PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Nebraska Game and Parks Commission – Lake McConaughy Visitors Center
August 9, 2016

Meeting Attendees

Water Advisory Committee (WAC)

State of Colorado
Suzanne Sellers – Member

State of Wyoming
Bryan Clerkin – Member
Jeff Cowley – Alternate

State of Nebraska
Jessie Winter – Member
Colby Osborn

U.S. Fish and Wildlife Service
Tom Econopouly – Member

U.S. Bureau of Reclamation
Brock Merrill – Alternate

Downstream Water Users
Cory Steinke – Chair
Duane Woodward – Member
Jeff Shafer – Member
Landon Shaw – Member
Nolan Little
Tyler Thulin

Colorado Water Users
Jon Altenhofen – Member
Luke Shawcross

Upper Platte Water Users
Dennis Strauch – Member

Environmental Groups
Jacob Fritton – Member
Bill Taddicken – Member
Duane Hovorka – Member

Executive Director's Office (ED Office)
Jerry Kenny, ED
Scott Griebling
Sira Sartori
Kevin Werbylo
Seth Turner
George Oamek

Contractors
Matt McConville – HDR
Greg Kernohan – Ducks Unlimited

Welcome and Administrative: *Cory Steinke, WAC Chair*
Introductions were made. There were no agenda modifications. Some edits were reported on the May 2016 WAC meeting minutes. Motion to approve meeting minutes was made by Woodward, seconded by Taddicken, unanimously approved.

WAP Projects and Other Brief Water Updates

J-2 Regulating Reservoir: *Cory Steinke, CNPPID & Jerry Kenny, ED*
Kenny said the GC took action at the July 26-27 meeting to put the project on hold and directed the ED Office to focus on other Water Action Plan projects that are common elements with or without J-2. There are institutional and cost allocation issues that need to be sorted out for the J-2 Reservoir project. PRRIP, DNR, and CNPPID are amending document language to keep the J-2 project on hold and make sure it doesn't die completely. Program brought in legal counsel and took the lead on drafting language; submitted to DNR for review, then will go to CNPPID. Steinke said acquiring land is on hold and RJH is finishing up a few last reports (cultural resources and geotechnical), which should be wrapped up in the next month or two.

CPNRD Water Leasing Permits: *Duane Woodward, CPNRD*
Woodward went over the surface water transferred acreage and natural flow returns to the river for the Cozad, Thirty Mile and Orchard-Alfalfa canals. There is a storage water component; however, it is no longer used on the land. The storage water can only be used for irrigation, not instream uses. Most of the lands with transferred surface water switch to groundwater irrigation. Still waiting for DNR approval of transfers. There was some discussion among WAC members about the depletions, on-farm recharge and net consumptive use credit.

Excess flows were recharged in April/May this year. The net recharged is based on deliveries into canals less the water returned through wasteways. The CPNRD is working on downloading the measuring data and calculating recharge volumes.

NPPD Water Leasing Permits: *Jeff Shafer, NPPD*
The NPPD is working on temporary permits to recharge water this fall. Permanent recharge permits were submitted to the NDNR but have not been approved yet; therefore, the NPPD operates under temporary permits. The permanent surface water transfer permits will hopefully be issued in the order applications were received (CNPPID, then CPNRD, then NPPD). Shafer said the NPPD is working on an additional transfer permit application (irrigation to instream use) for more acreage under the Dawson County and Gothenburg Canals.

CNPPID Water Leasing: *Jerry Kenny, ED*
The Program is looking to lease water from irrigators in the CNPPID again this fall, as this will be a full allocation year (Lake McConaughy full, so no farmer-to-farmer water transactions will be allowed). The GC will review a draft agreement in August, and the CNPPID board has already approved the concept for a second year.

The CNPPID handles the transactions. The cost is the same as last year - $220/acre with a cap of 2,000 acres. The Program will pay the administration fee to the CNPPID. Hopefully more irrigators will be interested in participating this year, especially as it is the second year of operations and commodity prices are lower. The credit is 9 inches of water per acre, added to the EA in Lake McConaughy on October 1st. The 2015 pilot program had about 50 parcels signed up totaling 1,037 acres, mostly pivot corners and odd-shaped parcels, the types of lands that were anticipated.

Wet Meadows Update: *Scott Griebling, ED Office*

Griebling mentioned there are no new updates – data collection and analysis continues for wet meadows sites. A 2015-2016 data analysis will be put together for the adaptive management reporting session.

COHYST Update*: Scott Griebling, ED Office & Duane Woodward, CPNRD*

The modeling team is working on documentation and starting to set up the calibration process. Work is moving on schedule, with a good working model, or at least calibrated model, by the end of 2016 or early 2017. Woodward gave a brief overview of the calibration work on the groundwater model.

Project Scoring Efforts: *Sira Sartori, ED Office*

Sartori said the CPNRD water lease scoring, which includes excess flow recharge accretions and transferred surface water credit, is under way. Elwood Reservoir recharge operations will also be scored soon. The Cook recapture well score (under the Phelps County Canal) will be brought to the GC for approval at the next meeting.

Excess Flow Analysis Report: *Scott Griebling, ED Office*

There were no questions. Motion to recommend the report as final by Woodward, seconded by Econopouly. All in favor; no opposed.

Water Plan A and B: *Jerry Kenny, ED*

A memorandum on Water Plan A and B (previously distributed to the signatories and presented to the GC in July) was distributed to the WAC – the estimates in the memo and this presentation are dynamic and subject to change. The Program signatories asked the ED Office to evaluate alternative paths to achieve the water milestone, with and without the J-2 Reservoir. Water Plan A includes the J-2 Reservoir as a large portion of the yield and also includes projects already underway, such as leasing. In addition, project concepts such as broad-scale recharge and slurry wall gravel pits would be necessary for Water Plan A to reach 50kaf of score.

The alternative without a large reservoir is referenced as Water Plan B and includes expanded development of broad-scale recharge and slurry wall gravel pits. Kenny said the Program would have to capitalize on the use of excess flows in other projects since the J-2 Reservoir would not be included in Water Plan B. Without a large reservoir, reaching a Short Duration High Flow (SDHF) will be very challenging.

Water Plan B also includes an "acquire and retire" component where the Program would buy agricultural land and retire the water. For groundwater irrigated land, the Program would take credit from the consumptive use that accretes to the river over time. For surface water, the Program would work with the associated ditch company and the ditch company would handle the transfer of water from irrigation to instream use. Transfers are temporary but up to 30 years and can be renewed. The Program would have easements on the land for permanent dryland. The Program would initially focus on marginal agricultural land. The intent is to disperse the acreage throughout the basin between the Stateline to Elm Creek.

The GC approved their first land/water acquisition in July as a test case – a small parcel of about 43 acres in Morrill County yielding about 30 acre-feet under the Alliance Ditch. The volume of water could be stored in the EA in Lake McConaughy; however, the volume from this one parcel is very small and hard to track. It may make sense to acquire several properties to increase the yield in the area or construct a small basin to capture the monthly credit and store it so it can be routed and tracked to the EA. Other irrigators under the Alliance and Enterprise Ditches may be interested.

Econopouly asked about how future excesses will impact broad-scale recharge and gravel pit operations. Kenny said both projects would be able to capitalize on large excesses coming in a short period of time. Canal capacities could be enlarged to bring in more water, in some cases. Kenny described some potential slurry wall gravel pit reservoir sites and more details on how the concept would work.

Altenhofen asked about the competition for water between the Program and the NDNR and NRDs. He noted that the NDNR may need 25% of other projects to make up the J-2 Reservoir yield if it is not constructed. He also emphasized the importance of storage and asked if the ED Office has looked at any previously studied projects, such as storage in Sutherland Reservoir East or Guernsey Reservoir. Shafer said the NPPD is working on a study of Sutherland Reservoir. Kenny said the focus is on broad-scale recharge and slurry wall gravel pits at the moment, but other storage sites are also being evaluated. The Program wants to do some pilot projects to test potential project concepts on Program-owned lands. Econopouly mentioned the USFWS is still interested in hitting SDHFs. There was some discussion as to whether a project score should include additional benefit from SDHF use.

Broad-Scale Recharge Update: *Kevin Werbylo, ED Office*

Werbylo presented on the general concept of broad-scale recharge, the locations identified for projects and the ED Office's path forward. The ED Office is looking at Cottonwood Ranch as a pilot project to implement in the near future. Bill Hahn, ED Office Special Advisor, is also evaluating additional locations for potential operations, including lands the Program owns or manages, as well as lands as far upstream as Gothenburg, for now. Werbylo discussed the conceptual design of the Cottonwood Ranch concept including preliminary berms, inundated

areas and capacities. Preliminary infiltration rates based on the two test pits constructed by the Program were discussed.

Cottonwood Ranch has been the focus of a pilot recharge project because the inundated area would also serve as enhanced habitat for cranes in the spring and fall. It is also managed by the Program and water could be delivered to the site through a pipeline from the Phelps Canal. The recharge area is an appropriate distance from the river for recharge operations. There are still questions the ED Office must address including more firm costs, scores, water delivery options, water service agreement terms and permitting for the site. Griebling is currently working on a groundwater model of the site. The ED Office intends to share the information with the TAC as well.

Update on Slurry Wall Gravel Pit Concept: *Seth Turner, ED Office*

The ED Office is looking at potential sites on Program lands, at existing pits and other locations under canals. Both Water Plan A and B include the concept of gravel pit slurry wall storage. Again, the projected costs, scores and capacities in this presentation are dynamic and subject to change as the ED Office evaluates projects further. The currently identified potential project locations include Plum Creek, Elm Creek and Lindstrom properties. Turner mentioned there are still many uncertainties with the concept of slurry wall storage pits, including the depth/extend of an impeding layer and the ability to deliver water in and out of the pit.

Field reconnaissance was done by the ED Office in July – Turner described some potential issues that would impact slurry walls at the site. An Aerial ElectroMagnetic (AEM) survey was also completed in July. The AEM survey was completed over the J-2 Reservoir area and along the river for gravel pit and broad-scale recharge sites. Interpreted results from the AEM survey are expected in a few months and will be used in conjunction with existing bore holes and well log data and new geophysical data collection (USGS Ohm-mapper survey, planned new bore holes at Plum Creek and Elm Creek).

Turner went over alternatives to traditional gravel pit reservoirs including berming pits to increase capacity and confined groundwater reservoirs (store water in sand/gravel pore space and pump back water to the river to avoid excavation). The ED Office distributed a memorandum to the WAC describing the concepts in greater detail.

Acquire and Retire Agricultural Land: *George Oamek, ED Office*

The concept of acquire and retire was further discussed by Oamek. The Program would purchase irrigated cropland, convert the water to instream use and sell the land as dryland. Oamek gave some back-of-the-envelope estimates for irrigation water values in the Central Platte Basin. Costs were amortized over 50 years at 3%. Water volumes were estimated at 0.95 acre-feet/acre to calculate a cost per acre-foot of water. Costs are in the ballpark of water leases but provide a long-term supply of water.

Some of the pros of acquire and retire include: competitive water pricing, low commodity prices currently, land market is active now, Program can have a diversified water portfolio, immediate implementation of projects but also flexibility to wait for good deals, etc. The Program would have long-term water on the books, instead of short-term leases.

Some cons include: upfront cash flow needed, potential 3rd party impacts from removing agricultural land, potential to distort land market, possible reduction in tax base, etc. To minimize these impacts, the Program intends to spread the purchased acreage over a large area and focus on less productive land. The proportion of land that would be converted to dryland would be minimal in comparison to the total irrigated acreage in the basin.

Altenhofen suggested the Program be selective for groundwater acquisition as the benefit is based largely on the location. He supported the concept of having the transferred water in perpetuity. Little went over the concerns from the TBNRD regarding acquire and retire, which were summarized and distributed in a memo to the WAC. The WAC discussed some of the comments. Kenny requested feedback from Colorado and Wyoming about acquiring agricultural lands for water in those states. Sellers noted that Colorado has export laws that makes it difficult to move water across the Stateline. Clerkin said Wyoming doesn't have the irrigated acreage for large transfers as Nebraska and Colorado do, and noted that exporting water would need to go through the legislature. Kenny also reminded the group about the higher cost of Colorado agricultural land and water. It was also noted that Colorado taxes exported water, further increasing the cost.

Kenny noted that all purchases for land/water acquisition would go through the GC, and that currently the GC has not requested other committees review purchase options. Strauch brought up that the Program and NRDs/NDNR should work closely together on these projects as Program water benefits all groups. Groundwater retirements, for example, increase river flows and thereby, reduce Nebraska's obligation to mitigate depletions to pre-1997 levels. Kenny noted that surface water can be protected, so that type of project wouldn't necessarily reduce the NDNR/NRDs' obligations; however, the Program and NDNR/NRDs should definitely team on projects and cost share.

Additional Business: *Cory Steinke, WAC Chair*
The next WAC meeting is October 11, 2016.

Action Items

General WAC

- n/a

ED Office

- n/a