PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Nebraska Game and Parks Commission – Lake McConaughy Visitors Center
April 25, 2017

Meeting Attendees

Water Advisory Committee (WAC)

State of Colorado
Suzanne Sellers – Member (on phone)

State of Wyoming
Bryan Clerkin – Member
Jeff Cowley – Alternate

State of Nebraska
Jessie Winter – Member

U.S. Fish and Wildlife Service
Matt Rabbe (on phone)
Tom Econopouly – Member

U.S. Bureau of Reclamation
Brock Merrill – Alternate

Downstream Water Users
Cory Steinke – Chair
Jeff Shafer – Member
Tyler Thulin
Duane Woodward - Member
Kent Miller - Member
Nolan Little

Colorado Water Users
Jon Altenhofen – Member

Upper Platte Water Users
Dennis Strauch - Member

Environmental Groups
Jacob Fritton – Member

Executive Director's Office (EDO)
Jerry Kenny, ED
Scott Griebling
Seth Turner

Contractors
Rick Wilson, JEO

Welcome and Administrative: *Cory Steinke, WAC Chair*
Introductions were made. Minor edits to the original draft of the February WAC meeting minutes were noted. Shafer made a motion to approve the February WAC minutes, with a second by Merrill and unanimous approval. Econopouly thanked Steinke and CNPPID for coordinating releases from the Lake McConaughy Environmental Account.

WAP Projects and Other Brief Water Updates

Cottonwood Ranch Broad-Scale Recharge: *Seth Turner, EDO*
Turner reported on contractor selection for engineering design and construction administration. Three firms were short-listed: JEO, HDR, and EA. Interviews were held on March 5 in Kearney, HDR was selected. EDO staff held a kickoff meeting with HDR at the project site on March 20, and the contract with HDR was signed the week of April 10. Current work involves assessing data gaps (mostly geotech and survey), scheduling fieldwork to fill those data gaps, and developing preliminary berm alignments. Negotiations with CNPPID regarding the proposed pipeline to deliver water from the Phelps County Canal to Cottonwood Ranch are ongoing. The EDO and Special Advisor Bill Hahn have been developing a database of other potential project sites for broad-scale recharge.

Initial Slurry Wall Project: *Seth Turner, EDO*
Turner reported that the options for a pilot-scale or full-scale initial slurry wall project were presented to the GC on March 6. This included discussion of the WAC's recommendation to develop a pilot-scale project while simultaneously seeking out potential locations for a full-scale project. The GC recommended pursuit of a full-scale initial slurry wall project at an existing gravel pit site. The EDO is now in the process of acquiring an existing pit, with the details expected to be presented to the GC in June. Earlier in April, the GC approved acquisition of another property near the existing pit, and the EDO is finalizing an agreement to have the Lindstrom crop ground mined out in the future. The EDO is working with Special Advisor Mike Applegate to develop and RFP for slurry wall gravel pit design, with the intention of presenting to the GC in June.

Alliance Canal acquire & retire update: *Seth Turner, EDO*
Turner reported that Scott Griebling of the EDO constructed a temporary dam for irrigation and started installing staff gages for measuring flow depth in the canal on March 27. At the request of the EDO, the NPNRD installed a data logger on their Monitoring Well 23-H, which is on the adjacent property to the west of the PRRIP Osborne property, and will be providing groundwater level data to the EDO. EDO staff are also coordinating with the Alliance Irrigation District ditch rider on irrigation scheduling.

CPNRD Water Leasing: *Duane Woodward, CPNRD*
Woodward reported that CPNRD diverted excess flows for recharge at the Thirty Mile and Cozad canals for three or four days at the end of March or early April. Diversions couldn't be made earlier because of EA releases. Woodward is working on new temporary transfer permits and plans to submit those to Nebraska DNR in the next month or so. Many of the surface water

acres are on 1- or 2-year contracts; the first round is expiring and those permits need to be renewed. Most acres will stay the same.

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

Shafer reported that he had visited with Mike Thompson of Nebraska DNR the day before, and it does not appear that NPPD's surface water transfer permits will be approved any time soon. NPPD still intends to file additional surface transfer permits to at least keep their place in the line of priority. In addition, NPPD did not divert excess flows at Gothenburg Canal or Dawson County Canal for recharge in the spring. They did not want to start diverting and then suddenly get cut off by a change in target flows, which would leave a wet canal and encourage unwanted vegetation growth.

***CNPPID Water Leasing**: Jerry Kenny, ED*

Kenny reported that the Program is in the second year of the pilot project to lease surface water from CNPPID irrigators, and will discuss with CNPPID to determine whether the pilot program should continue for a third year.

***Project scoring update**: Seth Turner, EDO*

Turner reported that the EDO continues to work on updates to preliminary gravel pit score calculations for Lindstrom and other sites. EDO staff are also starting to get back up to speed on CPNRD scoring—which has been on hold since Sira Sartori left the EDO—and are hoping to have that ready for the Scoring Subcommittee by late summer.

***New Technical Sub-Committee Report**: Jeff Shafer, NPPD*

Shafer reported that the sub-committee will focus issues related to slurry wall projects. However, there were no relevant technical issues in advance of the WAC meeting, so the sub-committee did not meet.

Colorado Depletions Plan Update: *Suzanne Sellers, CWCB and Jon Altenhofen, NCWCD*

Sellers reported on depletions for the North Platte River basin in Colorado for 2016. Irrigated acres in the basin totaled about 110,000 acres and consumed 91,500 AF. Population in the basin declined slightly. The net result is a depletions credit of nearly 20,000 AF for the North Platte in Colorado.

Altenhofen provided two reports for the South Platte River basin in Colorado: depletions and status of the Tamarack I recharge project. The South Platte depletions report is in the same format as past years with no changes in assumptions. Population in the basin is about 3.85M, reflecting 2.2% annual growth since 1997. Average annual May-June depletions from population growth are about 2,000 AF; managed accretions through groundwater recharge (about 4,800 AF) remain adequate to replace these depletions.

Altenhofen also reported on the Tamarack I project, which provides a shortage reduction of 10,000 AFY to go along with the other initial state projects, Pathfinder Modification (20,000

AFY), and the Lake McConaughy Environmental Account (50,000 AFY). The Tamarack I project pumps water from the South Platte River to fill recharge pits during times of excess and when there is no call in Colorado. The project gets credit for water that returns to the river during periods of shortage and makes it past the Western Canal in Nebraska. The average yield has been about 7,900 AF, although there was a bit of reduction in the last year due to the water rights not being in priority and 4 wells (out of 16 total) being taken out by flooding. Efforts are underway to redesign those wells and get them back online, hopefully with some funding assistance from FEMA. A project is also underway to jack-and-bore under I-76 to deliver water to additional recharge pits further away to the south of the river. It is hoped this project will be constructed during summer 2017.

Federal Depletions Plan Update: *Matt Rabbe, USFWS*

Rabbe reported on Endangered Species Act Section 7 consultations related to depletions that were completed during calendar year 2016. A total of 19 consultations were completed in 2016, including 17 in Colorado (2 federal) and 1 each in Nebraska and Wyoming; each consultation was documented in a spreadsheet developed by USFWS. Since the inception of the Program in 2007, USFWS has completed 180 consultations. In addition, a project consultation is underway for a U.S. Forest Service depletion associated with emergency fire suppression (Beaver Creek Fire). The depletion occurred in 2016, but will be included in the 2017 report.

Nebraska Depletions Plan Update: *Jessie Winter, NDNR*

Winter reported on Nebraska's new depletion plan, including 2015 permitted activities, non-permitted activities, estimated depletions, offsets and accretions, and basin-wide plan activities. Permits issued by NRDs and Nebraska DNR in 2015 included 65 groundwater transfers, 79 groundwater wells, and 9 surface water permits upstream or within the habitat reach. Of the 9 surface water permits, 6 were temporary for recharge or construction. Net effects resulting from new uses and mitigations were tabulated and projected through the end of the first increment in 2019.

Nebraska DNR has initiated a robust review of basin-wide activities using the WWUM and COHYST 2010 models. Input files are being developed, with completion of the review anticipated in late 2017. Planning is also underway for a second increment of the Upper Platte Basin-Wide Program.

Altenhofen asked if Nebraska would be contributing to funding of broad-scale recharge and gravel pit projects so the state can get a piece of the projects to replace its share of the J-2 Regulating Reservoirs project. Kenny said this is yet to be determined and Winter added that options for partnering are being considered.

Wyoming Depletions Plan Update: *Jeff Cowley, WY SEO*

Cowley presented the Wyoming depletions report for Water Year 2016 (October 1, 2015-September 30, 2016). As described in the report, Wyoming remains in compliance with three established baselines. Irrigated acreage above Guernsey Reservoir in WY 2016 totaled about

205,000 acres, less than the 226,000-acre limit (Baseline No. 1). As of WY 2016, Wyoming's total water use in the Platte River Basin remain less than Baseline No. 2, with underruns at the state line of nearly 47,000 AF during the irrigation season and 4,500 AF during the non-irrigation season. Post-1997 storage development in that portion of the South Platte River basin in Wyoming for WY 2016 totaled 78.32 AF, an increase of 8.88 AF over WY 2015 (Baseline No. 3). Per the report, these storage facilities are small ponds for stock, fish and wildlife, or environmental purposes. Wyoming has no plans to change the baselines.

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

Griebling presented on the 2016 Annual Flow Summary report. Overall, the content and context of the report is similar to past years. Good high flows above 8,000 cfs were observed at Grand Island. The annual hydrologic condition was "wet," with the cumulative flow plot tracking above the line delineating "wet" conditions all year. Average annual flow at Grand Island was 2,981 cfs for 2016. During the 10 years of the First Increment so far, there were six "normal" years and four "wet" years.

Regarding general operations of the Lake McConaughy Environmental Account, the EA only accrues natural inflows during non-irrigation season. Operational losses represent the volume lost to a reset; when Lake McConaughy is at effective capacity, the EA resets to a volume of 100,000 AF.

The Program uses the Overton gage to track Short-Duration High Flows (SDHF), with desired flows in the range of 5,000-8,000 cfs at that gage. The Program is moving toward the conclusion that SDHF are not as effective as had been hypothesized for channel maintenance.

UNL-TAPS program: *Jacob Fritton, TNC* (not on agenda)

Fritton described the UNL-TAPS program (taps.unl.edu), a competition between area agricultural producers and University of Nebraska-Lincoln (UNL) scientists. The competition incorporates various decision-making aspects of agricultural production, including what hybrids to grow, what crop insurance to carry, and so forth. There will be a mid-summer field day. Cash prizes will be awarded for the most profitable operation, the highest input use efficiency (water and nitrogen), and the greatest grain yield. There may be additional prize contributions by irrigation equipment makers or others.

Kenny stated that PRRIP is a sponsor of UNL-TAPS, with a $5,000 contribution. The competition fits well with the three ways the Program can get water: leasing, re-timing, and consumptive use (CU) efficiency. Most Program efforts are focused on the first two options. It is difficult to track CU efficiency to water in river, but studies such as this may help with quantification. Projects based on this third option are not likely to benefit the Program directly during First Increment or even during extension, but will likely provide benefits further down the road. Fritton confirmed that UNL-TAPS is intended to be a long-term program.

Lake McConaughy Spring 2017 Forecast: *Cory Steinke, CNPPID* (not on agenda)
Steinke discussed the 2017 spring forecast for Lake McConaughy. Inflows, outflows, water levels, etc. are tracked in a spreadsheet. CNPPID is not expecting a fill and spill situation and plans to only make releases for power and irrigation. Steinke added that there are seven permits upstream of Lake McConaughy for the recharge of excess flows. CNPPID is not planning on that use occurring, but is taking the water for storage. Strauch said that Farmers Irrigation District (~55,000 acres) is probably the largest of the districts with recharge permits.

Econopouly said that USFWS is thinking about doing a late-spring EA release (late-May to mid-June) to help keep cottonwoods from germinating and establishing. Kenny said the more that water can be run through North Platte, the better. Econopouly said he would report back regarding planned EA releases by the end of the week of May 1.

Platte to Republican Diversion Project Feasibility Study: *Jim Schneider and Travis Figard, Olsson Associates*
Nebraska has compact obligations to Kansas in the Republican River basin. Schneider and Figard discussed a proposed project to divert water out of CNPPID's E-65 Canal into Turkey Creek and ultimately to Harlan County Reservoir in the Republican Basin to help meet these obligations.

Turkey Creek has three main sections: upper (first 3,000 ft; steep, overland flow), middle (to 4-5 miles), and lower sections (fully-defined channel). Olsson completed extensive field observations of channel stability and developed a HEC-RAS model with the Turkey Creek basin split into 25 drainages, mostly divided based on creek crossings (bridges, etc.)

Options for the project include deliveries of 40 cfs or 100 cfs; a pipeline or grading to create a defined, stable channel in the upper 3,000 ft; and structural improvements such as erosion control and replacing or upsizing existing structures throughout the middle and lower sections of Turkey Creek. All existing bridges in the lower section need some sort of erosion control measures, regardless of additional flows.

The study looked at flows over the period 2000-2007, when the Republican River was flow short and Nebraska was not compact compliant. Based on this period, a 40 cfs diversion to Turkey Creek would potentially yield 625 AFY and a 100 cfs diversion would yield 1,500 AFY. The project proponents are currently leaning towards a buried pipe and deliveries of 100 cfs, which are estimated to be sustainable for about 5 days before channel sloughing and other issues arise.

Project implementation would require a delivery contract with CNPPID (through 2038, when CNPPID's present FERC license is set to expire) as well as permits from Nebraska DNR under statutes 46-289 and 46-290. Although water would be taken from E-65, it remains unclear at this time whether CNPPID can be the permit applicant since the district is not located in the basin of delivery. A critical aspect of the application will be determination of how the project is "in the

public interest." The water right for the diversion would junior to all other water rights in the Platte River basin.

Additional Business: *Cory Steinke, WAC Chair*
The next WAC meeting will be held on Tuesday, August 8, 2017 at the Lake McConaughy Visitors Center.

Action Items

General WAC

- n/a

ED Office

- n/a