

Lower reach Lolo Creek dewatered, August 2007



Photo courtesy of Katie Gaut (from 2015 GWIP Nomination)

MONTANA BUREAU OF MINES AND GEOLOGY

Ground Water Investigation Program LOLO CREEK PROJECT, MISSOULA COUNTY

In some years Lolo Creek goes dry in its lower reaches. The causes of the dewatering will be investigated. Specific topics include:

o Geology

Evaluate the geology as it relates to depositional and structural controls on Lolo Creek

- o Hydrogeology
 - $\boldsymbol{\mathsf{V}}$ Understand groundwater and surface water interactions
 - \boldsymbol{v} Sources of recharge and discharge to the focus area
 - ${\bf V}~$ Bitterroot River elevation effects on Lolo Creek and groundwater
- o Domestic and irrigation demands
- o Climate

Although data will be collected in the entire watershed, the focus area will be in the lower Lolo valley area. Data collection began in April of 2016:

1) Installation of surface water gaging stations throughout the watershed (a collaborative effort with the Department of Natural Resources and Conservation), and

2) Develop a groundwater monitoring network throughout the watershed with monitoring concentrated in the lower reach (Montana Bureau of Mines and Geology).

This project will investigate:

- Groundwater/surface-water interac tions
- Historic and current groundwater-level trends as they relate to land-use changes in the area and climate
- Make predictions on natural and man-made changes to surface water and groundwater



GWIP Focus Area

Data collection will involve entire watershed but is focused in the lower Lolo valley.

The products of this investigation will include an interpretive report and a numerical 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.

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Find more GWIP project information on MBMG's website: http://www.mbmg.mtech.edu/gwip/gwip.asp