

St. Mary & Milk River Water Management Initiative
Joint Status Report #8
September 25, 2009

Status

Members of the Joint Initiative Team (JIT) reviewed the results of potential future water management options as simulated by the Technical Teams hydrologic simulation model. Model simulations were compared to a *base case* scenario that reflects current water delivery operations as much as possible.

Technical Team members ran about 250 model simulations in the previous 8-10 weeks. Potential future water management options modeled included: three different St. Mary canal capacities, different storage capacities in Sherburne Reservoir, Lower St. Mary Lake and Fresno Reservoir; three different storage capacities on the Milk River, Alberta, and various combinations. Additional simulations were done to assess 1) the theoretical maximum amount of water generated by the St. Mary-Milk River system without concern for whether or not the water can be put to use; 2) the impact of in-stream flow releases on irrigation water deliveries; and 3) a shared Montana-Alberta Milk River storage project. Each simulation generated a large quantity of data, including flows in the St. Mary and Milk River channels, flows in the St. Mary Canal and each irrigation district canal, water levels in each reservoir, and irrigation shortfalls. Model outputs were summarized in three categories to measure the relative benefits to Montana and Alberta, as: the percent of entitlement share accessed; the volume of water this represents; and the irrigation delivery volumes and their reliability.

After considering the results, the Joint Team requested additional model runs to complete their understanding of the system.

Background

The St. Mary & Milk River Water Management Initiative is being conducted under a Terms of Reference approved by Premier Stelmach and Governor Schweitzer in January 2009. Under the Terms of Reference, Montana and Alberta agree that the shared water of the St. Mary and Milk Rivers is an important resource to both jurisdictions and that there are opportunities for the two jurisdictions to work together to improve their timing and access to this shared water. Alberta and Montana have shared the water from the two rivers for 100 years, under Article VI of the Boundary Waters Treaty (1909).

The Terms of Reference establishes a twelve member Joint Initiative Team of local water users and government officials from both sides of the border. The Team has been asked to explore and evaluate options for improving both Montana's and Alberta's access to the shared waters of the St. Mary and Milk Rivers, and make joint recommendations on preferred options to both governments for their consideration and approval. A report containing the joint recommendations is due to both governments in the fall of 2010.

The Joint Initiative Team is co-chaired by Robert Harrison from Alberta Environment, and Anne Yates from the Montana Department of Natural Resources and Conservation. Other team members include representatives from the Milk River Watershed Council Canada, Oldman Watershed Council, Alberta Agriculture & Rural Development, the office of Montana's Lt. Governor, Blackfoot Tribe, Ft. Belknap Indian Community, and the Milk River watershed in Montana.