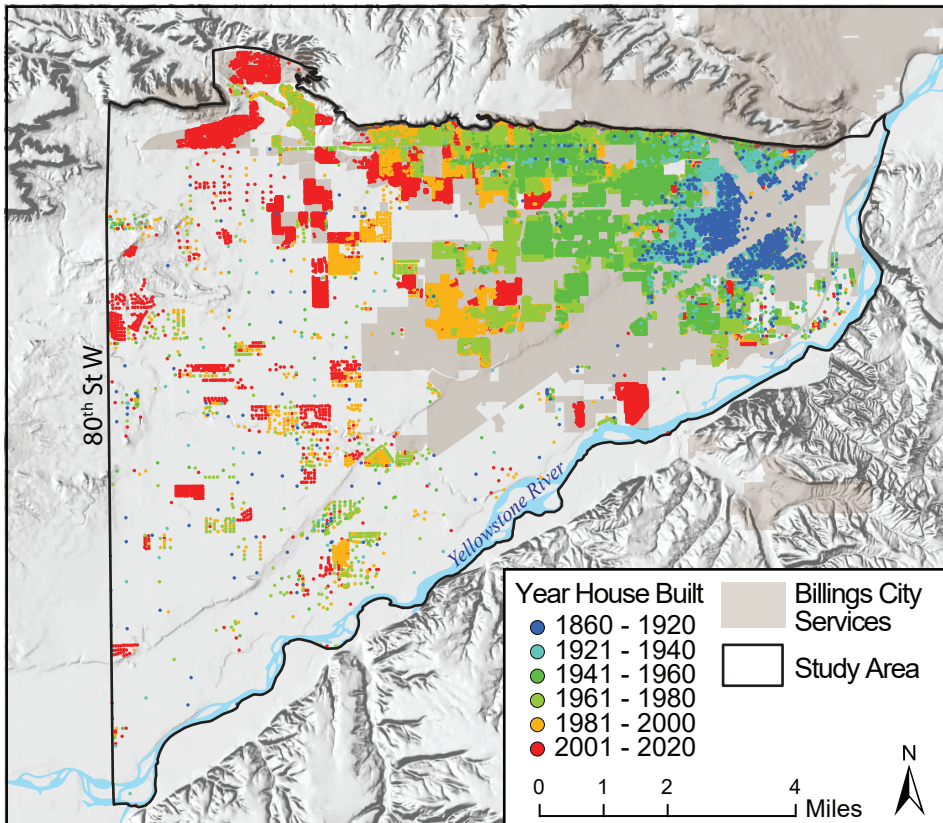


Montana Bureau of Mines and Geology Ground Water Investigation Program

June, 2022

Billings, Montana



Project Purpose:

The MBMG will evaluate the capacity of the local aquifer to support future groundwater development in west Billings and identify the extent and source of nitrates in the study area.

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The Billings area has experienced sustained, consistent growth and urbanization for the last 60 years. The number of housing units west of the core downtown area has grown from 11,000 in 1960 to 30,000 in 2020; a rate of over 300 residences per year. Most new developments are in areas beyond city services and depend on wells for drinking water and septic tanks for wastewater treatment.

To forecast the need for future city services (water, sewer, and storm), city and county officials must have a better understanding of the replenishment of water to the local aquifer contributed by agricultural irrigation and canal seepage, in addition to how land use changes will affect the shallow aquifer.

Data Collection

We need your help! In order to understand the influences of development on the aquifer, we need the following data:

1. Access to wells for water levels measurement.
2. Access to drains and streams for flow rate measurements.
3. Sample wells for nitrate concentrations (at no cost).

Products

- *A computer model will be created of the aquifer to predict its response to changes in land use.
- *All data is publicly available on the GWIC database (mbmggwic.mtech.edu).
- *A publicly available report summarizing findings.