

STATE OF NEBRASKA

DEPARTMENT OF NATURAL RESOURCES

APPROVAL OF APPLICATIONS NEX-9264, NEX-9266 AND NEX-9268

FOR A CHANGE OF APPROPRIATION TO GROUNDWATER AQUIFER RECHARGE

AND

APPROVAL OF APPLICATIONS NEX-9265, NEX-9267 AND NEX-9269

FOR A CHANGE OF APPROPRIATION TO STREAMFLOW AUGMENTATION

WATER APPROPRIATION D-920

WATER DIVISION 1-A

FINDINGS

1. Records on file in the Department of Natural Resources (Department) show that surface water appropriation D-920 is held by Enterprise Irrigation District.
2. Appropriation D-920 with a priority date of March 28, 1889, authorizes the appropriator to divert water from the North Platte River into and through the Enterprise Canal at its headgate located in Section 27, Township 23 North, Range 57 West of the 6th P.M. in Scotts Bluff County as shown below:

Surface Water Appropriation	Priority Date	Source of Water	Acres Approved for Irrigation	Maximum Diversion in CFS	
				Direct Irrigation	Incidental Recharge
D-920	03/28/1889	North Platte River	4969.86	114.81	18.19
D-920, P-234 ¹		Tub Springs	²	-	-
D-920, P-498 ¹		Wet Spotted Tail	²	-	-
D-920, P-236 ¹		Dry Spotted Tail	²	-	-

¹ Optional Diversions - the amount of water diverted under each of these permits must be available at the headgate on the North Platte River and must be offset by a reduction of a like amount at the North Platte River diversion. ² Acres vary, see petition and adjudication orders for details.

D-920 direct flow and incidental underground storage appropriations are quantified in cubic feet per second (CFS). As an alternative to diversions taken from the North Platte River, the later three (3) permits listed above are termed "Optional" and they permit the diversion of water from the various sources specified. They authorize irrigation, and they each carry a March 28, 1889, priority date. The optional diversions have been used in the past as long as the March 28, 1889, date is not called out of priority by an older right. The orders granting the optional diversions and subsequent adjudication order spell out the terms, but a general description is that a reduction in diversion under D-920 from the North Platte River must be made in proportion to any amounts diverted under D-920 P-234, D-920 P-498 and D-920 P-236.

3. On December 15, 2020, Enterprise Irrigation District, the North Platte Natural Resources District and individual landowners (Applicants) filed in the Department applications NEX-9264, NEX-9266 and NEX-9268 and requested a temporary change of the location of use and to change the purpose of appropriation D-920 to recharge groundwater for a period of 5 years. The purpose of use would temporarily be changed to ground water recharge under the applications. Each of these applications are associated with a specific tract of irrigated land appurtenant to D-920 that is under contract between the North Platte Natural Resources District and the landowners.
4. On December 15, 2020, Enterprise Irrigation District, the North Platte Natural Resources District and individual landowners (Applicants) filed in the Department applications NEX-9265, NEX-9267 and NEX-9269 to augment the flow in a specific stream reach for portions of water appropriation D-920 for a period of 30 years. The purpose of use would temporarily be changed to streamflow augmentation under the applications. Each of these applications are associated with a specific tract of irrigated land appurtenant to D-920 that is under contract between the North Platte Natural Resources District and the landowners.
5. The Department published notice of the application as provided in *Neb. Rev. Stat. § 46-291*, as amended. The notice specified that persons could participate either under Option 1 (informally) or option 2 (formally). There were no Option 2 objectors.
6. On June 14, 2021, Central Nebraska Public Power and Irrigation District filed in the Department comments under Option 1 requesting that the Department review the Applicant's estimation of consumptive use values as an over-estimation of consumptive use by an appropriation implicitly underestimates the amount of non-consumptive water remaining in the system for other uses; and thus, a transfer based on an overestimation of consumptive use has the potential to harm other appropriators.
7. On June 14, 2021, Nebraska Public Power and Irrigation District filed in the Department comments under Option 1 requesting the Department review the consumptive use estimate and transferrable amounts under the transfers as they appear to exceed the historical consumptive use and if approved may harm other appropriators.
8. Applications NEX-9264, NEX-9266 and NEX-9268 propose to change the location of use of a portion of appropriation D-920 to recharge

groundwater in a constructed recharge facility located in the NW¼ of Section 35, Township 23 North, Range 56 West of the 6th P.M. in Scotts Bluff County.

9. Applications NEX-9265, NEX-9267 and NEX-9269 propose to transfer a portion of Appropriation D-920 to augment the flow in a specific stream reach. The proposed location of use is a reach of the North Platte River starting in the NW¼ of section 35 Township 23 and ending in the NE¼ of Section 2 Township 22, all in Range 56 West of the 6th P.M. in Scotts Bluff County.

CONCLUSIONS

1. The point of diversion for the groundwater recharge use would remain at the headgate of the Enterprise Canal. Water diverted under applications NEX-9264, NEX-9266 and NEX-9268 would be routed into and through the Enterprise Canal system to the constructed recharge facility described above. The rate of recharge should not exceed the rate of diversion associated with the irrigated acres that have been transferred. Water that is being spilled out of the recharge project facility should be returned to the North Platte River in accordance with the provisions of *Neb. Rev. Stat.* 46-265.
2. The point of diversion for the stream augmentation use should remain at the headgate of the Enterprise Canal. The rate of stream augmentation should not exceed the rate of diversion associated with the irrigated acres that have been transferred. Water transferred under applications NEX-9265, NEX-9267 and NEX 9269 should be routed into and through the Enterprise Canal system to river returns (spills) available at the constructed recharge facility described above and returned to the North Platte River in accordance with the provisions of *Neb. Rev. Stat.* 46-265.
3. Changes to appropriations are authorized under *Neb. Rev. Stat.* 46-290 which provides for changes (transfers) from one use to another use; either temporarily or permanently. The Applicants have filed applications for two proposed uses and for two different periods of time. The three applications for recharge are proposed for a period of 5 years. The three applications for streamflow augmentation are proposed for a thirty-year period. For the Department to be able to effectively administer the transferred portions of the appropriations the Enterprise Irrigation District (Appropriator) or Appropriator's authorized agent should declare by April 1 each year whether the transferred purpose of use will be groundwater recharge, stream augmentation or some combination of uses. An operational plan for each year should be provided to the Department.
4. The instantaneous amount allowed to be diverted under the approved transfers should be computed by the ratio of acres transferred (142.9 acres from three farm tracts) divided by the total number of acres under permit for irrigation prior to the transfer (4969.86 acres) multiplied by the pre-transfer instantaneous diversion rate (114.81 CFS). Using this method, the maximum amount divertible under approved transfers should be 3.30 cubic feet per second (CFS).
5. Transfers for the purpose of recharging groundwater or streamflow augmentation are beneficial uses of water.

6. The public comments under Option 1 encouraged the Department to carefully review the requested transfer amounts that the commenters believe are too high. The Department has reviewed the seasonal consumptive use estimates and believes the information provided by the applicant supports a finding that the estimated consumptive use is acceptable as a maximum seasonal value. The commenters concerns should be addressed with the transfers being limited by the instantaneous rate, maximum seasonal value, irrigation season, and the new purposes are intended to be non-consumptive.
7. The application forms indicated a desire to transfer the non-consumptive incidental underground storage. This is not necessary for the following reasons. The incidental underground storage is already being recharged to the aquifer, which provides for baseflow enhancement to the streamflow. Thus, no hydrologic change would be affected by incorporating incidental underground storage into the water administration for this portion of the overall diversions. To minimize impacts to other water users on the stream system the incidental underground storage should continue to be diverted in a manner consistent with the terms authorized in the approval of Incidental Underground Storage Permit U-31.
8. Approval of these transfer applications should not alter any terms and conditions of the optional diversions D-920 P-234, D-920 P-498 and D-920 P-236, except that none of the lands that will forgo irrigation relative to the transfer applications should be served by an optional diversion either.
9. The Department has reviewed applications NEX-9264, NEX-9265, NEX-9266, NEX 9267, NEX-9268 and NEX-9269 and other pertinent information and determined that the transfer requests meet necessary requirements for approval pursuant to Neb. Rev. Stat. § 46-290 to 46-294.

IT IS HEREBY ORDERED

Applications NEX-9264, NEX-9266 AND NEX-9268 for a transfer of the location of use and type of use to groundwater aquifer recharge; and applications NEX-9265, NEX-9267 and NEX-9269 for a change of appropriation to augment streamflow for portions of water appropriation D-920 are hereby APPROVED with the following terms and conditions:

1. The Appropriator or its designated agent will notify the Department no later than April 1 of each year whether the intended use of transferred portions of appropriation D-920 will be used for the purpose of groundwater aquifer recharge and/or streamflow augmentation. An operational plan must be provided to the Department that describes how the transferred water will be used for the upcoming irrigation season. In complying with this requirement, the Appropriator must specifically reference the following pairs of transfers: NEX-9264 (Recharge) and NEX-9265 (Augmentation), NEX-9266 (Recharge) and NEX-9267 (Augmentation), NEX-9268 (Recharge) and NEX-9269 (Augmentation). The plan will include the anticipated delivery rates for use in the recharge facility and the expected augmentation river returns during the irrigation season.

2. The use of water diverted under these transfer applications may only be made during the irrigation season. The irrigation season for the purpose of this order will begin with the first irrigation delivery to a field under appropriation D-920. The irrigation season will end when the last irrigation delivery to a field under D-920 has ceased. The Appropriator must notify the Department when the irrigation season has begun and ended.
3. The combined annual transferable amount of water under any combination of the transfers designated above will not exceed 326.75 acre-feet. This transferable seasonal maximum amount is the sum of the individual maximum annual consumptive use estimates provided by the Applicants and listed in the table below. The instantaneous rate of diversion for the transferred appropriation under any combination of uses designated above shall not exceed 3.30 cubic feet per second.
4. The maximum seasonal amounts transferable and maximum instantaneous diversions are further enumerated on the table below.

Surface Water Appropriation	Source of Water	Transfer Application Number Purpose of Use	Maximum Combined Annual Acre-feet of Water Transferred	Instantaneous Diversion Cubic Feet per Second (CFS)	Number of Acres Transferred	Length in Years of Transfer
D-920	North Platte River	NEX-9264 Recharge	163.00 af	1.50	64.9	5
		NEX-9265 Augmentation				30
		NEX-9266 Recharge	109.00 af	1.22	52.9	5
		NEX-9267 Augmentation				30
		NEX-9268 Recharge	54.75 af	0.58	25.1	5
		NEX-9269 Augmentation				30

5. Water transferred through NEX-9264 thru NEX-9269 (for recharge and augmentation) will be diverted at the Enterprise Canal headgate and the instantaneous rate for delivery will be measured at the canal turnout where water will be routed into the groundwater aquifer recharge facility. This measurement must include instantaneous rate and total seasonal diversion into the facility. The amount delivered to the recharge facility cannot exceed a rate of 3.30 cubic feet per second and the seasonal maximums specified above. Any amounts delivered but not recharged must be measured at designated spill locations and returned to the North Platte River as natural flow and will become available for other beneficial uses once returned to the North Platte River.
6. The temporary use under transfers NEX-9264, NEX-9266 and NEX-9268 for the purpose of groundwater aquifer recharge are approved for a term of 5 years, which begins on the signing date of this order. The transfers may be extended according to the provisions of *Neb. Rev. Stat.* §46-294.02 but will not be approved beyond a total of 30 years.

7. The temporary use under transfers NEX-9265, NEX-9267 and NEX-9269 for the purpose of streamflow augmentation are approved for a term of 30 years, which begins on the signing date of this order.
8. The direct irrigation portion of D-920 will be reduced to serving 4,826.96 acres and 111.51 CFS during the terms of the transfers.
9. The terms and conditions for the incidental underground recharge component of D-920 in the amount of 18.19 CFS remains unchanged by this order.
10. The terms and conditions for optional diversions D-920 P-234, D-920 P-498 and D-920 P-236 remain unchanged with the exception that they may not be used to irrigate the 142.9 acres listed in the table above which are under contract for non-irrigation during the term of these transfers.
11. Nothing in this order should be construed as defining the specific hydrologic benefits of this transfer for the purpose of meeting Integrated Management Plan and Basin-Wide Plan goals.
12. All terms and conditions of D-920 remain in effect unless specifically changed by this Order.
12. The appropriator must comply with all relevant statutes. The statutes include, but are not limited to, the following:
 - A. Notify the Department of any change in ownership or address.
 - B. Notify the Department of the name and address of the person responsible for the use of the water appropriation.
 - C. Obtain approval from the Department prior to taking any action that changes the location of the point of diversion, the location of the place of use, the type of use, or the type of appropriation.

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 cause cancellation of part or all of this appropriation, temporary closing of the appropriation, administrative penalty, criminal prosecution, or any combination thereof.

Nebraska law provides that failure to use a portion or all of a perfected appropriation for more than five consecutive years may result in cancellation of the appropriation.

This appropriation is not a guarantee that water will be available. Nebraska law gives priority to senior appropriations. This appropriation may be closed if there is insufficient water to satisfy senior appropriations

DEPARTMENT OF NATURAL RESOURCES



Thomas E. Riley, P.E., Director

May 31, 2022

D-920 NEX-9264 thru NEX-9269 EID NPNRD Approval ORD

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A copy of this Order was posted on the Department's website, provided to the Department's field offices Bridgeport and North Platte, Nebraska and mailed on to the following:

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