is \$65/AF. Farnsworth added that even though the irrigator lease is
175 the Program’s most expensive water, it’s difficult to end it with the First Increment Water
176 Objective still not fully met.

177
178 Oamek noted in the presentation that current enrollment represents less than 5% of all irrigators
179 in the CNPPID system. Lewis asked if there is a way to communicate with and solicit info from
180 the 95% of CNPPID irrigators who are not participating in the irrigator lease. Turner said that it
181 was hoped that there would be former irrigator lease participants at the April 2 workshop but that
182 did not happen. There was some discussion of the value for irrigators to drag pipe to pivot
183 corners versus willingness to enroll more lands at higher prices.

184
185 Bradley recommended conversing with Tri-Basin NRD about a similar program they have, as the
186 Program doesn’t want to be offering competing incentives. Little said the goal has been to make
187 water use more efficient but it has been difficult to get people to sign up for Tri-Basin’s program.
188 A lot of money is needed to incentivize participation. Shaneman noted the difficulty in
189 competing with the NRCS making \$300/acre payments with 3-year agreements under EQIP.

190



191 Merrill inquired about the lease volumes associated with higher-priced lease-fallowing Programs
192 elsewhere. Brei said Middle Rio Grande Conservancy District reported about 18,000 AF over
193 several years. Merrill said he sees value in trying one more year at a higher price to see what
194 happens but given the relatively minor role that the irrigator lease is occupying in the Program
195 water portfolio, it is not useful to spend increasingly high amounts for relatively low volumes of
196 water over the long term. Farnsworth suggested there might be some utility in the reverse
197 auction approach to pricing to better understand irrigator pricing tolerances. Oamek noted that
198 even after running this irrigator lease program for an extended period, the irrigators are not fully
199 committed; it's unclear how easy it would be to restart if halted temporarily. Mosier asked about
200 the good will benefit of this program, and it was noted that the Program's up front payments help
201 to minimize how much irrigators have to borrow each year.

202
203 **Colorado Depletions Plan Updates:** *Kara Scheel, CWCB and Jon Altenhofen, Northern Water*
204 Scheel presented Colorado's annual depletions report for the North Platte Basin for 2023. The
205 analysis takes into account irrigated acres, population, and new post-1997 uses (both industrial
206 and piscatorial, wildlife, and environmental uses). Annual consumptive use was about 33,200
207 AF below the baseline of 111,785 AF. Scheel noted that the report was draft and would be
208 finalized once an updated value for the new industrial consumptive use was available.

209
210 Altenhofen presented Colorado's 2023 depletions report for the South Platte Basin, including a
211 review of assumptions and operations. Total May-June depletions at the CO-NE state line
212 attributable to population growth were 2,410 AF in 2023, with mitigation resulting from retimed
213 groundwater accretions totaling 5,549 AF. On an average annual basis since 2007, there have
214 been adequate retimed accretions (4,973 AF) to offset depletions (2,278 AF).

215
216 Altenhofen also reported on Tamarack I, which is Colorado's initial state water project
217 contribution to the Program. The South Platte Water Related Activities Program (SPWRAP) is a
218 non-profit group of water providers that collects fees to fund operation of Tamarack I and meet
219 Colorado's obligations to the Program. All 16 recharge wells at the Tamarack Wildlife Area
220 were pumped from November 2023 to March 2024 at a combined flow rate of 54 cfs. A 17th
221 well will be drilled in the next year. Total Tamarack I credits for deficit reductions at the CO-
222 NE state line were 7,483 AF in 2023 and averaged 8,171 AF for the period 2008-2023. This is
223 less than the 10,000 AF score assigned to the project based on 1947-1994 modeled hydrology but
224 acceptable under the negotiated terms of the Program.

225
226 **Federal Depletions Plan Update:** *Matt Rabbe, USFWS*
227 Rabbe reported on Federal tiered consultation activity in 2023. Seven consultations relying on
228 coverage provided by the Program were completed, of which four were in Wyoming, two in
229 Colorado, and one in Nebraska. Four of these were for actions by Federal agencies for roadway
230 maintenance and a solar well conversion. Rabbe also noted a change to the Federal depletions
231 spreadsheet included in the meeting documents: instead of USFWS preparing a spreadsheet for
232 just 2023 and then the EDO incorporating that information into a master tiered consultations
233 inventory, the master inventory was updated directly. In total from 2007-2023, there have been



234 229 tiered consultations (162 in Colorado, 23 in Nebraska, and 44 in Wyoming), of which 43
235 were for Federal depletions.

236
237 **Nebraska Depletions Plan Update:** *Jesse Bradley, NeDNR*

238 Bradley presented on Nebraska's New Depletion Plan (NNDP), which included updates on 2022
239 permitted activities, the 2023 Robust Review (previously done in 2019), and other activities.
240 The NRDs and NeDNR collectively permitted 47 groundwater transfers, 45 groundwater wells,
241 16 groundwater variances, and 9 surface water permits. These were further categorized as being
242 located upstream or within the AHR. Groundwater well permits included replacement,
243 irrigation, supplemental, dewatering, and observation wells. Eight of the surface water permits
244 were temporary permits for groundwater recharge. Nebraska's analysis shows the net effect of
245 2022 new permitted uses and mitigation measures to be positive through 2033.

246
247 Bradley discussed the various datasets that were reviewed/updated through 2020 as part of the
248 Robust Review, as well as related updates to Nebraska's groundwater modeling. The resulting
249 net impacts to streamflows above Chapman were shown to be positive through 2033 so that
250 Nebraska remains in compliance with the NNPD and Milestone 9 of the Program's Extension
251 Document. Altenhofen asked if recharge is the primary mitigation measure. Bradley said there
252 are other measures besides recharge, including groundwater allocation in the upstream NRDs,
253 the N-CORP project, and irrigation conservation measures. Analyses are completed using
254 COHYST downstream of Lake McConaughy and the Western Water Use Model (WWUM)
255 upstream of Lake McConaughy.

256
257 For other basin-wide activities, the Upper Platte River Drought Contingency Plan is anticipated
258 to be complete by December 31, 2024. The next Robust Review is planned for completion in
259 2027, and the 3rd Increment of Nebraska's Basin-Wide Plan will start in 2029.

260
261 **Wyoming Depletions Plan Update:** *George Moser, WWDO*

262 Moser presented Wyoming's depletions plan update for water year 2023. Per the requirements
263 of Baseline No. 1, Wyoming complied with the Modified North Platte Decree, with intentionally
264 irrigated acreage in the sub-basin above Guernsey Reservoir totaling 206,386 acres or about
265 19,600 acres below the 226,000-acre benchmark. Kendrick Project irrigated acres did not exceed
266 the 24,429-acre benchmark.

267
268 Baseline No. 2 accounts for irrigation, municipal, industrial, and rural domestic uses as well as
269 mitigation and post-1997 activities in six sub-basins in both the irrigation and non-irrigation
270 season. During water year 2023, the aggregate effects at the WY-NE state line were a 47,000 AF
271 underrun during the irrigation season and a 5,420 AF underrun during the non-irrigation season.

272
273 For Baseline No. 3, post-1997 storage in the South Platte Basin in Wyoming totaled 100.82 AF
274 in 2023, and increase from 80.56 AF in 2022.

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276



277 **Additional Business:** *Kara Scheel, CWCB – 2024 WAC Vice Chair*

278 The next two WAC meetings are scheduled for August 6 and October 29. Both are likely to be
279 in person meetings in Ogallala because of the expected presentations from the consultant teams
280 for the Expanded Recapture Reconnaissance Study (August) and the North Platte Chokepoint
281 Study (October). Venue(s) TBD.

282

283 **Action Items**

284

285 General WAC

- 286 • N/A

287

288 ED Office

- 289 • N/A

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