

Buffalo Rapids Irrigation Project District 2
Terry Pump Station Discharge Line Rehabilitation Project

The Terry Pump Station was constructed in the 1940's as part of a larger Bureau of Reclamation (BOR) project for the Buffalo Rapids Irrigation Project (BRIP). The original cast-in-place concrete discharge lines were constructed in 24-foot long sections and stretched 1,675 feet up to the head of the Terry Main Canal. Ever since the implementation of the discharge lines, issues of leakage have been ever present. In 1997 three separate field tests and a pipe inspection were conducted in efforts to realize the amount of water being lost during transportation from the pump station to the canal. The results revealed an average water loss of 3.1 cfs from the discharge lines, with a majority of the leakage taking place within the first 450 feet of the lines. In 1999 the BRIP began construction to rehabilitate the first 450 feet of the discharge lines using funding secured through the Renewable Resources Grant and Loan Program (RRGL). Due to unforeseen construction difficulties and high material costs, the project was only able to complete 180 feet of the proposed 450 feet of rehabilitation. Although 66% of the leakage issues were erased with the initial rehabilitation, it is estimated that approximately 1.0 cfs continues to escape. Therefore, it is being proposed to rehabilitate the next 270 feet of the discharge lines in effort to remove the leakage issues currently experienced. The rehabilitation of the discharge lines would improve irrigation management, preserve water quality, and conserve approximately 67.9 million gallons of water in the Yellowstone River each year.

The rehabilitation of the Terry Pump Station Discharge Lines would provide the following benefits:

- Elimination of leakage within the discharge lines
- Improved water delivery efficiency
- Improved irrigation efficiency
- Conservation of water pumped from the Yellowstone River
- Conservation of energy
- Decreased operation and maintenance costs
- Improved water quality
- Restoration of lost revenues to the local economy
- Maximized beneficial use of diverted water
- Increased river flows
- Development of existing acres that were unable to be irrigated under previous water shortage conditions
- Improved fish and wildlife habitat
- Increased local and state tax base
- Sustained agricultural production

Grant Request Amount:	\$100,000.00
Buffalo Rapids Irrigation Project Match Amount:	\$44,766.00
Estimated Total Project Cost:	\$144,766.00

Buffalo Rapids Irrigation Project District 2 sincerely appreciates your consideration of this project and hopes that you will find it as important and necessary as our residents and your constituents have.

