

Platte Basin Coalition Committee

Meeting Minutes

August 5, 2014, 2:00 p.m. Central Time
Twin Platte NRD Office, North Platte, NE

Call to order and attendance: Miller called the meeting to order at 2:00 p.m., Central Time. Sponsors and partners in attendance (Attachment A) were:

Mark Czaplewski	CPNRD	John Berge	NPNRD
Jesse Mintken	CPNRD	Tina Kurtz	NPNRD
Lyndon Vogt	CPNRD	Rod Horn	SPNRD
Duane Woodward	CPNRD	Ryan Reisdorff	SPNRD
Melissa Mosier	NDNR	John Thorburn	TBNRD
Jennifer Schellpeper	NDNR	Kent Miller	TPNRD

Guests in attendance:

Jeff Shafer	NPPD	Jerry Kenny	PRRIP
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- 1. Welcome and Open Meetings Act:** Miller noted that a copy of the Open Meetings Act was available in the meeting room.
- 2. Publication of Meeting Notices:** The NDNR published a public notice of the PBC meeting in the Grand Island Independent on July 29, 2014, the North Platte Telegraph on July 29, 2014, and the Scottsbluff Star Herald on July 27, 2014.
- 3. Agenda Modifications:** No revisions were made to the agenda (Attachment B).
- 4. Approval of June 2, 2014, PBC meeting minutes:**

Motion: To approve the June 2, 2014, PBC meeting minutes (Attachment C).
Berge motioned to approve. Vogt seconded. Motion passed with ayes from Vogt, Berge, Thorburn, Miller, and Schellpeper, and an abstention from Horn.
- 5. Budget Update**
 - A. Operations:** Schellpeper discussed the updated PBC budget sheet (Attachment D). More detail by invoice has been added to the funding summary for the Orchard Alfalfa and N-CORPE projects.
 - B. Studies:**
 - (1) Budgeting and contracting discussion:** A discussion was held on contracting and funding for the work on the Difference Between Current and

Fully Appropriated Levels of Development study. The ILCA will be reviewed to ensure that the contracting can go through CPNRD to PBC, and then through PBC to the contracting firms. CPNRD and NDNR will bring a draft agreement on the contracting to the October 6, 2014, PBC meeting. It was proposed that the funding for the study be covered by a total of \$225,000, which includes \$180,000 in IWMPP funds (80%) and a \$45,000 NRD match (20%).

Motion: The CPNRD, NPNRD, SPNRD, TBNRD, and TPNRD, will share equally the local \$45,000 match, not to exceed \$9,000.

Vogt motioned to approve. Berge seconded. Motion passed with all ayes.

Action: CPNRD and NDNR will review the ILCA and bring a draft agreement on the contracting for the Difference Between Current and Fully Appropriated Levels of Development study to the October 6, 2014, PBC meeting.

- C. Second three-year increment funding:** The draft NET application has been distributed to the members for review (Attachment E). The application is due on September 1, 2014. The group also discussed NET's request to display NET signage at NET funded project locations. Members can either use the standard NET signs or design their own signs that include the NET logo.

Action: The members will review the draft NET application and send any comments or revisions to the NDNR by mid-August 2014.

Czaplewski also discussed a handout that outlined the costs of the PBHEP and PBC canal rehabilitation projects and the budget shortfalls incurred (Attachment F).

Action: For the October 6, 2014, meeting, NDNR will prepare a spreadsheet that will show the current distribution plan for years 4-6 funds by NRD, as well as what funds have already been approved for spending. If possible, NDNR will send the spreadsheet out the members through email so that they have time to review before the October meeting.

- 6. Request to transfer funds from conservation easement package (CPNRD):** In 2013, CPNRD submitted a request for funding to the NDNR in the amount of \$1,855,909 for a conservation easement package. After review of the easements, CPNRD and NDNR negotiated a discounted value on some of the surface water easements, leaving a total \$118,682.72 that could not be used for this project. CPNRD would like to use this money to cover a portion of the budget shortfall incurred by the canal rehabilitation projects.

Motion: To approve the transfer of \$118,682.72, that had been approved for the CPNRD conservation easement package, to cover a portion of the costs for the Thirty Mile and Orchard Alfalfa canal rehabilitation projects.

Berge motioned to approve. Horn seconded. The motion passed with all ayes.

7. Project Updates

- A. **N-CORPE:** Construction on the south pipeline has been completed and water began flowing through it at the beginning of 2014. Construction on the north pipeline is scheduled to begin in the summer of 2015. Cover crops are now on almost all of the acres. Some corn and potato crops remain on a few acres in order to allow the contract for those crops to be fulfilled. TPNRD is working on purchasing the native grass seed needed to cover the project acres. Some of the center pivots have been sold and the remaining will be sold in the near future. TPNRD has met with landowners on obtaining easements and has entered into an agreement with Lincoln County to utilize the roadway for construction of the portion of the pipeline that runs parallel to it. An operational regional model will hopefully be in place in the next six months.
- B. **Orchard Alfalfa:** Mintken reported that because it is currently the irrigation season, there is no construction taking place. Once work resumes at the end of the irrigation season, the project should be finished by last 2014 or early 2015.
- C. **J-2 Regulating Reservoir:** Schellpeper discussed a few highlights from the J-2 quarterly report (Attachment G). Land purchasing activities are moving forward. A Joint Interagency Meeting was held on July 1, 2014, and was attended by a number of landowners. Access agreements are being worked out with some landowners so that technical exploration can occur after harvest. The water rights petition has been filed with the NDNR. The next quarterly report and an annual report will be out in September 2014.
- D. **North Platte NRD Lease:** Berge reported that the formal permitting application will be going to the NDNR soon and stakeholder meetings will be held in the next couple of weeks.
- E. **Tri-Basin Phase II Augmentation:** The observation well for the second augmentation well was drilled in July 2014 and the augmentation well itself will be drilled in August 2014. A nearby landowner agreed to sign-off on the infringement of spacing requirements that this new well posed.
- F. **Spring 2014 Excess Flows:** Schellpeper summarized a memo from the TBNRD, TPNRD, and the NDNR to the PBC members in regard to the 2014 excess flow and groundwater recharge projects funding (Attachment H). The projects occurred

in cooperation with Western Irrigation District and CNPPID. Horn distributed a news article about the recharge projects that was published in the North Platte Telegraph (Attachment I). Approximately 13,677 AF of water was diverted for a total cost of \$526,743. The request is to amend the PBC budget in order to cover the cost of the projects.

Motion: The Platte Basin Coalition supports the spring of 2014 groundwater recharge and flood mitigation project and agrees to commit funds of \$526,743 to the project. Calculations of recharged project water and calculations/modeling of accretions to the Platte River will be performed by the Plate Overappropriated Area Committee.

Schellpeper motioned to approve. Thorburn seconded. The motion passed with all ayes.

8. Public Comments: There were no public comments.

9. Adjourn: The PBC meeting adjourned at 3:21 p.m. Central Time.

The next PBC meeting dates have been set for October 6, 2014, and December 1, 2014, at 2:00 p.m., Central Time at the TPNRD offices.

Action: Future meetings will be scheduled at the October 6, 2014, meeting.

Action Item Summary:

- 1) CPNRD and NDNR will review the ILCA and bring a draft agreement on the contracting for the Difference Between Current and Fully Appropriated Levels of Development study to the October 6, 2014, PBC meeting.
- 2) The members will review the draft NET application and send any comments or revisions to the NDNR by mid-August 2014.
- 3) For the October 6, 2014, meeting, NDNR will prepare a spreadsheet that will show the current distribution plan for years 4-6 funds by NRD, as well as what funds have already been approved for spending. If possible, NDNR will send the spreadsheet out the members through email so that they have time to review before the October meeting.
- 4) Future meetings will be scheduled at the October 6, 2014, meeting.

PISHED / PLATTE BASIN COALITION COMMITTEE MEETING

Meeting Date: August 5, 2014
Place/Room: TPNRD, Conference Room

Name:	Representing:	E-Mail:
MELISSA M MOSI EK	NDNR	mel.s.mosiek@ndnr.gov
Jennifer Schellpeper	NDNR	jenschellpeper@ndnr.gov
Duane Woodward	CPNRD	woodward@cpnr.org
Ryan Reisdorf	SPNRD	rreisdorf@spnr.org
Jerry Kenny	PRRIP	kennyj@headwaterscorp.com
John Buge	NPNRD	jbuge@npprd.org
ROD L. HORN	SPNRD	r.l.horn@spnr.org
John Voigt	CPNRD	voigt@cpnr.org
John Thornburn	Tri-Basin NRD	jthornburn@tribasinard.org
Mark Czaplowski	CPNRD	mark@cpnr.org
Karl O. Miller	Twin Platte NRD	komiller@tpnr.org
Tina Kurtz	NPNRD	tkurtz@npprd.org
Jesse Martin	CPNRD	m.jesse@cpnr.org
Jeff Shater	NPPD	jtshate@nppd.com

Agenda

Platte Basin Coalition Committee Meeting

August 5th, 2014, 2:00 p.m. Central Time
Twin Platte NRD Office, North Platte, NE

1. Welcome and Open Meetings Act
2. Publication of Meeting Notices
3. Agenda Modifications
4. Approval of June 2nd, 2014, PBC Meeting Minutes
5. Budget Update
 - A. Operations
 - B. Studies
 - i. Budgeting and contracting discussion (DNR)
 - C. Second three-year increment funding
6. Request to transfer funds from conservation easement package (CPNRD)
7. Project Updates
 - A. N-CORPE
 - B. Orchard Alfalfa
 - C. J-2 Regulating Reservoir
 - D. North Platte NRD Lease
 - E. Tri-Basin Phase II Augmentation
 - F. Spring 2014 Excess Flows
 - i. Budget Amendment
8. Public Comments
9. Adjourn

**Platte Basin Coalition Committee
Meeting Minutes**

June 2, 2014, 11:00 a.m. Central Daylight Time
Central Nebraska Public Power & Irrigation office, Gothenburg, NE

Call to order and attendance: Vogt called the meeting to order at 11:00 a.m., Central Daylight Time. Sponsors and partners in attendance were (Attachment A):

Mark Czaplewski	CPNRD	John Berge	NPNRD
Marcia Lee	CPNRD	Tina Kurtz	NPNRD
Jesse Mintken	CPNRD	Ryan Reisdorff	SPNRD
Lyndon Vogt	CPNRD	Travis Glanz	SPNRD
Duane Woodward	CPNRD	John Thorburn	TBNRD
Melissa Mosier	DNR	Ann Dimmitt	TPNRD
Jennifer Schellpeper	DNR	Landon Shaw	TPNRD
Jessie Wietjes	DNR		

Guests in attendance:

Jeff Shafer	NPPD	Jerry Kenny	PRRIP
Randy Zach	NPPD		

- 1. Welcome and Open Meetings Act:** Vogt noted that a copy of the Open Meetings Act was available in the meeting room.
- 2. Publication of Meeting Notices – Procedure:** The DNR published a public notice of the PBC meeting in the Grand Island Independent on May 24, 2014, the North Platte Telegraph on May 31, 2014, and the Scottsbluff Star Herald on May 25, 2014.
- 3. Agenda Modifications:** No revisions were made to the agenda (Attachment B)
- 4. Approval of April 1, 2014, PBC meeting minutes:**

Motion: To approve the April 1, 2014, PBC meeting minutes (Attachment C).

Thorburn motioned to approve. Schellpeper seconded. Motion passed with all ayes.

5. Budget Update

A. Operations: Schellpeper discussed the updated PBC budget sheet (Attachment D). The Operations budget sheet has been updated to include the liability insurance for 2014. There were no changes to the Studies budget, the budget for years 1-3 Projects, or the projected budget for years 4-6 Projects.

B. Studies: Nothing new to report.

- C. **Second three-year increment funding:** The report to the legislature, report to NET, and the NET application for next year are being drafted by DNR staff and will be sent out to the PBC members for review. The application to NET will include specific projects that have already been identified, as well as a category of new projects that meet the funding requirements and may be identified in the future.

6. Project Updates

- A. **N-CORPE:** TPNRD is working with NDEQ to get SRF funding, traps have been set for the burying beetle, and work with landowners on the conservation easements is moving forward.
- B. **Orchard Alfalfa:** Mintken reported that the headwork structures should be finished in the next few weeks. The lower half of the canal has been cleared and graded and the upper half of the canal should be cleared and graded by fall 2014.
- C. **J-2 Regulating Reservoir:** Schellpeper noted that the quarterly report on J-2 is due this month and there is nothing else to report at this time.
- D. **North Platte NRD Lease:** Berge reported that NPNRD received comments from the DNR on their draft report and they will meet with the consultant in the next few days to respond to those comments. It is anticipated that the permitting process should be completed by August 2014.
- E. **Tri-Basin Phase II Augmentation:** The observation well for the Phase II site will be drilled this week and the production well will be drilled before the end of the month. The number one well was operated for one week in May.
- F. **Spring 2014 Excess Flows:** Schellpeper reported that flows at the stateline have not come up quite as fast as predicted, but there is still a large amount of water in Colorado and additional flows are expected. The DNR has begun working on contracts with TPNRD for those who have pits to store excess flows and also with CNPPID and TBNRD on storing some of the water in Elwood Reservoir. Managers are still waiting to see how much water comes down and how far into the critical habitat area it goes in order to determine how much “excess flow” will be available.

7. **Public Comments:** There were no public comments.

8. **Adjourn:** The PBC meeting adjourned at 11:14 a.m. Central Daylight Time.

The next PBC meeting dates have been set for August 5, 2014, October 6, 2014, and December 1, 2014, at 2:00 p.m., Central Daylight Time at the TPNRD offices.

PBC Budget Review and Amendments for Discussion

Note the cells shaded in red. This denotes a corection from the May Budget Summary

**Table 1:
May 2014 Budget**

PBC Budget Summary	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Year
Budget Year 1	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Budget Year 2	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Budget Year 3	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Amendment Total						\$ 253,887.00	\$ -	\$ 207,581.00	\$ 461,468.34
Total 3 Year Budget	\$ 904,200.00	\$ 2,125,200.00	\$ 184,800.00	\$ 1,333,200.00	\$ 2,052,600.00	\$ 6,853,887.00	\$ 9,900,000.00	\$ 6,807,581.00	\$ 23,561,468.34

PBC Project	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Project	Project Status
J-2 Reregulating Reservoir	\$1,168,500			\$1,168,500	\$934,800	\$3,271,800	\$4,907,700	\$6,426,750	\$14,606,250	Under Contract
Orchard-Alfalfa Canal Rehabilitation and Water Rights	\$1,665,578					\$1,665,578	\$2,498,368	\$0	\$4,163,946	Under Contract
CPNRD conservation easement package	\$742,364					\$742,364	\$1,113,545		\$1,855,909	Partial Payment/Inreview by NDNR
N-CORPE					\$600,000	\$600,000	\$900,000		\$1,500,000	Under Contract
Phase II North Dry Creek				\$39,000		\$39,000	\$58,500		\$97,500	to be submitted by TBNRD
North Platte NRD Lease/Recharge		\$196,758				\$196,758	\$121,887	\$173,250	\$491,895	to be submitted by NPNRD
Fall 2013 GW recharge	\$6,000	\$0	\$2,970	\$112,199	\$10,930	\$132,099		\$198,149	\$330,248	Paid
Grandview Permanent Retirement		\$6,288				\$6,288		\$9,432	\$15,720	to be submitted by NPNRD
PBHEP Overruns						\$200,000	\$300,000		\$500,000	to be submitted by PBHEP project sponsors
Totals by Contributor	\$ 3,582,442.00	\$ 203,046.00	\$ 2,970.00	\$ 1,319,699.34	\$ 1,545,730.00	\$ 6,853,887.34	\$ 9,900,000.00	\$ 6,807,581.00	\$23,561,468	

DNR Total										
Budget Difference	(\$2,678,242)	\$1,922,154	\$181,830	\$13,501	\$506,870	\$0	\$0	\$0	\$0.00	

**Table 2:
August 2014 Proposed Budget**

PBC Budget Summary	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Year
Budget Year 1	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Budget Year 2	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Budget Year 3	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$ 2,200,000.00	\$ 7,700,000.00
Amendment Total						\$ 253,887.00	\$ -	\$ 207,581.00	\$ 461,468.00
Total 3 Year Budget	\$ 904,200.00	\$ 2,125,200.00	\$ 184,800.00	\$ 1,333,200.00	\$ 2,052,600.00	\$ 6,853,887.00	\$ 9,900,000.00	\$ 6,807,581.00	\$ 23,561,468.00

PBC Project	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Project	Project Status
J-2 Reregulating Reservoir	\$1,168,500			\$1,168,500	\$934,800	\$3,271,800	\$4,907,700	\$6,426,750	\$14,606,250	Under Contract
Orchard-Alfalfa Canal Rehabilitation and Water Rights	\$1,665,578					\$1,665,578	\$2,498,368	\$0	\$4,163,946	Under Contract
CPNRD conservation easement package	\$742,364					\$742,364	\$1,113,545		\$1,855,909	Partial Payment/Inreview by NDNR
N-CORPE					\$600,000	\$600,000	\$900,000		\$1,500,000	Under Contract
Phase II North Dry Creek				\$39,000		\$39,000	\$58,500		\$97,500	to be submitted by TBNRD
North Platte NRD Lease/Recharge		\$196,758				\$196,758	\$121,887	\$173,250	\$491,895	to be submitted by NPNRD
Fall 2013 GW recharge	\$6,000	\$0	\$2,970	\$112,199	\$10,930	\$132,099		\$198,149	\$330,248	Paid
Grandview Permanent Retirement		\$6,288				\$6,288		\$9,432	\$15,720	to be submitted by NPNRD
PBHEP Overruns						\$200,000	\$300,000		\$500,000	to be submitted by PBHEP project sponsors
Re-Use Pits Recharge Project 2014			\$600.00			\$3,600.00			\$10,500.00	
2014 E65 Canal and Elwood Reservoir Recharge Project						\$258,121.50		\$258,121.50	\$516,243.00	
Totals by Contributor	\$ 3,582,442.00	\$ 203,046.00	\$3,570	\$1,319,699	\$1,549,330	\$7,118,309	\$ 9,900,000.00	\$ 6,807,581.00	\$24,088,211	

DNR Total										
Budget Difference	(\$2,678,242)	\$1,922,154	\$181,230	\$13,500.66	\$503,270.00	(\$264,421.84)	\$0.00	\$0.00	(\$526,743.34)	

PBC Funding Summary Updated 5/5/2014

PBC Budget Summary	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Year	
Budget Year 1	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00	\$1,693,277	\$ 9,393,276.70	
Budget Year 2	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00		7,700,000.00	
Budget Year 3	\$ 301,400.00	\$ 708,400.00	\$ 61,600.00	\$ 444,400.00	\$ 684,200.00	\$ 2,200,000.00	\$ 3,300,000.00		7,700,000.00	
Total 3 Year Budget	\$ 904,200.00	\$ 2,125,200.00	\$ 184,800.00	\$ 1,333,200.00	\$ 2,052,600.00	\$ 6,600,000.00	\$ 9,900,000.00	\$ 1,693,276.70	\$ 18,193,276.70	
PBC Project	CPNRD	NPNRD	SPNRD	TBNRD	TPNRD	Total NRD	DNR (NET Transfer)	DNR General Fund	Total by Project	Project Status
North Platte NRD Lease/Recharge		\$221,197				\$221,197	\$331,796	\$0	\$552,993	Approved pending funding
Orchard-Alfalfa Canal Rehabilitation	\$208,314					\$208,314	\$312,472	\$0	\$520,786	Approved pending funding
N-CORPE					\$1,730,071	\$1,730,071	\$2,595,107	\$0	\$4,325,178	Approved pending funding
J-2 Reregulating Reservoir	\$403,161			\$403,161	\$322,529	\$1,128,851	\$2,217,386.16	\$1,693,277	\$5,039,514	Approved pending funding
Totals by Contributor	\$611,476	\$221,197	\$0	\$403,161	\$2,052,600	\$3,288,434	\$5,456,760	\$1,693,277	\$10,438,470	
Remaining Financial Commitments by Contributor	\$0	\$0	\$0	\$0	\$0	\$3,311,566	\$4,443,240	\$0	N/A	
						\$6,600,000	\$ 9,900,000.00	\$ 1,693,276.70		

Funds Expended and Reimbursements Requested for Orchard Alfalfa	Orchard Alfalfa		NET	Total	Status
	DNR	CPNRD			
July 2012 - September 2012	\$ 18,443.83	\$ 12,295.89		\$ 30,739.72	Paid 9/6/2013
October 2012 - December 2012	\$ 40,364.18	\$ 26,909.46		\$ 67,273.64	Paid 9/6/2013
January 2013 - March 2013	\$ 20,888.25	\$ 13,925.50		\$ 34,813.75	Paid 9/6/2013
April 2013 - June 2013	\$ 40,965.19	\$ 27,310.13		\$ 68,275.32	Paid 9/6/2013
July 2013 - September 2013	\$ 81,196.28	\$ 54,130.86		\$ 135,327.14	Paid 11/18/2014
October 2013 - December 2013	\$ 380,533.05	\$ 253,688.70		\$ 634,221.75	Paid 2/24/2014
January 2014 - March 2014	\$ 815,793.13	\$ 543,862.09		\$ 1,359,655.22	
April 2014 Timeframe	\$ 314,892.62	\$ 209,928.42		\$ 524,821.04	
May 2014 Timeframe	\$ 224,966.11	\$ 149,977.41		\$ 374,943.52	
Total reimbursement requested to date	\$ 1,938,042.64	\$ 1,292,028.46	\$ -	\$ 3,230,071.10	

Funds Expended and Reimbursements Requested for N-CORPE	N-CORPE		NET	Total	Status
	DNR	TPNRD			
TPNRD PBHEP funding N-CORPE project	\$ 120,680.05	\$ 120,680.00	\$ 60,340.00	\$ 301,700.05	
TPNRD PBC funding N-CORPE project	\$ 900,000.00	\$ 600,000.00		\$ 1,500,000.00	
Total reimbursement requested to date	\$ 1,020,680.05	\$ 720,680.00	\$ 60,340.00	\$ 1,801,700.05	



NEBRASKA ENVIRONMENTAL TRUST FUND

APPLICATION COVER SHEET

Instructions to word processing users. Double click on each slash character (“ \ ”), including the ones below in the header, and replace them with your entry. Use your find function (Ctrl + F) to find the slash character “\”. This will position your cursor at each response.

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

3. County(s) where project is located: Approximately 30 counties of the Platte Basin with areas that have been declared fully or overappropriated

4. Nearest town: N/A

5. Total Amount Requested: \$9,900,000

6. Years of funding requested (select one): 3

Contact Person:

7. Name: Jennifer Schellpeper

8. Title: Integrated Water Management Coordinator

9. Organization: Nebraska Department of Natural Resources

10. Address, City, State & Zip: 301 Centennial Mall South, P.O. Box 94676, Lincoln, Nebraska 68509-4676

11. Daytime Phone: (402) 471.2363

12. Alternate phone: (402) 471.2899

13. Fax: (402) 471.2900

14. E-mail: jennifer.schellpeper@nebraska.gov

15. Sponsor web site: www.dnr.nebraska.gov

16. Is this a continuation request for a project previously funded by the Trust:

YES NO:

Is this a resubmission of a project application previously not funded by the Trust:

YES NO

17. Please indicate which category best describes the applicant:

Selections are: Individual City or County Natural Resources District Federal Agency Private for Profit

Private Nonprofit Consortium School, Irrigation, Power or Development District State Agency Other (specify):

18. Will this project receive federal funds or require a federal review or permit? YES NO:

Likely

If yes, identify the agency(s) and its role:

Some of the currently selected projects will either receive federal funds, require a federal review, or a federal permit during the three year scope of this project. It is possible that some project funding will be used as match for federal grants. Given the currently estimated timeline, the Platte Water Action Plan Projects will be, or are already, ready for funding and/or construction within the three year scope of this project.

19. Will this project receive other State of Nebraska funds or require a state review or permit? YES NO:

If yes, identify the agency(s) and its role:

The Department of Natural Resources (Department) will disburse funds obtained from NET under the Rules Governing the Water Resources Cash Fund, Title 461, Nebraska Administrative Code. Surface water projects completed through the Initiative will require Department issued surface water permits.

20. In **300 words or less** provide an overview of the project for which you seek funding. If you are asking the Trust to fund only a portion of the project, indicate the components for which you seek funding.

The project is three year's allocation of funding for the Water Resources Cash Fund (WRCF) pursuant to the legislative mandate of LB 229, 2011, and as required by *Neb. Rev. Stat.* § 61-218(7)(a). All funds obtained through the allocation will be used for the purposes of the WRCF as set out in *Neb. Rev. Stat.* § 61-218(7)(b). The WRCF was established by LB 701 in 2007 to fund the State's contingent water resources remediation needs in fully and overappropriated basins. The WRCF has funded various projects since its inception in 2007. One project is the Platte Basin Habitat Enhancement Project (PBHEP),



NEBRASKA ENVIRONMENTAL TRUST FUND

APPLICATION COVER SHEET

Instructions to word processing users. Double click on each slash character (“ \ ”), including the ones below in the header, and replace them with your entry. Use your find function (Ctrl + F) to find the slash character “\”. This will position your cursor at each response.

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

that is currently also funded with Nebraska Environmental Trust (NET) dollars. The “*Platte Basin Water Management Action Initiative*” (Initiative) described below is an anticipated evolution of the PBHEP, expanding on other methods and water projects and shifting the focus from the purchase of easements to other projects that achieve the same goal. The purpose of the Initiative is to plan, implement, and monitor activities that result in more effective water management and remediation for current depletions caused by past actions. The Initiative will assist the Department of Natural Resources and the Platte Basin Natural Resources Districts (NRDs), in cooperation with other partners, to optimize timing and efficiency of water use, enhance streamflows, and reduce water consumption in fully and overappropriated areas.

The Initiative described in this application is a portion of the currently intended uses for the WRCF. Other projects will be carried out under the auspices of the WRCF with available funds as well. Projects include both in-progress and new projects such as: surface water storage projects, groundwater retiming, leasing or purchasing water, conjunctive management of water, conservation easements, and other water use efficiency measures that would optimize water use in the basin.

21. On behalf of the sponsor(s) named above, I hereby certify that the information contained in this application, including all attachments, is true, accurate and complete.

Authorized Signature of Sponsor Organization

Title

Date

Typed or Printed Name of Authorized Signatory

Typed or Printed Title



NEBRASKA ENVIRONMENTAL TRUST FUND

NARRATIVE SECTION

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

In five pages or less, provide a discussion of your project. Be sure to cover the points specified in the instructions.

Introduction

Legislative Charge

This application is being submitted pursuant to *Neb. Rev. Stat. § 61-218(7)(c)*, which states that: “*It is the intent of the Legislature that the department apply for an additional three-year grant that would begin in fiscal year 2014-15 if the criteria established in subsection (4) of section 81-15,175 are achieved.*” The June 2014 reports from the Department to the Natural Resources Committee of the Legislature and the Nebraska Environmental Trust provide a detailed account of the means by which these criteria were fulfilled. The reports can be found here: [LINK](#)

The Platte Basin Water Management Action Initiative

a. Purpose and Goals

The purpose of the “*Platte Basin Water Management Action Initiative*” (Initiative) is to plan, implement, and monitor activities that result in better infrastructure and more effective water management in Nebraska’s Platte River Basin. This will remediate for current depletions caused by past actions and allow Nebraska to optimize timing and quantity of water use under a wide spectrum of water availability scenarios. This application will fund the WRCF to accomplish that purpose. The Department of Natural Resources (Department) and the Platte Basin Natural Resources District (NRD) partners (Central Platte, North Platte, South Platte, Tri-Basin and Twin Platte NRDs) will use the funds to help meet the following goals in fully and overappropriated areas of the Platte River Basin: 1) help water users optimize timing and efficiency of water use, 2) enhance streamflows, and 3) reduce water consumption. The Initiative is designed to address those goals through a combination of physical projects that store or otherwise optimize the timing of streamflow accretions and depletions and through leases and limited purchase of voluntary easements that restrict irrigation use.

b. General Description of Projects and Activities

The Initiative is planned to be cooperative with NRDs, surface water irrigation districts, and Platte River Recovery Implementation Program (PRRIP) partners, and would include projects that are currently in-progress, as well as new projects. Project types include: use of existing canal systems for alternate water uses and retiming (e.g. instream flow, groundwater recharge), surface water storage projects, reductions in consumptive use, and other water use efficiency measures that could optimize water use in the basin. The Initiative is expected to result in more efficient and effective water management and will optimize a spectrum of water uses, including those for environmental and endangered species needs.

A groundwater recharge project similar to some of the proposed Initiative projects was completed in spring 2011. The high water and flooding occurring along portions of the Platte Basin in 2011 gave the Department the opportunity to divert excess water into irrigation districts’ canals. This illustrates one of the circumstances in which this Initiative will be particularly effective in helping to optimize use of water. Although high flows are needed for environmental purposes, in some years the flow levels and duration surpass those needs. Much of this Initiative is geared to helping capture those excess flows (via recharge and surface water projects) to provide benefits in times of shortage.

The overall effort will include project feasibility studies, project design, project construction, identification and implementation of alternate water use and operation systems, and developing legal mechanisms to encourage alternate uses of existing facilities. In the long-term, the projects will be maintained by project partners or other participants in the PRRIP. More details concerning identified water projects can be found in the Nebraska New Depletion Plan, Platte Water Action Plan, and the individual integrated management plans (IMPs) for the Platte Basin NRDs. These documents can be found at the following web locations or hard copies can be provided upon request:



NEBRASKA ENVIRONMENTAL TRUST FUND

H1. Project Sponsor: Nebraska Department of Natural Resources

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<http://dnr.nebraska.gov/iwm/prrip-depletion-plan-attachment>

<http://www.platteriverprogram.org/PubsAndData/ProgramLibrary/Reconnaissance-Level%20Water%20Action%20Plan.pdf>

<http://dnr.nebraska.gov/iwm/approved-plans>

Processes for implementation and evaluation of the projects can also be found in those documents, including a description of a study to estimate the available excess water and appropriated water, which is an essential component to understanding a given project's ability to provide for long-term streamflow benefits. The IMPs also discuss public information and education programs that are and will continue to be implemented by the Department and the NRDs, which include information about the water projects discussed in this application.

Relationship of the Initiative to the Platte River Recovery Implementation Program and Integrated Management Planning in the Platte River Basin

The Initiative is expected to assist the Department and local NRDs in meeting the requirements of the NRD IMPs and the PRRIP. The joint Department/NRD IMPs in the basin and the "Basin-Wide Plan for Joint Integrated Water Resources Management of Overappropriated Portions of the Basin" are evidence of major efforts toward meeting statutory requirements. Each of the joint IMPs identifies water management projects and activities and provides a detailed plan for implementing and monitoring the projects. The Department and the NRDs have entered into an inter-local cooperative agreement, the Platte Basin Coalition, for purposes of making financial decisions related to the projects that are developed.

One of the major benefits of the Initiative is that it is expected to help meet Nebraska's requirements for complying with the Nebraska New Depletion Plan (NNDP) portion of PRRIP. PRRIP is a basin-wide effort undertaken by the U.S. Department of the Interior (DOI) and the states of Colorado, Nebraska, and Wyoming to provide benefits for the endangered interior least tern, whooping crane, and pallid sturgeon, and the threatened piping plover. Through PRRIP, the states and federal government will provide land, water, and scientific monitoring and research to evaluate program benefits for the target species. As one aspect of that program and the NNDP, Nebraska has agreed to reduce water development to July 1, 1997, levels so that there are no new depletions from Nebraska development after that date. Section III of the NNDP contains a list of potential projects that can be sources of offset water, including: yields from the Platte Water Action Plan Projects, water management incentives, easements to reduce consumptive water use, regulations, physical projects, and retiming of groundwater or surface water.

While the majority of the projects listed in the NNDP are anticipated to be developed by Nebraska interests only, one item on the list involves participation in Platte Water Action Plan Projects (PWAPPs). These projects are part of PRRIP and would involve all parties to that agreement. The Department and the NRDs continue to work with PRRIP to develop Platte Water Action Plan Projects that are of interest to Nebraska for the purpose of meeting the NNDP requirements, as well as IMP requirements. To participate, Nebraska is required to fund a portion of those projects equivalent to the benefit Nebraska will derive from the project. The PRRIP Governance Committee would fund a portion of the project equivalent to their benefit from the project. PRRIP has been moving forward with feasibility studies of the PWAPPs.

Potential Projects

Many projects are being investigated by the Department and the NRDs. Examples discussed in the IMPs are: Oliver Reservoir, lease of surface water appropriations, alternative management of NRD-owned reservoirs, Elwood Reservoir, groundwater pumping – stream flow augmentation, Elm Creek Reservoir, B-1 Reservoir, and various conjunctive management projects. Under PBHEP, the Department and the NRDs have been implementing conservation easements for the purchase of surface water appropriations and groundwater rights. The conservation easements are a tool that will continue to be pursued under this NET application as well. All projects being pursued will be evaluated for their ability to provide long-term benefits to streamflow.

Additionally, the PWAPPs have been under development for more than ten years. The reconnaissance-level study of these projects was completed in the year 2000. Since that time, many of the projects have progressed through a number of pre-feasibility and full-feasibility studies, the project planning stage, and on to implementation. Although limited time and



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monetary resources prevent all beneficial projects from being pursued simultaneously, the most cost-effective projects have been identified and are being pursued. Copies of the studies are available on the PRRIP website: www.platteriverprogram.org. Copies of the relevant studies can be provided upon request. Detailed information on some of the PWAPPs is provided below.

CNPPID Reregulating Reservoir(s) - This project, also known as the J-2 Regulating Reservoirs, would capture water in newly constructed facilities associated with Central Nebraska Public Power and Irrigation District's (CNPPID) system during periods of excess flows at the associated habitat. Water would then be released during periods of shortages to target flows. More information on this project can be found in this brochure from the CNPPID website <http://www.cnppid.com/wp-content/uploads/2014/05/CNPPIDJ-2RegulatingReservoirBrochure.pdf>.

Elm Creek Reregulating Reservoir - In 2009, Central Platte NRD and the Nebraska Public Power District (NPPD) initiated a feasibility investigation of a new reservoir located on Elm Creek. The primary use of the reservoir would be to regulate flood flows on Elm Creek. Although this is not currently considered to be a viable project, future increment requirements may lead to a reevaluation if its costs and benefits.

Nebraska Groundwater Recharge - These projects involve diverting surface water from the Platte River during times of excess flow into irrigation canals during the non-irrigation season or within excess canal capacity during the irrigation season. Excess flows could also be diverted using alluvial "headgate" wells located close to the Platte River. This project has gone through reconnaissance level and preliminary feasibility studies, and has been implemented during the excess flow events that occurred along the Platte River in the fall 2011, fall 2013, and spring 2014. More in-depth, ongoing studies are being conducted on Phelps, Dawson and Gothenburg Canals. The project concept is that seepage from the diverted excess flow percolates into the alluvium and recharges the groundwater aquifer. Details of the technical aspects of these projects can be found in the "Upper Platte River Recharge and Flood Mitigation Demonstration Project" technical memo at this link: <http://dnr.nebraska.gov/iwm/conjunctive-management-toolbox>. Excess water that is not recharged is returned to the river via spillways within the same month. Return flows that result from canal and reservoir seepage accrue to the river for some duration after the recharge event.

Additional groundwater recharge projects have been implemented through the rehabilitation of the Orchard Alfalfa, Thirty Mile, and Cozad canals. Benefits of the canal rehabilitation projects include enhanced surface water and groundwater supplies due to groundwater recharge, enhanced flows to the Platte River through the diversion and retiming of excess flows, and enhanced flows due to the return of natural flow irrigation rights.

Nebraska Water Leasing, Incentives, and Management - An annual or long-term (e.g., 30 years) voluntary temporary leasing program provides incentives to farmers to lease water supplies that would otherwise have been used for irrigation. The amount of water available to PRRIP results from the reduction in consumptive use. Central Platte NRD, North Platte NRD, and the South Platte NRD have worked with producers to either temporarily lease or retire irrigated acres within their districts.

Water management incentives consist primarily of programs resulting in reductions in consumptive use, or in the case of on-farm changes in irrigation techniques, reductions in return flows to the Platte River above the associated habitat. The programs evaluated at the reconnaissance level assumed the water rights involved are dependent on storage rights in Lake McConaughy. In general, an irrigation district or farmer with storage rights in Lake McConaughy will be paid to reduce their diversions through conservation cropping, deficit irrigation, land fallowing, or changes in irrigation techniques. The reduction in consumptive use could be added to the Lake McConaughy environmental account (EA) when storage space is available and released during times of shortage at the associated habitat.



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H2. Project Name: Platte Basin Water Management Action Initiative

Groundwater Management - A groundwater management projects can be accomplished through a number of options, including: active groundwater pumping, passive lowering of the groundwater table, switching irrigators to groundwater from surface water, or a conjunctive use project under CNPPID's system. North Platte NRD is currently in the process of implementing a water lease and groundwater recharge project that will temporarily retime the consumptive use of some lands and use that water to enhance streamflow. Construction on the Platte Basin side of the Nebraska Cooperative Republican Platte Enhancement (N-CORPE) project began in 2014. This project will help to reduce shortages to target flows in the Platte River by transporting water from retired irrigated acres in Lincoln County to the South Platte River via a pipeline.

North Dry Creek - This project involves the development of augmentation wells in the Tri-Basin NRD to pump groundwater into North Dry Creek and run the water to the Platte River. Wells would only be operated at times when state-protected flows or target flows are not being met in the Platte River.

Project Objectives

The Initiative is intended to result in management actions through identifying potential implementation projects, analyzing the projects, and designing and constructing or implementing the projects. For that reason it is difficult to provide a full list of projects, expected completion dates, and benefits of the construction at this time. Similarly, although some acreages are provided for expected voluntary easements, those easements are voluntary and depend upon the willing buyer/seller principle, as well as landowner demand at the stated prices.

The objectives of the Platte Basin Water Management Action Initiative over the three years covered by the grant are to:

- **Conduct project feasibility studies** - Existing studies from the NRDs, Department, joint NRD/Department projects, PRRIP, and other sources will be supplemented with additional suggested projects from potential sponsors and a systematic review of potential projects that can help meet goals of the Initiative. Types of projects to be analyzed include all of those discussed throughout this document. Economics of individual projects or activities will be analyzed and compared.
- **Complete project design for selected projects** - The feasibility studies are expected to lead directly to design efforts on the selected projects. While these efforts are expected to be contracted, the Department along with any other project sponsors will provide careful oversight.
- **Construct projects** - As soon as design is complete and co-sponsors have committed, work on construction is expected to begin and progress will be reflected in the quarterly reporting process.
- **Where economically effective, purchase leases and easements will be utilized to reduce consumptive water use** - Any purchase lease or easement agreement will comply with the willing seller / willing buyer principle and acquisition data will be provided to NET through the quarterly reporting process.
- **Identify and implement alternate water use and operation systems (conjunctive management)** - Significant opportunities exist for retiming water using existing canal systems and agreements with districts operating those systems. In some instances the existing systems could be supplemented with new construction or operated in conjunction with groundwater recharge efforts or agreements on alternate uses of water. Identification, and where appropriate, implementation of those efforts is planned through this Initiative. Through PBHEP, the Department and the NRDs funded a groundwater recharge pilot project in the spring of 2011. Results from this demonstration project have been used to identify appropriate areas for further study and development of conjunctive management systems.
- **Develop legal mechanisms to encourage alternate uses of existing facilities** - In some instances legal or administrative changes may be needed to help best administer the most efficient water use system. This may include



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further development of offset or banking systems, or other mechanisms. These options will continue to be explored with an emphasis on action opportunities.

- ***Measure or estimate project success, including: reductions in water consumption, surface water stored, groundwater recharged, enhancement/augmentation of streamflow, and any increase in wildlife habitat -*** Measurement of results are a major emphasis of the Initiative. Although few physical changes are expected in the initial few years, systems are being developed to track changes that occur as a result of the Initiative. Monitoring will occur as is described in the individual monitoring section of each of the five individual IMPs of the Platte Basin NRDs using tools developed through projects such as the Western Water Use Model and the Platte River Cooperative Hydrology Study (COHYST).

Project Implementation and Monitoring

The Department staff and Platte Basin NRDs will be responsible for implementation of the proposal. The IMP of each NRD includes a list of projects and a plan for implementing those projects. Also included are provisions for monitoring projects and tracking and reporting of water use activities. This will assist in assessing project impacts.

Projects in this Initiative will be funded in many different ways. PWAPPs would be funded by PRRIP and any project sponsors, including the Department or the local NRDs. Other projects will be constructed or executed through NRDs or irrigation districts on a contractual basis. When physical projects are constructed, permits such as Corps of Engineers Section 404 dredge and fill permits or Department surface water permits may be needed. Individual project sponsors, as appropriate to the specific project, will be responsible for seeing that all required permits are acquired for a given water project.

Beneficiaries

The beneficiaries of the project will include the Platte River ecosystem, which will have additional flow available during what would otherwise be periods of low-flow. This in turn will be beneficial to endangered species and other species of concern along the Platte River. Optimizing flow levels will also benefit local NRD efforts to reach a sustainable balance of water supplies and water uses and will provide additional options to irrigators seeking to maximize the value of water used. The state of Nebraska and the partner NRDs will benefit in that the Initiative will assist in meeting Nebraska's responsibilities under the NNDP of PRRIP.

Priority Points, Feature Program Bonus Points, Geo Points and Rating Criteria

Priority Points

Nebraska Revised Statute § 81-15,175(4) indicates that: "It is the intent of the Legislature that the Department of Natural Resources apply for an additional three-year grant from the Nebraska Environmental Trust Fund that would begin in fiscal year 2014-15 and such application shall be awarded fifty priority points in the ranking process as set forth in subdivision (2)(h) of this section if the following criteria are met..." As required by this statute, the Department submitted a report before July 1, 2014, to the Natural Resources Committee of the Legislature that provided a list of the "projects and activities that were funded through the NET grant funds and "demonstrable evidence of the benefits accrued from such projects and activities." As was further required by this statute, the Department's report provided documentation that: 1) No WRCF funds were expended under subdivision (5)(a) of section 61-218, so there was nothing to report for the *Neb. Rev. Stat.* §-81-15,175(4)(c)(i) requirement; 2) No in-kind contributions were included in local matches, so the requirement under *Neb. Rev. Stat.* §-81-15,175(4)(c)(ii) was met; and 3) The *Neb. Rev. Stat.* §-81-15,175(4)(c)(iii) requirement that at least 40% of the project or activity cost funded by the Department with NET grant dollars is matched with other funding sources. As *Neb. Rev. Stat.* § 81-15,175(4) has been complied with, we believe this application to be consistent with the purposes enumerated above and that the award of fifty priority points in the ranking process is the Legislature's intent.

Feature Program Bonus Points

We believe the Platte Basin Water Management Action Initiative qualifies for the feature bonus points because the program is implemented on a regional river basin basis; includes representatives of multiple governments in project efforts; involves



NEBRASKA ENVIRONMENTAL TRUST FUND

H1. Project Sponsor: Nebraska Department of Natural Resources

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private landowners in leasing and easement efforts; and it recognizes the need for water use optimization from multiple perspectives, including community, economic, and environmental perspectives. It also has very strong components creating efficiencies of delivery and maximizing available resources through partnerships. Through the integrated management planning efforts of the involved parties there will also be an effort to inform and educate the public on sound water resource management practices through the project. Each of the individual Platte Basin NRDs have an IMP which includes information and education programs. In addition, there is an Annual Basin-Wide Plan Meeting which provides an additional opportunity for public outreach.

Geo Points

Eligible activity areas in the Platte Basin Water Management Action Initiative include portions of five of the seven Nebraska Environmental Trust Districts, including District 6, which is eligible for 20 bonus points in the 2014 NET grant cycle.

Addressing Rating Criteria

The Initiative will both address the needs of PRRIP, one of the major environmental remediation programs in Nebraska, and directly improve Nebraska's environment in the Nebraska Environmental Trust funding category priority area of surface and groundwater, with benefits to the habitat and soils categories as well. The Initiative will involve taking the time to complete sound planning and design before choosing and constructing projects. It will also measure water savings benefits to help select the most cost-effective projects for addressing Nebraska's water-related needs in the Platte Basin. Because the Initiative involves undertaking physical projects to continuously address evolving water resource needs and the environment, its benefits are expected to be long lasting. In doing so, the Initiative is expected to utilize funding from NET and NRDs, and to leverage federal funding for use in meeting project goals. It will also utilize staff efforts of the involved partners. By serving counties across the heart of Nebraska and helping address one of the state's major environmental obligations, the Initiative will serve and provide public benefits to a cross section of Nebraskans. Some of the leasing and easement-oriented aspects of PRRIP will involve public-private partnerships. Because the Initiative is expected to include demonstration and pilot projects, efforts are expected to be both innovative and replicable.

In addition to the environmental benefits of this project, its economic impacts should not be underestimated. By assisting state compliance with a major interstate agreement for use of waters on the Platte River, it will help Nebraska avoid the costs of alternate methods of environmental remediation that might be needed to meet the requirements of the law.



NEBRASKA ENVIRONMENTAL TRUST FUND APPLICATION BUDGET SUMMARY

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

BUDGET YEAR: SUMMARY

Column A	Column B	Column C	Column D	Column E	Column F
1. Source of Funds ►	Nebraska Environmental Trust	Combined Natural Resources Districts' Match			TOTALS ▼
2. Budget Category ▼					
3. Management actions to reduce consumptive uses of water, to enhance streamflows, to recharge groundwater, to optimize timing and efficiency of water use, or to support wildlife habitat.	\$9,900,000	\$6,600,000			\$16,500,000
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12. TOTALS ►	\$9,900,000	\$6,600,000			\$16,500,000



NEBRASKA ENVIRONMENTAL TRUST FUND APPLICATION BUDGET YEAR ONE

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

BUDGET YEAR: ONE
 (This page is used by multi-year grants only. If your project is not a multi-year grant, then ignore or delete this page.)

Column A	Column B	Column C	Column D	Column E	Column F
1. Source of Funds ►	Nebraska Environmental Trust	Combined Natural Resources Districts' Match			TOTALS ▼
2. Budget Category ▼					
3. Management actions to reduce consumptive uses of water, to enhance streamflows, to recharge groundwater, to optimize timing and efficiency of water use, or to support wildlife habitat	\$3,300,000	\$2,200,000			\$5,500,000
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11. TOTALS ►	\$3,300,000	\$2,200,000			\$5,500,000



NEBRASKA ENVIRONMENTAL TRUST FUND APPLICATION BUDGET YEAR TWO

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

BUDGET YEAR: TWO

(This page is used by multi-year grants only. If your project is not a multi-year grant, then ignore or delete this page.)

Column A	Column B	Column C	Column D	Column E	Column F
1. Source of Funds ►	Nebraska Environmental Trust	Combined Natural Resources Districts' Match			TOTALS ▼
2. Budget Category ▼					
3. Management actions to reduce consumptive uses of water, to enhance streamflows, to recharge groundwater, to optimize timing and efficiency of water use, or to support wildlife habitat	\$3,300,000	\$2,200,000			\$5,500,000
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11. TOTALS ►	\$3,300,000	\$2,200,000			\$5,500,000



NEBRASKA ENVIRONMENTAL TRUST FUND APPLICATION BUDGET YEAR THREE

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

BUDGET YEAR: **THREE**
 (This page is used by multi-year grants only. If your project is not a multi-year grant, then ignore or delete this page.)

Column A	Column B	Column C	Column D	Column E	Column F
1. Source of Funds ►	Nebraska Environmental Trust	Combined Natural Resources Districts' Match			TOTALS ▼
2. Budget Category ▼					
3. Management actions to reduce consumptive uses of water, to enhance streamflows, to recharge groundwater, to optimize timing and efficiency of water use, or to support wildlife habitat	\$3,300,000	\$2,200,000			\$5,500,000
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11. TOTALS ►	\$3,300,000	\$2,200,000			\$5,500,000



NEBRASKA ENVIRONMENTAL TRUST FUND APPLICATION BUDGET JUSTIFICATION

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

1. Have other sources of funding not listed in the Budget Worksheet been approached for project support? If yes, name them and explain the outcome of your request.

No, other sources have not been approached. However, the Platte Water Action Plan Projects that are built are likely to be funded through combinations of federal funds, local funds, and state funds, as well as funding from the other states participating in PRRIP.

2. Are all of the matching funds in the Budget Worksheet confirmed? If not, please identify those entities and list the date when confirmation is expected. Explain how you will implement the project if these sources do not confirm participation.

Yes. Please note that although the NRD partner letters provide a three-year commitment, the application budget sheets do not provide an annual breakout of NRD expenditures, but rather lump them into one large NRD category for each year. This is because the amounts are three-year commitments and it is especially uncertain what amounts will be spent by any NRD in any one year. That will depend upon what projects are approved and where work begins first.

3. If any of the project costs identified in Column B of the Budget Worksheet have been expended or if debt has been incurred for these costs or a sponsor or partner is obligated for these costs in any other way: List these costs here. Explain clearly why Trust grant funds are requested for these costs.

There are existing efforts underway, but the costs stated have not been incurred or obligated.

4. For each line item in column A of the Budget Worksheet, justify the basis for the dollar amount indicated for that item.

CATEGORY/COMPONENT (from Column A of the Budget Worksheet)	BASIS USED TO DETERMINE COST	Attachment? Y or N	ATTACHMENT LABEL
3. Management actions to reduce consumptive uses of water, to enhance streamflows, to recharge groundwater, to optimize timing and efficiency of water use, or to support wildlife habitat	The costs are based upon funding availability. The costs of some Platte Water Action Plan Projects have been estimated. However, this Initiative is based in part upon developing costs and actions which can be used to address the goals.	N	
4.			
5.			
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11.			



NEBRASKA ENVIRONMENTAL TRUST FUND PROJECT SPONSOR FINANCIAL INFORMATION

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

Please see the instructions for section C-3. Attachments to this document may be necessary to complete this section. Include these attachments with your hard copy submission.

The Nebraska Department of Natural Resources has a Fiscal Year 2015 appropriation of about \$18.8 million for operations.



NEBRASKA ENVIRONMENTAL TRUST FUND TIMELINE

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

See instructions for section D.

Month/Year	Task Description:
1/2015 – 12/2015	Measure or estimate project success, including: reductions in water consumption, surface water stored, groundwater recharged, enhancement/augmentation of streamflow, and any increase in wildlife habitat
1/2015 – 6/2018	Continue project feasibility studies
1/2015 – 6/2018	Complete project design for selected projects
1/2015 – 6/2018	Construct projects, where appropriate
1/2015 – 6/2018	Where economically effective, purchase easements to reduce consumptive water use
1/2015 – 6/2018	Identify and implement alternate water use and operation systems
1/2015 – 6/2018	Develop legal mechanisms to encourage alternate uses of existing facilities
1/2015 – 6/2018	Program and compliance monitoring
1/2015 – 6/2018	Program Information and Education
1/2018 – 6/2018	Measure or estimate project success, including: reductions in water consumption, surface water stored, groundwater recharged, enhancement/augmentation of streamflow, and any increase in wildlife habitat



NEBRASKA ENVIRONMENTAL TRUST FUND REAL ESTATE / SITE PLAN

H1. Project Sponsor: Nebraska Department of Natural Resources

H2. Project Name: Platte Basin Water Management Action Initiative

This section will not apply to every project. Please see instructions for section F. Attachments should be sent with the hardcopy submission.

Legal Description	County	#Acres
As potential projects are selected by the Initiative, the required real estate / site plan information will be provided to NET. .		

DRAFT

PBHEP and PBC Canal Rehabilitation Cost Updates – August 4, 2014

Cozad Canal

May Engineering Design	\$ 1,168.96
May Construction	\$720,486.86
June Construction	\$ 32,896.78
July Engineering Design	\$ 1,106.62
July Construction	\$ 2,148.50
Unpaid Contract - Olsson (Design)	\$ 7,151.58
Subtotal	\$764,959.30 x 60% = \$458,975.58

<i>Less</i> Remaining DNR PBHEP Funds	\$192,701.37
<i>Less</i> PBC “PBHEP Cost Overrun” Funds	<u>\$300,000.00</u>

Cozad Canal Total \$ 33,725.79 (surplus)

Orchard/Alfalfa Canal

July Construction	\$583,742.62
Outstanding Contracts	
Olsson-Const Admin)	\$ 18,200.58
BSB Construction-Phase 2	\$811,060.44
Simon Contractors-Phase 3	<u>\$ 11,463.73</u>
Subtotal	\$1,424,467.37 x 60% = \$854,680.42

<i>Less</i> Remaining DNR PBC Funds	\$560,325.36
<i>Less</i> DNR 60% Funding from Year 4 Budget (60% of \$520,786.00)	<u>\$312,471.60</u>

Orchard/Alfalfa Canal Total \$ 18,116.54 (surplus)

Thirty-Mile Canal

May Construction	\$239,512.55
June Construction	\$ 10,585.10
July Construction	\$ 12,598.00
Unpaid Contracts	
Miller & Assoc (Const Admin)	\$ 14,537.30
Miller & Assoc (Design)	\$ 422.35
BSB Construction-Phase 2	\$163,804.44
Midlands Contracting –Phase 4	<u>\$338,533.23</u>
Thirty-Mile Canal Total	\$779,992.97 x 60% = \$467,995.78

<i>Less</i> Cozad Canal “surplus”	\$ 33,725.79
<i>Less</i> Orchard/Alfalfa Canal “surplus”	<u>\$ 18,116.54</u>
	\$416,153.45

All Three Canals – Net Short of State Funding at 60% level = \$416,153.45

J-2 Regulating Reservoirs Project

Quarterly Report No. 02

Report Period: March, April, and May, 2014

The purpose of this Quarterly Report is to provide a general summary of the work performed for the J-2 Regulating Reservoirs Project between March and May, 2014. This does not include details of all the subtasks performed. The summary of work is organized into the following general categories of work:

- General Project Management and Implementation Tasks
- Permitting Activities
- Land Purchase Activities
- Water Rights Petition Filing
- Engineering Tasks

General Project Management and Project Implementation Tasks

- Central Nebraska Public Power and Irrigation District (Central) retained the following individuals to assist the project team in advancing the project:
 - Dave Malone, Appraiser
 - Tom Luhrs, Appraisal Reviewer
 - Dr. Steve Holen, Cultural Resources Consultant.
- Central continued to manage the contracts and approve new task orders for the consultant team.
- Kleinschmidt had a change in permitting leads from Kelly Schaeffer to Kelly Larimer.
- RJH led project personnel from Central, Kleinschmidt, Midwest Right of Way, and Rembolt|Ludtke in periodic teleconferences. The teleconferences were used to coordinate, direct, and track task assignments. These call typically occurred every other week.
- RJH established a file-share site for use by the Implementation Team to share and store project information.
- RJH developed monthly reports and began setting up the systems to track team expenditures.
- Central established a public website to disseminate information about the Project.
- Changed the names of the reservoirs from “Area 1 Reservoir” and “Area 2 Reservoir” to “Reservoir No. 1” and “Reservoir No. 2”, respectively.
- Central presented J-2 Project to Holdrege Museum Board and Holdrege Rotary

Permitting Activities

- The Team developed a purpose and need statement for the FERC License Amendment Application.
- Met with FERC in Washington DC to introduce Project, coordinate the general submittal schedule and process, and explain our intended approach to file the amendment application.
- Identified potential agencies that would need to receive the Initial Consultation Document (ICD)
- Selected agencies with whom to meet for informal consultations. The objective of the meetings would be to introduce the project and discuss key concerns and potential resource issues prior to finalizing and issuing the ICD. The selected agencies were: Nebraska State Historical Preservation Office, Nebraska Game and Parks Commission, and the US Fish and Wildlife Service.
- Continued preparation of the ICD and revised the submittal date to mid-June to allow time for preliminary discussions with agencies regarding key resource issues.
- Began developing study plans to be issued with the ICD.
- Scheduled the Joint Agency Meeting (JAM) for July 1, 2014.
- Scheduled and participated in a meeting in late May with the Gosper and Phelps County roads departments to present alternative road realignments. During this meeting, the counties narrowed the alternatives from 6 to 2 alignments. RJH and Central are continuing to coordinate with the road departments for the counties. Scheduled a meeting on June 30 with Gosper County commissioners to discuss road alternatives.
- Coordinated with local gas utilities to identify potential conflicts between existing infrastructure and the proposed Project.

Land Purchase Activities

- Notified landowners within the footprint of the Project of the need to purchase their land.
- Prepared for and held a landowner meeting to explain the Project and the process that would be used to purchase land for the Project.
- Contacted land owners to schedule property visits for the appraiser.
- Began property visits and appraisals.
- Began contacting land owners to schedule property visits for the appraisal reviewer.
- Clarified and interpreted State statutes regarding land purchases for public processes.

- Developed an approach for purchasing lands needed for the Project, that are beyond the Reservoir Footprints and where the Project components are not currently well defined.
- Tentatively scheduled public hearings related to purchasing lands for late August to Early September. This is a significant change from the General Implementation Schedule and the change is primarily a result of difficulties in coordinating property access and meetings with land owners during the appraisal process.
- Began process to obtain temporary rights of entry for private property to perform environmental studies and geotechnical exploration within reservoir areas.

Water Rights Petition Filing

- Completed preparation of a draft of the water rights petition.
- Completed preparation of a draft of the supplement to the water rights petition.
- Central and RJH reviewed the first draft of the water rights petition and supplement.
- Performed legal research and analysis regarding petition process, appropriation statutes, and preferred language to use in the petition.
- Prepared second draft of water rights petition and supplement.
- Completed independent review of water rights petition and supplement.
- Met with the Central Platte Natural Resource District (CPNRD) to discuss potential impacts of changing the return flow point from the existing J-2 Return to the Proposed Reservoir Outlets.
- Received letter from CPNRD stating that the change in discharge location was amenable to CPNRD provided outflow measurements from the reservoir were recorded daily and shared on an annual basis.
- Finalized the water rights petition and supplement, including figures, and prepared for submittal.
- Filed the water rights petition with the Nebraska Department of Water Resources on May 7, 2014

Engineering Tasks

- Completed the installation of 22 groundwater monitoring wells along the Phelps Canal and around the proposed reservoir areas. These wells will provide data needed for engineering and design of the reservoirs.
- Began recording groundwater levels within 22 monitoring wells.
- Revised the configuration of Reservoir No. 1 to provide the required reservoir volume, allow for future design adjustments to the embankment and reservoir footprint, and to effectively utilize the lands north of the currently-cultivated areas.

- Met with FERC Division of Dam Safety and Inspections in Chicago to present the dam concept and initiate coordination with this regulatory division.
- Continued to advance development of road realignment alternatives following second meeting with county road departments.
- Continued a hydraulic evaluation to support a Conditional Letter of Map Revision (CLOMR) because this Project will be within the currently-mapped 100-year flood plain.
- Completed an evaluation of the feasibility for adding hydropower generation to the Reservoir No. 1 and Reservoir No. 2 outlets. Central concluded that hydropower generation would not be included in the Project.
- Began evaluation of the benefit of including facilities that would simplify the addition of hydropower generation at the Reservoir No. 1 outlet in the future.
- Completed a field survey of the canal that provided data needed to begin hydraulic analysis of the canal.
- Began hydraulic analysis of the canal.
- Began construction impact analysis.

Tasks Anticipated for the next quarter

- Complete the Initial Consultation Document and submit to FERC.
- Advertise for, and have the Joint Agency Meeting.
- Obtain temporary rights of entry to private properties for environmental and geotechnical studies.
- Receive agency comments on ICD and study requests.
- Begin consultations with regulatory agencies.
- Begin environmental field studies.
- Begin geotechnical evaluations of potential borrow areas.
- Begin preparation of Draft License Application.
- Complete appraisals and appraisal reviews.
- Schedule and advertise for the Public Hearing for land purchasing.
- Begin negotiations with landowners for purchasing property.
- Continue hydraulic evaluations of canal and floodplains.
- Begin developing a hydraulic model of the canal and regulating reservoir system to support final design.

To: PBC Administrators

From: Jesse Bradley, NDNR; Rod Horn, SPNRD; Kent Miller, TPNRD; John Thorburn, TBNRD

Date: August 5, 2014

Subject: NDNR Late Spring 2014 Groundwater Recharge and Flood Mitigation Projects

Request:

This is a request for funds for an additional groundwater recharge and flood mitigation project along the Platte River, similar those that took place in the spring and fall of 2011, and the fall of 2013. Details of the 2011 and 2013 groundwater recharge projects can be found in the February 28, 2011, memo from the Department to the PBHEP administrators (Attachment A), and the two (2) November 25, 2013, memos: one from the Department, CPNRD, TBNRD, and TPNRD to the PBC administrators, and the other from the Department and TBNRD to the PBHEP Administrators (Attachment B). Project details, therefore, will not be repeated here; rather, this memo will provide a brief overview of the 2014 project and project costs. The Department requests that the Platte Basin Coalition administrators take action to support this request for funding.

2011 Project Successes:

In the spring and fall of 2011, multiple irrigation canals in the Platte Valley were used to divert river flows for the purpose of recharging groundwater aquifers and to assist with mitigation of anticipated flood flows. The Department and area NRDs supported and participated in these projects. The details of the 2011 projects, supporting arguments, and basic agreements are described in the Department's February 28, 2011, memo. The 2011 projects resulted in the diversion of 141,911 acre-feet of water at a cost of approximately \$550,000. As a result of these projects, approximately 36,000 acre-feet of water will reach the Platte River through accretions over the next 50 years. More can be found in this report on the Department website: <http://dnr.nebraska.gov/iwm/conjunctive-management-toolbox>

2013 Project Successes:

Due to expected excess flows along the Platte River again in the fall of 2013, the Department proposed another groundwater recharge and flood mitigation project. The basic principles described in the February 28, 2011, memo also applied to the fall 2013 project, but the method for determining payment changed. Payments were based upon an estimate of the operation and maintenance of the canal for a two-week diversion period, rather than payments based upon the number of days that diversions occurred. The 2013 project resulted in the diversion of approximately 43,693 acre-feet of excess flood water for a total cost of approximately \$705,000. The estimated recharge resulting from this project is 28,161 acre-feet.

2014 Project:

TBNRD, NDNR, and CNPPID entered into an agreement on June 6, 2014, for the diversion of excess Platte River flows in the late spring of 2014 for the purposes of groundwater recharge. Excess flows were available as a result of higher streamflows and above average precipitation which delayed the need for irrigation deliveries. Approximately 13,237 AF of water were diverted into the reservoir. The price was set at \$39/AF to be split evenly between the TBNRD and NDNR, totaling \$516,243 or \$258,121.50 for each party for the spring diversions.

TPNRD and SPNRD administered a recharge project with Western Irrigation District in Deuel and Keith Counties to divert excess flood flows into re-use pits along the Western Irrigation Canal and the South Platte River for the benefit of groundwater recharge. Diversions took place from June 11, 2014, to July 8, 2014 and the total estimated accretion for the project is approximately 440 acre-feet. Payment for this project was based on a \$750 fee for the use of each re-use pit, with a total cost of \$10,500 to be split 40% to the participating NRDs (\$600 to SPNRD and \$3,600 to TPNRD) and 60% to the Department (\$6,300).

Funding:

The Department and TBNRD entered into a contract with Central Nebraska Public Power and Irrigation District to divert excess flood flows for the purpose of groundwater recharge. A copy of this contract is included as Attachment C. A copy of the memo from TPNRD and SPNRD requesting reimbursement for the re-use pits recharge project that was carried out through their agreement with Western Irrigation District is included as Attachment D.

PBC:

The total cost for the two (2) projects detailed above and being submitted to the PBC for payment is \$526,743 (see Table 1 for details). While the Department did not enter into the contract to divert excess flows into pits on Western Canal, because this action is part of the excess flow project it is included for approval in this memo.

Budget Amendments – Because all PBC funds have been committed, a budget amendment is needed to approve funding for the 2014 groundwater recharge and flood mitigation projects.

Draft Proposed Motion (PBC)

The Platte Basin Coalition supports the spring of 2014 groundwater recharge and flood mitigation project and agrees to commit funds of \$526,743 to the project. Calculations of recharged project water and calculations/modeling of accretions to the Platte River will be performed by the Plate Overappropriated Area Committee.

Table 1: Summary of Excess Flow Projects

Contract Number	Project	Irrigator	NRD	Funding Project	Total Dollars	Project Dollars by NRD	Project Dollars by NDNR	Project Dollars by NET	Estimated Diverted (af)
n/a	Re-Use Pits Recharge Project 2014	Western Irrigation District	TPNRD	PBC	\$10,500.00	\$3,600.00 (TPNRD)	\$6,300.00		440.37
			SPNRD			\$600.00 (SPNRD)			
771	2014 E65 Canal and Elwood Reservoir Recharge Project	Central Nebraska Public Power and Irrigation District	TBNRD	PBC	\$516,243.00	\$258,121.50	\$258,121.50		13,237.00
Totals: Proposed projects for funding					\$526,743.00	\$262,321.50	\$264,421.50		13,677.37

Date: February 28, 2011
To: PBHEP
From: NDNR

Subject: NDNR Ground Water Recharge Demonstration Project Proposal;
Conceptual Discussion for Action by PBHEP

The Department proposes that multiple existing irrigation district canals divert river flows this spring and potentially this fall (pre- and post-irrigation season) for the purpose of recharging the ground water aquifers in the Platte Valley and to assist with the mitigation of flood flows; and that the Natural Resources Districts participate in and support this project.

A more detailed Project Proposal will be provided as documents are developed and a final complete project package will be presented to the PBHEP group for approval after the project has taken place.

I. Arguments for support:

- A. Based upon the excess flow report recently published by NDNR, (http://www.dnr.ne.gov/IWM/Reports/PlatteRiverStreamflow_1210.pdf) there have been times historically, when river flows are in excess of state protected flows and Platte River Recovery Implementation Program target flows. Based upon inflow projections by the Bureau of Reclamation and the current status of Lake McConaughy, the Department expects this year to be one with excess flow.
- B. Ground water recharge projects such as this are supported in the integrated management plans adopted by each NRD and DNR:
 - a. (b) These other programs may include, but are not limited to, the following:
 - (1) transfer existing surface water appropriations within the XXNRD to instream flow appropriations;
 - (2) transfer existing surface water appropriations or apply for new appropriations for intentional recharge, and recovery when appropriate, in existing canals during the irrigation or non-irrigation season;
 - (3) develop new infrastructure (e.g. dams or canals) that may include intentional recharge projects, and recovery when appropriate;
 - (4) develop ground water projects for the purpose of providing net accretions to the river; and
 - (5) facilitate contractual agreements between water users.
- C. Flood flows have been occurring in the lower reaches of the Platte and are likely in the upper reaches of the Platte when the reservoirs begin releasing excess flows. Diversion of the flows into existing canals has the potential to lessen flood impacts.

II. Basic agreements to be discussed and for action:

- A. Diversions would occur any where in the Platte, upstream of Chapman, where excess flows are available; however, a coordinated approach to the program is needed. As of today, February 28, the North Platte Reservoir System managed by the US Bureau of Reclamation, is expected to begin releasing water from Guernsey Reservoir. The current storage in the North Platte Reservoir System combined with a high estimate of inflows for April through July has prompted this action from the Bureau of Reclamation. Based upon this information, the Department expects there to be excess flow available in the reach of the North Platte River upstream of Lake McConaughy and proposes to target this upstream area to divert these flows. Additionally, Lake McConaughy plans to begin making releases on February 28, 2011 to make room for the expected high spring flows; therefore, the Department expects there to be excess flow available in the reach of the Platte River downstream of the Lake as well. Diversions would be prioritized to occur in the North Platte section of the river first and any excesses would continue downstream.
- B. DNR would enter into a contract with each irrigation district involved and the NRD in which the project will take place.
- C. Each irrigation district would need to complete the permitting process and be issued a temporary permit to store water for the purpose of a ground water recharge demonstration project and flood mitigation.
- D. The projects would follow the PBHEP protocol for division of funds: 40:40:20 for DNR:NRD:NET or 50:50 for DNR:NRD. As part of the NET application, conjunctive management projects were anticipated; as of yet this type of project has not been submitted to NET for reimbursement. DNR proposes to directly pay the irrigation districts rather than reimburse the NRDs because DNR would be a party to the contract with the irrigation districts.
- E. Expected costs are the operation and maintenance to perform the action plus a fixed dollar amount for each acre-foot of water that is calculated to be recharged to the aquifer.

III. Draft Proposed Motion

PBHEP supports this project described by DNR in their memo dated February 28, 2011, and more specifically, PBHEP supports the bullet items A through E under section II of the memo, as direction on how to move forward with the project. PBHEP expects a more detailed project proposal will be developed and brought to PBHEP for further approval as the project is moved forward.

To: PBC Administrators

From: Jesse Bradley, NDNR; Lyndon Vogt, CPNRD; Kent Miller, TPNRD; John Thorburn, TBNRD

Date: November 25, 2013

Subject: NDNR Fall 2013 Groundwater Recharge and Flood Mitigation Projects

Request:

This is a request for funds for an additional groundwater recharge and flood mitigation project along the Platte River, similar those that took place in the spring and fall of 2011. Details of the groundwater recharge projects can be found in the February 29, 2011, memo from the Department to the PBHEP administrators (Attachment A). Project details, therefore, will not be repeated here; rather, this memo will provide a brief overview of the 2013 project and project costs. The Department requests that the Platte Basin Coalition administrators take action to support this request for funding.

2011 Project Successes:

In the spring and fall of 2011, multiple irrigation canals in the Platte Valley were used to divert river flows for the purpose of recharging groundwater aquifers and to assist with mitigation of anticipated flood flows. The Department and area NRDs supported and participated in these projects. The details of the 2011 projects, supporting arguments, and basic agreements are described in the Department's February 28, 2011, memo. The 2011 projects resulted in the diversion of 141,911 acre-feet of water at a cost of approximately \$550,000. As a result of these projects, approximately 36,000 acre-feet of water will reach the Platte River through accretions over the next 50 years. More can be found in this report on the Department website: <http://dnr.ne.gov/IWM/Reports/2011RechargeTM2013.pdf>

2013 Project:

Due to expected excess flows along the Platte River again in the fall of 2013, the Department proposed another groundwater recharge and flood mitigation project. The basic principles described in the February 28, 2011, memo also apply to the fall 2013 project, but the method for determining payment has changed. Payments were based upon an estimate of the operation and maintenance of the canal for a two-week diversion period, rather than payments based upon the number of days that diversions occurred.

Funding:

The Department, along with the CPNRD, SPNRD, TBNRD, and the TPNRD, entered into six (6) contracts with various irrigation districts or canal companies along the Platte River upstream from Grand Island. Copies of these contracts are included as Attachment B.

PBC:

The total cost for the six (6) projects detailed in contracts (585, 587, 588, 622, 624, and 632) and being submitted to the PBC for payment is \$320,498.34. (see Table 1 for details)

While NDNR did not enter into the contract to divert excess flows into pits on Western Canal, because this action is part of the excess flow project it is included for approval in this memo and adds an additional \$9,750 to the total project costs.

Budget Amendments – Because all PBC funds have been committed, a budget amendment is needed to approve funding for the 2013 groundwater recharge and flood mitigation project. Because there are other projects pending which also will require a budget amendment, the motion proposed below does not include language for a budget amendment. That action will be discussed separately.

Draft Proposed Motion (PBC)

The Platte Basin Coalition supports the fall of 2013 groundwater recharge and flood mitigation project and agrees to commit funds of \$330,248.34 to the project. Calculations of recharged project water and calculations/modeling of accretions to the Platte River will be performed by the Plate Overappropriated Area Committee.

Table 1: Summary of Excess Flow Project Contracts

Contract Number	Irrigator	Canal	NRD	Funding Project	Total Dollars	Project Dollars by NRD	Project Dollars by DNR	Max Diversion Allowed	Actual Diverted
n/a	Thirty Mile Canal Company	Thirty Mile Canal PR	CPNRD	PBC	\$5,000.00	\$2,000.00	\$3,000.00	-	3,564
624	Nebraska Public Power District	Dawson Co. Canal from PR	CPNRD	PBC	\$5,000.00	\$2,000.00	\$3,000.00	-	2,529
		Gothenburg Canal PR	CPNRD	PBC	\$5,000.00	\$2,000.00	\$3,000.00	-	2,538
622 ¹	Central Nebraska Public Power and Irrigation District	E-65 and Elwood Reservoir	TBNRD	PBC	\$280,498.34	\$112,199.34	\$168,299.00	15,000	15,000
588	Platte Valley Irrigation District (North Platte Canal)	North Platte Canal NPR	TPNRD	PBC	\$5,000.00	\$2,000.00	\$3,000.00	-	3,822
585	Paxton-Hershey Water Company	Paxton-Hershey NPR	TPNRD	PBC	\$5,000.00	\$2,000.00	\$3,000.00	-	1,870
587	Western Irrigation District	Western Canal SPR	SPNRD ²	PBC	\$15,000.00	\$1,800.00	\$9,000.00	-	3,625
			TPNRD ³			\$4,200.00			
n/a	Western Irrigation District	Western Canal SPR - Pits	SPNRD ²	PBC	\$9,750.00	\$1,170.00	\$5,850.00	-	316.4 ⁴
			TPNRD ³			\$2,730.00			
					\$330,248.34	\$132,099.34	\$198,149.00		32,948

¹ Portion of the contract not covered by PBHEP budget dollars.

² SPNRD pays 30% of the NRD share of project dollars.

³ TPNRD pays 70% of the NRD share of project dollars.

⁴ This is what was diverted from the Western Canal into the pits, it is a subset of the total Western Diversion and therefore is not added again to the total value.

To: PBHEP Administrators
From: Jesse Bradley, NDNR and John Thorburn, TBNRD
Date: November 25, 2013

Subject: NDNR Fall 2013 Groundwater Recharge and Flood Mitigation Projects, with attachments and slightly revised from 11/22/13 version

Request:

This is a request for funds for a groundwater recharge and flood mitigation project along the Platte River, similar to those that took place in the spring and fall of 2011. Details of the groundwater recharge projects can be found in the February 29, 2011, memo from the Department to the PBHEP administrators (Attachment A). Project details, therefore, will not be repeated here; rather, this memo will give a brief overview of the 2013 project and project costs. The Department requests that the PBHEP administrators take action to support this request for funding.

Prior PBHEP Actions / 2011 Project Successes:

In the spring and fall of 2011, multiple irrigation canals in the Platte Valley were used to divert river flows for the purpose of recharging groundwater aquifers and to assist with mitigation of anticipated flood flows. The Department and area NRDs supported and participated in these projects with funding from PBHEP. The details of the 2011 projects, supporting arguments, and basic agreements are described in the Department's February 28, 2011, memo. The 2011 projects resulted in the diversion of 141,911 acre-feet of water at a cost of approximately \$550,000. As a result of these projects, approximately 36,000 acre-feet of water will reach the Platte River through accretions over the next 50 years. More can be found in this report on the Department website: <http://dnr.ne.gov/IWM/Reports/2011RechargeTM2013.pdf>

2013 Project:

Due to expected excess flows along the Platte River in the fall of 2013, the Department sought cooperation on another groundwater recharge and flood mitigation project. The basic principles described in the February 28, 2011, memo also apply to the fall 2013 project. For the two contracts which anticipate funding from PBHEP, payments were based upon a fee per acre-foot of diverted water.

Funding:

The Department and TBNRD entered into two (2) contracts with Central Nebraska Public Power and Irrigation District (CNPPID) for the use of the E65 Canal and Elwood reservoir, and Phelps Canal (see table 1). Copies of these contracts are included as Attachment B.

Contracts #622 and #623 were drafted concurrent to the most recent flood event. Under PBHEP, the Department is responsible for 40% of the total project costs, the associated NRD (TBNRD) for another 40%, and the Nebraska Environmental Trust (NET) for the remaining 20%.

Contracts #622 and #623 include a water service charge per acre-foot diverted. Contract #622 also includes a one-time contract delay charge and daily contract delay charges due to the postponement of a canal coating contract previously entered into by CNPPID, the terms of which they could not meet while providing recharge services for the purposes of the recharge project. The one-time contract delay charge was \$12,880, of which CNPPID paid one-third, leaving a balance of \$8,586.67. The daily contract delay charges totaled \$133,680, of which CNPPID paid one-third, leaving a balance of \$75,786.67. Added to the water service charge of \$35/acre-foot for 15,000 acre-feet of diverted water, the total amount owed for contract #622 is \$609,373.34. Contract #623 included a water service charge of \$25/acre-foot for 3,890 acre-feet of water, which equaled \$97,250. Platte River Recovery Implementation Program funds were used to pay 50% of this total, leaving a balance of \$48,625.

Budget Amendments – Because all PBHEP funds have been committed and there are existing approved projects that have not been implemented, a budget amendment is needed to approve funding for these projects. The Department and the TBNRD propose that funds from the “TBNRD Water Lease from CNPPID” and the “DNR CNPPID GW Recharge project (fall-12 to spring-13)” be defunded and those funds transferred to contracts #622 and #623. The defunded projects will allow \$377,500 to be transferred to the current balance for contracts #622 and #623, which is \$657,998.34. This will leave a remaining balance of \$280,498.34. The Department and TBNRD are not requesting PBHEP funding of the remaining balance of \$280,498.34.

Draft Proposed Motion

PBHEP supports the fall 2013 groundwater recharge and flood mitigation project as described by this memo and agrees to commit funds as described in table 1 of this memo. Calculations of recharged project water and calculations/modeling of accretions to the Platte River will be performed by the Plate Overappropriated Area Committee.

Table 1: Total Budget Request for the Project

Contract Number	Project	Irrigator	Canal	NRD	Funding Project	Total Dollars	Project Dollars by NRD	Project Dollars by DNR	Project Dollars by NET	Estimated Diverted
Proposed projects for defunding										
-	TBNRD Water Lease from CNPPID	Central Nebraska Public Power and Irrigation District	-	TBNRD	PBHEP	\$190,000.00	\$76,000.00	\$76,000.00	\$38,000.00	n/a
-	CNPPID GW Recharge project (fall-12 to spring-13)	Central Nebraska Public Power and Irrigation District	-	TBNRD	PBHEP	\$187,500.00	\$75,000.00	\$75,000.00	\$37,500.00	n/a
Proposed projects for funding										
622	E-65 Groundwater Recharge Project (fall 2013)	Central Nebraska Public Power and Irrigation District	Elwood Reservoir	TBNRD	PBHEP	\$609,373.34	\$243,749.34	\$243,749.34	\$121,874.67	15,000
623	Phelps Canal Groundwater Recharge Project	Central Nebraska Public Power and Irrigation District	Phelps Canal PR	TBNRD	PBHEP	\$48,625.00	\$19,450.00	\$19,450.00	\$9,725.00	3,890
Totals: Proposed projects for funding						\$657,998.34	\$263,199.34	\$263,199.34	\$131,599.67	18,890
Remaining Balance after use of available PBHEP funds:						\$280,498.34	\$112,199.34	\$112,199.34	\$56,099.67	

#

**WATER SERVICE AGREEMENT-
GROUNDWATER RECHARGE FROM EXCESS FLOWS BETWEEN
THE CENTRAL NEBRASKA PUBLIC POWER AND IRRIGATION DISTRICT,
NEBRASKA DEPARTMENT OF NATURAL RESOURCES
AND
TRI-BASIN NATURAL RESOURCES DISTRICT**

THIS AGREEMENT made and entered into this 6th day of JUNE, 2014, by and between The Central Nebraska Public Power and Irrigation District, a public corporation and political subdivision of the State of Nebraska, with its principal office located at 415 Lincoln Street, P.O. Box 740, Holdrege, NE 68949-0740, hereinafter referred to as "Central", Tri-Basin Natural Resources District, a political subdivision of the State of Nebraska, with its principal office located at 1723 North Burlington Street, Holdrege, NE 68949, hereinafter referred to as "Tri-Basin" and the State of Nebraska, acting by and through the Nebraska Department of Natural Resources, with its principal office located at 301 Centennial Mall South, Lincoln, NE 68509-4676, hereinafter referred to as "State ". Sometimes hereinafter Central, State and Tri-Basin shall be collectively referred to as "Parties" or individually as "Party".

WITNESSETH:

WHEREAS, Central is the owner of the E65 Canal and Elwood Reservoir as shown on Exhibit A; and

WHEREAS, Central filed in September of 2013 with the Nebraska Department of Natural Resources (hereinafter "DNR") a "Petition for Leave to File an Application for a Temporary Permit to Appropriate Water for Groundwater Recharge on the E65 Canal and Elwood Reservoir in Gosper County, Nebraska; and

WHEREAS, DNR approved Petition VAR-4829 on May 1, 2014 which grants permission to file a new appropriation pursuant to VAR-4829 for groundwater recharge using the E65 Canal and Elwood Reservoir; and

WHEREAS, Central filed in May of 2014 with the Nebraska Department of Natural Resources an "Application for a Temporary Permit to Appropriate Water for Groundwater Recharge on the E65 Canal and Elwood Reservoir in Gosper County, Nebraska (hereinafter "Appropriation"); and

WHEREAS, the State and Tri-Basin have jointly developed and agreed to implement an Integrated Management Plan, which plan includes investigating projects to enhance and improve water supply, including groundwater recharge projects; and

WHEREAS, the State and Tri-Basin desire Central to divert available excess flows to provide groundwater recharge for purposes of studying groundwater recharge, sustaining groundwater supplies and implementing the State/Tri-Basin joint Integrated Management Plan (IMP).

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants and agreements herein contained and the terms and conditions hereinafter set forth, it is hereby covenanted and agreed:

1. WATER SERVICE.

a. Beginning no earlier than June 2, 2014, and ending as provided in Section 3 below, Central will divert for the State and Tri-Basin available natural flow into Elwood Reservoir for recharge when capacity is available in Central facilities, as determined by Central. The Total Amount Diverted shall be calculated by Central using

the E65 Canal measuring flume located at milepost 2.8 on the E65 Canal, the measuring device at milepost 5.9 on the E65 Canal and historic pump performance. The Total Amount Diverted shall not exceed 10,000 acre feet.

b. The State or Tri-Basin shall have the right to terminate the diversions under this agreement by providing three day notice to the other Parties via email. If written agreement among the remaining Parties is reached regarding revised cost allocations within the three day period, then diversions into Elwood Reservoir may continue. If no agreement is reached, then diversions into Elwood Reservoir will terminate. Notwithstanding the above, Central may terminate diversions into Elwood Reservoir at any time for operational concerns.

2. WATER SERVICE CHARGES. The State and Tri-Basin shall pay Central for the water service described above as follows:

a. A Water Service Charge of thirty nine dollars (\$39.00) per acre-foot multiplied by the Total Amount Diverted, pursuant to paragraph 1 above, shall be assessed. All measurements made through Central's measuring device and so recorded by Central operating personnel shall be considered final. Tri-Basin will be responsible for 50% of the Water Service Charge and State will be responsible for 50% of the Water Service Charge.

b. Central shall invoice the State and Tri-Basin for the Water Service Charge upon completion of each pumping occurrence. Payment shall be due within 90 days of invoice. Past due payments shall accrue interest at 1.5% per month or the maximum legal rate, whichever is less, until paid in full.

3. TERM. The term of this Agreement shall commence when this Agreement is signed by the Parties (the "Commencement Date") and shall expire on December 31, 2014.

4. DATA SHARING. The Parties agree to share all hydraulic and hydrologic data collected in association with this Agreement, including data from either party which might be useful for calculation of evaporation from Elwood Reservoir.

5. WATER APPROPRIATIONS. The source of supply shall be water which is available pursuant to the Appropriation and Central will coordinate with the Bridgeport office of DNR. Tri-Basin shall cooperate, as reasonably necessary, to help Central to obtain the DNR's authorization for diversion consistent with the Appropriation. Water diverted into Elwood Reservoir under this agreement will not be released by Central for irrigation water service in calendar year 2014.

6. FORCE MAJEURE. Central shall not be liable for any delay or failure to perform its obligations under this Agreement caused by an event or condition beyond the reasonable control of, and without the fault or negligence of Central, including, without limitation, failure of facilities, flood, earthquake, storm, lightning, fire, severe cold or other weather event, epidemic, contamination, war, terrorist act, riot, civil disturbance, labor disturbance, accidents, sabotage, or restraint by court or restrictions by other public authority which delays or prevents performance (including but not limited to the adoption or change in any rule, policy, or regulation or environmental constraints imposed by federal, state or local governments). Upon the occurrence of such an event or condition, the obligations of Central under this Agreement shall be excused and suspended without penalty or damages, provided that Central shall give the State and Tri-Basin prompt written notice describing the particulars of the occurrence or condition, the suspension of performance is of no greater scope and of no longer duration than is required by the event or condition, and Central proceeds with reasonable diligence to remedy its inability to perform and provides progress reports to the State and Tri-Basin describing the actions taken to remedy the consequences of the event or condition.

7. DEFAULT. If any Party to this Agreement fails to perform or otherwise breaches any of the terms of this Agreement, then such failure shall constitute a default. In the event of default by any Party, the non-

defaulting Party/s shall give written notice of the default to the defaulting Party. Following such written notice, the defaulting Party may cure the default within thirty (30) days. Upon cure, this Agreement shall remain in full force and effect. If the defaulting Party fails to cure, the non-defaulting Party/s shall be entitled to any and all legal and equitable remedies except Central's total liability to the State and Tri-Basin for any loss or damage, including but not limited to special and consequential damages, arising out of or in connection with the performance of this Agreement shall not exceed either the amount of Water Service Charges paid by the State and Tri-Basin to Central pursuant to this Agreement or \$50,000, whichever is less.

8. ENTIRE AGREEMENT. This Agreement contains the entire understanding of the Parties hereto with respect to the water service contemplated hereby and supersedes all prior agreements and understandings between the Parties with respect to such subject matter.

9. AMENDMENT. No amendment to this Agreement shall be valid unless it is in writing and signed by the Parties hereto.

10. BINDING EFFECT. This Agreement shall inure to the benefit of and be binding on the Parties, their successors and assigns. This Agreement may not be assigned by State or Tri-Basin without the written consent of Central.

11. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the law of the State of Nebraska.

12. FUNDING. By execution of this Agreement, the State represents and affirms that it has requested and will make every effort to secure funds for this project. Should the anticipated source of funding no longer be available, the State will use its best efforts to secure alternative sources of funding.

13. LAWS. In executing this Agreement, each Party shall be responsible for its compliance with all applicable state and federal laws.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the date first stated above.

TRI-BASIN NATURAL RESOURCES DISTRICT,

Date 6/3/14

By 
General Manager

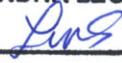
THE STATE OF NEBRASKA,
ACTING BY AND THROUGH THE NEBRASKA
DEPARTMENT OF NATURAL RESOURCES,

Date 6/6/14

By 
Director

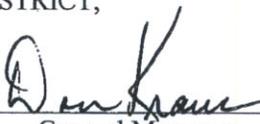
APPROVED

AS TO FORM & CONTENT
BY NDNR LEGAL COUNSEL

 DATE 6/3/2014

THE CENTRAL NEBRASKA PUBLIC POWER AND
IRRIGATION DISTRICT,

Date 6/3/14

By 
General Manager

THE CENTRAL NEBRASKA PUBLIC POWER AND
IRRIGATION DISTRICT
1000 S. 10th Street
Lincoln, NE 68502
3748

**AMENDMENT NO. 1 TO THE
WATER SERVICE AGREEMENT-
GROUNDWATER RECHARGE FROM EXCESS FLOWS BETWEEN
THE CENTRAL NEBRASKA PUBLIC POWER AND IRRIGATION DISTRICT,
NEBRASKA DEPARTMENT OF NATURAL RESOURCES
AND
TRI-BASIN NATURAL RESOURCES DISTRICT**

THIS AMENDMENT NO. 1 made and entered into this 30th day of JUNE, 2014, by and between The Central Nebraska Public Power and Irrigation District, a public corporation and political subdivision of the State of Nebraska, with its principal office located at 415 Lincoln Street, P.O. Box 740, Holdrege, NE 68949-0740, hereinafter referred to as "Central", Tri-Basin Natural Resources District, a political subdivision of the State of Nebraska, with its principal office located at 1723 North Burlington Street, Holdrege, NE 68949, hereinafter referred to as "Tri-Basin", and the State of Nebraska, acting by and through the Nebraska Department of Natural Resources, with its principal office located at 301 Centennial Mall South, Lincoln, NE 68509-4676, hereinafter referred to as "State ". Sometimes hereinafter Central, State and Tri-Basin shall be collectively referred to as "Parties" or individually as "Party".

WITNESSETH:

WHEREAS, the Parties entered into a Water Service Agreement for Groundwater Recharge from Excess Flows dated June 6, 2014, hereinafter the Original Agreement; and

WHEREAS, the Parties mutually desire to amend the terms and provisions of the Original Agreement by increasing the Total Amount Diverted limit from 10,000 acre feet to 15,000 acre feet;

NOW, THEREFORE, in consideration of the mutual promise and agreements herein contained, and other good and valuable consideration, the Parties do hereby covenant and agree that said Original Agreement is the same except as amended as follows:

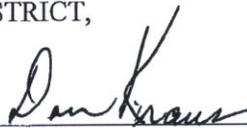
1. Section 1(a) of the Original Agreement is hereby amended to read as follows:

Beginning no earlier than June 2, 2014, and ending as provided in Section 1(b) or Section 3 below, Central will divert for the State and Tri-Basin available natural flow into the E65 Canal and the Elwood Reservoir for recharge. The Total Amount Diverted shall be measured by Central using the E65 Canal measuring flume located at milepost 2.8 on the E65 Canal. The Total Amount Diverted shall not exceed 15,000 acre feet.

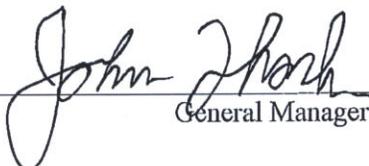
2. In the event any terms and provisions of this Amendment are construed to conflict with the terms and provisions of the Original Agreement, the terms and provisions of this Amendment shall prevail. In all other respect, except as herein amended, the terms and provisions of the Original Agreement shall remain in full force and effect. This Amendment shall have the same force and effect as if incorporated in the Original Agreement, and shall take precedence thereover.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment No. 1 the date first stated above.

THE CENTRAL NEBRASKA PUBLIC POWER AND
IRRIGATION DISTRICT,

By 
General Manager

TRI-BASIN NATURAL RESOURCES DISTRICT,

By 
General Manager

THE STATE OF NEBRASKA,
ACTING BY AND THROUGH THE NEBRASKA
DEPARTMENT OF NATURAL RESOURCES,

By 
Director

APPROVED

AS TO FORM & CONTENT
BY NDNR LEGAL COUNSEL

PT DATE 6-30-14



TO: PBC Sponsors
FROM: Twin Platte NRD – Ann Dimmitt
DATE: July 22, 2014
RE: Project Summary for the Twin Platte NRD and South Platte NRD Re-Use Pits Recharge Project 2014

The Twin Platte and South Platte NRDs are requesting approval for reimbursement for their Re-Use Pits Recharge Project in Deuel and Keith Counties. This project was managed in conjunction with the excess flows in the South Platte River; diversions took place from June 11, 2014 thru July 8, 2014. This is a joint project among the Twin Platte NRD, South Platte NRD, NDNR, and local landowners. The total cost of this project was \$10,500.

The Twin Platte NRD took the lead role in administrating this recharge project along the Western Irrigation District Canal in Deuel and Keith Counties. Project participants worked with the Western Irrigation District Board to divert excess flood flows during the 2014 South Platte River Excess Flows. Since the timing of these excess flows were later than the normal spring runoff, recharge benefits from the Western Irrigation Canal could not be counted as a credit since diversions are normal practices this time of year. This project incorporated 14 (12 TPNRD/2 SPNRD) re-use pits between the Western Irrigation District Canal and the South Platte River for additional ground water recharge and augmentation benefits to the South Platte River (see attached map for locations, and spreadsheet for the expected recharge rates). The average Stream Depletion Factor for this area is 70%. The location of these re-use pit sites are within PBHEP Zone 2, and are within two miles of the river. The re-use pits project was operational for 28 days, or from June 11 to July 8, 2014. The documentation and analysis used to determine recharge amounts was the ideology and methods that were developed by NDNR when this same type of recharge project was completed in 2011, and 2013. Any recharge and accretions to the Platte River from this recharge project will aid in meeting the goals and objectives of the NRD's IMPs and the Basin-wide Plan as well as PRRIP.

This document constitutes a re-imbursement request from the Twin Platte NRD and South Platte NRD. The preapproved percentage breakdowns for PBC re-imbursements are as follows: NRDs (40%); and the NDNR (60%). The total cost per pit was \$750.

The total re-imbursements of the project are expected as follows:

<u>Project Name</u>	<u>SPNRD (2 pits)</u>	<u>TPNRD (12 pits)</u>	<u>NDNR</u>	<u>TOTAL</u>
Re-use Pits	\$600	\$3,600	\$6,300	\$10,500

The TPNRD is requesting their share of the 40% reimbursement made payable to them in the amount of \$3,600.00. The SPNRD is requesting their share of the 40% reimbursement made payable to the Twin Platte in the amount of \$600.00.

Spring 2014 - 14 active pits														
Legal	NWNW Sec 28, T13, R39	SENW Sec 20, T13, R39	SENE Sec 30, T13, R39	NWSE Sec 30, T13, R39	SWSW Sec 24, T13, R40	SSE Sec 25, T13, R40	SESW Sec 25, T13, R40	NWNE Sec 34, T13, R40	NW Sec 2 T12, R41	NW Sec 2 T12, R41	SENW Sec 2 T12, R41	SWNE Sec 2 T12, R41	Sec 10 T12, R42	Sec 8, T12, R42
Name	Svoboda	Wright	Flaming	Dennis #1	Dennis #2	Dennis #3	Dennis #4	C Frates	B Armstong	B Armstrong #2	P Armstrong East	P Armstrong West	WH Palser East	WH Palser West
Area (acres)	1.4	0.211	0.09	0.25	1.1	0.13	0.16	0.278	0.3	0.95	0.3	0.55	0.75	0.4
Stream Depetion	80%	80%	68%	68%	61%	64%	64%	61%	66%	66%	79%	79%	~70%	~70%
# of Days Filled	28	28	28	28	28	28	28	28	28	28	28	28	25	25
Avg Daily AF Delivered*	2.64	2.87	1.5	0.02	1.15	0.07	0.105	0.08	0.16	0.16	1.33	1.33	2.97	1.86
Estimated Accretion	73.92	80.36**	42.0**	0.56	32.2	1.96	2.94	2.24**	4.48**	4.48**	37.24	37.24	74.25	46.5
Cost per Pit	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750

* Calculated for 2011
recharge project
** Estimated by size
and soil type-to be
measured at a later
date

Total ac-ft recharge for TPNRD pits 2013 **185.27 ac-ft**
Total ac-ft recharge for SPNRD pits 2013 **131.13 ac-ft**
Total ac-ft **316.4 ac-ft**

Total ac-ft recharge for TPNRD pits 2014 **319.62 ac-ft**
Total ac-ft recharge for SPNRD pits 2014 **120.75 ac-ft**
Total ac-ft **440.37 ac-ft**

TPNRD pits
SPNRD pits

Water diversion aims to recharge aquifer

By Heather Johnson hjohnson@nptelegraph.com | Posted: Wednesday, June 25, 2014 3:00 am



Floodwater from the South Platte River is diverted into a canal system on the western edge of Deuel County. The water will be stored in a series of pits that will allow it to leak through the soil and replenish the aquifer.

Natural Resources Districts in Nebraska are taking advantage of floodwaters in the South Platte River. Flows are being diverted in an attempt to recharge the aquifer.

“We are taking a proactive approach to preserving our groundwater supply,” said Ann Dimmitt, integrated management plan manager for the Twin Platte NRD. “The neat thing about this is that it’s a joint effort.”

Twin Platte has teamed up with the Western Irrigation District, the South Platte NRD and landowners in Keith and Deuel counties for the project.

Permits from the Nebraska Department of Natural Resources allow water to be pulled off the South Platte at a head gate near Julesburg, Colo.

Flows are then routed down a canal system and into re-use pits. According to Dimmitt, 13 pits in Keith County and two pits in Deuel County are being utilized.

“The pits aren’t lined. The water moves through the coarse, gravelly-type soil quickly — faster than the pits can fill up,” Dimmitt said. “The idea is that the water will soak into the ground and replenish the aquifer.”

The canals aren’t lined, which means some seepage will occur there as well.

“But, because of the time of year it is, the canals are being used for irrigation,” Dimmitt said. “We can’t take credit for the recharge right now, even though we know it is happening.”

The project is similar to others conducted during flooding in September and in 2011.

“In 2013, we had 13 pits filled for 27 days, resulting in a total recharge of 316 acre feet,” Dimmitt said. “The amount we get from this project will vary based on the day.”

Two more pits were added in Keith County this year. The flood in the fall happened so fast that landowners didn’t have as much time to prepare for it as they did this go-round.

In 2011, 180,000 acre feet of floodwater was diverted off the North Platte River. It was determined that about 65,000 acre feet of that recharged the aquifer.