PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Water Advisory Committee Meeting Minutes
Virtual Meeting
February 11, 2025

PRRIP Water Advisory Committee Meeting Attendees		
Name	**Affiliation**	**Member or Alternate**
Department of the Interior (DOI)		
Brock Merrill	U.S. Bureau of Reclamation	Member
Matt Rabbe	U.S. Fish and Wildlife Service (USFWS)	Alternate
Steven Labay	USFWS	
State of Wyoming		
Jeff Cowley	Wyoming State Engineer's Office (WY SEO)	Member
George Moser	Wyoming Water Development Office (WWDO)	Alternate
Michelle Hubbard	WY SEO	
State of Colorado		
Kara Scheel	Colorado Water Conservation Board (CWCB)	Member 2025 WAC Vice Chair
Don Baggus	Colorado Parks and Wildlife (CPW)	
State of Nebraska		
Jennifer Schellpeper	Nebraska Department of Natural Resources (NeDNR)	Member
Kari Burgert	NeDNR	Alternate
Justin Ahern	NeDNR	
Caitlin Kingsley	NeDNR	
Jeremy Gehle	NeDNR	
Tyler Martin	NeDNR	
Upper Platte Water Users		
Dennis Strauch	Pathfinder Irrigation District	Member
Colorado Water Users		
Jon Altenhofen	Northern Water	Member
Kyle Whitaker	Northern Water	Member
Rich Belt	South Platte Water Related Activities Program	
Jason Marks	Denver Water	
Kevin Urie		
Downstream Water Users		
Cory Steinke	Central Nebraska Public Power and Irrigation District (CNPPID)	Member 2025 WAC Chair
Brandi Flyr	Central Platte Natural Resources District (CPNRD)	Member
Jeff Shafer	Nebraska Public Power District (NPPD)	Member
Nick Lee	NPPD	
Nolan Little	Tri-Basin Natural Resources District (TBNRD)	
Travis Preston	North Platte Natural Resources District	
Tyler Thulin	CNPPID	

PRRIP Water Advisory Committee Meeting Attendees		
Downstream Water Users		
Randy Zach	NPPD	
Environmental Entities		
Melissa Mosier	Audubon	Member
Executive Director's Office (EDO)		
Justin Brei	Engineering/Colorado Coordinator	
Jason Farnsworth	Executive Director	
Nicole Fijman	Geospatial Analyst	
Seth Turner	Water Plan Coordinator	
Ed Weschler	Water Resources Engineer	
Other Participants		
N/A		

Welcome and Administrative: *Cory Steinke, 2024 WAC Chair*

Meeting participants were identified from Teams. Steven Labay was introduced as the new USFWS EA Manager. The only agenda modification was that Cottonwood Ranch recharge project scoring would be discussed earlier in the meeting to accommodate participants needing to leave early. There were no edits to the original draft of the October 2024 meeting minutes. Merrill made a motion to approve the minutes, second by Rabbe. October 2024 meeting minutes were approved with no objections.

Nomination and Election of WAC Officers for 2025: *Cory Steinke, 2024 WAC Chair*

Shafer nominated Steinke as 2025 WAC Chair and Scheel as 2025 WAC Vice Chair. Second by Altenhofen. Nominated WAC officers approved with no objections.

Brief Water Updates: *Ed Weschler and Seth Turner, EDO*

Platte Basin Hydrology:

Weschler reviewed 2024 flows at the Grand Island gage. The preliminary annual hydrologic condition for 2024 is normal based on an average flow of 1,077 cfs but this is subject to change because data after October 23 is still provisional and most of December was affected by ice conditions. The real-time hydrologic condition designation for the December-February period is normal.

Drought conditions generally improved across the South Platte Basin in Colorado between late October and early February but persist across most of the Wyoming and Nebraska portions of the Platte River Basin. Southeastern Wyoming and the northwestern Nebraska panhandle have broad areas of extreme drought.

Snowpack in the South Platte Basin is tracking close to median but in the North Platte Basin snowpack has been persistently below median for nearly the entire season so far.

***Leasing, Recharge, and Recapture Projects**:*
Turner reported that excess flows were available between November 19 and December 9; diversions were made into Phelps County Canal and Elwood Reservoir, and deliveries were made to Cottonwood Ranch. Program recharge in Phelps totaled 658 AF (75% of total, with the other 25% going to Nebraska) during this period and 1,402 AF in total for calendar year 2024. At Elwood Reservoir, 3,485 AF (50% of total) was pumped in for the Program during November-December, with 5,423 AF in total for the year. In December, 346 AF (100% of total) was delivered to Cottonwood Ranch bringing the annual total to 1,144 AF for 2024. With the excess flow diversions made in 2024, the Program's remaining credit balances with CNPPID are about $8.62 million for Phelps and Elwood recharge and about $860,000 for Cottonwood Ranch recharge.

Recapture pumping totaled about 2,400 AF in 2024. Despite periods of shortage, the wells have remained off since early July out of concern of creating river depletions as a result of pumping depletions exceeding accretions from the Program's recharge projects. Preliminary accounting suggests that net accretions may have been less than 1 cfs in July and August but that is subject to change once full recharge data for 2024 is available from CNPPID.

In December the GC approved an amendment to extend the CNPPID irrigator lease for another year. Based on the evaluation of lease alternatives presented by George Oamek in September, the GC elected to increase the payment from $100/acre to $160/acre for 2025. CNPPID established an enrollment period from January 1 through February 15. As of February 10, there were 1,024 acres enrolled (compared to 1,053 acres enrolled in 2024), which would result in a contribution of 768 AF to the Lake McConaughy EA in October 2025. It was hoped that there would be a late surge in enrollments.

Negotiations for longer-term surface water leases with CPNRD and NPPD at least through the end of the Extension in 2032 remain ongoing.

Cottonwood Ranch Recharge Project: *Seth Turner, EDO*
Also in December the GC approved an amendment to the original 2018 Water Service Agreement for Cottonwood Ranch, the effect of which is to have CNPPID manage all operations at Cottonwood Ranch and perform some maintenance activities. Since CNPPID already was operating the delivery pipeline and outlets, the primary functional change is that they will also monitor and operate/adjust the Rubicon gates instead of the EDO. CNPPID will be installing new hardware to integrate the Rubicon gate controls with their SCADA system. That effort is expected to take 4-6 months.

Similar to the Program's agreement with TBNRD for operation and maintenance of the recapture wells, the Program will reimburse CNPPID for expenses associated with operations and maintenance at Cottonwood Ranch. All costs for water deliveries and services will be deducted from the $860,000 remaining credit balance discussed previously, so the Program will not be making actual payments for the time being. The EDO will develop an Operations Plan for

CNPPID to use, including necessary water level and pool storage data for the Rubicon gates and recharge cells.

There are a number of other ongoing maintenance activities at Cottonwood Ranch. The replacement valve actuator for the north vault finally arrived at the vendor Mellen & Associates in mid-January and is expected to be installed in the coming weeks. The EDO is working with Rubicon to schedule replacement of the gearbox at Gate 6. The EDO will also be developing plans for the installation of two new monitoring wells along the eastern boundary of Cell 8.

Testing of the outlet valve cavitation is tentatively scheduled for late May. The EDO will be working with Miller & Associates and CNPPID on the testing. USFWS granted permission to use a small amount of EA water (75 cfs for a day or less, or about 150 AF) at the front end of the germination suppression release if there are no timely excesses. With the valve actuator repaired and digital pressure gages installed, it is hoped that we can run the necessary tests, devise a solution to the cavitation, and get that implemented. Ideally most of this maintenance work will be completed by mid-year so the Program and CNPPID can focus on the operations transition.

The discussion of Cottonwood Ranch scoring is summarized later in these minutes.

Elwood Outlet Feasibility Study: *Seth Turner, EDO*

LRE Water presented the results of the Expanded Recapture Reconnaissance Study to the GC in September 2024. The GC recommended proceeding with further evaluation of the Elwood Reservoir gravity outlet concept but not the construction of additional recapture wells. The EDO worked with LRE Water and their subconsultants RJH and Inter-Fluve through the fall to develop a scope of work and budget for what is now the Elwood Outlet Feasibility Study. An overall budget of about $500,000 was approved by the GC in December.

CNPPID met with the landowner whose property the majority of the outlet alignment would cross. She was not in favor of an open channel that would essentially bisect the pastureland but was amenable to a buried pipeline.

Tasks for the Elwood Outlet Feasibility Study will be phased, and the first priority is a 30% design of the outlet. In January the Finance Committee approved a contract amendment for about $141,000, with the funds split about 90%/10% between RJH and LRE Water. The scope of work includes a desktop geotechnical evaluation, reevaluation of pipeline alignment alternatives only (no open channel), and concept-level design drawings and cost opinion. This latter part will include hydraulic calculations; pipeline locations, dimensions, and materials; and intake, energy dissipation, and other appurtenant structures. Altenhofen asked what flow rate is being considered for the outlet. Turner said 100 cfs; the reconnaissance study did not show that much of an incremental gain in score from a 50 cfs outlet to a 100 cfs outlet, but the 100 cfs outlet would provide greater operational flexibility.

It is anticipated that selection of a preferred alternative will be made around the time of the May WAC meeting, with final presentations on the 30% outlet designs to the WAC in August and the GC in September.

There were a couple additional related items brought up by TBNRD. Little explained that landowners to the west of Cottonwood Ranch, the Wilkes, have expressed a willingness to convert one of their irrigation wells to a recapture well in order to help alleviate high groundwater on their property. There is a drain nearby and it would be relatively simple to construct a discharge outlet. It is also believed that the high groundwater in that area is in part the result of a culvert installed too high in the Peterson Drain at Cottonwood Ranch. Turner said that further investigation of the culvert issue will be added to the Cottonwood Ranch maintenance list.

Turner said the other item is a landowner at the mouth of Plum Creek where it meets the south channel of the Platte having some erosion issues. This will need to be considered by Inter-Fluve if the Elwood Outlet Feasibility Study proceeds to further analysis of Plum Creek. Thorburn added that this landowner had erosion damage during a 2019 flood and earlier events. They are aware that they need to address the issue but would appreciate cooperation from the Program if the Elwood outlet proceeds.

Monitoring Wells Review: *Seth Turner, EDO*

Turner introduced this topic by noting that the memo included in the meeting documents is the same as that provided to the TAC the week before. The Program has an extensive network of monitoring wells at properties spread across the Associated Habitat Reach. It requires staff time and resources to collect data and maintain the wells and associated equipment. Much of the data being collected has not been used for analytical purposes in many years. The questions for the WAC (and the TAC previously) are whether the Program should continue to maintain these wells, collect the data, and replace failed equipment. A typical instrumented monitoring well uses an InSitu Level TROLL 500 data logger, which costs about $1,400 to replace. The TAC provided recommendations for the monitoring wells at 6 Program sites (e.g., wet meadows); the WAC is asked for guidance at 4 other Program sites primarily related to water projects.

Phelps/Cook

Monitoring wells Cook 1 and Cook 2 were installed on either side of the Cook recapture well to observe drawdown from pumping. These wells have concrete pads, steel riser pipes, and locking lids. Collected data has not been utilized in recent years. Monitoring wells MW-1 through MW-6 were installed in 2011 during the groundwater recharge feasibility study. MW-1 and MW-2 have telemetry units and defined water level thresholds, and they are actively used to monitor groundwater levels during Phelps recharge events. The Program has no current use for MW-3 through MW-6. Little confirmed that TBNRD has expressed interest in MW-3 and MW-5, both located along 748 Rd, and that TBNRD could install their own data loggers. MW-5 is near the Wilke property discussed earlier as having issues with high groundwater.

Recommendations: Remove instruments and lock Cook 1, Cook 2, MW-4, and MW-6. Transfer use of MW-3 and MW-5 to TBNRD.

Cottonwood Ranch/Morse

Eight monitoring wells (in two transects of four each) in the northwest quarter (what is now Cell 3) were installed by NPPD in the 1990s for a wet meadows study and have not been used by NPPD or the Program for many years. These are likely just PVC pipe wells, some probably broken off over time. The monitoring well in the southeast corner of what is now Cell 8 was installed by the Crane Trust around 2000 and transferred to the Program around 2010. The EDO recently found it to be filled in. None of these wells are known to be instrumented.

Recommendations: Initiate process to formally decommission all nine of these wells.

Lakeside/Stall/Edlund

Four monitoring wells were installed around the Lakeside gravel pit during the design of the shelved slurry wall gravel pit project. None are known to be instrumented. Another monitoring well of unknown status is shown to be located in the northwest corner of the property near the river channel.

Recommendations: Verify status of northwest corner well. Initiate process to formally decommission all five wells.

North Platte Chokepoint

Monitoring well GW-1 is located at the corner of North River Road and North Washboard Road. This is a constructed well (i.e., concrete pad, steel riser, locking lid) that was installed in the early 2010s. The well is instrumented but the Program has not used the data since the July 2020 chokepoint flow test. Twin Platte NRD has expressed interest in this well. The status of surface water monitoring "well" SW-1 is unknown. SW-2, SC-1, and SC-2 (the latter two along the restored State Channel berm) were instrumented for the July 2020 chokepoint flow test. Data was downloaded after the flow test but not since then.

The EDO was planning to recommend removing instruments from SW-1 (if any present), SW-2, SC-1, and SC-2. Rabbe requested that these remain in place until the GC makes a formal decision regarding future monitoring at the North Platte chokepoint. Rabbe agreed with the plan to transfer GW-1 to Twin Platte NRD, since the Program could still request data if needed.

Mosier asked about monitoring wells GW-2 and GW-3 that were also shown on the map in the memo. Brei said those are on private property and were used by EA during a flood proofing study in the early 2010s. The EDO could look into decommissioning those wells; they have not

been touched in more than 10 years, the landowners haven't asked about them, and present condition is unknown. Brei also suggested checking with Twin Platte NRD to see if they're interested in GW-2 and GW-3. (NOTE: The EDO subsequently contacted Twin Platte NRD about GW-2 and GW-3. They were not interested in those wells.) Mosier asked if data from monitoring wells in this area had any potential value in assessing the long-term results of the Program's work there. Brei said not likely given the response of the National Weather Service to the July 2020 flow test. Any potential solutions to capacity issues at the chokepoint are unlikely to involve groundwater north of the river and east of Hwy 83 in the area of GW-2 and GW-3.

Recommendations: EDO to assess status of data loggers in SW-1, SW-2, SC-1, and SC-2. Leave data loggers in place pending further discussion/decisions from the GC regarding the North Platte Chokepoint. Work with Twin Platte NRD to transfer GW-1. Leave GW-2 and GW-3 as they are for now.

Water Projects Scoring: *Seth Turner, EDO*

Turner explained that the Cottonwood Ranch recharge project was constructed in 2019 and began operating in 2020 but has not yet been scored. The score analysis protocol approved by the GC utilizes output data from the OPSTUDY model with a study period of 1947-1994. OPSTUDY was used in the original EIS analyses for the Program and was developed earlier. The EDO initiated a discussion with the GC in December about pursuing development of a replacement for OPSTUDY that would include the more recent 30 years of hydrology, but that idea was not received favorably. The GC reiterated that the protocol is to use the 1947-1994 hydrology for scoring consistency at least until the First Increment Water Objective is met.

Turner said the EDO had started preliminary work on a Cottonwood Ranch groundwater model prior to Kristen Cognac's departure in early 2024 but that work has since been on hold. During the Expanded Recapture Reconnaissance Study, NeDNR provided COHYST-based stream depletion factors (SDF) that LRE Water used in the assessment of potential scores from additional recapture wells. The EDO believes that these same SDFs can be used as a basis for scoring the Cottonwood Ranch recharge project and nearby recapture wells. Turner said Scoring Subcommittee membership will be reviewed by the GC in March, and the group will be convened to review and approve methods before any formal work is done for the score analysis.

Altenhofen asked if there is a memo documenting Nebraska's work on COHYST and the new SDFs. Schellpeper confirmed that documentation is available and can be shared.[1] Mosier asked if this means the plan is to use the new SDFs from COHYST to update OPSTUDY. Turner clarified that the 1947-1994 modeled hydrology from OPSTUDY would still be used to determine excesses and shortages but the SDFs from COHYST would be used to estimate return flows to the river from recharge at Cottonwood Ranch (or depletive effects from recapture

[1] **ShareFile - State of Nebraska** Section 15.2 of the main report (and associated Section 15 figures/tables) documents the Recharge Projects URFs Test Application. Documentation of the COHYST-based SDFs will be developed by NeDNR.

pumping), instead of building an expensive and time-consuming new groundwater model to accomplish the same thing.

Turner added that scoring could also proceed for the CPNRD and/or NPPD surface water leases if longer-term agreements for those are finally reached. Scoring projects that contribute to the Lake McConaughy EA is relatively simple and straightforward, and we already have several prior score analyses to use as examples.

Other Water Plan Priorities for 2025: *Seth Turner, EDO*

Turner noted that much of the meeting to this point had focused on the EDO's planned activities related to the Program's Water Action Plan in 2025. At this time, discussion would be opened for committee members to provide feedback on other water-related issues the EDO should address this year, at future WAC meetings, through other analyses, etc.

Wet Meadows

Altenhofen asked about the status of the wet meadows analysis. Farnsworth said the wet meadows synthesis went through peer review. One chapter out of six had some issues, the EDO is working to get those addressed. Most of that work should be completed prior to the May WAC meeting, which would be a good time to present to the WAC.

Recharge Project Operations, Scoring, and Adaptation

Mosier initiated an extended discussion about Program recharge project operations relative to hydrologic condition. Specifically, if excess flows occur during extended dry conditions, has the EDO looked at the benefits of leaving water in the river versus diverting into recharge projects? How often does this scenario occur?

Turner said the general pattern is that during normal/wet years there tends to be more excesses to divert into recharge projects, but fewer of the accretions from recharge projects that occur during these periods count towards deficit reductions in the project accounting. In dry years, there are fewer excesses to divert but more of the accretions count towards deficit reductions. There were large amounts of recharge from 2015-2019 or 2020 and much less from 2021 to the present, and you can see the effect of this in the operations accounting. With several consecutive years of limited excess diversions for recharge, the accretion rate from recharge that occurred earlier has tapered off over time.

Turner also said the EDO previously looked into the availability of excess flows since the start of the Program versus the 1947-1994 hydrology used for scoring, but that was about 10 years ago. This led into additional commentary from Altenhofen and Brei on scoring versus real operations, assumptions that the Program would always take advantage of available excess flows, and the role of USFWS target flows in determining the availability of excesses based on the real-time hydrologic condition.

Mosier noted that there are newer members on the committee who may not be familiar with how scoring works for Program water projects. Farnsworth said the EDO could put some information together. Turner added that one of the EDO's earlier accounting memos included discussions of the differences between scoring and operations.[2] That can be provided to anyone who is interested.

Building upon Mosier's original question, Rabbe asked about the breakdown of the types of scenarios when excesses have been captured for recharge? We had good conditions for excess diversions from 2015-2019, when did that water come back? To what extent did it supplement baseflows in the summer months?

(EDO note: It has been the intent of the water projects accounting to demonstrate when recharge occurs, what is the timing and rate of accretions back to the river, and how much Program water is reducing deficits to target flows. These questions from WAC members bring up an interesting point to address in the next round of accounting, one that we have not specifically considered before: what was the real-time hydrologic condition at the time of excess flow diversions, what were the target flows, and what was the range of Platte River flows at the time relative to target flows?)

Steinke provided additional commentary on scoring assumptions versus actual operations and performance of water projects versus original scores. He noted in particular how the Program's Water Plan philosophy has evolved and adapted over time. With CNPPID constructing a new E65 Canal and siphons in the coming years, there will need to be discussions of how to best utilize that. Rabbe added that it would be useful to document how the Program's approach to water has been modified, what's been learned, why we're on the current path. Turner said the most recent Water Action Plan update was basically a recap of the history and evolution of the Water Action Plan from 2007 to 2019.[3] This would be worth revisiting so everyone has an understanding of what has changed and why.

Winter Diversions

Altenhofen commented that the basis of the Program is the USFWS target flows and that some projects are operated based on the shortages and excesses that are determined based on those target flows. Farnsworth noted that earlier in the history of the Program's recharge project there was greater ability to divert excesses in winter. Even if the Grand Island gage was ice affected, the Overton gage was considered, which doesn't seem to be the case anymore. Turner added that until around 2019, the Program would routinely have excesses up to 90 days in a row between mid-November and mid-February. There was still occasionally ice at the Grand Island gage but it didn't persist for 60 days like it does now. Since the beginning of December, there are 7 days

[2] 2018 PRRIP Water Projects Accounting, EDO Final, August 27, 2019 (specifically Section D, starting on page 8). Prior accounting documents were also made available with the August 2024 WAC Meeting documents.
[3] FINAL Water Action Plan Update Report: First Increment Progress, 2007-2019

with estimated flow values. It's very frustrating when USGS provides estimated winter flows in April or May and it turns out there were excesses all along (in December-January-February), but we didn't know that in real time.

Turner suggested devising a workaround to determine winter excesses if the Grand Island gage is iced. Gehle suggested reaching out to USGS to see about getting more frequent measurements. Farnsworth asked if the flow is well above the target flows at Overton, why is that not sufficient to assume flow would still be above targets at Grand Island and excess flows would be available? Gehle said that sounded reasonable, and that some of the past decision-making should be reviewed. Turner added that so much of the Program's water project operations are based on the Grand Island gage but it would be nice to use upstream gages when Grand Island has ice conditions. Steinke suggested that NeDNR would need to work through a checklist to make sure this could be done.

Altenhofen asked if the Program had considered using wells to make winter diversions for recharge the way that Tamarack does. Turner said diverting from the river hasn't been the issue because the Program's recharge projects are supplied through CNPPID's system, which runs water year round anyway. Farnsworth added that the number of wells that would be needed for impactful recharge diversions for the Program doesn't work out. Altenhofen said Tamarack has 16 wells running every day during the winter.

Water Projects Fact Sheets

In the Teams chat, Marks asked about updating the water projects fact sheets that were originally prepared around 2019. Turner said that could be done after the accounting is updated to include 2024.

Additional Business: *Cory Steinke – 2025 WAC Chair*
Remaining WAC meetings in 2025 are scheduled for May 6, August 5, and October 28.

Action Items

General WAC

- N/A

EDO

- Wet meadows presentation for May WAC meeting.
- Compile documentation discussing Program water projects operations vs scoring.
- Include evaluation of real-time hydrologic condition and target flows at the time of excess flow diversions in the next round of water projects accounting.
- Future WAC meeting presentation on the evolution of Water Action Plan priorities over time.

- Work with NeDNR and USGS on a possible alternate approach to determining excess flows availability when the Grand Island gage is affected by ice conditions during the winter.
- Update water projects fact sheets.