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PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM Water Advisory Committee Meeting Minutes

Virtual Meeting – Microsoft Teams February 1, 2022

Meeting Attendees

Water Advisory Committee (WAC)

State of Colorado Michael Hein Amy Ostdiek Kelly Romero-Heaney Brent Schantz

State of Wyoming

Jeff Cowley – Alternate Michelle Gess

State of Nebraska

Jennifer Schellpeper – Member Jesse Bradley – Alternate Kari Burgert – Alternate Justin Ahern Jeremy Gehle

U.S. Fish and Wildlife Service

Jeff Runge – Member Mark Porath – Alternate Matt Rabbe – Alternate

U.S. Bureau of Reclamation

Brock Merrill – Member

Downstream Water Users

Cory Steinke – Chair Brandi Flyr – Member Jeff Shafer – Member Mike Drain – Alternate Scott Dicke John Shadle Tyler Thulin Randy Zach

Water Advisory Committee (WAC)

Colorado Water Users Jon Altenhofen – Member Joe Frank – Alternate Luke Shawcross – Alternate Nathan Baker Jason Marks John Rusch Kyle Whitaker

Upper Platte Water Users

Dennis Strauch – Member

Environmental Groups

Jacob Fritton – Member Melissa Mosier – Member Andrew Caven – Alternate Rich Walters – Alternate Michelle Koch

Executive Director's Office

Jason Farnsworth, ED Justin Brei Kristen Cognac Julia Grabowski Malinda Henry Chad Smith Tim Tunnell Seth Turner Ed Weschler

Contractors/Interested Parties

Ryan Donovan Beth Eckles Katie Leone Matt Lindburg Renata Rimsaite Kara Sobieski Julianne Woldridge



- 9 Welcome and Administrative: Cory Steinke, WAC Chair
- 10 Meeting attendees were identified from Microsoft Teams. There were no agenda modifications.
- 11 Minor edits to the draft October meeting minutes were noted. Shafer made a motion to approve
- 12 the minutes, second by Altenhofen. There were no objections, and the October WAC meeting
- 13 minutes were approved.
- 14

15 **Perkins County Canal Project:** Jesse Bradley, Nebraska DNR

- 16 Bradley provided an overview of the 1923 South Platte Compact. This Compact applies
- 17 downstream of the western boundary of Washington County, CO, where it crosses the South
- 18 Platte River. In the Compact, this is referred to as the "Lower Section." In Colorado today, this
- 19 is administrative Water District 64. The Compact allows Nebraska two water rights: (1) 120 cfs
- 20 during the irrigation season (from 4/1 to 10/15) with 1897 priority to meet the demands of the
- 21 Western Canal, which diverts just east of the CO-NE state line, and (2) 500 cfs during the non-
- 22 irrigation season (10/15-4/1) with a 1921 priority for a proposed Perkins County Canal (aka
- 23 South Divide Canal) that would divert in Colorado for use in Nebraska. If a call is placed to
- 24 fulfill either of these rights, it only applies to junior rights in the Lower Section. Some
- 25 construction of the canal was done prior to World War I (and prior to the South Platte Compact)
- and some remnants still remain, but the canal was never completed.
- 27

28 On January 10, the Governor and Attorney General of Nebraska held a press conference

- announcing the intent to construct the Perkins County Canal. They are working through the
- 30 Nebraska legislature to secure funding and agency authority to proceed with the project. Bradley
- 31 noted that this is just step one in a thousand-mile journey. Nebraska is thinking of ways for the
- 32 project to be supportive of PRRIP goals, not inhibitive. The Nebraska New Depletions Plan
- 33 (NNDP) limits depletions to 1997 levels, and state law does the same. At this point, no specific
- 34 technical or legal analyses have been conducted. The project proposal was sparked by concern
- 35 that Nebraska needs to protect its South Platte rights as Colorado continues to develop water
- 36 upstream.
- 37

38 The proposed canal would divert from the South Platte River near Ovid, CO and may convey

- 39 water to one or two new reservoirs in Nebraska. Nebraska intends to work closely with other
- 40 water users in the Platte Basin. The project would not be used as a means to expand irrigation
- 41 but may serve existing irrigation through exchanges; specific details are all still to be determined.
- 42 The intent would be to preserve and protect operations that are already there.
- 43
- 44 Bradley noted that there was a U.S. Bureau of Reclamation study in the early 1980s that
- 45 provided general cost estimates for a similar project. Altenhofen asked if it was possible to get a
- 46 copy of that study to post on the website for WAC members, Bradley said he'd check on it.
- 47 Altenhofen also asked about the timeline for adding more definition, technical information, etc.
- 48 Bradley said this project will take a long time, several years to more than a decade. The first step
- 49 is to get the necessary appropriations and authority to move forward, then look at design,
- 50 permitting, and other aspects. Altenhofen noted that there are some old documents that describe
- 51 the canal as perhaps supplying the Republican Basin. Bradley reiterated the intent to preserve



- 52 and protect uses in the Platte Basin, and that the water would be used there (thus the name being
- 53 used for the canal is a bit of a misnomer, as the canal wouldn't necessarily deliver water to
- 54 Perkins County, NE).
- 55
- 56 Runge noted the potential 7- to 10-year time frame and asked if this would factor into
- 57 discussions for a potential Second Increment for the Program. Bradley said it's possible the
- 58 project could move in that direction, it could be implemented in phases with potential elements
- 59 that could address issues for the Program (such as North Platte chokepoint capacity). It will take
- 60 a larger institutional push by entities in Nebraska to move this project forward. Runge asked if
- 61 reservoirs would be integrated from the start or added on later. Bradley said the project would
- 62 likely include some water storage component, whether than means additional new storage or
- 63 expansion of existing storage is unknown.
- 64

65 **WAP Projects and Other Brief Water Updates:** Seth Turner, EDO

66

67 Leasing and Recharge Projects:

- 68 Turner noted a few recent project operations numbers: 688 AF was diverted into Phelps County
- 69 Canal in December. The Cook well pumped about 324 AF from August 25-December 17. Total
- pumping in 2021 was 541 AF. Enrollment in the CNPPID irrigator lease is 1,157 acres for 2022,
- 71 up from 1,030 AF in 2021. Runge asked about using EA water versus excess flows for recent
- 72 recharge. Turner said all recharge diversions into Phelps in December were excess flows;
- although there was discussion last year of using EA water for recharge at Cottonwood Ranch,
 this was not done. Farnsworth said there was a preference for not reallocating EA water to other
- this was not done. Farnsworth said there was a preference for not reallocating EA water to other projects. Turner added that EA water would only be used at Cottonwood Ranch if excess flows
- 75 projects. Turner added that EA water would only be used at Cottonwood Ranch if excess nows 76 are not available in the spring and water is needed for infrastructure testing and/or operations
- 77 training.
- 78

79 Platte Basin Hydrology Update:

- 80 Excess flows were available December 6-13. The real-time hydrologic condition for December-
- 81 February is normal, and target flows increased from 1,000 cfs to 1,800 cfs on February 1. The
- 82 annual hydrologic condition for 2021 was normal, based on annual flow volume of 813,575 cfs
- 83 and average flow of 1,124 cfs. Altenhofen asked about the volume of excess flow in 2021,
- 84 Turner said that could be calculated and provided later.
- 85
- 86 Drought conditions across much of the Platte Basin have generally worsened since late October.
- 87 Storage in Lake McConaughy was at 64.6% of capacity on January 31; present EA volume was
- 88 unknown, as it has not been formally updated since October. The USFWS finalized the EA
- 89 Annual Operations Plan for WY2022 in late December. The highest priority release planned for
- 2022 is for germination suppression between June 1 and July 15. Storage in the Pathfinder EA
- 91 was 3,465 AF on January 29, and the Municipal Account held 13,018 AF. South Platte Basin
- 92 snowpack in Colorado was tracking at or below median early in the season but increased sharply
- 93 in late December and early January. North Platte Basin snowpack in Wyoming was at or above



- 94 median in the upper North Platte and Sweetwater at the end of January, but well below median
- 95 downstream of Pathfinder Reservoir.
- 96

97 North Platte Chokepoint Update:

- 98 The EDO is developing plans for disking the same areas that were sprayed in fall 2021. The
- 99 includes about 43 acres along riverbanks, island perimeters, and side channels. Landowner
- 100 permissions for access and disking need to be obtained, and an RFQ will be released to solicit
- 101 contractors. This work needs to be accomplished before irrigation water deliveries ramp up.
- 102 The EDO is also conducting preliminary investigations into the bypass canal concept. This 103 includes modeling EA releases with a modified flow routing tool as an input to channel width
- 104 modeling. More information will be presented at the Science Plan Reporting Session and the
- 105 March GC meeting. Altenhofen asked about using NPPD's Sutherland system for bypass.
- 106 Turner said the EDO had a preliminary conversation with NPPD. There is no consistent surplus
- 107 capacity in the system, and any available capacity depends on the hydrology of a given year. In
- addition, enlarging or running parallel to the Sutherland Canal to Paxton would be about 20
- 109 miles, compared to about 5.5 miles for the alternative parallel to PVID/North Platte Canal.
- 110

111 *Permitting Services RFP*:

- 112 An RFP to solicit proposals for 2022-2025 permitting services for the Program was released
- 113 January 5, and a pre-proposal meeting was held on January 19. Proposals are due to Turner on
- 114 February 2 at noon central time. The GC appointed a selection panel in December. Contractor
- selection will be based only on proposals, no interviews, and the selection panel is expected to
- 116 have a recommendation for approval at the March GC meeting. Altenhofen asked what types of
- 117 permitting. Turner said federal Section 404, state, and local permits as needed for activities such
- 118 as construction of Water Action Plan projects, habitat projects, and sediment augmentation.
- 119 Permitting activities can also include wetland delineations, determining if nationwide permits are
- 120 applicable, and so forth.
- 121

122 Revised Colorado North Platte Basin Depletions Update:

- 123 Colorado submitted a revised North Platte Basin Depletions Update in November. Irrigated
- acreage in the basin was reduced for 2020, which reduced the irrigation consumptive use (CU)
- 125 and increased the CU underrun relative to baseline conditions.
- 126

127 <u>CNPPID Elwood Project:</u> Tyler Thulin, CNPPID

- 128 Thulin provided an overview of two projects at CNPPID's Elwood Reservoir. Elwood Reservoir
- 129 was constructed in the mid- to late-1970s to provide supplemental irrigation supply when
- demands in the E65 system exceed the capacity of upstream siphons. In recent years, the
- 131 average water surface elevation in Elwood has been at higher levels due to use of the reservoir
- 132 for recharge. Significant seepage was observed below the Pump Station Dam in 2019.
- 133 Consultant RJH was hired to investigate and determined that there was potentially unsafe
- seepage at both the pump station and main dams when the water surface elevation is above 2597
- 135 ft (10 ft below normal max of 2607 ft). The design of seepage management systems below the
- 136 dams is 95% completed and was submitted to the state (Nebraska) for review. Construction is



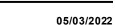
- estimated to cost \$4.2 million and is expected to be completed in 2022 and 2023. Altenhofen
- asked what type of repairs will be made. Thulin said wells to lower groundwater levels, toe
- drains, and weighted filter blankets will be included. Cowley asked what will happen to the collected seepage water from the wells and drains. Thulin said it will go back to Plum Creek
- collected seepage water from the wells and drains. Thulin said it will go back to Plum Creek.
 Runge asked if Tri-Basin NRD is using Elwood for recharge. Steinke said 50% goes to the
- 142 Program and 50% is split between Tri-Basin and the state.
- 143
- 144 The other project is a new E65 canal and siphon to convey water into the north end of Elwood
- Reservoir by gravity rather than pumping. The existing E65 canal has three siphons with 350 cfs capacity, but irrigation demands can sometimes exceed 500 cfs. The siphons include about
- 147 7.300 ft of 78" to 84" steel pipe that has been in service for over 80 years and is near the end of
- 148 useful life. The new alignment is approximately 2 miles shorter than the existing, with about
- 149 5,500 ft of new canal and 5,800 ft of new siphon. The capacity is estimated to be about 450 cfs.
- 150 With better capacity to meet irrigation demands, more reservoir space will be available for
- 151 recharge. These system improvements will also allow CNPPID to capture rejected irrigation
- 152 water that was already diverted from the river but no longer needed for irrigation due to rains. A
- 153 feasibility study was completed by JEO. Construction is estimated at \$15 million; CNPPID
- applied for and received a Water Sustainability Fund Grant for \$8.9 million. An RFP for design
- 155 is expected soon, with construction planned for 2023 and 2024.
- 156

157 <u>Wet Meadows Project:</u> Kristen Cognac, EDO

- 158 Cognac provided an update on the EDO's work on wet meadow hydrology. Since 2013, the
- 159 Program has been monitoring and collecting data on both hydrology and climate at two wet
- 160 meadow sites: the Fox site is restored cropland, and the Shoemaker site is a native wet meadow.
- 161 Extensive work was completed in 2021, including comprehensive data QC (a significant
- 162 undertaking given the amount of data collected), development of hydrologic study objectives and
- 163 methodology and presentation to the GC, testing and calibration of analytical models, and data
- analysis. Objectives of the study are to (1) quantify relationships between hydrological and
- 165 meteorological variables and groundwater levels, (2) develop hydrological management targets,
- and (3) develop a tool to inform management decisions. Cognac presented several illustrative
- 167 examples of the data analysis and results.
- 168

169 **<u>Recapture Network Construction:</u>** Seth Turner and Justin Brei, EDO

- 170 Turner provided a status update on construction of the new recapture well network near
- 171 Cottonwood Ranch. Downey Drilling was awarded the contract for well construction with a bid
- 172 of \$178,000 (followed by a change order for \$22,000 for stainless steel mesh screen and deeper
- drilling of some wells). Pipeline construction was awarded to J&G Dirtworks with a bid of
- 174 \$803,800. Pipeline construction began in mid-November, and all of the pipe was installed by
- 175 mid-December. Well drilling and testing was completed the week of December 13. Several of
- the wells have production capacities less than anticipated (for example, well 4 and 5 are at 390
- gpm and 330 gpm, respectively), but efforts were made to improve production as much as
- possible. Pump sizing is to be finalized soon so those can be ordered. Several construction



- 179 items remain to be completed, including discharge structures, pump-outs, installation of pumps 180 and motors, and fittings from the wells to the pipelines. Completion is expected by March 31.
- 181
- 182 Turner also discussed the existing Cook recapture well. Persistent surging and/or valve
- 183 cavitation issues were observed during 2021 operations, and consistent long-term pumping in the
- 184 630-640 gpm range is less than the design capacity of the current pump. Downey Drilling
- 185 completed a pump test on January 14 and observed similar flow rates. A new, smaller pump will
- be installed in the Cook well, and the existing pump will be used in one of the new recapture
- 187 wells at Cottonwood Ranch. In addition, a SCADA system will be installed on the Cook well,
- and Tri-Basin NRD will take over operation and maintenance of the well as part of the larger
- recapture network. This will likely require an amendment to the Well Augmentation Agreementfor the recapture network, which will be presented to the GC for approval in March or June.
- 190

192 Additional Business: Cory Steinke, WAC Chair

- 193 Upcoming meetings were noted from the agenda. The next WAC meeting is scheduled for May
- 194 3, tentatively to be held in person at the Lake McConaughy Visitor Center, subject to covid
- 195 conditions and enough meeting substance to justify the drive for everyone.
- 196
- 197 Runge asked about the timing of the spring EAC/RCC meeting. Turner said usually early
- 198 March. Steinke said he can coordinate with Mark Porath (USFWS) and maybe have the meeting
- 199 later in the spring if the primary focus is going to be the June-July germination suppression200 release.
- 201

202 <u>Action Items</u>

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204 <u>General WAC</u>

- Provide 1980s USBR canal and reservoir study to post on PRRIP website for WAC members (Bradley).
- Reserve conference room at Lake McConaughy Visitor Center for May 3 WAC meeting (Steinke).
- 208 209
- 210 ED Office
- Provide estimate of 2021 excess flow volume (Turner).