Introduction

The Proposed Project irrigation system is operated by the Marysville Irrigation Company (MIC) which was established in 1894, and provides irrigation water to approximately 6,130 acres of farmland, mostly east of the Cities of Ashton and Marysville. The MIC delivers irrigation water from the Falls River through approximately 25 miles of a series of open ditches to individual landowners.

The project area is located in eastern Idaho on a rhyolite plateau at the upstream end of the Upper Snake River Plain. The Henry’s Fork River generally follows the project’s north boundary with its tributary, the Falls River, dissecting the plateau and forming part of the project area boundary on the south. Elevations range from 5,200 feet in the west to 5,500 feet in the east. The project area is located in Fremont County, approximately 15 miles north of St. Anthony. Agricultural lands surround the communities of Ashton on the west side of the project and Marysville in the center of the project area.

The Natural Resources Conservation Service (NRCS) has received special USDA, NRCS Environmental Quality Incentive Program (EQIP) funding to assist the MIC with installation of the Proposed Action.

The Proposed Action includes the construction, operation and maintenance of three plastic pipelines that provide for the delivery of gravity pressurized irrigation water to approximately 6,130 acres surrounding Marysville, Idaho, eliminating most of the need for pumping powered by electric motors. Approximately 1,000 acres would require booster pumps. Water would only be drawn from the pipe when irrigation is required, eliminating overflow to the Henry’s Fork River. The Proposed Action would eliminate about 90% of the water seepage loss from the canals and would eliminate the need for approximately 1,600 horsepower (hp) from electric pump motors.

This federally assisted action, was prepared under the authority of Public Law 46, as amended (16 U.S.C. 590 a-f), 42 U.S.C. 4321 et seq. An interdisciplinary team assisted with development and review of the Environmental Assessment of the Proposed Action in accordance with 7 CFR Part 650.11; and the National Environmental Policy Act of 1969, Public Law 91-190, as amended (42 U.S.C. 4321 et seq.).
**Planned Action**

The purpose of the Proposed Action Alternative is to maximize the conservation and use of irrigation water and the energy required to irrigate all of the existing cropland within the project area. The associated need for the action is to provide a reliable water supply, increase irrigation water efficiency and management, eliminate water losses associated with the open irrigation canal system, reduce power consumption required for irrigation, and maximize on-farm crop net return.

The Proposed Action Alternative would include three main pipelines. These pipelines would follow a similar route of the existing North-North, North and Turkey Track open canals. The open canals would be filled in where practical and advantageous to the layout of the farm fields.

The pipelines serving the North-North and North service areas would have a small irrigation regulating reservoir at the inlet. This reservoir would store water when system demand is low, and release it when the pipeline needs more water. The pipeline inlet for the Turkey Track would be directly from the canal. Water that does not enter into the Turkey Track pipeline would continue down the canal to other users.

Users at the upper end of each pipeline would not have adequate gravity pressure to irrigate. These users would be provided additional pressure from a pump driven by an electric motor (booster pump). The energy to provide adequate pressure to these uphill water users is expected to be approximately 350 hp. Approximately 1,000 of the 6,130 irrigated cropland acres would require booster pumps. Annual energy consumption from installation of this alternative is estimated to be 350,000 to 400,000 kW-hr.

Currently, the water diverted to the project area is 9,260 acre feet per year. If the Proposed Action Alternative is installed, this amount would drop to approximately 4,980 acre feet per year. The 4,280 acre feet (90% of the current water that is lost or 46% of the No Action Alternative total water diverted) of ‘saved’ water would be retained in Grassy Lake reservoir and used to extend the irrigation season, generate electricity or offset water that was previously rented.

Currently the project area has irrigation pumps driven by 2,000 hp of electric motors. If the Proposed Action Alternative is installed, the project would use only 350 hp of electric motors, eliminating about 1,600 hp. Approximately 1,700,000 kW-hr per year of electric use would be eliminated.

**Environmental Impacts**

Under the Proposed Action Alternative, there would be a **no net effect** to most of the affected environments. The following affected environments would have a **minor effect** from the Proposed Action Alternative: Ground Water Quantity and Quality, Cropland, Small Pastures, Safety and Health, Socioeconomic Conditions and Transportation and Access.
There would be **minor beneficial effects** to Cropland, Ground Water Quality (long term), Hydrology and Surface Water Quantity, Small Pastures, Safety and Health and Socioeconomic Conditions. There would be **minor effects** to Ground Water Quantity, Ground Water Quality (short term), and Transportation, Public Utilities and Access (short term).

The Proposed Action Alternative would replace any loss of grassy and woody borders associated with the decommissioning of 50% of the existing irrigation canals. Approximately 10 acres of herbaceous field borders and 5 acres of artificial scrub/shrub wetlands would be lost when the project changes the open delivery system to a closed pipeline. Landowners would be responsible for planting appropriate herbaceous or woody vegetation on their land to replace lost habitat value. Five acres of palustrine scrub/shrub wetlands would be planted associated with the irrigation regulating reservoir. The tree and shrub plantings would replace functions and values lost due to the decommissioning of the existing irrigation delivery system.

The Proposed Action Alternative will have **no long term adverse effects** on Air Quality, Fish and Wildlife Habitat, Floodplains, Prime Farmland, Threatened and Endangered Species, Water Quality and Quantity, Historic and Cultural Resources or Wetlands.

**Adverse Environmental Impacts Which Cannot Be Avoided**

The Proposed Action Alternative was found to **not adversely impact** the goals of protecting cultural resources, prime farmland, wetlands, threatened and endangered plants and animals or other environmental concerns.

Consultation with the US Fish and Wildlife Service, Idaho Department of Fish and Game, Idaho Department of Environmental Quality, Idaho Department of Water Resources and the Corps of Engineers did not reveal any adverse environmental effect that was beyond normal concerns addressed by required permits.

The potential to cause an effect on Cultural and Historic Resources has been resolved by the Memorandum of Agreement M-0211-34 between the Idaho NRCS and the State Historic Preservation Office (SHPO).

**Alternatives**

Two alternatives were considered during plan formulation.

**Alternative A – No Action Alternative**

The Marysville Irrigation Company (MIC) would continue to operate the system as they have in the past with an open irrigation canal system. Sprinkler irrigated acres would continue to use motors and pumps to pressurize the individual sprinkler irrigation systems. Water losses of approximately 51 percent would continue in the delivery system, and the MIC would not be capable of providing full season irrigation water needs 7 years out of 10.
This alternative does not meet the sponsor’s objectives of 1) reducing power consumption to existing sprinkler irrigation systems and 2) reducing the 51 percent water loss in the canal delivery system. There are no costs or benefits associated with the No Action Alternative.

**Alternative B – Replace the Open Ditch Irrigation System with a Gravity Pressurized Irrigation Delivery System**

The project sponsors have selected Alternative B as the Preferred Alternative. This alternative meets their objectives.

This Alternative would replace the open ditch system with buried plastic pipes to distribute irrigation water. This would be accomplished by the conversion of 6,130 acres of cropland from electric pressurized sprinkler irrigation to gravity pressurized sprinkler irrigation. The pipes would allow gravity to pressurize the water, eliminating most of the need for electrically powered pumps. About 1,000 acres of cropland would require on-farm pressurization (booster pumps). Water would only be drawn from the pipe when irrigation is required, eliminating any overflow to the Henry’s Fork River. The system of plastic pipes would also eliminate about 90% of the seepage loss from the canals.

**Consultation and Public Participation**

Natural Resources Conservation Service (NRCS) policy supports and encourages public participation in planning and decision making related to the conservation of natural resources on private lands. Requirements for public participation are specified in the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), OMB Circular A-95, Executive Orders, Departmental Memoranda and NRCS policies.

The Marysville Irrigation Company (MIC) used local and regional newspapers throughout the area to disseminate information on the proposed project. Press releases announced the time, location and agenda of the official scoping meeting, and invited the public to attend and provide comments.

The MIC also sent notification, in the form of a letter dated August 14, 2006, to all MIC water users, as well as governments, individuals and organizations identified jointly by the MIC and the NRCS. Along with being an invitation to the public meeting, this letter also welcomed written comments throughout the planning process. To encourage comments, either verbally at the meeting or written, a “concerns and comments” questionnaire was attached to this letter.

The NRCS consulted with state and federal agencies and other groups or individuals as required by the various acts and policies listed above.

The MIC conducted the public meeting on August 22, 2006 at the North Fremont High School in Ashton, Idaho. This was an open meeting with formal presentations by NRCS employees followed by a comment period. Meeting facilitators made the “concerns and comments” questionnaire available and encouraged participants to complete it. The meeting was attended by representatives of the Marysville Irrigation Company, the Farmers Own Ditch Company,
Bonneville Power, Falls River Electric, as well as irrigation company shareholders, local landowners and employees of the NRCS. The majority of the comments and concerns were voiced during the August 22 meeting; however, several responses were also received through letters, email and telephone calls. These concerns were evaluated and addressed during the preparation of the Environmental Assessment (EA).

The Draft Plan/EA was mailed to approximately 60 participating and interested agencies, groups and individuals in February, 2007 as part of the public participation/interagency review process. The Draft Plan/EA was available on the Idaho NRCS website and copies were mailed to the Nez Perce Tribe and Shoshone-Paiute Tribe during the review process. Agency consultation and public participation to date have shown no unresolved conflicts with the implementation of the Proposed Action Alternative.

**Short Term Uses Versus Long-Term Productivity**

The planned action will assure long-term productivity and will not change the present short-term uses of the area.

**Commitment of Resources**

Labor, capital and energy used in taking these actions will be irretrievably and irreversibly committed.

**Conclusion**

I have reviewed the Environmental Assessment document and have determined that this project will not result in significant local, regional or national adverse impacts affecting the quality of the human environment. Therefore, based on the above findings, I have concluded that an Environmental Impact Statement (EIS) for the Marysville Irrigation Company Gravity Pressurized Irrigation Delivery System is not required.

The Environmental Assessment file is available for public inspection through the office of Mr. Richard Sims, State Conservationist, Natural Resources Conservation Service, 9173 W. Barnes Dr., Suite C, Boise, Idaho 83709-1574. Telephone number: (208) 378-5700.

**RICHARD SIMS**
State Conservationist

April 3, 2007
Date