



Executive Summary

Project Name

Raft River Flood Protection and Groundwater Recharge Project

Proposed Action

The proposed action would use funds allocated for projects authorized under Public Law 83-566 to provide necessary flood risk reduction for citizens in the watershed and community while improving infrastructure for the reliability of water delivery to irrigators across the district, improve water conservation, and help to stabilize the Eastern Snake Plain Aquifer.

Purpose and Need for Action

The purpose of this project is to provide groundwater recharge to a designated Critical Ground Water Area (CGWA) and provide a sustainable agricultural water supply for agricultural producers in the region. The project will also provide flood prevention and flood damage reduction to agricultural lands, infrastructure, and homes in Cassia County.

The Proposed Project is needed to raise groundwater levels and avoid state administrative actions due to insufficient groundwater supply in Cassia County and substitute groundwater pumping with available surface water rights. The NRCS identifies needs associated with agricultural water management, of which groundwater recharge and irrigation water supply are a subset. The Proposed Project is also needed to address ongoing flooding on Heglar Creek and Cassia Creek and flood damage to agricultural crops, roads, houses, and other structures within Cassia County.

Costs

The total cost of installation for the proposed action is estimated at \$49,307,043. Public Law 83-566 funds would cover \$31,30,245 (or 63 percent of the total project cost), which includes \$25,000,000 in construction costs; \$5,523,067 for technical assistance; and \$781,178 for project administration. Sponsors and other non-Federal funding sources would contribute \$18,002,798 (or 37 percent of the total project cost).

Alternatives Considered Include

Proposed Action. The Modernization Alternative would use funds allocated for projects authorized under Public Law 83-566 to provide groundwater recharge to a designated Critical Ground Water Area (CGWA) and provide a sustainable agricultural water supply for agricultural producers in the region. The project will also provide flood prevention and flood damage reduction to agricultural lands, infrastructure, and homes in Cassia County.

No Action. Taking no action assumes that flood risk would remain the same, the existing infrastructure would not improve and current conditions within the basin would remain the same. This alternative would result in further decreases in the aquifer leading to additional energy pumping costs, possible further regulations, the potential for ground subsidence, and water

curtailment by the State of Idaho which would lead to a reduction of crop production, and an increase of operations and maintenance costs due to the need for larger pumps and motors.

Alternative Selected

The recommendation is to implement the proposed action. The action would include construction of intake suction lines, pump house, and a 13-mile (68,872 feet [ft]) long north to south buried agricultural water management pipeline; construction of three groundwater recharge basins with a combined volume of 493 acre-feet (ac-ft); construction of a 25-megawatt (MW) substation; construction of 85 ac-ft flood detention basin along Heglar Creek; improvements to existing diversions on Cassia Creek and Middle Fork of Cassia Creek; bank restoration and stabilization measures on Heglar Creek; and operations and maintenance of these facilities for the life of the project. Raft River Electric would provide power to the pump station, using existing infrastructure as practicable, upsizing poles from 30 feet to 40 feet and running underground power line 400 feet from the road to the pump station.