



MONTANA BUREAU OF MINES AND GEOLOGY

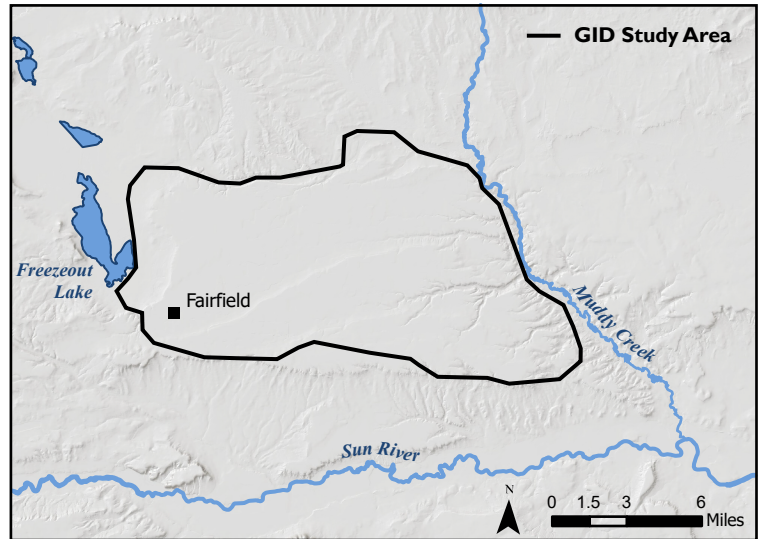
Greenfields Irrigation District Groundwater Investigation

April 2025

BACKGROUND AND PURPOSE

The Greenfields Irrigation District (GID) overlies the Greenfields Bench aquifer in Fairfield, MT. This aquifer provides drinking water for over 400 private residences as well as three public water supplies: the Town of Fairfield, the Tri-County water system, and the Greenfields School.

Previous studies indicate the Greenfields Bench aquifer is largely recharged by irrigation, but in recent years irrigation practices have shifted toward more efficient water delivery methods. Understanding how modernization of irrigation infrastructure impacts aquifer recharge is essential for all water users.



Over the next two years, the Ground Water Investigation Program (GWIP) will conduct a study to describe the interactions between the GID irrigation infrastructure/practices and the alluvial groundwater system.

FIELD DATA COLLECTION

- ◆ **Groundwater levels** from existing wells
- ◆ **Stream flow and seepage loss** measurements on canals and drains

PROJECT OUTCOMES

- ◆ **Published report** presenting hydrologic interpretations of the data



Main Canal

GWIP CONTACTS

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PROJECT NOMINATED BY

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The Ground Water Investigation Program (GWIP) answers locally-identified, site-specific water resource questions prioritized by the Montana Ground Water Steering Committee (MCA 85-2-525). As mandated by the Montana Legislature, GWIP conducts research on the most urgent water issues in the State.

For more information about GWIP, visit: <https://www.mbmgs.mtech.edu/WaterEnvironment/GWIP/main.asp>