

Helena Valley Irrigation District

HVID Pump No. 2 Rehabilitation

The rehabilitation of Pump #2 has been identified by the HVID and the BOR as a priority for the HVID system due to its aged condition, increasing O&M costs, safety hazards, and its potential for failure, which would eliminate the source for half the irrigation water to the HVID water users. A field review was conducted in March 2009 and October 2010 to observe the conditions of the pump station. The existing pump is in poor condition and shows significant signs of wear. The significant wear of the pump leads to inefficient pumping, lack of available water due to decreased pumping capacity, and potential failure of the pump. The pump intermediate packing sleeve, turbine wicket gates and associated plumbing all show signs of significant wear that will likely result in a pump failure if corrective measures are not taken. Rehabilitation or replacement of Pump No. 2 will ensure long-term operation and pumping capacity. The pump rehabilitation will ensure water delivery to existing users, reduce operation and maintenance costs, and provide a safe operating condition for HVID personnel.

The severe condition of Pump No. 2 will result in a revenue loss of up to \$2,980,750 from a one year loss of irrigated crop production. Implementation of the proposed pump rehabilitation project will result in preservation of the pumping facility, preservation of over 8,800 acres of crop production, preservation of fish and wildlife habitat and uses as well as increased management efficiency.

The rehabilitation of Pump No. 2 will provide the following benefits:

- Preservation of the pumping facility
- Preservation of crop production
- Preservation of fish and wildlife habitat and uses
- Increased management efficiency
- Conservation of energy
- Preservation of a long-term and adequate water supply to the City of Helena and the Helena Valley Regulating Reservoir
- Protection of the salmon fishery and corresponding waterfowl and wildlife use and habitat
- Preservation of a long-term and adequate water supply to provide flow augmentation resulting in the preservation of the Prickly Pear Creek fishery
- Protection of the critical spawning habitat and fish populations within Lake Helena
- Preservation of a long-term and adequate water supply to the artificial wetland
- Increased on-farm efficiencies
- Elimination of additional operation and maintenance costs
- Return lost revenues to the local economy

Grant Request Amount:	\$100,000.00
HVID Match Amount:	\$138,350.00
Estimated Total Project Cost:	\$238,350.00

Helena Valley Irrigation District 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.

