

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM 1 2 **Water Advisory Committee Meeting Minutes** 3 Conference Call and Webinar 4 May 5, 2020 5 6 **Meeting Attendees** 7 8 **Water Advisory Committee (WAC)** Water Advisory Committee (WAC) 9 **Upper Platte Water Users State of Colorado** 10 Jojo La – Member 11 Erik Skeie – Alternate **Environmental Groups** 12 Jacob Fritton – Member 13 Rich Walters **State of Wyoming** 14 Bryan Clerkin – Member 15 Jeff Cowley - Alternate **Executive Director's Office (EDO)** 16 Jason Farnsworth, ED 17 State of Nebraska Justin Brei 18 Jessie Winter – Member Scott Griebling 19 Seth Turner Jesse Bradley – Alternate 20 Jennifer Schellpeper – Alternate Kevin Werbylo 21 Jeremy Gehle 22 Contractors 23 U.S. Fish and Wildlife Service 24 Tom Econopouly – Member 25 Jeff Runge – Alternate 26 Matt Rabbe 27 28 U.S. Bureau of Reclamation 29 Brock Merrill - Member 30 31 **Downstream Water Users** 32 Corv Steinke – Chair 33 Jeff Shafer – Member 34 Brandi Flyr – Member 35 Tyler Thulin 36 Nolan Little 37 John Thorburn 38 39 Colorado Water Users 40 Jon Altenhofen – Member 41 Luke Shawcross – Alternate 42 Jason Marks 43 Nathan Baker 44 Kyle Whitaker 45



- 46 Welcome and Administrative: Cory Steinke, WAC Chair
- 47 Introductions were made. There were no agenda modifications. No edits to the draft February
- 48 WAC meeting minutes were noted. La made a motion to approve the minutes, second by
- Econopouly. There was no further discussion and no opposition; Steinke declared the minutes
- 50 approved.

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

- 53 Policy for Platte River diversions during EA releases: Jeremy Gehle, NDNR
- 54 Gehle discussed Nebraska DNR's process for making decisions regarding excess flow
- 55 diversions. There are a number of factors considered, including streamflows exceeding USFWS
- 56 Fixed Daily Target Flow at Grand Island, and at other locations where there are instream there
- are in-stream flow appropriations downstream, expectation that excess flows will be available for
- more than just a couple days, and no calls for water by other users. Precipitation is also
- 59 considered, particularly how it could impact South Platte River inflows from Colorado and North
- Platte River inflows from Wyoming. In the future, Nebraska DNR will require annual operating
- 61 plans (AOPs) for excess flow diversion projects. La asked for clarification about a "natural flow"
- 62 irrigation use, and Gehle said it differentiates from irrigation water that is stored and released.

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## **Leasing and Recharge Projects:** Seth Turner, EDO

In advance of the meeting, the EDO distributed a memo with status updates on the Program's leasing and recharge Water Action Plan (WAP) projects. Turner asked if there were any questions from the group, and there were none.

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## Platte Basin Hydrology Update: Scott Griebling, EDO

The EDO also provided a memo with updates on flow conditions at Grand Island, storage volume in the Lake McConaughy Environmental Account (EA), and snowpack in the South Platte and North Platte Basins. Griebling said conditions are trending towards a higher discharge year due to full reservoirs and above average snowpack. He also asked the committee to provide feedback on the content of the memo.

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Econopouly noted that EA releases stopped on Sunday, May 3 due to forecasted high rains around North Platte. Releases may start again on Thursday or Friday of this week.

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Runge noted that during the February-March EA release, the Program target flow of 3,350 cfs was exceeded at times but flows at Grand Island were still within the range of USFWS targets.

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## North Platte Chokepoint Test: Seth Turner and Justin Brei, EDO

Turner gave an update on planning for the chokepoint test, which had to be postponed last year due to the flooding in central and eastern Nebraska. The Program has a long-term goal of achieving flows of 3,000 cfs through the chokepoint area while remaining below minor flood stage. Flow at the minor flood stage of 6.0 ft is currently less than 2,000 cfs, and an increase to 6.5 ft would get much closer to 3,000 cfs.

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There are two potential test scenarios this year: a Lake McConaughy fill-and-spill in early July and a controlled release from the EA starting in late July and continuing through early August. Thulin said that Lake McConaughy is still expected to peak in early July, although possibly not as high as expected a few weeks ago; it all depends on the inflows to the reservoir.

Turner said the test plan is to ramp up flows to a stage of 6.0 ft and hold, then to 6.5 ft and hold, and possibly up to 6.75 ft, at which point flow is greater than 3,000 cfs. The National Weather Service (NWS) has suggested that hold periods may need to be as long as a week to collect adequate data and imagery. Econopouly asked if these longer hold periods would require more than the 50,000-60,000 acre-feet (AF) of EA water that were anticipated for the test. Turner said the EDO had not yet done the analysis to determine that but will be doing so soon.

 Turner added that the Chokepoint Workgroup was reconvened for a conference call on April 16 to review where planning for the test left off last year, and the EDO met with NWS by conference call on May 1. The EDO also plans to coordinate with the City of North Platte, the Lincoln County Emergency Manager, and Nebraska DNR. La asked if there will be a monitoring plan. Turner said developing both flow routing and monitoring plans will be a focus for the EDO over the next month. Brei added that the North Platte City Administrator and City Engineer are both retiring, so there will need to be some effort to bring new city staff up to speed on the test release plan.

Recapture Wells Pilot Project: Kevin Werbylo, EDO and Nolan Little, Tri-Basin NRD Werbylo gave a comprehensive overview of planning for a pilot-scale recapture well project, noting that the project concept has long been referenced in the context of Program water projects and reviewing the Cook recapture well that was installed in 2015. Werbylo added that any element of control that can be added to recharge projects is beneficial to the Program.

For the past year, the EDO has been working with the NRDs (Tri-Basin and Central Platte) and Nebraska DNR to develop an expanded recapture project concept to re-time accretions from the Phelps, Elwood, and Cottonwood Ranch recharge projects. In addition to operational flexibility, the project would have added benefits of dewatering and support for rural fire departments.

The current plan for a pilot-scale Phase I recapture network would likely involve installation of 5-6 wells (and possibly up to 10 wells) on the downstream side of the Cottonwood Ranch recharge project. Each well would have its own outlet pipe to the river. The preliminary score estimate is about 150 AF/year per well, with estimated construction costs of \$85,000 to \$112,000 per well. Over the long term, project costs work out to about \$120 to \$150 per AF of score. A larger Phase II would potentially follow, but both phases would be dependent on continued recharge operations. Phase II would also require input from the WAC and TAC.

Acknowledging that score analyses have to be completed using the 1947-1994 OPSTUDY hydrology, Econopouly asked if the project has been evaluated in the context of the current hydrology in which the Program actually has to operate the project, or whether the impacts of



climate change have been considered. Griebling said the current score projections are just preliminary, rough estimates. Econopouly said it would still be good to see if operations change significantly under current hydrology.

Altenhofen noted that operations would be a matter of balancing well depletions and accretions at the river and asked if this project applies to all of Elwood, Phelps, and Cottonwood Ranch, since the amount pumped cannot be more than the volume recharged. Werbylo said yes, the project includes recharged water from all three of those Program projects.

Werbylo said costs and agreements with Tri-Basin NRD are being negotiated. The well network would likely be owned (via a buy-back) and operated by the NRD. The Program would pay under the terms of a Water Service Agreement (WSA). Tri-Basin NRD would operate the project according to the WSA and to achieve landowner benefits. Runge asked if O&M costs include payments under the WSA with Tri-Basin NRD. Werbylo, said yes, that is part of the cost of service, along with power costs and maintenance. The final terms of the agreement should be ready by June or July.

Werbylo, having presented the "what" of the project, turned the discussion over to Little to cover the "how" of the project. Little explained that well permits from Tri-Basin NRD will be required. Since the wells will each pump less than 1,000 gpm, 600-foot spacing is needed. As "environmental wells," public presentation of the permit at a Tri-Basin NRD Board meeting is required, as well as the opportunity for public comment and final approval by the Board. Little added that Army Corps of Engineers permits are not needed for rip rap placed at the pipeline outlets within the historic riverbanks, and NPDES permits are not required for groundwater pumping.

The installation and operation of wells at Cottonwood Ranch will be specified in an interlocal agreement between the Program and Tri-Basin NRD. The NRD will also secure easements from private landowners. Tri-Basin NRD will operate the wells at the request of the Program, and general operating rules will be agreed upon. Pumping could be limited based on the REA rate plan selected. Operations will be controlled remotely through a SCADA system; observation wells and flowmeters will be installed.

Altenhofen asked if Tri-Basin NRD would want to operate the wells as part of its own depletions plan obligations, Little said not likely. Altenhofen commented that this is a worthwhile project and asked if it is in the budget for 2020. Farnsworth said yes, it's in the budget. The form of agreement with Tri-Basin NRD is nearly complete, just need to settle on final terms, structure of payment, etc. Approval by the GC will be needed, just need to confer with Tri-Basin NRD about whether to have everything ready for June or save some parts for September. Thorburn said the preference is to have the agreement in place during or before July because the Tri-Basin NRD fiscal year starts on July 1, but as long as there is agreement in principle, there is flexibility in that schedule. Thorburn also said construction would be open to all interested well drillers. Given the irrigation workload during the summer, fall is the realistic timeline for construction.



Runge asked about the expected life of well projects. Thorburn said 25-30 years, maybe longer.

Runge also asked whether there was potential to use this project to recapture water recharged in

- the Rainwater Basin projects. Griebling said the Program had looked at the potential to recharge
- in Funk Lagoon and found that with its location on the edge of multiple groundwater divides,
- 179 recharged water wouldn't necessarily return to the Platte. With Phelps, Elwood, and
- 180 Cottonwood Ranch, we know that most of the water is returning to the Platte and far enough
- upstream to benefit most of the critical habitat reach. Thorburn added that Victor Lake and other
- recharge sites are farther west, and that water reaches the Platte eventually, but there has been no
- consideration of recapturing that water with this project.

 The current project timeline shows approval of the interlocal agreement (WSA) in June 2020; construction of wells and pipelines in the fall; installation of electrical connections and controls during the winter; and concludes with operation of the Phase I wells in spring 2021. Phase II planning will continue, with installations potentially to begin in fall 2021 into 2022.

Federal Depletions Plan Update: Tom Econopouly and Matt Rabbe, USFWS

Turner prefaced the depletions plan updates by saying that the discussions were intended to be more expansive this year, to provide a refresher on the provisions of the individual depletions plans and to provide more context for the annual updates.

Econopouly provided information on the purpose, definition, coverage, and current uses of the federal depletions plan. New federal depletions are water related activities in the Platte Basin (upstream of the Loup River confluence) implemented by federal agencies that primarily provide a "national benefit" to the general public. Examples include new consumptive water uses in national forests, refuges, parks, monuments, and historic sites, as well as at federal facilities that provide benefits such as national security and research activities. Other federal activities, such as vegetation management in the Platte Basin by the Forest Service and large volume depletions (1,000s of AF/yr) associated with new or enlarged reservoirs, large well fields or surface diversions, etc., are not covered by the federal depletions plan. Water and land conservation activities on privately-owned agricultural lands are also excluded. The federal depletions plan is intended to cover small water uses, with a 350 AF annual limit in each of the three Program states, and the states work with cooperating federal agencies on mitigating measures.

Rabbe reported on tiered consultation activity in 2019. Twelve consultations were completed, six in Colorado, one in Nebraska, and five in Wyoming. One of the consultations in each state was a federal depletion associated with road maintenance at Minute Man Missile Sites. Since the Program began in 2007, there have been a total of 208 tiered consultations.

Cowley requested that he be added to the distribution list for the USFWS memo in place of Matt Hoobler.



218 Wyoming Depletions Plan Update: Jeff Cowley, WY SEO

Cowley guided the committee through the key provisions of Wyoming's Depletions Plan and explained his role as State Coordinator for administering the plan. Cowley noted that the plan defines existing water uses are those occurring prior to July 1, 1997; new water sources are difficult to find and develop, so the state encourages acquisition of water from nearby existing users for construction projects in remote areas, such as wind turbines.

Wyoming has three baselines for compliance with the depletions plan. Baseline No. 1 is tied to compliance with the North Platte Decree and pertains to irrigation use in the North Platte River basin above Guernsey Reservoir. Although there are strict limitations on irrigated acreage, there is flexibility under certain conditions, for example if Baseline No. 1 is exceeded but Guernsey or Kingsley Dam spill, then Wyoming can present evidence to show that the excess acreage was the result of abundant water supplies and there was no adverse impact to the Program.

Baseline No. 2 is related to irrigation, municipal, industrial, and other uses in six sub-basins defined in the plan. There are benchmark acreages and depletion volumes for the irrigation and non-irrigation seasons. Depletions are translated to the Wyoming-Nebraska state line. Cowley noted that participation in Wyoming's Depletion Plan is voluntary, but municipalities always find it preferable to alternatives for ESA compliance. Outside of power generation, the plan also identifies six major industrial water users. Cowley also said that Wyoming issues no new permits for irrigation or irrigation reservoirs in the North Platte Basin to avoid incrementally approaching the benchmarks and increasing the risk of exceedance.

Baseline No. 3 is associated with storage in the South Platte Basin. In that area, Crow Creek flows towards Colorado and Lodgepole Creek flows towards Nebraska, but water rarely leaves Wyoming except under very high runoff or precipitation conditions. Most reservoirs constructed in this area are small and off-channel.

For the annual reports, Wyoming is complying with the three baselines. Cowley noted a revision Laramie Basin numbers in the 2018 report. Industrial water use at the sugar beet plant in Torrington declined significantly because of the construction of a new processing plant in Scottsbluff. This is reflected in Table 2.4 of the 2019 report, which shows greatly reduced usage in the Guernsey to State Line sub-basin for Baseline No. 2. Cowley said Wyoming may be overreporting the post-1997 increase in storage capacity in the South Platte Basin (Baseline No. 3) and will adjust as necessary in next year's reporting.

Nebraska Depletions Plan Update: Jessie Winter and Jennifer Schellpeper, NDNR Winter presented on the key provisions of the Nebraska New Depletion Plan (NNDP), the annual report of 2018 permitted activities, and the 2019 Robust Review. The NNDP is implemented through actions taken by Nebraska DNR (surface water) and five NRDs in the plan area above Chapman, NE. The plan also allows Nebraska to reserve yields from Program WAP projects. The NNDP requires reporting of new permits, depletions, and mitigations upstream and within the critical habitat area, and the 28/40 area is used primarily for reporting purposes. Compliance



is determined using the COHYST model and other tools, and a land use inventory is completed in 5-year increments. Additional iterations of the Robust Review will be conducted in 2023 and 2027. Tasks identified in Part V of the original NNDP have all been completed.

Winter reviewed the 2018 new permitted water uses, including groundwater transfers, various groundwater wells (new wells, replacement wells, and supplemental wells), groundwater variances, and surface water appropriations. Nebraska's analysis shows that the net effect of depletions and mitigation measures is positive through the end of the decade. Altenhofen asked whether this net positive effect to the river from mitigation measures was a potential water supply for the Program. Winter said the positive balance is being counted towards achieving the fully appropriated condition. Winter also reported that the 2019 Robust Review shows Nebraska to be in full compliance with the NNDP and Milestone 9 of the Program Extension document.

 Colorado Depletions Plan Update: Jojo La, CWCB and Jon Altenhofen, Northern Water La gave an overview of Colorado's depletions plan requirements for the North Platte Basin, including baseline values for irrigated acres and population and post-1997 new water related activities. Annual reporting includes irrigated acreage; irrigation storage; transbasin diversions; population in Jackson County; piscatorial, wildlife, and other environmental uses (without federal nexus and not incidental to irrigation); and new industrial uses. La explained the calculations to determine over-/underruns relative to the baseline values. For 2019, Colorado had an underrun of 17,332 AF in the North Platte Basin and is therefore in compliance with the depletion plan.

Altenhofen reviewed the terms of Colorado's Plan for Future Depletions, computations for which are based on population increases since July 1, 1997. For this purpose, the South Platte Basin is divided into northern, central, and southern regions as groups of counties. Population growth has continued at a nearly linear 2.2% per year. Altenhofen explained the assumptions and calculations used by Colorado to assess post-1997 water use. The regional water supply mix includes six sources: "new" transbasin imports, nontributary groundwater, in-basin agricultural conversion, conservation, water reuse, and native post-1997 South Platte flow development. The percentage of each supply is updated in 5-year increments. Data collection is underway for the 2019 update, and a survey was sent to SPWRAP members, but responses have been slow to come in due to the ongoing covid-19 pandemic. The updated information will be provided as soon as it is available. Overall, Colorado shows cumulative depletions in May and June that are successfully offset by retiming accretions from groundwater recharge.

Winter asked about documentation of past revisions to Colorado's depletions analysis assumptions. Altenhofen said those should be on the Program website, and EDO staff said they would confirm.

Additional Business: Cory Steinke, WAC Chair

The next WAC meeting is scheduled for August 4, hopefully in person at the Lake McConaughy Visitor Center.



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