



**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM**  
**Water Advisory Committee Meeting Minutes**  
Nebraska Game and Parks Commission – Lake McConaughy Visitor Center  
August 6, 2019

**Meeting Attendees**

**Water Advisory Committee (WAC)**

**State of Colorado**

Jojo La – Member

Erik Skeie

**State of Wyoming**

Bryan Clerkin – Member

Jeff Cowley - Alternate

**State of Nebraska**

Jessie Winter – Member (phone)

Jesse Bradley – Alternate

Kari Burgert

**U.S. Fish and Wildlife Service**

Tom Econopouly – Member (on phone)

**U.S. Bureau of Reclamation**

Brock Merrill – Member

**Downstream Water Users**

Cory Steinke – Chair (phone)

Jeff Shafer – Member

Brandi Flyr – Member (phone)

Mike Drain - Alternate

Tyler Thulin

**Colorado Water Users**

Jon Altenhofen – Member (phone)

Luke Shawcross (phone)

**Upper Platte Water Users**

Dennis Strauch - Member

**Environmental Groups**

Jacob Fritton – Member

**Executive Director's Office (EDO)**

Jason Farnsworth, ED

Chad Smith, DED (phone)

Scott Griebeling

Seth Turner

Kevin Werbylo

**Contractors**



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

Introductions were made. Shafer agreed to serve as acting Chair for the meeting. Turner noted several non-agenda items to be discussed in the brief project updates. There were no updates or comments on the May meeting minutes, which Shafer declared approved by consensus.

**Nebraska DNR Robust Review:** *Jesse Bradley and Kari Burgert, NDNR*

Bradley presented an update on the Nebraska New Depletions Plan (NNDP) and Integrated Management Plan (IMP) monitoring. The end of the first 10-year IMP increment coincides with the end of the PRRIP First Increment in 2019. Bradley provided background information regarding the requirements of the NNDP. For groundwater, the NNDP covers the area in the watershed of the Platte River upstream of Chapman, NE and within the 28/40 area; for surface water, the NNDP covers the watershed of the Platte River upstream of the confluence with the Loup River. The NNDP essentially covers depletions from new water uses between 1997 and 2005. Since 2006, offsets for new depletions have been the responsibility of the permittee. Bradley reviewed the goals of the Upper Platte Basin-Wide Plan (BWP) and the natural resources districts' IMPs.

The purpose of the Robust Review was to update new net depletions due to new or expanded uses of water subsequent to July 1, 1997. More specifically, the Robust Review sought to assess what was accomplished during the IMP first increment and establish goals for the IMP second increment. The Robust Review also serves as a “truing up” of the permitted activities included in the NNDP annual reports.

The Robust Review evaluated water use changes due to unpermitted small reservoirs and sand pits, as well as rural domestic population and livestock. Other factors include groundwater irrigated acres, crop-type changes, municipal and industrial (M&I) changes, and depletions-offsetting management actions such as canal recharge, flow augmentation, groundwater allocations, and retirements of irrigated acres. The emphasis of the Robust Review was on groundwater-only uses and depletions, not surface water or comingled acres, as moratoriums were in place on surface water uses prior to 1997.

The Robust Review relied on two groundwater models: the Western Water Use Model (WWUM) encompassed the North Platte and South Platte NRDs in the Panhandle region, and the COHYST model was used for those NRDs downstream of Lake McConaughy (e.g., Twin Platte, Central Platte, and Tri-Basin). The models used a 50-year evaluation period from 2013-2063. Owing to limitations in data availability, the Robust Review only considered those land use changes, M&I pumping changes, and management actions implemented through 2013.

Although some NRDs (e.g., Twin Platte and Central Platte) have depletive effects heading into the IMP second increment that are greater than in the first increment, results of the Robust Review show management actions implemented under the IMPs providing an ever-increasing net positive effect by 2029. Updates to the Robust Review are scheduled for 2023 and 2027. Later in the year, Nebraska expects to present these results to the Program's GC for recognition that all



tasks required by the NNDP have been completed. The BWP and IMPs for the second increment are expected to be finalized and adopted in September. Bradley noted that extensive documentation of the Robust Review can be accessed through the NDNR website.

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

#### ***CPNRD Water Leasing: Brandi Flyr, CPNRD***

Flyr said the surface water transfer (aka pilot exchange project) is proceeding along similar lines to last year. During the irrigation season, water is retained in Lake McConaughy rather than delivering to the headgates of the CPNRD canals. Enrolled acreage for 2019 is slightly smaller than in 2018: 12,035.8 acres for Thirty Mile; 13,135.2 acres for Cozad; 3,020.4 acres for Orchard-Alfalfa; 28,191.4 acres enrolled in total. These acreage numbers represent 80% or more of all surface acres in the three irrigation districts. Given the similar acreage, a similar volume (~14,200 AF) is expected to be transferred to the Lake McConaughy EA in October.

There were no diversions of excess flows for groundwater recharge in the spring. The Cozad Canal experienced significant damage from flooding.

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

Shafer said the surface water transfer is proceeding as planned, with no news to report. NPPD will be applying for new temporary permits so that available excess flows can be diverted for recharge at the Gothenburg and Dawson County canals in the fall.

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

Steinke said there was some recharge in Elwood in recent weeks following the big rains, with the reservoir filled for PRRIP. Actual numbers will be available next week. CNPPID is making preparations for fall recharge; the current temporary water right is valid through late November.

#### ***Project Scoring: Seth Turner, EDO***

Turner provided a brief update on project scoring. The CNPPID irrigator lease score (1,900 AF) was approved by the GC in June. Following extensive discussions with Nebraska DNR, the recommended score of 2,800 AF will be presented to the GC in September. It will be regarded as a “provisional score” subject to future revision if appropriate. The EDO is behind the anticipated schedule for either the CPNRD or NPPD groundwater recharge score analysis, but it is still hoped that at least one of them will be ready for the GC in December.

Farnsworth added that the EDO has been working with the districts to extend the various recharge and leasing agreements into or through the First Increment Extension.

#### ***2019 WAP Update Report: Seth Turner, EDO***

Turner said the EDO is in the early planning stages for the preparation of a 2019 WAP Update report. Unlike the 2009 and 2014 updates, this one is not mandated as part of the steps necessary for the completion of Milestone #4, but it seems appropriate to report on the status of Program



water projects at the end of the First Increment. This report will likely eliminate the Tier I, II, II categorization used in previous versions, as that has not proven particularly useful in prioritizing what WAP projects to pursue. The report will provide a status update on all WAP projects considered during the First Increment but will also include a strong emphasis on lessons learned and plans moving forward to meet the First Increment water objective. Turner invited committee members to submit any suggestions they have for content to include in the report.

***PRRIP Legislation Update (not on agenda): Jason Farnsworth, ED***

Farnsworth reported that legislation reauthorizing PRRIP has been introduced in both the House (by Colorado Rep. Neguse) and the Senate (by Wyoming Sen. Barrasso). Hearings have been held in subcommittees of both houses of Congress, which went well. Rich Walters testified in support of PRRIP.

La added that comments were positive in testimony. The delegations from all three states are on board, providing bi-partisan support. The House is presently in recess, but it is hoped that the legislation will get on the suspension calendar in the next couple months. Efforts to understand the possibility of hotlining the legislation in the Senate are also in progress. The states are supporting the passage of a bill before the end of the year.

Farnsworth also provided an update on the choke point indemnity agreement. He has been working with the Colorado contingent and CNPPID to finalize the agreement, the CNPPID board recently approved the agreement, and it will be presented to the GC in September. Farnsworth noted that there may be a test flow release in September and that the NWS is on board.

***Colorado South Platte Reservoirs (not on agenda): Jojo La, CWCB and Seth Turner, EDO***

Turner noted that there was a story published in the Denver Post in late-June regarding potential reservoir storage in the South Platte basin, which caught the attention of editorial writers in the Omaha newspaper and prompted this update. Colorado passed legislation in 2016 authorizing a feasibility study of South Platte storage opportunities. The study was funded by a CWCB grant and completed in 2017. La said there is a new grant to fund further investigation. Discussions are at a stakeholder level right now, identifying potential participants in such a project.

Ultimately, these are the starting phases of what would be a very long process to develop new storage in the South Platte basin. Skeie noted that the 2017 feasibility study specifically considered compliance with the South Platte Compact, the ESA, and PRRIP. Turner said links to available documentation, in particular the 2017 South Platte Storage Study and a May 2019 Fact Sheet, would be distributed with the draft meeting minutes.

***Fort Laramie Canal tunnel collapse (not on agenda): Dennis Strauch, Pathfinder Irrigation District, Brock Merrill, USBR, and Jeff Cowley, WY SEO***

In the early morning hours of July 17, a tunnel on the Fort Laramie Canal collapsed, backing up water that was running about 1,400 cfs and blowing out the canal upstream of the tunnel. The breach eroded as much as 16 feet from the canal bank and floor, and about 62 acres were covered in sediments from the washout. This cut off irrigation supplies to over 100,000 acres in



Wyoming and Nebraska at a critical point during the growing season. Several WAC members familiar with the situation were asked to provide and update to the committee given the potential impacts to other water operations in the North Platte and Platte River basins.

Strauch reported that Goshen Irrigation District (GID) is working from the top to uncover the tunnel, and a contractor is working to reinforce the tunnel from the inside. If only the tunnel roof collapsed, they may be able to put in an open trench framework to let water through. If the tunnel walls have collapsed as well, they're probably done for the season.

Merrill said Reclamation is releasing water as if irrigating at full capacity, but there are no diversions by GID. Reclamation needs to get North Platte system storage down to about 2.1 MAF by October 1.

Thulin said that CNPPID has changed their operations because of the additional water coming into Lake McConaughy. They are running full power production, filling canals to the extent possible, and releasing as much as possible out of Lake McConaughy without wasting water. Lake McConaughy needs to be below elevation 3260 ft on October 1, presently at 3258 ft.

Cowley showed photos of the sinkhole above the tunnel, the extent to which the bank and bottom of the canal were eroded, the channel cut by water flowing out of the canal back to the North Platte River, the aerial extent of sediment distribution from the washout, and several photos showing progress on the construction work to rebuild the canal upstream of the tunnel.

Farnsworth added that PRRIP needs to make a call whether to accept the additional 4,800 AF from the Wyoming Municipal Account. Given the levels in Lake McConaughy, it is likely that additional water will be declined this year.

**Cottonwood Ranch Broad-Scale Recharge and Lakeside Slurry Wall Gravel Pit Updates:**  
*Kevin Werbylo, EDO*

Construction work on the Cottonwood Ranch broad-scale recharge project began in October 2018. Werbylo gave an update and showed photos of construction progress since then. Construction is several months behind schedule due to numerous weather events that have flooded the construction site on several occasions, including a storm in July that dumped up to 9 inches of rain around Kearney in a single night. Werbylo presented maps that show Cottonwood Ranch near the epicenter of an area that has received precipitation at 12-15 inches above normal since February. Substantial completion of construction was originally planned for May 1, then extended to July 15. Owing to the recent events and resulting delays, it is now anticipated that completion will be extended to September 15 or October 1. There was a contract amendment with the engineering and construction administration consultant due to the extended construction time. The EDO was recently notified by the construction contractor that they will be asking for "significant amendments," the specific details of which are not yet known.



For the Lakeside gravel pit project, Werbylo said the miner has moved offsite to an adjacent property. Design consultant JEO completed a survey of the project site and is in the process of finalizing the design. Per an earlier decision by the GC, the project will not move forward into construction at this time.

**Recharge Recapture Well Network:** *Kevin Werbylo, EDO*

Werbylo explained that the EDO is developing a preliminary concept for a well field to recapture groundwater intentionally recharged through the Phelps County Canal, Elwood Reservoir, and Cottonwood Ranch. At the current conceptual level, the EDO is evaluating three locations of interest for well installations, including at and east of Cottonwood Ranch, a tract about a mile west of Cottonwood Ranch, and an area extending west from the Program's Cook property. It is anticipated that there may be as many as 42 wells, with a combined capacity of up to 65 cfs (129 AF/day). For the most part, the wells would be piped back to the river or a drain in configurations that avoid Tri-Basin NRD requirements for much larger setbacks from existing wells if multiple recapture wells were piped in series. Capital costs are estimated to be in the range of \$4-5M. Refinement of the conceptual design will continue over the coming months.

**Water Operations Model and Adaptive Management Update:** *Scott Griebeling, EDO*

Griebeling presented an overview of the surface water operations model that the EDO is developing in support of the adaptive management update. He emphasized that the model is still in progress and is not intended as a replacement for COHYST; the focus of the model is to simulate Program water project operations and aid in future Program decision making. The current iteration of the model is developed in Excel and runs a daily timestep for a 13-year simulation period. Key inputs include flows at Julesburg on the South Platte River and Keystone on the North Platte River, as well as canal diversions and returns. Reach gains/losses are estimated using factors from COHYST or the WMC Loss Model. The model domain extends downstream to Grand Island. Griebeling explained the process of routing water through the model, in particular EA releases. Other Program water projects will also be incorporated into the model.

**USGS Plum Creek and North Dry Creek Groundwater Discharge Study:** *Scott Griebeling, EDO*

Griebeling discussed a solicitation from USGS to the Program to contribute funding to a study of groundwater discharge in the Plum Creek and North Dry Creek areas. The study would use various imaging techniques to identify when and where water from the groundwater aquifer would emerge in these surface streams. Farnsworth noted that the funding request was fairly small. Bradley and others were skeptical that the study would have value in enhancing the understanding of groundwater discharge into Plum Creek and North Dry Creek and suggested that if expenditures were to be made that further synoptic streamflow data collection would likely be more valuable.



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

The next WAC meeting is scheduled for October 22. Whether the meeting will be in person or a conference call will be determined later.

**Action Items**

General WAC

- None

ED Office

- None