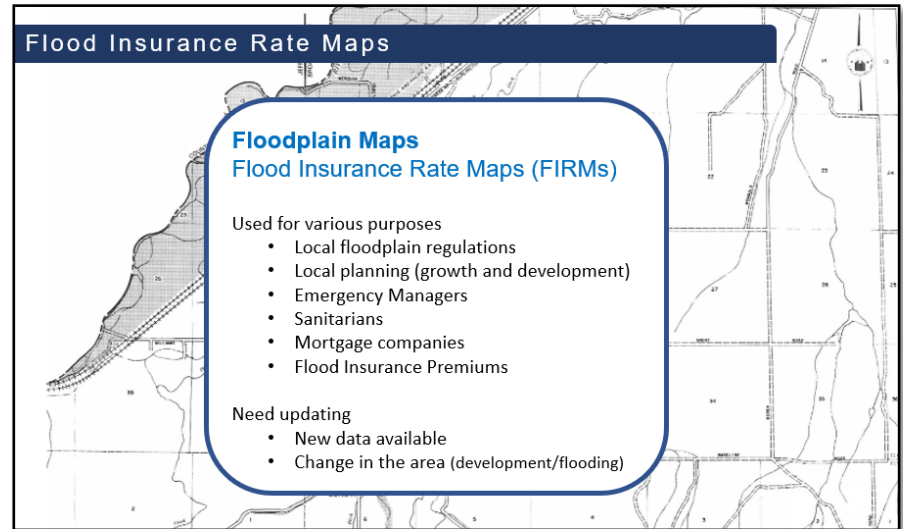


2022 Floodplain Mapping Project

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 high flood events, new data that can improve the accuracy, or if there has been substantial development in the area.

History of floodplain maps in County and City:

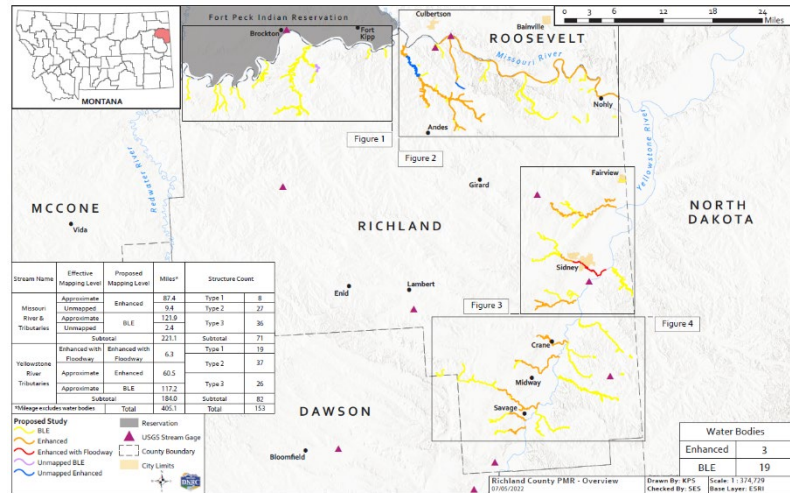
Flood Hazard Boundary maps were initially produced for Richland County in 1978, the City of Sidney in 1975, and the Town of Fairview in 1974. The first detailed flood study was conducted on Lone Tree Creek in 1985 for Richland County and the City of Sidney. Lone Tree Creek runs through the City of Sidney and has caused flooding concerns.

In 2007, Richland County went through Map Modernization to incorporate a 1986 detailed study on the Missouri River from the Fort Peck Assiniboine and Sioux Tribes and convert the remaining existing paper FIRMs in the county to digital format. In 2008 a Letter of Map Revision (LOMR) was issued for a portion of Lone Tree Creek for bridge and channelization work.

Richland County has consistently requested updated mapping, specifically along the Yellowstone River corridor, due to development pressure from oil production. Due to challenges with administering a Zone A floodplain on the Yellowstone River, Richland County worked with MT DNRC in 2015 to initiate a detailed study on the Yellowstone River. Richland County funded \$80,000 of the cost of the project, with \$46,000 provided by the state, along with in-house engineering. The resulting 2019 Physical Map Revision (PMR) updated 25 FIRM panels along the Yellowstone River corridor.

2022 Flood Study:

This project will conduct new floodplain mapping studies on the remaining mapped floodplains in the county, including 6.3 miles of the enhanced with floodway tributaries, 157.3 miles of enhanced tributaries, 24.2 shoreline miles of mapped water bodies, and 241.5 miles of BLE. 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.

Richland County, City of Sidney,
Town of Fairview
Floodplain Maps Update

RICHLAND COUNTY
MONTANA

SIDNEY
MONTANA

MONTANA
DNRC

TOWN OF FAIRVIEW

*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) Hydrologic (engineering) 3) Hydraulic (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.		