

Platte-Republican Diversion Project

The Platte-Republican Diversion Project will divert excess flows (streamflows above and beyond levels needed to fulfill existing water rights and instream target flows for endangered species) from the Platte River through the CNPPID canal system, and then discharge the flows into Turkey Creek, a tributary of the Republican River.



The upper end of Turkey Creek Canyon

The project at a glance:

The project is a collaborative effort of Lower Republican NRD (LRNRD), Tri-Basin NRD (TBNRD), and Central Nebraska Public Power and Irrigation District (CNPPID), with engineering, permitting and design assistance from Olsson Associates.

Water will be diverted from the Platte at the Tri-County diversion dam east of North Platte. It will flow through the CNPPID Supply Canal, then into E-65 Canal. It will then be piped into Turkey Creek Canyon above the east branch of Turkey Creek, a tributary of the Republican River. Turkey Creek flows into the Republican River between Edison and Oxford, Nebraska. From there, water will flow down the Republican to Harlan County Lake.

Construction will commence after the Nebraska Department of Natural Resources issues a water right for the project. Project construction is expected to last four months. The NRDs will be responsible for protecting and maintaining the Turkey Creek channel throughout the life of the project.



Natural Resources District

Republican River Basin-Wide Plan Annual Meeting, February 2020
Meeting Minutes



CENTRAL

Nebraska Public Power
and Irrigation District



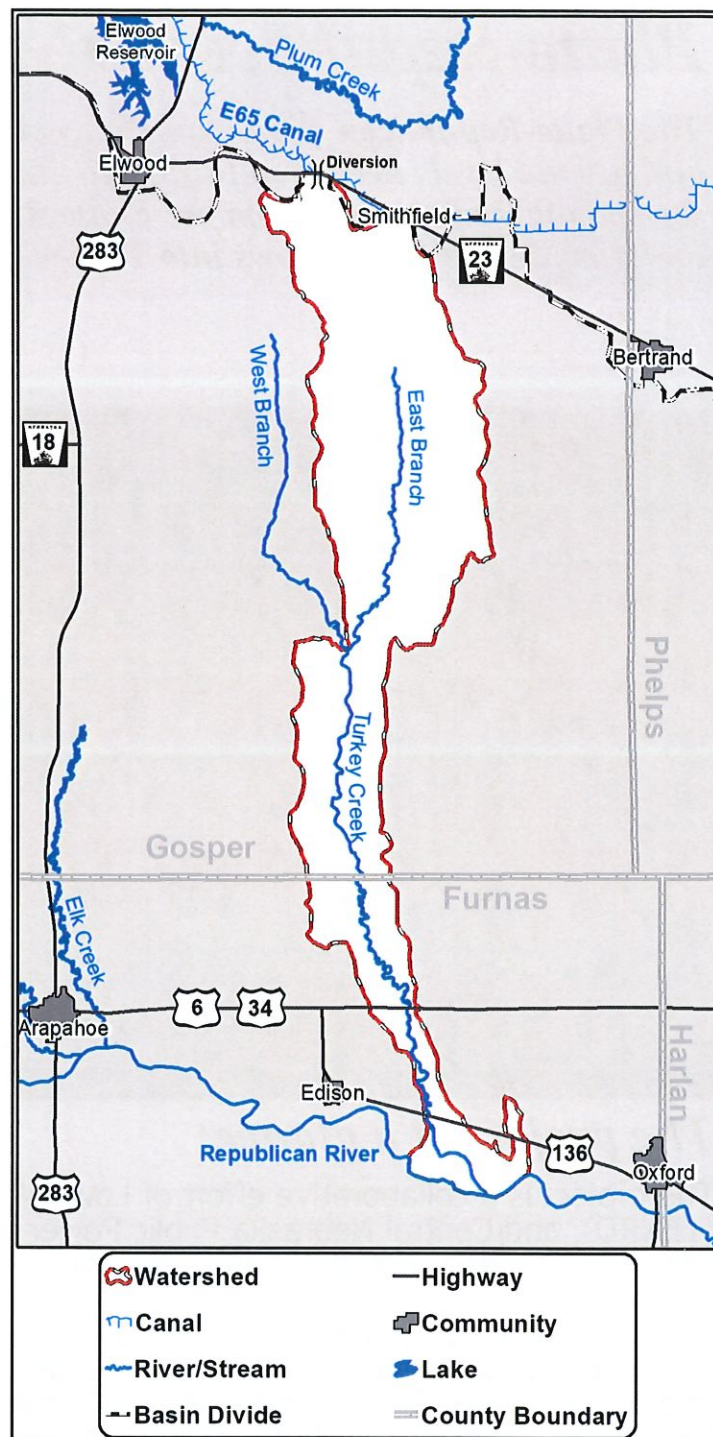
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More specifics:

The water diverted will either soak into the ground, recharging groundwater supplies, or flow to Harlan County Lake, helping LRNRD and TBNRD meet requirements to offset impacts of groundwater irrigation on Republican River flows. All water diverted will also help insure that the State of Nebraska meets its requirements to comply with the Republican River compact. Ultimately, operation of this project protects irrigators in the Republican Basin in Nebraska from additional water use restrictions.

The project is designed to have a maximum diversion rate into Turkey Creek of 100 cubic feet per second (cfs), but that rate can only be sustained for a few days before the rate will be reduced to 40 to 60 cfs to prevent streambank erosion. Analysis of past Platte streamflow data indicates that the project will have water available for diversion four years out of ten, but water is needed in the Republican River only about half the time it is available from the Platte. When water is both available and needed, the project should be able to provide 2000 to 4000 acre-feet of water per year to augment the water supply of the Republican basin.

This project will only divert water from the Platte when flows are sufficient to supply all existing water rights in the Platte and when target flows for endangered species are met. Furthermore, the sponsors have agreed not to assert priority for their water right, after it is issued, over future water rights within the Platte Basin. Total project construction costs are estimated to be approximately \$1.5 million, which will be split between the two NRDs. The districts have received a grant of \$897,300 from the Nebraska Water Sustainability Fund to help pay project construction costs.



For more information on the Platte-Republican Diversion Project, contact
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Tri-Basin NRD · 308-995-6688 · www.tribasinrd.org
CNPPID · 308-995-8601 · www.cnppid.com