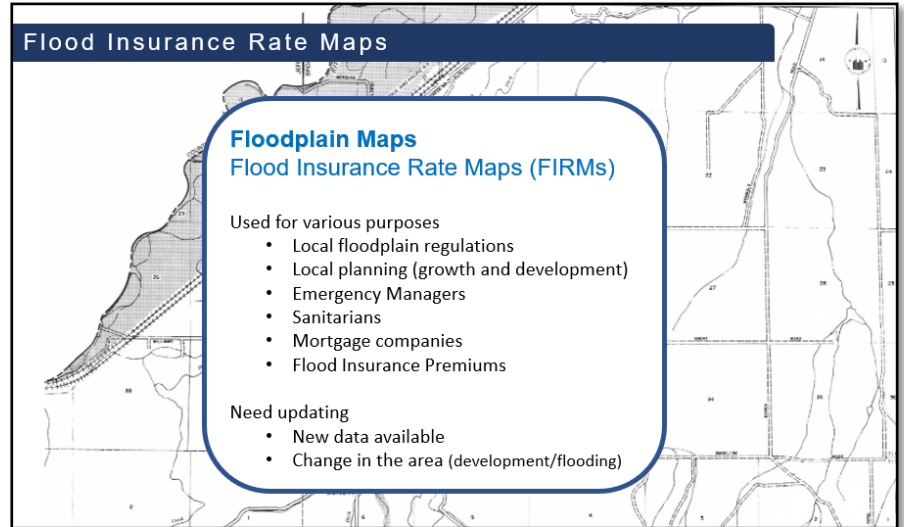


2022 Floodplain Mapping Project

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.



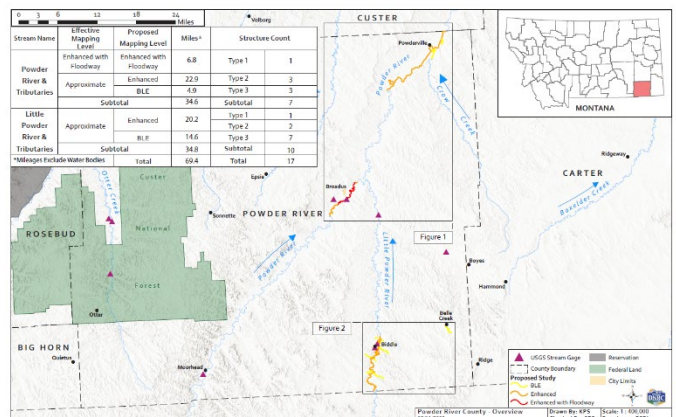
Floodplain maps are called Flood Insurance Rate Maps (FIRMs). They are used for various purposes in the community. Maps need periodic updating due to age of the existing maps, change in the area, or new data that can improve the accuracy.

History of floodplain maps in County and City:

Flood Hazard Boundary Maps (FHBMs) were originally produced in 1979 for the Powder River County. A FHBM was originally produced for the Town of Broadus in 1974 and revised in 1978. All of the mapping was approximate A mapping. The county and town FHBM maps were converted by letter into the regular program of the NFIP in 2010. In 2014, a LOMR was completed for approximately four miles of the Powder River through town limits and included a small part of the county. The LOMR provided the town and county with newer information and BFEs, however, the mapping revision was still in paper format, remaining a challenge for local administration. No other revisions have occurred to the effective mapping.

2022 Flood Study:

This project will conduct new floodplain mapping studies on 29.7 miles of the Powder River, 20.2 miles of the Little Powder River, 19.5 miles of BLE,





modernizing the existing paper. The overall project covers 69.4 miles of updated floodplain mapping. Funding includes all of the field survey, base map preparation, hydrologic and hydraulic analyses, and floodplain mapping.

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.

Estimated Project Timeline

Powder River County & Town of Broadus
Floodplain Maps Update

POWDER RIVER COUNTY



*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 3) Hydraulics (engineering) 2) Hydrology (flood flow) 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.		