



**TO:** TECHNICAL ADVISORY COMMITTEE  
**FROM:** EXECUTIVE DIRECTOR'S OFFICE  
**SUBJECT:** ENVIRONMENTAL ACCOUNT WATER AT COTTONWOOD RANCH RECHARGE  
**DATE:** OCTOBER 1, 2021

The Cottonwood Ranch Broad-Scale Recharge (CWR BSR) project is a Water Action Plan (WAP) project used to retine flows in the Platte River via groundwater recharge. Consequently, excess flows are the project's primary source of water. An ancillary project benefit is the creation of several hundred acres of shallow water habitat, suitable for use by whooping cranes. However, this benefit is dependent upon excess flows being available during the migration seasons. As we move into the Extension under variable flow conditions, the question brought to the TAC for discussion is:

- When excess river flows are not available, but Lake McConaughy Environmental Account (EA) water is available, should it be used to fill the CWR BSR project during the spring and fall whooping crane migrations to maximize the project's benefit to whooping cranes?

EA water has been used to fill the CWR BSR project in the past. Specifically, in July, August, and September of 2020, EA water was used as the source of deliveries to test the infrastructure of the newly constructed project. This was done to provide certainty that water would be available for these necessary test fills (instead of waiting for the presence of excess flows). These deliveries were authorized via a 1-year temporary water use permit that allowed for diversion of EA water by the Central Nebraska Public Power and Irrigation District (CNPPID) and subsequent deliveries to the CWR BSR project. The permit expired in July of 2021, but a new permit application was recently filed to accommodate potential future fills.

For context, CNPPID can deliver about 50 to 75 cfs to the CWR project through the pipeline. Project full pool volumes total about 460 acre-feet, although actual delivery volumes needed to fill the project can be greater to account for losses as water is routed through the project. When full, water is ponded over approximately 420 acres.

The benefit of using EA water to fill the project would be the ability to create off-channel habitat for whooping cranes during the fall and spring migrations, without relying on the availability of excess flows or the occurrence of precipitation/runoff events. Instead, water can be routed from the EA specifically for delivery to CWR or taken from EA water already in the river (e.g., during a spring whooping crane release). Deliveries during the migrations could be limited by CNPPID system maintenance, already high groundwater levels, conflicting PRRIP land use activities, or other factors. Limitations due to the availability of EA water are also a consideration when determining when to fill.

The EDO presents this issue to the TAC for an initial discussion. Ideally, the EDO would like to develop a process (whether it be formal or informal) to evaluate if/when EA water should and should not be used to create off channel habitat for whooping cranes at the CWR BSR project site.