

Water Review

A Perspective On Western Water Issues Prepared By The Family Farm Alliance And Its Members

MONTANA

Aging St. Mary Facilities Are Infrastructure Poster Child

BACKGROUND

The U.S. Bureau of Reclamation's (Reclamation) St. Mary Facilities of the Milk River Project are in urgent need of rehabilitation. Most of the structures have exceeded their design life and are in need of major repairs or replacement. System capacity has diminished. Steel siphons are threatened by slope stability and leaks, and landslides and crumbling structures have reduced water supply reliability.

The economy of the Hi-Line region of northern Montana has been built around the stable water supply provided by the St. Mary Facilities. Without the needed rehabilitation the aging system may soon suffer catastrophic failure. Loss of the St. Mary Facilities would have a disastrous economic impact on the Milk River Basin and the state of Montana.

The St. Mary dilemma is seen by many as the "poster-child" example of an aging water project that must be modernized soon, with potentially catastrophic implications if the problems are not addressed. Like many other parts of the West, this single-purpose project puts the financial burden of repairs on the irrigators it serves, who simply do not have the resources to solely pay for such an expensive repair. The solutions developed at St. Mary may very well provide a successful template that can be used in other parts of the West.

THE PROJECT

The St. Mary Facilities, located on the Blackfeet Reservation in Glacier County, consists of a storage dam (Sherburne Dam), diversion dam, headgate, 29 miles of canal, two sets of steel siphons, and five concrete drop structures.

Starting on the east side of Glacier National Park, the St. Mary River flows north into Canada. In 1891, the U.S. Department of Agriculture proposed a trans-basin diversion of water from the St. Mary River into the North Fork of the Milk

River. In 1905 the Secretary of the Interior authorized construction of the St. Mary Diversion Dam and Canal. Construction began in 1906. Construction of Sherburne Dam – which releases water to Swiftcurrent Creek and Lower St. Mary Lake via the Swiftcurrent Dike – was completed in 1919.

The St. Mary Diversion Dam is located immediately downstream from Lower St. Mary Lake. It serves as the diversion point for the St. Mary Canal, which, further downstream, crosses the St. Mary River and Hall's Coulee through two huge, parallel riveted steel-plate siphons. A series of concrete drops at the lower end of the 29-mile canal discharges the flows into the North Fork of the Milk River, over 200 feet below. The water then flows for 216 miles through Alberta, Canada, before returning to Montana, where it is stored in Fresno Reservoir 14 miles east of Havre.

SIGNIFICANCE

Failure of the St. Mary Facilities would be catastrophic to the economy of north central Montana. Settlers moved to the Milk River valley on the promise of a stable supply of water for irrigation, which hinged on the Milk River Project's intent to divert water from the St. Mary River in order to augment flows in the Milk River. In dry years the imported water may make up to 90% of the Milk River flows past Havre. The system provides water to irrigate over 110,000 acres on approximately 660 farms within the Project. Together, these farms produce about 8% of all cattle/calves, irrigated hay and irrigated alfalfa in Montana.

"The stable supply of irrigation water provided by the system supports the backbone of the region's agricultural economy," says Larry Mires, Executive Director of the St. Mary Rehabilitation Working Group.

The Milk River also provides municipal water to approximately 14,000 people in the communities of Havre, Chinook, and Harlem and two rural water systems. This water further benefits fisheries, recreation, tourism, water quality and wildlife.

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St. Mary Facilities' Deterioration Is A Big Worry In Montana

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ISSUES

This system, which brings water from the St. Mary River Basin to the Milk River Basin, has been in operation for over 85 years with only minor repairs and improvements since its original construction.

The design capacity of the system has dropped by about 20%. The steel siphons are plagued with slope stability problems and leaks, and the concrete in the drop structures is severely deteriorating. Landslides along the canal and condition of the structures make the canal unreliable as a water source.

Failure of one of the drop structures in 2002 resulted in the canal being turned off for approximately two months during the irrigation season. It would cost \$120 million to bring the system up to modern standards.

In addition to the huge monetary cost, rehabilitating the St. Mary Facilities will involve complex political and legal considerations, including assessing impacts to threatened bull trout and addressing two Federal Indian Reserved Water Right Compacts. Canadian and U.S. differences on apportioning flows of the St. Mary and Milk Rivers must also be worked out.

SOLUTIONS

It will take a well-coordinated and cooperative basin-wide effort to secure rehabilitation of the St. Mary Facilities, and ensure the economic viability of the Milk River Basin.

The forum where this is already occurring is the St. Mary Rehabilitation Working Group, which includes representatives from government, tribes, irrigators and local communities.

In addition to developing a comprehensive working plan to fix St. Mary, this group is also working the political end, looking for ways to get the federal government to take into account the other sectors that benefit from the diversion, such as public flood control, recreation, wildlife and municipalities.

The St. Mary Diversion and Conveyance Works And Milk River Project Act of 2006

Key Elements

- Finalizes an ongoing feasibility study, which will trigger the NEPA process and identify a preferred alternative.
- Changes the current single purpose irrigation project to a multi-purpose/use project with irrigation as the main focus.
- Requires the Secretary of Interior to develop a strategic plan of procedures on how to deal with the St. Mary Diversion Works in case of a "catastrophic" failure.
- Establishes a "catastrophic" fund with equitable cost share and reasonable repayment schedules to deal with the problem before it is a disaster.
- Authorizes comprehensive studies for the entire system.
- Acknowledges the concerns of both Indian reservations without jeopardizing their ongoing water compacting negotiations.
- Identifies all of the stakeholders within the basin and allows for their participation in the process, and requires partnerships of the state, tribal, stakeholder and federal agencies.

U.S. Senator Conrad Burns (MONTANA) has secured a total of \$7 million for the St. Mary Rehabilitation and Milk River Project for fiscal year 2007, which begins October 1, 2006.

The Energy and Water Appropriations bill includes \$5 million for environmental and feasibility studies and development of an emergency response plan in the event of catastrophic failure. The Interior bill includes \$2 million for irrigation investigations at the Blackfeet and Fort Belknap Reservations.

On June 23, 2006, Senator Burns also introduced legislation, co-sponsored by

Senator Baucus (MONTANA), which authorizes major repairs for the water system along the Hi-Line (see insert). Congressman Denny Rehberg, Montana's lone congressman, introduced into the House an identical bill, which has not yet had a hearing scheduled.

"The important part of this legislation is that it addresses the issue of aging Reclamation water project infrastructure and requires a solution to the issue," said Mires.

The Senate Energy and Natural Resources Committee has agreed to conduct a September 1 field hearing in Havre that will focus on this legislation.

SOURCES: Larry Mires, Executive Director, St. Mary Rehabilitation Work Group. (406) 263-8402. Montana Department of Natural Resources and Conservation, http://dnrc.mt.gov/st_mary/pdfs/stmarybackground.pdf

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