1 PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM 2 **Water Advisory Committee Meeting Minutes** 3 Nebraska Game and Parks Commission - Lake McConaughy Visitor Center 4 May 1, 2018 5 6 **Meeting Attendees** 7 8 **Water Advisory Committee (WAC) Executive Director's Office (EDO)** 9 **State of Colorado** Jason Farnsworth - ED 10 Jojo La – Member Scott Griebling 11 Erik Skeie Seth Turner 12 Kevin Werbylo 13 **State of Wyoming** Courtney Black 14 Bryan Clerkin – Member 15 Jeff Cowley - Alternate **Contractors** 16 17 State of Nebraska 18 Jessie Strom – Member 19 Kari Burgert 20 Brian Harmon 21 Margeaux Carter 22 23 U.S. Fish and Wildlife Service 24 Tom Econopouly - Member 25 Jeff Runge – Alternate (on phone) 26 27 U.S. Bureau of Reclamation 28 Brock Merrill - Alternate 29 30 **Downstream Water Users** 31 Cory Steinke - Chair 32 Jeff Shafer – Member (on phone) 33 Brandi Flyr - Member 34 Tyler Thulin 35 Nolan Little 36 37 **Colorado Water Users** 38 Jon Altenhofen – Member 39 Luke Shawcross (on phone) 40 Jason Marks 41 42 **Upper Platte Water Users** 43 Dennis Strauch - Member 44 45 **Environmental Groups** 46



48 Welcome and Administrative: Cory Steinke, WAC Chair

Introductions were made, including new WAC representatives for the State of Colorado. There were no edits to the February WAC meeting minutes; Strauch made a motion to approve, second by Altenhofen, unanimous approval.

## **WAP Projects and Other Brief Water Updates**

Cottonwood Ranch Broad-Scale Recharge: Kevin Werbylo, EDO

Werbylo reported that the project is estimated to recharge 9,000 to 10,000 acre-feet per year (AFY), about 4,000 AFY of which will go towards deficit reductions. Current tasks are focused on permitting aspects. EDO is waiting on a 404 permit from the Corps. Once that is completed, will be able to bid project and start construction, hopefully in June or July. EDO is also coordinating with Nebraska DNR on state permits. The first year of project operations will be covered under a temporary recharge permit, eventually permit as aquifer storage and recovery (ASR) so that recharged water can be recovered using recapture wells. There are no plans at present to pump surface water from recharge ponds to river, as that could potentially change the permit structure. However, such pumping or direct releases back to the river through the Peterson Drain during times of shortages could be considered in the future in a revised permit if the habitat benefit of the developed wetlands would not be negatively impacted.

CNPPID is working on the pipeline design to deliver water from Phelps Canal to Cottonwood Ranch (CWR). The pipeline will be 42" diameter; approximately 8,000 to 9,000 ft long to the southwest corner of CWR. PRRIP will add the extra half mile along the west side of CWR. The county gave approvals to install the pipeline in ditch rights-of-way. EDO is working on the bid specs and waiting for approval of the Water Service Agreement (WSA) with the Program. Farnsworth reported that the WSA is close. It is anticipated to be submitted to the GC for approval in June, along with the NPPD land agreement. CNPPID would like to bid the pipeline project with other projects this summer to capitalize on mobilization fees, install the pipeline during the summer, and then make connections to begin operations after the irrigation season. Werbylo reported that the current estimate is \$3M to \$3.4M for construction, including the pipeline on the CWR property. An additional \$1M will be paid to CNPPID to design and construct the pipeline in the ditch rights-of-way, but the pipeline will be bought back by CNPPID through no-cost water deliveries to CWR.

## Lakeside Gravel Pit: Kevin Werbylo, EDO

Werbylo reported on the progress of the Lakeside slurry wall gravel pit. The project was initiated a year ago at an existing gravel pit mine based on the GC's recommendation of doing a full-scale initial slurry wall project. A contract for design work was signed in 2017. Design is underway and full operation is targeted for late 2019 or early 2020. The EDO is working with the design consultant to confirm storage numbers, which are presently estimated at 800 to 1,200 AF. An impermeable layer was confirmed at a depth of about 40 ft, and the design consultant would like to key the slurry wall into this layer by about 5 to 8 ft. Water supply for the project can be delivered through the Peterson Drain by gravity and from an on-channel wellfield, and then pumped out for delivery to the river. Overall, the project is presently indicated to have less



storage capacity than anticipated at a greater cost (\$8.5M to \$9M). Special Advisor Applegate is reviewing the current cost figures, which will be available to the GC in June.

92 93 94

95

96

97

98

99

100

91

## Alliance Canal project update: Seth Turner, EDO

Turner reported on activities related to the Program's Osborne property near Bayard. This will be the second season of irrigation under the Program's ownership. A concrete check structure was constructed at the east end of the lateral crossing the property in March/April at an estimated cost of \$1,500 to the Program. Two days of irrigation were scheduled for the spring, the first to have been April 13, but the lateral is not yet running water due to lack of flow in the source creek. There was discussion of plans for the property and potential water yield. In March, the GC gave direction to the EDO to have the property appraised, which is in progress.

101 102 103

## CPNRD Water Leasing: Brandi Flyr, CPNRD

104 105

No report.

106 107

108

109

110

111

## **NPPD Water Leasing**: Jeff Shafer, NPPD

Shafer reported that there was no recharge through the Gothenburg and Dawson County canals in the spring due to inadequate river flows. Those canals have now switched over to normal operations. NPPD will divert water for recharge in the fall if excess flows are available. Discussions are underway between NPPD, CNPPID, and NDNR about possible exchanges involving leased water, but there is still a lot of progress that needs to be made.

112113114

115

116

## CNPPID Water Leasing (Phelps, Elwood, Irrigators): Cory Steinke, CNPPID

Steinke reported that deliveries since January 1 for recharge were 800 to 1,000 AF into Phelps and 3,850 AF into Elwood Reservoir. Storage space available in Elwood was maximized, and the pumps were recently shut off.

117 118 119

120

121

122

123

The irrigator lease is becoming more popular due to a combination of good feedback from customers and low commodity prices. For 2018, a total of 2,055 acres were enrolled, exceeding the original cap of 2,000 acres; an amendment to the leasing agreement increased the cap to 2,100 acres. The Program pays \$220/acre and receives 9" per acre added to the Lake McConaughy EA at the end of the irrigation season for an effective cost of \$293/AF.

Farnsworth reported that the PRRIP has started conversations with Don Kraus about expanding and making the irrigator leasing program permanent. If the PRRIP can't get more acres enrolled, there may be an opportunity to increase the amount of water per acre (up to 18").

127 128

## Data Reporting Guidelines for PRRIP water leasing projects: Seth Turner, EDO

- 129 Turner gave an overview of draft data reporting guidelines that the EDO is developing for
- leasing and recharge projects. The objective is to ensure that the EDO is getting all the
- information needed for accounting and scoring analyses, as well as verifying invoice amounts.
- La asked about current practices, and Turner replied that it was ad hoc and varies by district and
- project, which is why the EDO wants to make a more standardized approach. The handout



provided to the WAC included generic guidelines to serve as a conversation starter. The EDO

will have conversations with CNPPID, NPPD, and CPNRD to better understand what data is

available and in what formats so that reporting guidelines can be tailored to specific projects.

Strom said that this is something DNR is considering as well and would be willing to coordinate.

138 139

135136

137

## Phelps County Canal Groundwater Recharge Report: Seth Turner, EDO

- 140 Turner reported on Phelps County Canal recharge during the non-irrigation season that extended
- 141 from September 15, 2016 to February 14, 2017. The project was operated under CNPPID's
- temporary recharge permit from Nebraska DNR and the WSA between CNPPID and the
- Program. The canal is checked at Mile Post (MP) 13.3, and deliveries are measured in the flume
- at MP 1.6. Measured diversions totaled 5,676 AF, of which 75% was allocated to the PRRIP
- 145 (4,257 AF) and the remaining balance to DNR. The average delivery rate of 19 cfs, after the
- canal was full, was approximately equal to the recharge rate. Groundwater levels are extensively
- monitored using wells owned by the Program (8 wells), Tri-Basin NRD (9 wells), and CNPPID
- 148 (8 wells), as well as in three drains, so that recharge operations can be terminated if needed to
- prevent waterlogged fields. After deducting evaporation and adding additional recharge between
- the headgate and the flume at MP 1.6, the total recharge credited to the Program for the 2016-
- 151 2017 season was 4,784 AF.

152153

#### WAP Project Fact Sheets: Courtney Black, EDO

- Black showed an example fact sheet for Phelps County Canal recharge operations. The EDO will
- be developing these for all major Water Action Plan (WAP) projects to provide brief project
- descriptions and summaries of operations. The fact sheets will eventually be available on the
- 157 Program website as downloadable handouts. Black asked for committee members to provide any
  - questions or comments within two weeks (by May 15).

158159160

## COHYST Update: Scott Griebling, EDO

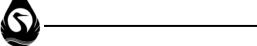
- 161 Griebling reported that documentation of the COHYST models is done and waiting to be
- officially approved. Nebraska DNR and the NRDs are using various applications of the models
- and the Program is also interested in using the model. The COHYST sponsors are considering
- next steps. Griebling is talking to Brandi Flyr (CPNRD) and Hayden Strickland (ERC) about
- creating an ongoing COHYST users group.

166 167

## Colorado Depletions Plan Update: Jojo La, CWCB and Jon Altenhofen, NCWCD

- La presented the Colorado depletions plan update for the North Platte Basin. In 2017, there was
- a reduction in post-1997 industrial use and a slight increase in irrigated acres, well within limits.
- 170 Specific numbers are included in the report. Overall, Colorado continues to have a consumptive
- use (CU) underrun in the North Platte Basin exceeding 19,000 AF.

- 173 Altenhofen provided Colorado's reports on the South Platte Basin and the Tamarack I project. In
- the South Platte, depletions are associated with population increases. Irrigated acres continue to
- be under limits owing to early 2000s court decisions during drought periods and the resulting
- losses of irrigation wells.



Colorado is successfully meeting its obligations to the Program through the South Platte Water Related Activities Program (SPWRAP), which includes the Tamarack I project. SPWRAP collects about \$1M in assessments annually, which are used mainly for Operations and Maintenance of the various recharge projects, with Denver Water being the largest contributor. The main recharge project at the Tamarack State Wildlife Area includes 16 wells drilled along the South Platte River, which deliver water to recharge basins. The 2013 floods took out four of the wells, which may be rebuilt this year. A jack-and-bore under I-76 was completed in 2017 to allow deliveries to a recharge pond south of the interstate (and thus, farther from the river). Shortage reductions from Tamarack are averaging 8,022 AFY. This is less than the 10,000 AF score credit, but hydrology has not been the same as during the study period (1947-1994). There has been less water availability during winter months: in the model period, about 59% of winter months had divertible flows. First Increment hydrology has only had divertible flows in about 40% of winter months. Overall, managed groundwater accretions are successfully meeting Colorado's depletion requirements, with a good safety margin.

## Nebraska Depletions Plan Update: Jessie Strom, NDNR

Strom reported on 2016 permitted water uses, including breakouts for those uses upstream of and within the Critical Habitat Reach (CHR). In total, there were 52 groundwater transfers, 45 groundwater wells, three groundwater variances, and five surface water permits. The groundwater transfers represent a change in location of irrigated acres, but no change in actual water use. Four of the five surface water permits were for temporary groundwater recharge, all upstream of the CHR. Nebraska DNR calculated a positive net effect of new permitted water uses and mitigation results from 2016 through the end of the First Increment in 2019.

Nebraska DNR is also engaged in a robust review analysis, which began in early 2017 and is anticipated to be completed in 2018. The analysis uses the WWUM and COHYST2010 models to evaluate consistency with the requirements of the Nebraska New Depletions Plan (NNDP): post-1997 depletions, changes in irrigated acres, municipal and industrial uses, and mitigation activities through 2013.

Other basin-wide activities include stakeholder meetings for the Upper Platte Basin-Wide Plan (BWP) 2<sup>nd</sup> Increment, which is to be in place by January 1, 2019. Stakeholder meetings will begin this summer for the 2<sup>nd</sup> increment of the upper Platte NRDs' individual Integrated Management Plans (IMPs), which are expected to be in place by summer 2019. The BWP and IMPs goals and objectives will ensure that Nebraska continues to comply with the NNDP.

Farnsworth noted that, based on updated modeling, there will be increases in depletions for the NRDs, meaning more competition for the Program for a finite volume of water to operate projects. The NRDs are generally proposing conjunctive management, which generally includes retiming of excess flows through groundwater recharge, as a tool to mitigate. As a result of these changes, the Program could end up with less water than planned to operate WAP projects.



#### 221 Wyoming Depletions Plan Update: Jeff Cowley, WY SEO

Cowley reported that Wyoming continues to be in compliance with the three baseline requirements. For Baseline No. 1, Wyoming had 206,314 acres irrigated in Water Year (WY) 2017, a new record but still well under the 226,000-acre cap. As of WY 2017, Wyoming's total uses are less than Baseline No. 2. Translated to the state line, Wyoming has an irrigation season underrun of 39,188 AF and a non-irrigation season underrun of 4,778 AF. For Baseline No. 3, there was an increase in South Platte Basin storage of 11.70 AF, bringing the total post-1997 storage increase to 90.02 AF. All these storage facilities are small ponds for stock, wildlife, fish, or environmental purposes. Wyoming also recently updated the Acreage Inspector Rugged Tablets and sensors on the four Weather Stations, both of which are part of the Modified Decree.

231

222 223

224

225

226

227

228

229

230

232

233

234

235

236

#### **Federal Depletions Plan Update:** Tom Econopouly, USFWS

Econopouly reported on Federal Depletions and Tiered Consultations. As part of the Cooperative Agreement, federal agencies can deplete 350 AFY in each state for a "national purpose." There have been no federal depletions in Wyoming and Nebraska. In Colorado, the allowance was split to 175 AFY, then to 87.5 AFY each in the North Platte and South Platte basins. Current federal depletions in Colorado are only about 26 AFY, well below the limit.

237 238 239

240

241

242

The Program provides for streamlined biological opinion consultations with the U.S. Fish and Wildlife Service. In total, there have been 188 of these tiered consultations under Program since start of First Increment, mostly in Colorado. In 2016, there were 17 in Colorado and one each in Wyoming and Nebraska. In 2017, there were 8 total tiered consultations: six in Colorado and one each in Wyoming and Nebraska.

243 244 245

246

247

248

249

250

251

252

253

#### **Draft Annual Flow Summary Report:** Scott Griebling, EDO

Griebling presented an overview of Platte River flow conditions during calendar year 2017, with an emphasis on conditions at Grand Island and the Lake McConaughy EA. Overall, 2017 was a wetter year, with a drier summer but wetter spring. Through the 11 years of the First Increment, there have been five years with annual hydrologic condition "wet" and six "normal" years. The annual hydrologic condition is calculated retroactively. Griebling explained that the method for calculating annual hydrologic condition is such that it can be altered by EA releases. Extensive discussion ensued, focused on this issue of the hydrologic condition being affected by Program operations and the implications for project yields and scoring. All agreed that the issue is important and that the discussion should continue in the future.

254 255 256

257

258

## Preview PRRIP Water Projects Tour: Seth Turner, EDO

Turner gave a brief overview of the stops on the PRRIP water projects tour, which departed after lunch and included Lake McConaughy and the State Channel Project in North Platte on Tuesday. Stops scheduled for Wednesday included Elwood Reservoir, the Jeffrey Island Sediment

259 260

Augmentation Project, Cook/Dyer sand pits, Cottonwood Ranch, and the Lakeside gravel pit.

Printed copies of the itinerary, maps, and driving directions were available.

261 262



264 Additional Business: Cory Steinke, WAC Chair

The next WAC meeting is scheduled for Tuesday, August 7 at the Lake McConaughy Visitor Center. Merrill suggested that there may be reason to reschedule the October 2 WAC meeting; this will be discussed further in August.

267268

265266

# **Action Items**

269270

## General WAC

271272273

274

- Provide feedback to the EDO on the draft fact sheets for Phelps County Canal Groundwater Recharge and the Pathfinder Municipal Account Lease by May 15.
- Revisit scheduling of October 2 meeting.

275276

## **ED Office**

277278279

280

• EDO to set up calls with CNPPID, NPPD, CPNRD to discuss data availability and reporting for leasing and recharge projects.