2024 Annual Water Sustainability Fund Report for Project 5269

South Platte Supply Canal Restoration and Rehabilitation

Kyle Liebig Nebraska Public Power District April 1, 2024

Project Progress

This is the fourth annual report. The project has been placed into service in 2022. The sediment basin that NPPD built with WSF dollars is working as expected. NPPD diverted ~130,000 acrefeet over 166 days in 2023. In our application we noted that average yearly diversions were 214,000 acrefeet (30-year average 1972-2001). NPPD was fortunate to be able to divert 61% of that average. Most of the flows were diverted May 15-July 30.

Our calculations indicate ~44,000 cubic yards of sediment were captured by the sediment basin in the summer of 2023, as opposed to being deposited in the canal and reducing the canal's capacity.

NPPD estimates that approximately 4,000 AF was saved in Lake McConaughy in 2023 because of the operation of NPPD's South Platte Supply Canal.

In 2024, flows continued into the sediment basin on January 1 with a cumulative amount of ~30,000 AF through March 10 in 2024. The sediment basin will be available for 2024 operations.

Next steps include

- Complete the sediment basin slope erosion protection in 2024.
- NPPD anticipates continued operation of the sediment basin and periodic evaluation of sediment conditions from the South Platte River water. This will determine when to begin dredging using a temporary dredge, as well as help to determine the specifications of the permanent dredge expected to be purchased in 2027.
- Project closeout is expected in 2027.

Project Costs

The majority of the project construction costs were incurred in 2021-2022. The permanent dredge is expected to be purchased in 2027. Due to inflation and increased erosion protection costs, NPPD expects the project to be over the funding budget. NPPD is prepared to make up the difference or seek additional funding from another source. The project completion and operation are not in jeopardy.

Project Benefits

At this time, we anticipate that the benefits in the application will be realized.