

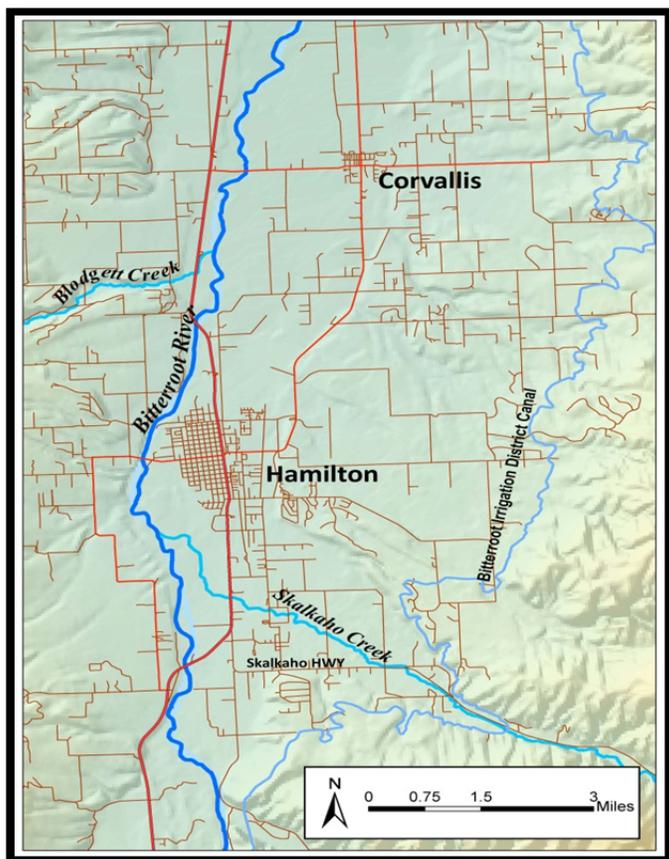
MONTANA BUREAU OF MINES AND GEOLOGY

Ground Water Investigation Program

HAMILTON GROUNDWATER AND SURFACE WATER PROJECT, RAVALLI COUNTY

The Montana Bureau of Mines and Geology (MBMG) Ground Water Investigation Program (GWIP) is conducting a study of the groundwater and surface water in the Hamilton area. Population growth over the past several decades in the Bitterroot Valley has resulted in a conversion of irrigated land to residential land causing a higher density of wells and septic systems, which is increasing the demand for groundwater resources. As the demand on the aquifer increases, questions regarding groundwater availability are coupled with the county's concerns of changes to the quality of drinking water by land-use changes.

This study will focus on the area between the Skalkaho Highway, south of Hamilton, and Woodside Crossing in Corvallis. Data will be gathered from the Bitterroot River, its tributaries, irrigation ditches, and groundwater. In the initial phase of the project, a groundwater and surface water monitoring network will be established. Aquifer tests and water-chemistry sampling of the local aquifers and surface water will help refine the characterization of the hydrogeologic system.



This project will investigate:

- Groundwater/surface-water interaction.
- Historic and current groundwater-level trends as they relate to land-use changes in the area and climate.
- Potential new residential growth on long-term groundwater-level trends and the effects on surface water.
- The sources and extent of nutrients in groundwater and surface water as a result of land-use changes from residential and agricultural sources.

The project will begin in October 2013 and is expected to end in 2015. The products of this investigation will include an interpretive report and a groundwater flow model. These

publicly available products will provide land owners and public agencies with scientific information and tools to help make data-driven water management decisions.

Current MBMG personnel assigned to this project include:

Ginette Abdo
Program Manager/Hydrogeologist
406.496.4152
gabdo@mtech.edu

Todd Myse, P.G.
Team Leader/Hydrogeologist
406.496.4838
tmyse@mtech.edu

Dean Snyder
Hydrogeologist
406.496.4882
dsnyder@mtech.edu