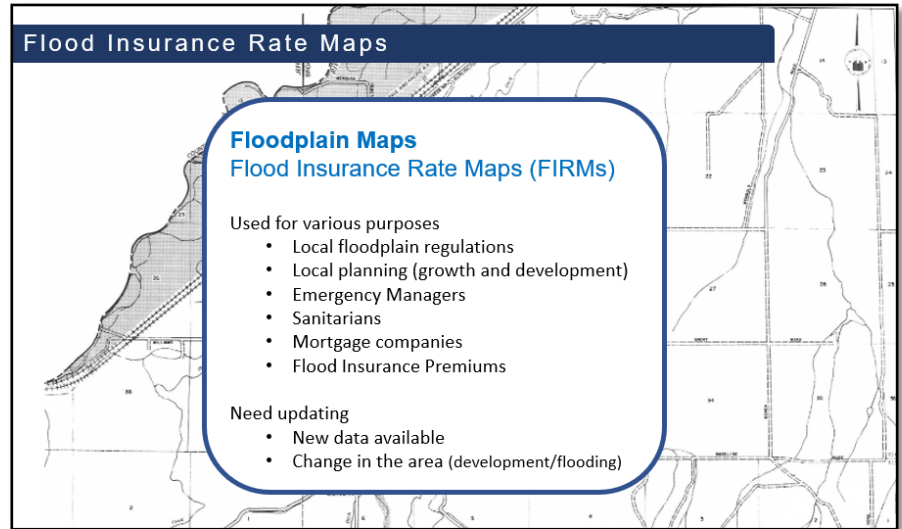


2022 Floodplain Mapping Project

What are floodplain maps?

Floodplain maps help identify risk, and in turn that helps keep people and property out of harm's way. Floodplain mapping projects are a coordinated effort with the state, county, city, and FEMA to identify and reduce flood risk. What these maps show is what is called the 100-year flood event. A better way to think of this is not in terms of years, it's the flood event that has a 1% chance of occurring in any given year.



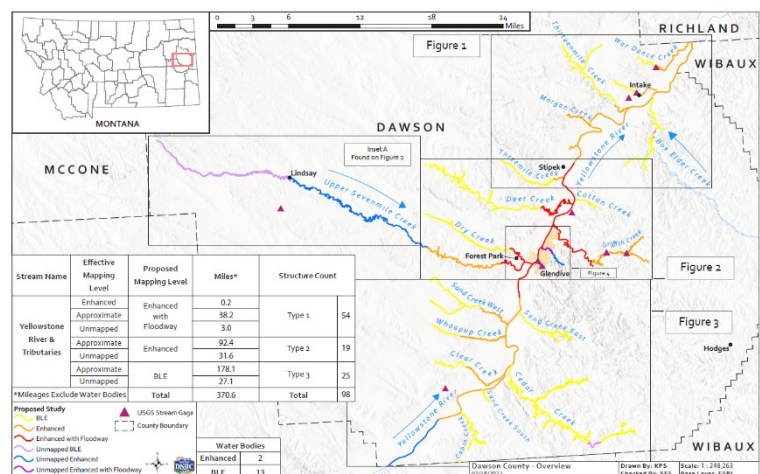
Floodplain maps are called Flood Insurance Rate Maps (FIRMs). They are used for various purposes in the community. Maps need periodic updating due to age of the existing maps, change in the area, or new data that can improve the accuracy.

History of floodplain maps in County and City:

Flood Hazard Boundary Maps (FHBMs) were originally produced in 1974 for the city of Glendive and in 1978 for Dawson County. Glendive is the only incorporated community within the county. In 1981, a Flood Insurance Study (FIS) and FIRMs were produced for Glendive. Dawson County was not a part of that study. Dawson County's FHBMs were converted to FIRMs by letter in 1999. Within the county, all of the existing mapping is approximate, based on the original FHBMs and other limited data from the late 1970's. There have been no mapping updates to the maps since 1981.

2022 Flood Study:

This project will conduct new floodplain mapping studies on 55.8 miles of the





Yellowstone River within Dawson County, 82.2 miles of tributaries, 15 ponds and reservoirs, 205 miles of base level engineering (approximate A study), modernizing the existing paper inventory in Dawson County. The overall project covers 370.6 miles of updated floodplain mapping. Funding includes field survey, base map preparation, hydrologic and hydraulic analyses, and floodplain mapping for the county.

Estimated Project Timeline

Dawson County & City of Glendive
Floodplain Maps Update



*Timeframes are estimated and may change during the project

| 2022 | 2023-2024 | 2024 | 2025-2026 | 2026-2027 |
|--|---|---|---|--|
| Measurements are made of the topography around the river, along with any culverts, bridges, and road crossings. LIDAR uses an airplane to collect ground elevation over a large area, and ground survey supplements the airborne data. Flood flow data determine how much water there will be in a river during a flood event. | The elevation and survey data are combined with the flood flow data to determine where the water will go when it overflows the channel and how far it will spread out. The area shown to be underwater and at high risk is mapped as the regulatory floodplain. | Draft data is delivered to the communities. Public open houses will be conducted for landowners to review the information. | FEMA Preliminary Maps are produced and ready for public review and comment period. A second public open house is usually conducted to review the information. 90-day official comment & appeal period held. | FEMA Flood Insurance Rate Maps finalized. |
| Data gathering | Engineering and floodplain modeling | Draft Data available public review | Preliminary Data public comment and appeal period | Flood Insurance Rate Maps become effective |
| Flood Study Conducted 4 steps of a flood study: 1) Survey & LIDAR 2) Hydrology (flood flow) 3) Hydraulics (engineering) 4) Mapping (delineation) | | Public Review 2 public open houses are usually held during this time. Once at draft map stage and again at preliminary map stage. During this time public comments are encouraged. There will be an official 90-day appeal period after the maps become preliminary. Resiliency and Mitigation efforts Once new maps become effective the community can determine what mitigation efforts it would like to pursue to reduce flood risks. | | |

Outreach & Engagement:

DNRC will develop a project website for the project that can be used to keep the public informed. DNRC will post information on the project (timelines, figures, completed reports throughout the project), upcoming meeting information & materials. At draft data stage a public viewer will be developed and posted.

Community project support:

In conjunction with the new flood study there are things that the county and town will be asked to help with.

- Providing jurisdictional information (i.e newly annexed areas for the town)
- Provide historic flood information (photos, GIS data)
- At draft data stage the community will send post cards or letters to all affected landowners (list to be provided by DNRC) inviting them to attend a public open house meeting
- Schedule and arrange venue for a joint (county, town, DNRC) public open house
- Prior to the appeal period DNRC will provide a template press release, we ask that the community share these with the local media

Mitigation Plan:

If the county is in the process of updating the county hazard mitigation plan, support for project planning can be provided in conjunction with the new flood study.