

STATE OF NEBRASKA

DEPARTMENT OF NATURAL RESOURCES

APPROVAL OF APPLICATION A-19639

WATER DIVISION 1-A

BACKGROUND

1. On July 14, 2004, the Department of Natural Resources (Department) issued a formal moratorium on all new surface water appropriations in the Platte River Basin upstream of the confluence with the Loup River near Columbus, Nebraska. The moratorium included all tributary streams above the Loup River confluence including the North and South Platte Rivers and tributaries.
2. On September 11, 2009, a Basin-Wide Plan (BWP) for the overappropriated area of the Platte River Basin was adopted by order of the Department. The BWP was also adopted by the following NRDs: the North Platte NRD, the South Platte NRD, the Twin Platte NRD, the Central Platte NRD, and the Tri-Basin NRD. These NRDs are collectively referred to in the BWP as the "Platte River Basin NRDs." The individual integrated management plans referenced in the next paragraph are required to be in conformance with the goals and objectives of the BWP.
3. In the second half of 2009, the initial integrated management plans (IMPs) were adopted by order of the Department, pursuant to *Neb. Rev. Stat. § 46-718(2)* for the following Natural Resources Districts (NRDs): the North Platte NRD, the South Platte NRD, the Twin Platte NRD, the Central Platte NRD, and the Tri-Basin NRD. There have been subsequent revisions to the IMPs. Goals of the BWP include achieving a fully appropriated condition and preventing reductions in streamflow that would cause non-compliance with any extant interstate agreements. Methods to achieve these goals include using periodic or intermittent unappropriated water (excess flows) to recharge underground aquifers or otherwise retiming excess flows to enhance stream flows at times when there are shortages to U.S. Fish and Wildlife Service (USFWS) designated target flows or state-protected flows. The moratorium on issuing new surface water appropriations was continued, with provision for variance from the moratorium if proposed new uses are deemed to be in the public interest.
4. On January 1, 2007, work officially commenced on the Platte River Recovery and Implementation Program (PRRIP or Program). PRRIP's goals include reducing shortages to USFWS target flows and providing additional land habitat for endangered species in the Lexington to Chapman reach of the Platte River. In order to meet these goals, each signatory to PRRIP has adopted depletions plans to address the mitigation of the adverse impacts of water-related activities on streamflows in the Platte River. The State of Nebraska, through the Department will utilize the integrated management process to achieve the goals of PRRIP (BWP and IMPs).

5. On April 23, 2019, Kent Miller, General Manager of the Twin Platte Natural Resources District (District), filed petition VAR-7353 for Leave to File or Consider an Application for a Permit to Appropriate Water within a Moratorium Area or Stay Area. The petition requests leave to file an application for a temporary permit to appropriate water from the North Platte River for the purpose of groundwater recharge via the Paxton-Hershey Canal.
6. On April 30, 2019, the Department granted leave to file an application for a permit to appropriate water by approving petition VAR-7353.
7. On May 2, 2019, the District filed in the Department application A-19639 for a temporary permit to appropriate water for the purpose of groundwater recharge through the Paxton-Hershey Canal. The application proposes to divert water from the North Platte River at the headgate of the Paxton-Hershey Canal located in Section 18, Township 14 North, Range 33 West of the 6<sup>th</sup> P.M. in Lincoln County.
8. Temporary permits may not be granted for a term of more than one year.

#### CONCLUSIONS

1. Construction of the Paxton-Hershey Canal system has been completed.
2. Applicant has demonstrated there may be periods when unappropriated water in the North Platte River is available. It is anticipated there may be water available for diversion for some periods under this application in the future.
3. The purpose of this application is to divert unappropriated excess flows, if available, for recharge of the groundwater aquifer in order to mitigate stream depletions from groundwater pumping and increase base flow into local streams, which supports key goals and objectives of the BWP and IMPs. Accretions to streamflow that may occur as a result of recharge under this appropriation are beneficial if they are achieving the goals of the BWP and IMPs. Additionally, the BWP and IMPs provide support for Nebraska's participation in the PRRIP. Nebraska is a party to the PRRIP and in part, Nebraska will achieve its commitments under the PRRIP through implementation of Water Action Plan projects. Diversions under A-19639 may be used for PRRIP purposes. Any diversions under this application must not be to the detriment of achieving the goals of the BWP and IMPs in the most effective manner as determined by the Department.
4. Diversions would occur under the proposed project during the non-irrigation season or under conditions such that no adverse impacts to existing water users are expected.
5. This diversion project is expected to be operated in accordance with the goals and objectives of the BWP and IMPs. As stated above, Nebraska has committed to achieve its obligations to the PRRIP. Therefore, under Nebraska's current commitment to the PRRIP the project shall only divert water when USFWS target flows are exceeded or such requirement is waived by the Department. As such, this project will not require an offset for the purpose of ensuring that these target flows are met.

6. The Department has and will continue to exercise prudence in determining the most effective beneficial use of what is frequently a limited and intermittent water supply in the fully and over-appropriated reaches of the Platte River system.
7. Certain conditions should be imposed on this appropriation to ensure the public interest is met for the near-term and long-term. Significant public investments have been and will continue to be made toward achieving the goals of the BWP and IMPs; including PRRIP commitments. The Department believes the limited water resources available in the fully and over-appropriated reaches of the Platte River system must be prioritized to serve these goals while continuing to meet the public interest. To ensure this outcome, this appropriation and existing or future appropriations of similar type should be adaptively managed and/or modified to continue achieving BWP and IMPs goals. This adaptive management should consider the order and prioritization in which appropriations are authorized to divert, the rate at which the appropriation is authorized to divert, Recharge Facilities to be utilized, and other factors deemed by the Department as necessary toward continuing to serve the public interest.
8. For the purposes of this order "Desired Minimum Discharge" (DMD) describes one criterion that will be used to determine whether, and to what extent diversion may occur for projects such as that proposed under A-19639. Table A lists the DMD values for the Platte River, measured in cubic feet per second (cfs) at the Grand Island stream gage, for specific time periods. The magnitude of these flows differs according to the PRRIP's designation of wet, normal or dry hydrologic conditions, derived from the USFWS's recommendations for species flows and annual pulse flows and found in the PRRIP Water Plan Reference Materials Attachment 5, Section 11, Appendix A-5. The flow values listed in Table A include instream flow appropriation values when they exceed the target flows. These instream flow appropriations must also be satisfied in order for unappropriated water to be considered available for possible diversion.
9. The diversion of water for aquifer recharge in furtherance of achieving the goals of the BWP, IMPs and the PRRIP is beneficial. There may be unappropriated water available at times during the next one-year period, and subject to the adaptive management principles outlined in (7) above, the application is deemed to be in the public interest. Therefore, it should be approved with reasonable conditions to best facilitate achieving the aforementioned goals.

ORDER

IT IS HEREBY ORDERED that application A-19639 is APPROVED subject to the following conditions:

1. The source of water is the North Platte River.
2. This appropriation is temporary and may not be used for more than one year from the approval date of this Order.

3. When the specified limitations and conditions contained within this Order for this appropriation are met, water may be diverted at a rate specified by the Department up to a maximum rate of 102.78 cfs, into the headgate of the Paxton-Hershey Canal located in Section 18, Township 14 North, Range 33 West of the 6<sup>th</sup> P.M. in Lincoln County.
4. The priority date is May 2, 2019.
5. The water diverted under this temporary permit shall only be used for the purpose of groundwater aquifer recharge (recharge) in support of the BWP, IMPs and PRRIP via the existing Paxton-Hershey Canal.
6. This appropriation is a natural flow appropriation. The rate of recharge must essentially match the rate of delivery into each recharge area with only modest increases in head to provide for effective recharge of water into the groundwater aquifer. The Department may reduce the diversion rate if it determines that water is being stored above ground in addition to the recharge activity or spilled out of the canal system.
7. The term "Desired Minimum Discharge" is quantitatively defined in Table A attached to and hereby incorporated into the conditions of this Order. Only those flows in excess of the DMD, as defined in Table A, shall be considered to be available to be diverted if other conditions for diversion under this approval are also met.
8. The Department will reduce or deny diversion under this appropriation if there is not enough available unappropriated water to satisfy all appropriations and the Department determines that there are more beneficial uses for the limited water supply under other appropriations, and that doing so is in the public interest. An adaptive management approach to determining which potentially complimentary or competing temporary excess water recharge projects receive a portion of a limited water supply will be applied consistently to best serve the stated goals while continuing to meet the public interest. This same determination will be made for each recharge facility that is a component of this appropriation in order to best meet the public interest as determined by the Department.
9. In order to ensure the public interest is served relative to the purpose for which this appropriation is being granted, the Department further imposes the following hydrologic and administrative conditions, to determine whether and in what quantity water may be available for diversion:
  - A. The Appropriator shall have measuring devices installed and operational at the headgate diversion from the North Platte River and other locations on the canal system as required by the Department prior to commencing diversions under this appropriation. Accurate measurement of diversions and deliveries will be documented by the Appropriator and made available upon request by the Department.

- B. Appropriator must request diversion in writing and must include the specific information described within this Order when making such request. Appropriator must receive written approval from the Department's Bridgeport Field Office to divert under this appropriation prior to diversion. This communication must occur during regular business hours to confirm that conditions are met for diversion. This condition may be met by an acknowledged email exchange. This permission and approval to divert from the Department will specify the rate of diversion allowed.
  - C. Appropriator must report when water is first diverted into their canal system for irrigation, whether irrigation deliveries to fields are occurring, and when the final diversion of water into the canal system for irrigation has been made for that year. The Appropriator shall notify the Bridgeport Field Office within twenty-four hours of the first and the final irrigation season deliveries of the Appropriator's canal system. If this falls on a holiday or weekend, then the notification must be received by the next business day.
  - D. If permission to divert under this appropriation is granted, the Department will authorize diversion and will respond to the written request for diversion with a written approval and will specify the total diversion (if any) that will be allowed.
  - E. No diversion under this appropriation may occur unless the previous day's twenty-four-hour average flow of the Platte River, as measured at the Grand Island stream gage or other Department-specified gage, is in excess of the DMD. This requirement may be waived if written permission is granted by the Department.
  - F. The current hydrologic condition of wet, normal or dry, as designated by PRRIP, shall determine the appropriate DMD value from Table A.
  - G. Once diversion under this appropriation has begun, the Appropriator shall notify the Bridgeport Field Office prior to cessation of diversion under this appropriation. If this falls on a holiday or weekend, then the notification must be received by the next business day. Once diversion has ceased for a period of twenty-four hours or more, permission must be obtained from the Department as described within this Order before resuming diversion under this appropriation.
  - H. The Department may modify the amount authorized to be diverted after diversion has commenced under this appropriation. The Department will issue a regulating or closing notice to the Appropriator if such modifications are required to serve the public interest or to protect other appropriators.
10. The Department reserves the right to make adjustments to the amounts and measurement location(s) listed in Table A.

11. The water diverted under A-19639 through the Paxton-Hershey Canal **may not be used for direct irrigation** by the District's customers. The water diverted under A-19639 may flow only through the headgate, canals, and laterals. Any water diverted for the purpose authorized under this permit that does not seep into the groundwater aquifer under the specified limitations and conditions shall be returned to the Platte River system at established spills and drains.
12. The Appropriator must comply with all relevant statutes.
13. If a relinquishment is not submitted first, then A-19639 will EXPIRE one year from the approval date of this Order and appropriation A-19639 will be CANCELLED without further action by the Department as of that date.
14. Within six months after the final date of diversion under this temporary permit, the Appropriator shall provide a report containing the following elements: 1) Tables of water deliveries to each recharge facility which received water under this appropriation. 2) An evaluation of the evaporative loss for each component of the diversion project will be provided. 3) In addition, stage data (water surface elevation) should be provided. 4) A copy of any other data or reports provided to the PRRIP Executive Director's Office, the local Natural Resources District, or pursuant to any contractual arrangements between applicant and the Department or other entities. 5) Maps or plans must be provided to the Department, which include a detailed depiction of the areas used to recharge the groundwater aquifer and the infrastructure used to deliver the water, including any recently constructed pipelines. 6) Data gathered from any groundwater level measurements during and after water has been recharged under this appropriation that demonstrates an increase in the elevation of the local water table has occurred around these sites

ADDITIONAL INFORMATION

Failure to comply with all laws and regulations pertaining to surface water appropriations, any orders issued by the Director of the Department of Natural Resources, or the provisions of this Approval may result in the cancellation of the appropriation, temporary closing of the appropriation, administrative penalty, criminal prosecution, or any combination thereof.

This appropriation is not a guarantee that water will be available. Nebraska law gives priority to senior appropriations.

DEPARTMENT OF NATURAL RESOURCES



Gordon W. Fasset, P.E., Director

May 13, 2019

A copy of this approval was posted on the Department's website and provided to the Department's field offices in Bridgeport and North Platte, Nebraska. A copy of this approval was mailed on May 13, 2019, to the following:

Kent O. Miller, Manager  
Twin Platte Natural Resources District  
P.O. Box 1347  
North Platte, Nebraska 69103-1347

Paxton-Hershey Water Company  
22431 West Platte Valley Road  
Hershey, Nebraska 69143

Table A - Desired Minimum Discharge of the Platte River in cfs  
 Measured at the Grand Island Stream Gage Relevant to Appropriation A-19639

Period	PRRIP Target Flows Grand Island		
	Wet*	Normal*	Dry*
January 1 - January 31	1,000	1,000	600
February 1 - February 14	1,800	1,800	1,200
February 15 - February 28	3,350	3,350	2,250
March 1 - March 15	3,350	3,350	2,250
March 16 - March 22	1,800	1,800	1,200
March 23 - March 31	2,400	2,400	1,700
April 1 - April 14	2,400	2,400	1,700
April 15 - May 3	2,400	2,400	1,700
May 4 - May 10	2,400	2,400	1,700
May 11- May 19	1,200	1,200	800
May 20 - May 31	3,700	3,400	800
June 1 - June 20	3,700	3,400	1,000**
June 21 - June 23	1,200	1,200	1,000**
June 24 - July 31	1,200	1,200	1,000**
August 1 - August 22	1,200	1,200	800
August 23 - August 31	1,200	1,200	800
September 1 - September 15	1,200	1,200	800
September 16 - September 30	1,000	1,000	600
October 1 - October 11	2,400	1,800	1,350**
October 12 - November 10	2,400	1,800	1,500**
November 11 - November 15	2,400	1,800	1,300
November 16 - December 31	1,000	1,000	600

\* The current Hydrologic Condition, (Wet Normal or Dry) determined by PRRIP can be found at: <http://platteriverprogram.org/PubsAndData/Pages/CurrentHydrologicCondition.aspx>

\*\*Represents the minimum discharge required by instream flow appropriation, which is greater than PRRIP Target Flows, and senior to A-19639