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**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM**  
**Water Advisory Committee Meeting Minutes**  
Virtual Meeting – Microsoft Teams  
August 6, 2024

<b>PRRIP Water Advisory Committee Meeting Attendees</b>		
<b>Name</b>	<b>Affiliation</b>	<b>Member or Alternate</b>
<b>Department of the Interior (DOI)</b>		
Brock Merrill	U.S. Bureau of Reclamation	Member
Matt Rabbe	U.S. Fish and Wildlife Service (USFWS)	Alternate
<b>State of Wyoming</b>		
Jeff Cowley	Wyoming State Engineer’s Office (WY SEO)	Member
George Moser	Wyoming Water Development Office (WWDO)	Alternate
Michelle Hubbard	WY SEO	
<b>State of Colorado</b>		
Kara Scheel	Colorado Water Conservation Board (CWCB)	Member 2024 WAC Vice Chair
Don Baggus	Colorado Parks and Wildlife (CPW)	
<b>State of Nebraska</b>		
Jennifer Schellpeper	Nebraska Department of Natural Resources (NeDNR)	Member
Jesse Bradley	NeDNR	Alternate
Kari Burgert	NeDNR	Alternate
Avery Dresser	NeDNR	
Ryan Kelly	NeDNR	
Caitlin Kingsley	NeDNR	
Jim Ostdiek	NeDNR	
Mike Archer	Nebraska Game and Parks Commission (NGPC)	
<b>Upper Platte Water Users</b>		
Dennis Strauch	Pathfinder Irrigation District	Member
<b>Colorado Water Users</b>		
Jon Altenhofen	Northern Water	Member
Kyle Whitaker	Northern Water	Member
Joe Frank	Lower South Platte Water Conservancy District	Alternate
Rich Belt	South Platte Water Related Activities Program	
Jason Marks	Denver Water	



PRRIP Water Advisory Committee Meeting Attendees		
<b>Downstream Water Users</b>		
Cory Steinke	Central Nebraska Public Power and Irrigation District (CNPPID)	Member 2024 WAC Chair
Brandi Flyr	Central Platte Natural Resources District (CPNRD)	Member
Jeff Shafer	Nebraska Public Power District (NPPD)	Member
Mike Drain	CNPPID	Alternate
Nick Lee	NPPD	
Nolan Little	Tri-Basin Natural Resources District (TBNRD)	
Travis Preston	North Platte Natural Resources District	
Randy Zach	NPPD	
<b>Environmental Entities</b>		
Jacob Fritton	The Nature Conservancy (TNC)	Member
Abraham Kanz	The Crane Trust	Member
Rich Walters	TNC	Alternate
<b>Executive Director’s Office (EDO)</b>		
Justin Brei	Engineering/Colorado Coordinator	
Libby Casavant	Hydraulic Engineer	
Jason Farnsworth	Executive Director	
Nicole Fijman	Geospatial Analyst	
Quinn Lewis	River Scientist	
Seth Turner	Water Plan Coordinator	
<b>Other Participants</b>		
Matt McConville	HDR	
Mark Mitisek	LRE Water	
Jon Mohr	LRE Water	

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**Welcome and Administrative:** *Cory Steinke, CWCB – 2024 WAC Vice Chair*  
Meeting participants were shown in Teams. Turner requested permission to record the meeting to assist with the minutes; there were no objections. Steinke noted issues with securing a venue for an in person meeting. Turner said the EDO elected to have a virtual-only meeting so that everyone would be in the same virtual space rather than split between in person and virtual. It was hoped this would facilitate better discussion of the Expanded Recapture Reconnaissance Study to be presented by LRE Water.

Turner noted a change in the order of presentation for the Brief Water Updates (Wyoming Property flow split would be first) and that he planned to include an overview of 2022-2023 Program water projects accounting following the discussion of recent water projects operations. Turner also said a break would likely be added after the LRE Water presentation and discussion.

Two versions of the February 2024 WAC meeting minutes were put forth for consideration, the original March 6 version prior to any committee edits (document 1a) and a May 14 version incorporating changes proposed during the May 2024 WAC meeting (document 1b). The latter



23 version moved the entire Perkins County Canal discussion to the end of the minutes with  
24 language added to state that there were committee disagreements over content and therefore that  
25 section would not be considered part of the formal meeting minutes. Committee members  
26 continued to voice various concerns and perspectives on what should and should not be included  
27 in meeting minutes. Several people noted that minutes should just be a record of what was said,  
28 regardless of whether there is agreement on those statements. Scheel made a motion to approve  
29 the May 14 (document 1b) version, second by Marks. No objections, February minutes  
30 approved.

31  
32 There were no edits to the original draft of the May 2024 WAC meeting minutes. Flyr made a  
33 motion to approve, second by Strauch. No objections, May minutes approved.

34  
35 **Expanded Recapture Reconnaissance Study:** *Jonathan Mohr and Mark Mitisek, LRE Water*  
36 To provide context for this study, Turner explained that the Program has 3 recharge projects in  
37 the CNPPID system: Phelps County Canal, Elwood Reservoir, and Cottonwood Ranch. Absent  
38 controllable elements, these projects are inefficient at reducing deficits to target flows at Grand  
39 Island because roughly half of the accretions (return flows) occur during periods of excess.  
40 Recapture wells can accelerate the return of water to the river and pump specifically during  
41 periods of shortage when the water is needed in the river. The Program has 8 existing recapture  
42 wells, including the Cook well that was installed in 2016 and 7 newer wells near Cottonwood  
43 Ranch. The Program has an agreement with Tri-Basin NRD for the operation and maintenance  
44 of these wells. Additionally, the Program has agreements with CNPPID and has pre-paid for  
45 more than 200,000 AF of excess flow diversions into the 3 recharge projects.<sup>1</sup> The team led by  
46 LRE Water has been working on the Expanded Recapture Reconnaissance Study for the last year  
47 to find ways to optimize the benefit that the Program can generate for the Platte River through  
48 these projects. Turner added that the NeDNR contributed funding to the study, so the analyses  
49 also included potential recapture well options for the State of Nebraska.

50  
51 Mohr and Mitisek of LRE Water presented on the study. Their team also includes Inter-fluve  
52 and RJH. Key elements of the study include an assessment of conveyance capacity in Plum  
53 Creek and potential mitigation required to accommodate higher flows; evaluation of gravity  
54 outlet options to convey water from Elwood Reservoir to Plum Creek; potential siting and  
55 quantities of new recapture wells; and tradeoffs between Elwood outlet concepts and additional  
56 recapture wells to maximize the potential score in terms of reductions to target flow deficits at  
57 Grand Island. Mohr recapped specific questions the study sought to address for the Program and  
58 for NeDNR.

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<sup>1</sup> In Water Service Agreement (WSA) between the Program and CNPPID dated December 7, 2022, the Program prepaid \$9,154,956.24 for excess flow diversions totaling 50,000 AF into Phelps County Canal at \$35.92/AF and 134,927.7 AF into Elwood Reservoir at \$54.54/AF. The initial term of the agreement is through December 31, 2032 but can be extended through successive one-year agreements for up to another 10 years or until the full volume of water is delivered (whichever is sooner). There is a separate WSA concerning excess flow deliveries to Cottonwood Ranch, with an estimated 28,000 AF to be delivered based on the remaining pipeline cost balance and a term through December 31, 2032.

59 *Plum Creek*

60

61 The Plum Creek assessment was completed by Inter-fluve and included analysis of gage data,  
62 field surveys, 1D HEC-RAS modeling, risk assessment, and planning level costs. Inter-fluve  
63 surveyed more than 40 cross-sections across 4 representative reaches of Plum Creek. Baseflow  
64 in Plum Creek was determined to be about 12 cfs and the ordinary high water line is at about 50  
65 cfs. The risk of impacts such as bank sloughing and erosion increases with duration and  
66 magnitude of flow, particularly above 100 cfs. Inter-fluve estimated mitigation costs for the  
67 surveyed sub-reaches based on proposed Elwood outlet capacities of 50 cfs or 100 cfs and  
68 extrapolated to the more than 28 miles of creek between Elwood Reservoir and the Platte River.  
69 At least 2 public and 11 private stream crossings would need to be upgraded to accommodate  
70 additional flows for the Program.

71

72 *Elwood Outlet*

73

74 RJH developed both open channel and pipeline alternatives for the Elwood Reservoir gravity  
75 outlet. At the request of the EDO, these were designed to convey either 50 cfs or 100 cfs. The  
76 presentation and Executive Summary memo provided to the WAC include maps showing the  
77 proposed outlet alignments. The open channel option would utilize the existing 42-inch  
78 emergency evacuation pipeline from Elwood Reservoir and discharge to a 5,900 ft riprap lined  
79 channel through a natural drainage to a culvert crossing at Hwy 283. This may require 404  
80 permitting and would potentially impact 3 private property owners.

81

82 The pipeline option would involve construction of a new control structure and turnout in the  
83 existing E65 Canal between the pump station and the outlet of siphon 3. From the turnout, a  
84 4,500 ft pipeline would convey water to the culvert crossing at Hwy 83. RJH estimated costs for  
85 both steel and PVC pipe, both of which are more expensive than the open channel option. There  
86 are 2 private property owners along the proposed pipeline alignment. Conveyance of Program  
87 water to the pipeline turnout via the E65 Canal could be a potential issue during periods of high  
88 irrigation demand.

89

90 The current outlet designs are considered feasibility-level and cost estimates include 30%  
91 contingency (excluding permitting, land, O&M, and conveyance from the Hwy 83 culvert to  
92 Plum Creek). Costs range from \$2.8 million for a 50 cfs open channel to nearly \$9.5 million for  
93 a 100 cfs steel pipe.

94

95 *Recapture Wells*

96

97 Mitisek described the various elements of the recapture well assessment, which included  
98 completion of hydrogeologic cross-sections; evaluation of the potential to utilize natural  
99 conveyance or drains to return water to the river; defining recapture zones and conceptual  
100 recapture well areas based on COHYST stream-depletion factor (SDF) zones and proximity to  
101 the Platte River (maps were included in the presentation and memo); determination of well and



102 pipeline capacities and infrastructure requirements; and estimation of costs. In general, wells  
103 close to the river are shallower, require less conveyance, and are therefore less expensive. Wells  
104 more distant from the river are deeper, have greater conveyance requirements, and are more  
105 expensive. However because of the timing of depletive effects from recapture well pumping,  
106 wells closer to the river produce less net benefit (i.e., score) than those wells farther away.

107

### 108 *Trade-Offs and Cost Estimates*

109

110 For the trade-off analysis, LRE Water developed a GoldSim model that closely replicated the  
111 EDO's spreadsheet score models. There are 3 main components of the GoldSim model: an  
112 Elwood storage balance (inflows from excesses, outflows as seepage or gravity release) with  
113 separate accounts for the Program and NeDNR; an aquifer storage balance (inflows from  
114 recharge, outflows as accretions or recapture pumping); and a score model that routes net river  
115 returns to Grand Island to determine reductions to target flow deficits. The model uses the  
116 Program's actual recharge/recapture data through 2023 to define antecedent conditions, includes  
117 the standard 1947-1994 model period used for score analyses, and adds the 1995-2023 period to  
118 get an idea of project performance under more recent hydrology. For the Program, the GoldSim  
119 model was used to simulate a baseline scenario (existing recharge/recapture operations), 3  
120 scenarios with no Elwood outlet and new recapture wells in different zones, and both 50 cfs and  
121 100 cfs gravity outlets from Elwood Reservoir with no new recapture wells. Model runs for  
122 NeDNR included a recharge-only baseline and 3 recapture well scenarios.

123

124 The Program's baseline score of 6,800 AF includes Phelps recharge (approved 2,700 AF),  
125 Elwood Recharge (approved 2,800 AF), and the 8 existing recapture wells (estimated 1,300 AF).  
126 Incremental scores of a new Elwood outlet or additional recapture wells were estimated by  
127 subtracting 6,800 AF from a new total score with existing and proposed recharge/recapture  
128 projects. For the Program, a 100 cfs gravity outlet with existing recapture wells results in the  
129 highest incremental score increase (5,009 AF based on the 1947-1994 period). For both the  
130 Program and NeDNR, new recapture wells in Zone 3 south of Phelps County Canal would  
131 generate the highest incremental score increase.

132

133 The cost analysis considered both initial capital costs and 50-year lifecycle O&M costs. Total  
134 costs were calculated and divided by 50-year deficit reductions to estimate unit costs per AF of  
135 score. The 50 cfs Elwood outlet has unit costs as low as \$33/AF for the open channel option.  
136 Total 50-year life cycle cost for this scenario was estimated at around \$7.4 million. The lowest  
137 unit cost for recapture wells would be in Zone 3, ranging from \$141/AF to \$167/AF depending  
138 on conveyance pipeline material (PVC or steel). Life cycle costs exceed \$25 million. Wells  
139 closer to the river have lower life cycle costs but higher unit costs due to reduced net benefits to  
140 the river in terms of deficit reductions.

141

142 The presentation concluded by summarizing responses to the key questions that were identified  
143 at the start (see presentation and Executive Summary memo, both available on the meeting



144 website). LRE Water also identified a few important considerations for potential future phases  
145 of this study.

146  
147 *WAC Discussion*

148  
149 Turner said the EDO is looking for direction on what to do next. The presentation was a  
150 summary of what was evaluated and potential infrastructure projects to consider. Substantial  
151 infrastructure costs are involved, is this something to pursue further? The EDO is not seeking a  
152 specific motion from the WAC, but feedback is needed to inform discussion with the GC in  
153 September. The Executive Summary memo provided to the WAC will be expanded to a full  
154 report over the next month, with expected distribution prior to discussion at the September GC  
155 meeting.

156  
157 Rabbe asked for clarification regarding controllable project elements. Turner said the idea  
158 behind the gravity outlet or recapture wells is that they are entirely controllable and can be  
159 operated when needed to reduce deficits. A gravity outlet from Elwood would release 50 cfs or  
160 100 cfs to the Platte River via Plum Creek. With 8 existing recapture wells running, the Program  
161 can deliver 10-12 cfs to the river, so adding 6 more wells might get us near 20 cfs.

162  
163 Steinke noted that with the proposed new E65 gravity inlet to Elwood Reservoir, there would be  
164 less need for CNPPID to hold water in storage for irrigation. That would free up space for  
165 storage of excess flows and allow the Program to better capitalize on big flow events. Steinke  
166 later added that he is 90% sure CNPPID will proceed with construction of the new inlet, and that  
167 will allow more efficient operation of Elwood for the Program. Mitisek said that having a  
168 gravity outlet reduces the need for Program recapture wells because the volume of ongoing  
169 recharge (as Elwood seepage) is reduced.

170  
171 Strauch suggested that the unit costs per AF should include the initial costs of excess flow  
172 diversions for comparison to other water projects. Turner agreed that should be considered and  
173 confirmed that the unit costs shown by LRE Water in the presentation and memo account for the  
174 capital costs of new infrastructure, 50-year life cycle O&M costs, and 50-year score contribution.  
175 Farnsworth later added that since the Program has already pre-paid CNPPID for a large volume  
176 of excess flow diversions, caution would need to be taken to make sure those costs are  
177 incorporated in a useful way.

178  
179 Altenhofen asked if there would be competition between projects for excess flow deliveries.  
180 Turner said the modeling for this study, which was based on the original Elwood recharge score  
181 model, includes partitioning of available excess flows so that all recharge projects within the  
182 CNPPID system can receive water. This partitioning was based on examples included in the  
183 Cottonwood Ranch water service agreement.

184  
185 Drain asked if the scoring subcommittee would be convened to review the analyses, or if the GC  
186 would just use the scores as currently presented. Turner said these reconnaissance-level analyses



187 will need to be refined before presenting to the scoring subcommittee for formal review, and that  
188 is not expected soon. In response to a question from Altenhofen, Turner reiterated that the score  
189 estimates developed by LRE Water represent the potential incremental gain above the 6,800 AF  
190 baseline score for the existing recharge/recapture projects that would be integrated with an  
191 Expanded Recapture project. That includes 2,700 AF for Phelps recharge, 2,800 AF for Elwood  
192 recharge, and 1,300 AF for the 8 existing recapture wells based on 160 AF score for the Cook  
193 well extrapolated to 8 similar wells.

194  
195 There was some additional discussion of the unit costs per AF of score increase. Farnsworth  
196 stated the intent to pursue a project such as this during the Extension as part of ongoing efforts to  
197 achieve the First Increment Water Objective (120,000 AF per year average reduction to target  
198 flow deficits at Grand Island). Altenhofen asked if this would fit within the existing Water Plan  
199 budget or if other items would need to be trimmed. Farnsworth said it likely fits in the budget  
200 and has been contemplated as part of the Water Action Plan, but it would also depend on the  
201 final mix of Elwood outlet and/or recapture wells.

202  
203 Steinke made additional points about the advantages an Elwood outlet would provide for the  
204 Program because of operational flexibility and quicker timing for making releases back to the  
205 river during shortages then refilling the reservoir during excesses. There was a question about  
206 the effects of different operations by the Program and NeDNR. Turner said that all inflows of  
207 excesses were split 50/50 in the model. The availability of excess flows (capped at 30,000 AF  
208 annually) and finite capacity of the reservoir (around 37,800 AF) were more significant limiting  
209 factors than operational differences. The Program would be able to make gravity outlet releases  
210 until the reservoir reached dead pool level (about 12,000 AF), below which any remaining  
211 Program water could continue to seep from the reservoir as groundwater recharge.

212  
213 The discussion turned to Plum Creek and Inter-fluve's conclusion of limited erosive impacts  
214 from 50 cfs releases. Mitisek again noted the significance of the frequency and duration of flow  
215 releases in terms of causing potential channel impacts. Turner emphasized that for this  
216 reconnaissance-level study, the objective was to get a sense of whether it was even reasonable to  
217 consider using Plum Creek for conveyance from Elwood Reservoir to the Platte River and to get  
218 insights as to what should be studied in greater depth. If the GC recommends moving forward  
219 with this project concept, it is expected that the next phase would include a more refined study of  
220 Plum Creek.

221  
222 Further discussion returned to the low unit costs, particular for the Elwood outlet options, the  
223 importance of controllable water, and the ability to much more efficiently convert divertible  
224 excess flows into deficit reductions during shortages at Grand Island. Farnsworth noted that  
225 making a formal or informal recommendation or otherwise advising the GC about this project  
226 was at the discretion of the WAC. Several committee members made or agreed with  
227 recommendations to move forward with a similar presentation to the GC in September.

228  
229



230 **Brief Water Updates:** *Libby Casavant and Seth Turner, EDO*

231

232 ***Wyoming Property Flow Split:***

233 Casavant presented a recap of the purpose and history of this project on Program land  
234 downstream of Kearney. Around 2019, a narrow strip of land separating the middle and north  
235 channels of the Platte River washed out. This resulted in a loss of flow from the middle channel  
236 to the north channel and a decrease in flows through Rowe Sanctuary, particularly during dry  
237 periods. The project purpose was to restore the separation between channels.

238

239 A wetland delineation was completed in August 2023, followed by issuance of a permit in March  
240 2024, bid selection in April 2024, and construction in May-June 2024. The winning bid was less  
241 than the engineer's estimate. Casavant showed several photos of the construction progress. A  
242 berm was built using sand from the river channel, stabilized with trees and rootwads. Trees were  
243 sourced from the west end of the Wyoming Property at the request of a neighbor; this was a  
244 different location than shown on the original design plans. Seeding of the berm is expected to be  
245 completed during wetter conditions in winter 2024. Analyses indicate that middle channel flow  
246 through Rowe Sanctuary should be about 35% higher than without the restored berm.

247

248 ***Platte Basin Hydrology:***

249 Turner presented a year-to-date flow summary for the Grand Island gage, which has been below  
250 the USFWS target flows for most of the year except for brief periods of excess flows in early  
251 February and early July. The real-time hydrologic condition was normal from January through  
252 July but switched to dry for the August-September period. This was despite 4-7 inches of  
253 rainfall in July across much of the central Platte valley from west of Lexington to east of Grand  
254 Island. The on-site weather station at the Program's Cottonwood Ranch property recorded more  
255 than 9 inches of rain from July 1-16. Overall the prevalence of abnormally dry to severe drought  
256 conditions across the Platte Basin increased from April 30 to July 30. Although much of central  
257 Nebraska remains largely drought-free, drought has expanded across far western Nebraska,  
258 southeastern Wyoming, and along the Front Range of Colorado. Some of the driest areas in  
259 northern Colorado experienced recent wildfires.

260

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

262 The Program was able to take deliveries of excess flows totaling about 250 AF at Cottonwood  
263 Ranch from July 2-7, bringing total 2024 deliveries to nearly 800 AF. Storm-related damages  
264 knocked out the controls for the north outlet valve, and repairs are in progress. Most of the  
265 recapture wells ran from mid-February to early July, with 2024 cumulative pumping now at  
266 2,440 AF. The GC once again approved 1-year lease agreements with CPNRD (max 15,000 AF)  
267 and NPPD (max 3,306 AF) at \$90/AF. The GC is expected to discuss approaches to longer-term  
268 agreements in September. Both the Pathfinder Municipal Account and Pathfinder Environmental  
269 Account filled in early June. The Program is leasing 9,600 AF from the Municipal Account at  
270 \$65/AF and will receive all remaining EA water after deducting summer evaporation losses.  
271 Deliveries of water from Pathfinder to Lake McConaughy are expected in September.

272





273 ***2022-2023 Water Projects Accounting:***

274 Turner explained the purpose of Program water projects accounting and how it differs from  
275 scoring. Accounting is an assessment of deficit reductions at Grand Island based on real  
276 operations data; doing so is specified in the Program Document. Accounting for 2007-2018 was  
277 first completed in 2019, followed by updates in November 2021 to include 2019-2020 and in  
278 February 2023 to include 2021 operations. New updates for 2022-2023 include Lake  
279 McConaughy EA accruals and releases and integrated accounting of Phelps recharge, Elwood  
280 recharge, and the Program's 8 existing recapture wells. At this time, the Program has no means  
281 of evaluating accretions from NPPD recharge (252 AF in 2023) and Cottonwood Ranch recharge  
282 (2,750 AF in 2022-2023).

283

284 The Program has 7 sources of water that contribute to the Lake McConaughy EA: 10% of  
285 October-April Storable Natural Inflows (SNI, an in-kind contribution from the State of  
286 Nebraska), the Pathfinder EA (in-kind contribution from the State of Wyoming), No-Cost Net  
287 Controllable Conserved Water (314 AF annually), the Pathfinder Municipal Account Lease,  
288 CNPPID irrigator lease, and CPNRD and NPPD surface water leases. Contributions totaled  
289 about 76,700 AF in 2022 and 92,200 AF in 2023, with the largest volumes by far coming from  
290 SNI and the Pathfinder EA.

291

292 Releases from the Lake McConaughy EA totaled 79,359 AF in 2022 and 49,870 AF in 2023;  
293 both releases were made for germination suppression. Deficit reductions from EA releases are  
294 calculated but are ultimately incidental to the scientific or species-related purpose of the release.  
295 Calculated deficit reductions at Grand Island were much smaller than the volume of EA water  
296 released in both years because the target flow for germination suppression (1,500 cfs) was much  
297 higher than the USFWS target flows at the time (800 cfs because of dry real-time hydrologic  
298 conditions). Only the EA water up to the 800 cfs target flow counted as deficit reduction.  
299 Altenhofen emphasized this point that the EA is operated for specific purposes that are different  
300 from the way it was evaluated during the development of the Program (i.e., for deficit  
301 reductions) but that doesn't mean anything needs to change. Turner added that with a 3,400 cfs  
302 target flow at Grand Island during the first 3 weeks of June, much more of this year's EA release  
303 will count as deficit reductions.

304

305 For the first time, the EDO completed a fully-integrated accounting of the Phelps and Elwood  
306 recharge projects and the 8 existing recapture wells. All are located within the CNPPID system  
307 south of the Platte River. Diversions of excess flows into both projects were limited in 2022-  
308 2023 due to both hydrology (limited excess flows, including for only about 48 hours in 2022)  
309 and operational factors (ongoing design and construction of a seepage control system at Elwood  
310 Reservoir). The Program added 7 new recapture wells in the spring of 2022, and all 8 wells were  
311 pumped extensively due to dry conditions and persistent shortages throughout 2022-2023.

312

313 Total invoiced diversions for the two recharge projects totaled 101,300 AF through 2023, with  
314 recharge totaling 97,200 AF. The total volume of recapture pumping since the Cook well was  
315 installed in 2016 is 6,140 AF, with more than 80% of that occurring during 2022-2023. Total



316 river returns from both recharge accretions and recapture pumping were about 52,000 AF  
317 through 2023, leaving the Program with about 45,200 AF of intentionally recharge groundwater  
318 still in the aquifer as of December 31, 2023. Despite this volume remaining in the aquifer,  
319 accretion rates from the recharge projects have declined in recent years as the volume of new  
320 recharge has declined. The Program’s pool of excess flow water stored in Elwood Reservoir was  
321 1,440 AF as of the end of 2023 and is likely zero as of August 2024 with no new diversions this  
322 year. Given the close proximity of the Program’s recapture wells to the Platte River, the net  
323 benefit of water added to the river is only 1,989 AF from 6,140 AF of pumping.

324

325 ***North Platte Chokepoint Study:***

326 The Chokepoint geomorphology report was distributed to the WAC and the North Platte  
327 Chokepoint Planning Workgroup in early June. Comments received by the EDO were returned  
328 to the project team to address and finalize the report. The EDO has also developed a  
329 supplemental memo supporting the conclusions of the geomorphology study.

330

331 Alternatives analysis is underway, with a conceptual design and cost assessment for a bypass  
332 canal concept nearly complete. The team led by Anderson Consulting Engineers is working on  
333 1D hydraulic and sediment transport modeling of several in-channel alternatives, including a no  
334 action scenario, dredging, and modification of the Tri-County Diversion Dam. At least 1  
335 alternative will be evaluated further with more refined 2D modeling. A permitting assessment  
336 focused on potential impacts to wetlands is also in progress. Altenhofen asked whether a South  
337 Platte storage alternative will be concluded. Turner said it’s been discussed and will be included  
338 in the report, but the concept is not expected to move forward.

339

340 The alternatives report is expected to be distributed prior to the WAC meeting, followed by a  
341 modeling report in November or December. The Anderson team will present the alternatives  
342 analysis to the WAC in October and the GC in December.

343

344 **EA Release for Germination Suppression:** *Seth Turner, EDO*

345 This year was the 5<sup>th</sup> consecutive year for a release from the Lake McConaughy EA for  
346 germination suppression, with the goal of achieving 1,500 cfs at Grand Island for 30 days from  
347 June 1-30. The release was made from May 22-June 23 and totaled 77,950 AF at an average  
348 release rate of 1,191 cfs including ramp up/down. The EA release was held at 1,300 cfs for 23  
349 straight days in June. Average flow at Grand Island for June 1-30 was just under 1,800 cfs  
350 (USGS keeps making slight adjustments to the provisional data), with about 28 days exceeding  
351 1,500 cfs. Turner showed comparative plots of the 2022, 2023, and 2024 EA releases for  
352 germination suppression to emphasize how different the hydrology has been from year to year.

353

354 Turner also showed a figure to illustrate the routing of EA water through the Sutherland Canal  
355 versus down the North Platte River during the EA release. Overall, less than 20% of this year’s  
356 EA release for germination suppression was released down the North Platte River (and through  
357 the North Platte Chokepoint). During the extended period of 1,300 cfs release, 1,150 cfs was  
358 routed through the Sutherland Canal with only 150 cfs going to the North Platte River. For this



359 EA release, the North Platte Chokepoint was a non-factor. In 5 years of germination suppression  
360 releases between late May and early July, there have been only about 10 days (all in 2022) in  
361 which the North Platte Chokepoint has been a constraint on the EA release. Altenhofen asked if  
362 this means the Chokepoint may not be an issue for germination suppression in the future. Turner  
363 said Chokepoint constraints on the EA release have been limited to date. Rabbe said his  
364 perspective is that the historical record indicates that the Chokepoint is a big issue and will  
365 remain that way because the most capacity is needed during drier times.

366  
367 Turner thanked USFWS, CNPPID, NPPD, and NeDNR for their help in coordinating and  
368 managing another successful EA release for germination suppression.

369  
370 **Elwood Reservoir Seepage Repair Update:** *Cory Steinke, CNPPID*

371 Steinke said the seepage project is about 75% complete, with some weighted filter blankets still  
372 to be installed over the next few weeks. Substantial completion of the project is to be on  
373 September 14, with a final walk-through on October 1. At this point in the process, limitations  
374 on Elwood operations are probably gone if there were to be excess flows available.

375  
376 **Additional Business:** *Kara Scheel, CWCB – 2024 WAC Vice Chair*

377 The next WAC meeting will be on October 29. A presentation on the North Platte Chokepoint  
378 Study alternatives analysis and modeling is planned, so this meeting will most likely be in person  
379 at the Lake McConaughy Visitor Center. Details will be confirmed as the meeting approaches.

380  
381 **Action Items**

382  
383 General WAC

- 384 • N/A

385  
386 ED Office

- 387 • N/A

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