







# Madison, Ruby, & Jefferson Watershed Floodplain Maps Update

Completed in 2019	Completed in 2020	Completed in fall 2020	Broadwater County preliminary maps10/14/2022 Madison County preliminary maps 2/24/2023 Gallatin County Mid- late 2023 (est)	Broadwater County 9/26/2024 Madison County 2024 (est) Gallatin County 2026-2027 (est)
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 determines 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 were held in January 2021 and March 2021 for landowners to begin to review the information.	FEMA Preliminary Maps are produced and ready for public review and comment period.  90-day official comment & appeal period Broadwater County 5/3/2023-8/1/2023 Madison County 8/24/2023-11/21/2023	FEMA Flood Insurance Rate Maps finalized.  Broadwater County Maps Effective 9/26/2024
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**

A public open house is held after draft data is available and before preliminary maps are released.

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 the flood study is completed the community can determine what mitigation efforts it would like to pursue to reduce flood risks.

## **Community Work**

Update local floodplain ordinances.

Prepare initiatives to reduce flood risk.