

Dawson County & City of Glendive, MT

2023 Accomplishments

Ice jams on the Yellowstone River can cause major flooding in Glendive (pop. 5,000) and Dawson County (pop. 9,000). Outdated floodplain maps do not capture the full risk to vulnerable populations such as mobile home residents.

FloodWise Community since July 2021

Project services paid by FloodWise to date: \$72,500



2019 ice jam in West Glendive

2023 FloodWise Deliverables

- Facilitated flood project meetings and engaged with stakeholders.
- Conducted research to assess flood risk to mobile home park residents.
- Funded a study of erosion rates along the Yellowstone River.
- Helped secure a \$50,000 HUD grant for planning recreational trails.
- Helped the City of Glendive apply for a federal technical assistance program to address erosion along the Yellowstone River.

Stakeholder Engagement

The Army Corps of Engineers began the Section 205 Flood Risk Management Study in partnership with the City of Glendive and Dawson County in August 2022 to identify flood mitigation solutions. FloodWise Community Assistance helps coordinate federal, state, and local stakeholders and facilitates the project's monthly meetings. In 2022, Headwaters Economics provided a \$50,000 grant to assist with the required local cost-share payment.

In 2023, FloodWise Community Assistance assisted with community engagement with key stakeholders and facilitated 11 monthly project meetings with partners from the Army Corps of Engineers, Montana Department of Natural Resources and Conservation, KLJ Engineering, Dawson County, and the City of Glendive. FloodWise staff track the time spent on this project and submit these hours to the Army Corps of Engineers, on behalf of the county and city, as in-kind support.

Mobile Home Park Risk Assessment

In the spring, FloodWise Community Assistance published the "Mobile Home Flood Risk in West Glendive, Montana" report that summarizes findings from 18+ months of research and community engagement with mobile home park residents, including:

- On-site community outreach with mobile home residents at Casitas del Rio Mobile Home Park;
- Stakeholder meetings with regional, county, and city contacts;
- Social vulnerability assessment using Neighborhoods at Risk data;
- Mobile home structure assessment using property tax records obtained by Headwaters Economics.





Yellowstone River Erosion Study

FloodWise Community Assistance partnered with the Geospatial Core Facility at Montana State University to conduct an analysis of erosion rates along the eastern bank of the Yellowstone River. Drones collected LiDAR data over eight separate flights between the Bell Street Bridge and the Interstate 94 Bridge. Data from 2023 were compared to 2019 LiDAR data collected by Montana Department of Natural Resources and Conservation to assess how the streambank has eroded over time.

Results indicated that the average rate of erosion was .6 feet per year between 2019 and 2023 along the study area. At its most extreme, nearly 20 linear feet of streambank were eroded over the four years. Between streambank loss and undercutting, 10,740 cubic meters of riverbank materials were eroded and displaced in that time period.

City of Glendive Master Trails Plan Grant

In coordination with the City of Glendive and Great West Engineering, FloodWise assisted with writing a \$50,000 HUD Community Development Block Grant proposal to develop a recreational trails master plan. The study will help inform the Army Corps of Engineers Section 205 flood mitigation study. FloodWise will provide the city with the required \$12,500 matching funds. The proposal was selected for funding in May.

Army Corps of Engineers Pilot Project

The City of Glendive applied for funding to the Army Corps of Engineers' "Pilot Program for Water Resources Projects for Small or Disadvantaged Communities" to address the erosion issues along the Yellowstone River. FloodWise assisted the City of Glendive by writing the proposal and providing data on the river's erosion rates and the community's social vulnerabilities. It was submitted in October 2023.

Next Steps

- In Summer 2024 the Army Corps of Engineers will announce their preferred flood mitigation solution from the Section 205 Study. Headwaters will assist with stakeholder coordination, community engagement, and project logistics, including engaging with and assisting mobile home park residents.
- Identify funding sources for the Section 205's local cost-share requirement.
- Assist with the creation of the master trails plan per the recently awarded HUD grant.
- Coordinate stakeholders if the City of Glendive is accepted into the Army Corps Pilot Program to address the erosion issues near Penninger Park.
- Coordinate with local, state, and federal stakeholders to assist with FEMA floodplain map update.

About FloodWise Community Assistance & Headwaters Economics

FloodWise Community Assistance is a program of Headwaters Economics that provides free technical assistance to decrease flood risk and strengthen communities.

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions. <https://headwaterseconomics.org/>