



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Virtual Meeting – Microsoft Teams
August 1, 2023

PRRIP Water Advisory Committee Meeting Attendees		
Name	Affiliation	Member or Alternate
Department of the Interior		
Brock Merrill	U.S. Bureau of Reclamation	Member
Jeff Runge	U.S. Fish and Wildlife Service (USFWS)	Member
Matt Rabbe	USFWS	Alternate
State of Wyoming		
Jeff Cowley	Wyoming State Engineer's Office (WY SEO)	Member
Bill Brewer	Wyoming Water Development Office	Alternate
Michelle Hubbard	WY SEO	
State of Colorado		
Kara Scheel	Colorado Water Conservation Board (CWCB)	Member
State of Nebraska		
Jennifer Schellpeper	Nebraska Department of Natural Resources (NDNR)	Member
Jesse Bradley	NDNR	Alternate
Kari Burgert	NDNR	Alternate
Justin Ahern	NDNR	
Mike Archer	Nebraska Game and Parks Commission	
Avery Dresser	NDNR	
Caitlin Kingsley	NDNR	
Jim Ostdiek	NDNR	
Shuhai Zheng	NDNR	
Upper Platte Water Users		
Dennis Strauch	Pathfinder Irrigation District	Member
Colorado Water Users		
Jon Altenhofen	Northern Water	Member
Kyle Whitaker	Northern Water	Member
Joe Frank	Lower South Platte Water Conservancy District	Alternate
Jason Marks	Denver Water	
Downstream Water Users		
Cory Steinke	Central Nebraska Public Power and Irrigation District (CNPPID) – 2023 WAC Chair	Member
Brandi Flyr	Central Platte Natural Resources District (CPNRD)	Member
Jeff Shafer	Nebraska Public Power District (NPPD)	Member
Nolan Little	Tri-Basin Natural Resources District	
Tyler Thulin	CNPPID	
Randy Zach	NPPD	

This document is a draft based on one person's notes of the meeting. The official meeting minutes may be different if corrections are made by the Water Advisory Committee before approval.



PRRIP Water Advisory Committee Meeting Attendees		
Environmental Entities		
Jacob Fritton	The Nature Conservancy (TNC)	Member
Melissa Mosier	Audubon Great Plains	Member
Executive Director's Office (EDO)		
Jason Farnsworth	Executive Director	
Seth Turner	Water Plan Coordinator	
Malinda Henry	Science Plan Coordinator	
Justin Brei	Engineering/Colorado Coordinator	
Libby Casavant	Hydraulic Engineer	
Kristen Cognac	Hydrogeologist	
Other Participants		
n/a		

Welcome and Administrative: *Cory Steinke, 2023 WAC Chair*

Meeting participants were identified from Microsoft Teams. Turner noted two agenda modifications: (1) he would be presenting the Platte Basin hydrology update, and (2) analysis of the temporary hydrologic condition is still in progress, so no motion would be requested from the WAC. Minor revisions to the original draft of the May 2023 WAC meeting minutes were reviewed. Mosier made a motion to approve the minutes, second by Marks. No objections, minutes approved.

Brief Water Updates: *Seth Turner, EDO*

Platte Basin Hydrology:

Turner reviewed year-to-date flow at the Grand Island gage. River flows tracked below target flows for much of the year through mid-May. However, data for most of January and the first half of February are now showing flows above targets, indicating potential excess flows. This was unknown in real time due to ice conditions at the gage, and USGS did not publish estimated flows until a few months later.

Initial rains in Colorado resulted in a brief period of excess flows in mid-May. This was followed by a lull in late May before rains continued and streamflows at Grand Island increased throughout the month of June. Nearly all of the observed high flows were due to rainfall along the Front Range of Colorado and resulting flow down the South Platte River. The Denver metro area had the wettest May-June on record, and rainfall from Colorado Springs to the north was from 150-300% of normal over the May-July period. Much of the South Platte Basin, including in Nebraska and southeastern Wyoming, received 9-18 inches of precipitation during the May-July period, with some of the highest amounts concentrated over the Bijou Creek basin in the counties just east of metro Denver. The frequent and extensive rainfall was reflected in several “waves” traveling down the South Platte River.



The result of all this precipitation is that nearly all of eastern Colorado, eastern Wyoming, and the Nebraska panhandle are no longer under abnormally dry or drought conditions, and drought conditions in central Nebraska improved compared to late April.

Leasing, Recharge, and Recapture Projects:

The Program's 8 recapture wells collectively pumped about 1,018 AF from the start of 2023 through May 16. Most of that pumping was after March 31, translating to about 10-12 cfs continuously pumped to the river through April and the first half of May. Two wells were operated for a week in July due to lower high groundwater levels, and all wells resumed pumping on July 27 after flows at Grand Island dropped to shortage levels (below the 1,200 cfs target flow at the time).

Nebraska DNR declared excess flows available from May 16-24 and again from June 9-July 24. During those periods, deliveries to Elwood Reservoir for Program recharge totaled 3,346 AF. A total of 1,741 AF was delivered to the Cottonwood Ranch broad-scale recharge (BSR) project, including 897.4 AF to the recharge cells north of the Peterson Drain and 843.6 AF to the recharge cells south of the Peterson Drain. This was the first opportunity to operate the project over an extended time period after brief test fills in 2020 and a week of deliveries in 2022.

The Program leased the full 9,600 AF from the Pathfinder Municipal Account. This was released for delivery to Lake McConaughy earlier than usual, in late June, due to the high volume of runoff into Wyoming reservoirs from spring runoff. About 7,170 AF reached the Lake McConaughy EA, representing about 25% transit losses. The Pathfinder Environmental Account filled to capacity (33,493 AF) on June 11. That water, minus accrued evaporation losses over the summer, is expected to be released in late August or early September.

North Platte Chokepoint Study:

The project team led by Anderson Consulting Engineers and including subcontractors River Works, ERO Resources, and Dr. Peter Nelson of Colorado State University was selected for the study. Contracting was completed and a kickoff meeting with the project team was held in late May. Task Order #1 is underway, including review of prior chokepoint documentation and preparation of a comprehensive list of alternatives, initial existing conditions model updates, and scoping for the detailed alternatives analysis (Task Order #2). A meeting with the Chokepoint Planning Workgroup to review and discuss the list of alternatives is anticipated in late August. The Anderson project team will present an initial progress update at the September GC meeting.

Expanded Recapture Reconnaissance Study Contractor Selection:

Four proposals were submitted in response to the RFP for the Expanded Recapture Reconnaissance Study. The Proposal Selection Panel met on July 31, and a decision on contractor selection was expected in early August. Contracting and a project kickoff meeting will likely proceed by early September, and a project site visit may be scheduled to coincide with the September GC meeting.



Germination Suppression EA Release: *Seth Turner, EDO*

Turner first reviewed the 2022 germination suppression release to help illustrate how different it was from the 2023 release. This year was the 4th consecutive year in which an EA release for germination suppression was made. As noted in the hydrology discussion, Platte River flows at Grand Island were tracking below target flows for much of the year through mid-May. When planning for the 2023 germination suppression release started in early May, flows at Grand Island were averaging less than 150 cfs. It was anticipated at that time that 2,000 cfs releases from the Lake McConaughy EA were potentially necessary just to reach the 1,500 cfs germination suppression flow target while accounting for expected significant transit losses from the dry river channel.

With the 8-day travel time from Lake McConaughy to Grand Island, the EA release was initiated on May 24, right at the end of a brief period of excess flows, and as the flow at Grand Island was in a steep decline. Given the uncertainty of the magnitude, timing, and duration of rising South Platte River flows, the EA release was ramped up to 1,500 cfs over a couple days and held there for another 10 days. Once it became apparent in early June that the rainfall in Colorado was persisting, the EA release was steadily reduced starting June 5 and ended on June 14, after which the flow at Grand Island continued to increase throughout the rest of June. EA water was released down the North Platte River for a few days at the start of the release to accommodate acceptable ramping rates in the Sutherland Canal, but after that all water from this EA release was routed through the Sutherland Canal. Unlike in June 2022, the North Platte chokepoint was not a constraint on the EA release this year.

The duration of the 2023 EA release for germination suppression was 22 days, with 49,870 AF released. Of that volume, 40,342 AF (81%) reached Grand Island based on Nebraska DNR tracking. For the first time during a germination suppression test, flow at Grand Island exceeded 1,500 cfs for all 30 days of June (and actually continued for 51 days, from May 31-July 20). Flow at Grand Island averaged about 3,300 cfs for the month of June.

Schellpeper asked about the Annual Operating Plan (AOP) for the Lake McConaughy EA, since there was not one for 2023. It was noted that typically the USFWS coordinates with the EDO and sets EA release priorities based on Program priorities. Rabbe said that the fall EAC/RCC meeting is when EA release priorities are discussed, but there is currently not an official USFWS EA Manager and no AOP. He added that with full reservoirs in Wyoming, USFWS does not want to risk an EA reset if there is another big winter, but planned fall maintenance by CNPPID and NPPD limits EA release opportunities in October. However, there may still be a couple weeks for a fall release after maintenance is completed, then there could potentially be a spring release and another germination suppression release in 2024. Hubbard asked what it means for the EA to reset. Rabbe said if Lake McConaughy fills to its effective capacity, the EA automatically resets to 100,000 AF regardless of how much more or less was in the account previously.



Rabbe was asked if USFWS was close to hiring someone to fill the EA Manager position, and he said potentially late in 2023 or early 2024. Mosier asked about scheduling for the fall EAC/RCC meeting. Turner said it was scheduled for Tuesday October 24 at 9:30 a.m. mountain time, preceding the October WAC meeting. Scheel inquired about the timing for there to be an AOP, and it was proposed that the date of the fall EAC/RCC meeting should be moved to earlier in October in advance of a potential fall whooping crane release from the EA. Farnsworth added that there should at least be a temporary AOP documenting a potential fall release. Schellpeper emphasized the importance of the AOP and said there should be a draft for the EAC/RCC to review and react to. Rabbe said this request was noted.

CNPPID Irrigator Lease: *Seth Turner, EDO*

Turner reviewed the history of the CNPPID irrigator lease Water Action Plan project, which began with a lease agreement in the fall of 2015 for a pilot project during the 2016 irrigation season. Terms of the agreement included that (1) CNPPID has to be making full allocation irrigation deliveries to its customers (so the Program is the only customer for leasing); (2) CNPPID customers enroll parcels in the lease program and do not irrigate, but may fallow the land or grow dryland crops; and (3) the Program receives 9" (0.75 AF) per enrolled acre, which is credited to the Lake McConaughy EA in October. One-year agreements for the first 3 years of the project (through the 2018 irrigation season) included maximum enrollment of 2,000 acres. The Program paid \$220 per enrolled acre (effectively \$293/AF) plus a \$10,000 administration fee to CNPPID. A 5-year agreement was reached for the 2019-2023 irrigation seasons, with maximum enrollment increased to 3,000 acres. The Program initially continued to pay \$220 per acre but reduced that to \$100 per acre (\$133/AF) starting in 2021. The current agreement expires December 31, 2023.

Initial enrollment in 2016 was 1,037 acres and added 778 AF to the Lake McConaughy EA. Enrollment increased each of the first 5 years, reaching nearly 3,000 acres in 2019 and 2020. With the drop in price starting in 2021, enrollment declined by nearly 2/3 but has increased slightly each year since then. Enrollment for 2023 was 1,320 acres, with an expected 990 AF to be credited to the EA in October.

A project score of 1,900 AF for the CNPPID irrigator lease was approved by the GC in June 2019. The score analysis assumed that CNPPID makes full allocation irrigation deliveries in all years, i.e., the Program can lease from CNPPID irrigators in all years, and that enrollment would consistently remain near 3,000 acres. The final score memo included the caveat that the recommended score is "subject to review and modification at the end of the current 5-year lease agreement, or sooner if there is a substantial change (increase or decrease) in project enrollment" and specified the basis for any future revisions to the project score.

Turner identified 3 general options for the future of the CNPPID irrigator lease for the WAC to discuss: (1) renew the lease agreement through the end of the Extension and revise the score; (2) renew the lease agreement for a shorter duration and revise the score; or (3) end the lease agreement and eliminate the score.



Steinke said that CNPPID has no comment. Bradley recommended against eliminating the project, as it still represents a useful measure of the water market and the Program has not yet met its water objective. Whitaker asked if there is verification that enrolled parcels are not irrigated. Turner explained that the parcels enrolled are typically those that are difficult to irrigate, such as pivot corners or other odd-shaped parcels. CNPPID verifies that they are not irrigated, and there have been a few instances of enrollment being reduced because parcels were irrigated. Steinke confirmed that this was correct and added that CNPPID makes sure that enrolled parcels were in fact irrigated previously. He added that the initial years of the irrigator lease were wet, and very good dryland crops could still be produced. At this point, the \$100/acre payment is probably not covering yield losses, and farmers don't like to be the one with poor yields.

Cowley asked if consumptive use (CU) is the basis for the yield credited to the EA. Steinke said yes, it is basically CU, and that the 9" per acre is less than regular irrigation deliveries. Whitaker emphasized the importance of not incentivizing taking land out of production. Cowley mentioned the system conservation program in the Colorado River Basin, which has a considerably higher price point. But Green River irrigators are mostly growing hay to feed their own cattle, and maybe hay vs corn is too different. Whitaker added that there is no dryland option in the Colorado River Basin.

Farnsworth said that unresolved issues with other proposed long-term water leasing agreements complicate this decision-making process, but the irrigator lease could potentially be extended for just one year. Whitaker asked if there was anything to be learned from increasing payment to \$150 per acre. Farnsworth said economic analyses were completed before the irrigator lease began, and \$220-\$250 per acre was where the risk curve for irrigators inverted. Altenhofen noted that early in the project the price for corn was \$3 per bushel; now it is around \$6 per bushel but coupled with high fuel and fertilizer costs.

Mosier asked if there was a strategy behind reducing payment to \$100 per acre. Farnsworth said it was to bring the unit cost closer to that of other lease water purchased by the Program, but also somewhat of an experiment to see what the response would be. Mosier asked if there are other acres that could be enrolled, Steinke said yes if the price was increased.

Farnsworth proposed to extend the irrigator lease for 1 year at the current terms and potentially have George Oamek (former EDO) take another look at the economics. Steinke said CNPPID would probably go along with that. Mosier asked about revising the score, and Turner said that could be done based on the scenario and data specified in the original score memo. Farnsworth stressed the importance of continuity in Program water projects. Bradley agreed and added that if we lose some score but identify an inflection point for cost, this ultimately becomes a policy decision for the GC to make about the project over the long term. Farnsworth said the price would be viewed differently if this was the last water needed to reach 120,000 AF. Merrill offered support for a one-year agreement with the same terms for continuity but did not want to start changing the price paid by the Program.



Merrill motioned and Whitaker seconded to extend the CNPPID irrigator lease for one year at the current price and terms. There were no objections, so the motion will advance to the GC in September.

Temporary Hydrologic Condition: *Seth Turner, EDO*

Turner reviewed the wet-normal-dry hydrologic condition concept and its development by USFWS for the Program, how it is used to set target flows at Grand Island, and the differences between real-time and annual hydrologic conditions. The real-time hydrologic condition is set several times throughout the year, is used to help determine the availability of excess flows, and guides water project operations. Annual hydrologic condition is set retroactively based on the average flow at Grand Island over the entire calendar year. Information about current and past hydrologic conditions and target flows is available on the Program website under the “Flow Conditions” menu.

The Anderson and Rodney (2006) journal article that introduced the method for calculating the hydrologic condition index is also available on the website. Their approach resulted in a series of regression equations that utilize variable combinations and weights of 7 parameters including average monthly flows at Grand Island and Julesburg; end of month storage in North Platte Basin (Wyoming) and Upper South Platte Basin (Colorado) reservoirs and Lake McConaughy; April 1 snowpack at SNOTEL sites in Wyoming; and the previous month’s Palmer Drought Severity Index (PDSI). The hydrologic condition is evaluated 7 times each year at intervals of 1 to 3 months.

The monthly PDSI data is typically not available until the 2nd week of the month, which can create uncertainty at the start of a new hydrologic condition period. In 2015, the EDO and WAC agreed to use a temporary hydrologic condition based on the most recent weekly PDSI in order to reduce this uncertainty. Most of the time, the final hydrologic condition ends up the same as the temporary hydrologic condition. However, since October 2015 the final and temporary hydrologic conditions have differed in 8 of 39 periods that use PDSI in the calculations (about 20% of the time). The EDO is exploring new approaches to improve the temporary hydrologic condition and will report back to the WAC if a viable alternative method is identified.

NPPD Sutherland System Virtual Flyover: *Jeff Shafer, NPPD*

As a follow-up to several stops that were made during the May 2023 water projects tour, Shafer presented a “virtual flyover” that offered the WAC a bird’s eye view of the entire NPPD Sutherland system. This started at the Keystone diversion and progressed through various control structures, the Paxton siphon, the junction of the Sutherland and Korty canals, Sutherland Reservoir, Lake Maloney, all the way to the penstocks and tailrace of the North Platte hydroelectric plant. Shafer also showed the recently constructed sedimentation basin at the upper end of the Korty Canal, which settled out a large volume of sediment during diversion operations while South Platte River flows were high from mid-May to late-July.



Altenhofen asked about NPPD vs CNPPID irrigated acres. NPPD has about 45,000 acres, most of which is downstream of the Sutherland system under the Gothenburg and Dawson County Canals. CNPPID has about 110,000 irrigated acres in their system.

Additional Business: *Cory Steinke, 2023 WAC Chair*

2023 WAC Meeting Schedule: October 24. Location TBD (in-person or virtual). Timing will be adjusted if the EAC/RCC meeting is rescheduled.

Altenhofen asked about the status of the Perkins County Canal study. Bradley said the initial focus is on the route through Colorado, which would determine the route in Nebraska. Project proponents are currently awaiting new guidance on the permitting process from the Corps of Engineers as a result of the Supreme Court's *Sackett v EPA* decision, which could impact nexus questions, wetlands, etc. It is premature to know specifically what permitting will look like, whether the project would be covered by the Program or require an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Altenhofen said it is hoped that Program agreements are honored and that this project does not affect target flow shortages or other states' contributions to the Program.

Action Items

General WAC

- N/A

ED Office

- Coordinate with CNPPID, USFWS, and others on potential rescheduling of Fall EAC/RCC meeting.