PRRIP - ED OFFICE 05/03/16 PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

> Conference Call and WebEx Meeting February 2, 2016

Water Advisory Committee Meeting Minutes

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Meeting Attendees

Executive Director's Office (ED Office)

Jerry Kenny, ED

Scott Griebling

Kevin Werbylo

Sira Sartori

Seth Turner

Contractors

Matt McConville - HDR

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Water Advisory Committee (WAC)

10 **State of Colorado**

11 Suzanne Sellers – Member

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13 **State of Wyoming**

Bryan Clerkin – Member 14

Philip Stuckert - Alternate

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State of Nebraska

Jessie Winter – Alternate

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U.S. Fish and Wildlife Service

21 Tom Econopouly – Member 22

Jeff Runge – Alternate

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U.S. Bureau of Reclamation

25 Mahonri Williams - Member

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Downstream Water Users

28 Cory Steinke - Chair

29 Duane Woodward – Member

30 Jeff Shafer - Member

31 Landon Shaw – Member

32 Mike Drain - Alternate

33 Nolan Little

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Colorado Water Users

36 Jon Altenhofen – Member

Luke Shawcross

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39 **Upper Platte Water Users**

40 n/a

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42 **Environmental Groups**

43 Jacob Fritton – Member

44 Rich Walters

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PRRIP WAC Meeting Minutes

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48 Welcome and Administrative: Cory Steinke, WAC Chair

49 Introductions were made. Kenny made an agenda modification to move the wet meadows peer

50 review to the first topic of the meeting. Sartori reported no changes to the October 2015 WAC

51 meeting minutes. Motion to approve meeting minutes was made by Woodward, seconded by 52

Econopouly, unanimously approved. Altenhofen nominated Steinke as 2016 WAC Chair. There

were no other nominations. Woodward seconded. Unanimously approved and Steinke accepted the role.

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Wet Meadows Peer Review & Monitoring: Scott Griebling, ED Office

Griebling provided a brief review of the peer review process and recent changes to the peer review packet for the wet meadows hydrologic monitoring approach. There were no questions or comments on the approach or peer review packet. Woodward motioned to recommend the peer review packet to the GC. Clerkin seconded. There was no additional discussion; unanimous agreement.

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WAP Projects and Other Brief Water Updates

J-2 Regulating Reservoirs: Cory Steinke, CNPPID

The CNPPID is working on amending the Three-Party Agreement with sponsors. RJH is drilling holes on the county right-of-way and the CNPPID's property to determine if there is a continuous layer of low seepage sediment. If so, a cut off wall down to this layer may be a costeffective approach, in lieu of a clay liner. Woodward asked if the same number of landowners would be affected by the change in size of the J-2 Regulating Reservoirs. Steinke said the removal of a second reservoir, Area 2, reduced the number of landowners.

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Phelps Groundwater Recharge and Recapture: Sira Sartori, ED Office

Sartori gave a brief presentation on the Phelps Groundwater Recharge project and the Phelps Groundwater Recapture project. Deliveries into the canal for recharge began 11/23/15 and will continue through likely mid-February. Deliveries were also made on behalf of the Program into Elwood Reservoir in November/December of 2015 for recharge purposes.

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The ED Office checks water level elevations in monitoring wells near the canal, MW-1 and MW-2, throughout the recharge season. Both wells have 'operational' water levels that when reached, require discussion on whether continued operations are recommended. The operational levels are based on the Feasibility Study, and in place to avoid impacting other landowners. Water levels have remained within the 'operational' level during the 2015-2016 recharge season.

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Sartori discussed the groundwater recapture project on the Cook tract: 2 monitoring wells were drilled, 1 production well was drilled, Tri-Basin NRD approved the permit for operations, well testing is delayed due to weather, the project is anticipated to be operational in 2016.

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General Water Leasing: Sira Sartori, ED Office

Sartori talked briefly about the water leasing white paper provided to the WAC. It is meant to be an overview document of the water leases available to the Program and outline of potential



discussion items that may arise with the various types of leases. The biggest questions are related to surface water leasing and the potential increased groundwater pumping that may occur on those lands. Sartori requested the group provide thoughts or comments on the white paper. There were no questions or comments at the time.

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- **CPNRD Water Leasing:** Duane Woodward, CPNRD
- Woodward said the CPNRD is preparing agreements for transferred surface water rights again for those with 1- or 2-year signups. Recharge operations using excesses to target flows are anticipated in March.

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- **NPPD Water Leasing:** Jeff Shafer, NPPD
- The NPPD is still waiting for the surface water transfer application to be approved by the NDNR. Shafer said the NPPD met with the NDNR but no resolution has been reached. The NDNR has not issued an order yet.

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- **CNPPID Water Leasing:** Jerry Kenny, ED
- The leasing arrangement with irrigators under the CNPPID was discussed. The Program put a cap of 2,000 acres to lease. The total signups were a total of 1,037 acres. This is successful for the first go at this project, but not as much as was hoped for by the Program. It is thought that the dry-up requirement may be a dis-incentive for some people. Irrigators may also be conservative and not want to be the first ones to try the program. Kenny said that Dave Ford at the CNPPID thought some irrigators may also be hesitant to sign up because they don't want to suggest there is more water available than needed.

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Altenhofen asked about the asking price of the water. Kenny said he thought the price offered by the Program was reasonable, and probably generous at \$220/acre. The water associated with the land is about 9 inches/acre, then there are routing losses to Grand Island. The water is available in Lake McConaughy.

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- The Program may be in the position of a similar arrangement next year if there is full allocation.
- The CNPPID's board is reluctant to let the Program or others into the water leasing arena if there
- is not a full allocation year; if less than full allocation, farmer-to-farmer leases are allowed.
- Kenny is hopeful more irrigators will sign up in the future after seeing the success this year.
- Altenhofen asked how many irrigators signed up this year. Kenny thought in the ballpark of 20-
- 30 landowners. A lot of the lands are pivot corners or hard to irrigate areas, but geographically, it
- seemed like a broad distribution. The water will be transferred to the EA on October 1, 2016.

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Runge commented that leasing in the future may require more discussion about the CNPPID's non-irrigation releases under their license, specifically in years when the allocation is short and a waiver of non-irrigation releases is expected.

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- 132 Funk Lagoon: Jerry Kenny, ED
- 133 There were no items to discuss as this project is not moving forward as a WAP project.



- **COHYST Update:** Scott Griebling, ED Office
- 135 The graphical user interface (GUI) is operational but continues to be developed further. A
- workshop is scheduled later in February to teach the GUI to users. Documentation on the model
- is moving slowly. Land use from 2006-2010 is being integrated in the model.

- **Broad-Scale Recharge Update:** Kevin Werbylo, ED Office
- 140 Werbylo gave a presentation on the broad-scale recharge project anticipated at the Cottonwood
- Ranch complex. He discussed the conceptual design, the current work plan and path forward.
- The next phase is a feasibility study for the site, including an infiltration pit, field data collection
- and validation of other assumptions used in the conceptual design, preliminary cost and draft
- score analyses. The focus in 2016 is recharge on the Morse tract.

Altenhofen asked about the depth to groundwater at the site and at the estimated acreage of recharge ponds. Werbylo said he thought between 3-8 feet, depending on the time of year and if water is applied to the land. The acreage at build-out would be about 725 acres, but will depend on the infiltration rate for design parameters. The infiltration pit will be similar to the study conducted during the Feasibility Study for the Phelps County Canal recharge project.

Altenhofen requested the map of conceptual design include the bermed wet meadows areas and the river. There was also some discussion among the WAC members on the location of the berms, the source of water for wet meadows at the site and the soil type and layers on the property. Cores taken on the property show mainly sandy soils in the area. Runge asked about whether the project would require U.S. Army Corps of Engineers permitting given the installation of the berms. Kenny said he didn't think any Corps permits would be required and also thought the berms were low enough to avoid permitting related to dam safety. The permitting process still needs to be investigated.

Altenhofen stated the feasibility study is going to be important due to the high groundwater in the area. Kenny agreed and said there is still a lot of work to be done. The amount of recharge discussed could bring the water level to the surface or create a mound that does not allow for additional infiltration. He suggested detailed groundwater modeling by Bill Hahn, ED Office Special Advisor. Griebling said the Peterson Ditch also goes through the property. Altenhofen commented that this may also create an issue if there is less lagged effect. He expressed his concern with how close the property is to the river and stressed the need for more investigative work of recharge operations on the site. Little mentioned some of the TBNRD monitoring wells in the area show rain events that brought groundwater to the surface.

Altenhofen suggested working with landowners between the canal and the river to recharge in pivot corners or on lands used for water leasing. These lands would be further from the river for a more lagged effect. Kenny said no discussions have been initiated. Steinke did not think landowners would be very interested due to crop prices. In his opinion, he thinks recharge will work at the site, but maybe not at the scale proposed at full build-out. The big question may be how much recharge can occur at the site.



177 Trans-Basin Diversions Statutes: Jessie Winter, NDNR

Winter provided a presentation on the 2 main sections regarding interbasin transfers: § 46-288 and § 46-289 in the Nebraska Revised Statutes. She defined the terms in the statutes as well as the application and order process. The factors considered include the benefits of proposed transfers, adverse impacts and alternatives. Projects are deemed in the public interest if benefits are greater than adverse impacts, in which case, the NDNR would then grant the order. The ED Office then explained there is a proposed transbasin diversion to take excess from the Platte River and deliver it to the Republican Basin.

Kenny asked if a public hearing is required in the application process and the answer is no. Kenny asked if it is allowable and Winters said yes, if the NDNR thinks it is necessary. There is public notice. The WAC discussed the need for excesses in Program projects, especially as the basin is over-appropriated. Altenhofen asked if the permit could be granted as conditional, to allow for Program projects to divert excess flows for use in the basin first. Winters said yes and that there would be a condition that the proposed transfer would be junior to current and future uses in the Platte Basin. WAC members expressed concerns about the project. Little said the Tri-Basin NRD, who would be a user of the interbasin transfer, is in the process of working with landowners in the Republican Basin now, but have not estimated potential yields from the project. He described how the water would be moved through the CNPPID system to Turkey Creek and piped to the Republican headwaters. The use would be to meet compact compliance with Kansas. The WAC asked to stay current on the proposed application.

Draft Annual Flow Report Summary: Scott Griebling, ED Office

The draft 2015 annual flow summary was presented to the WAC. Graphs of streamflow at various gages, Lake McConaughy EA content and USFWS target flows for the year were depicted in various graphs and discussed by Griebling. The 2015 annual data was compared to data from 2007 through 2014 during the Program's First Increment, as well as historical data beginning in the 1940s. The 2015 annual hydrologic condition is considered wet, based on the hydrologic condition thresholds. A few WAC members commented the report summary was very useful and well-done.

Runge asked if the annual flow summary tracks Tamarack water to Grand Island, since Pathfinder EA and Lake McConaughy EA waters are tracked through the system. Altenhofen said he reports the monthly volume of Tamarack water at the state line to the WAC annually. He said if there is a Tamarack III as a Water Action Plan project, the yield would likely be tracked to Grand Island for scoring purposes. Runge clarified earlier statement in that the suggested evaluation would not represent an effort to score projects. Rather, the suggested evaluation would be used to assess combined Program effect to Platte River hydrology. Runge thought that tracking Tamarack water to the state line is reasonable, and Tamarack III could provide an opportunity to evaluate contributions to associated habitat area.



- 220 Excess Flow Analysis: Scott Griebling, ED Office
- The purpose of the analysis was to evaluate trends in annual excesses and monthly excess
- distribution. A previous analysis by the ED Office was completed on this topic already; however,
- 223 this is an extension of that analysis. Griebling went over various graphs of annual excesses over
- 224 time, including historical trends in excesses. Historical data from the Grand Island gage from
- 225 1947 through 2015 was used. Box plots of monthly excesses were shown to illustrate the spread
- of the data. Large flow events in short periods of time tend to skew the annual averages upwards.
- There are also months in the analysis when there are no excesses. This makes it important to
- 228 capitalize on large flow events and evaluate excess availability using medians and distributions
- in addition to averages.

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- Altenhofen requested the graphs in the presentation include clear titles. He noted there appear to be less winter excesses, which would limit potential diversions for projects such as Tamarack.
- be less winter excesses, which would limit potential diversions for projects such as Tamarack.

 Even though there may be an upward trend in excesses over time, it is deceiving as it may not be
- during times when projects divert. Altenhofen suggested showing the 2007 2015 period to see
- during times when projects divert. Alternoten suggested showing the 2007 2013 period to see
- 235 how this relates to Program operations. Griebling said he could make additional box plots for the
- 236 first 9 years of the Program. Econopouly agreed this would be a good idea. After some
- 237 discussion, the ED Office said the excess flow analyses will be organized into a comprehensive
- white paper, which will be provided to the WAC for the next meeting.

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Hydroclimatic Indices Update: Jerry Kenny, ED

241 The Water Year (WY) 2016 forecast for the North Platte is the high average category for the

- volume of streamflow at Lewellen from May through July. This means predicted flows of
- 243 average to above average inflows into Lake McConaughy. The South Platte forecast for WY
- 2016 is average for the Snow Water Equivalent (SWE) and in the high average category for the
- volume of streamflow from May through July at Julesburg. The ED Office will distribute the
- reports soon. Dewberry, the contractor for the hydroclimatic indices work, has also been asked to
- 247 attend the May WAC meeting to provide information to the group.

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Additional Business: Cory Steinke, WAC Chair

Steinke presented the upcoming meeting schedule. Next WAC meeting is May 3, 2016.

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Econopouly informed the WAC there may be an EA release mid-February to mid-March, if the ice in the river does not pose an issue.

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Action Items

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• Compile the excess flow analyses into a comprehensive white paper.