

Rattlesnake Neighborhood Transportation Committee Meeting Minutes

May 9, 2023

6:15 – 7:45 pm

Missoula Public Library, Cooper B, Room 402

Introductions:

Tom Carlson (Acting Chair), Dan Doyle (Acting Secretary), Fred Rice, Kirk Henderson, John Bleicher, Jeanie Alonzo-Adams, Terri Roach, Linda Hedstrom, Adriane Beck (Director and Dept. of Emergency Services Director, Missoula County Office of Emergency Management)

Tom Carlson noted that the recently elected Co-Chair of the Rattlesnake Transportation Committee, Joe Baker, passed away in early April. Joe was very active in the work of this committee and will be missed. Dan Doyle said a few words in tribute, noting especially Joe's lifelong passion for the protection of human rights and his love of all things outdoors. His obituary can be found at:

<https://www.legacy.com/us/obituaries/missoulian/name/joseph-baker-obituary?id=51709745>

Review of Previous Meeting Minutes:

Minutes for April 11, 2023 were approved with no changes.

Agenda Review:

No changes to draft

Public Comments on Non-agenda Topics:

None

Old Business:

Review of April 11 meeting discussion of Lolo Street Bridge rehabilitation project with: Shane Stack, Public Works Director, Missoula County

Those present were reminded that Missoula County (which is in charge of the bridges, even within Missoula city limits) is conducting a public meeting concerning this project on May 31, from 6-8 pm, at the Rattlesnake Elementary School gymnasium. Interested people were encouraged to attend.

Review of April 11 meeting discussion of bicycle and pedestrian safety on Lolo Street and Greenough Drive and striping changes with Ben Weiss Works, Senior Transportation Planner and Bicycle/Pedestrian Program Manager.

Note that both of the above topics will be the focus of the Rattlesnake Transportation Committee's June 13 meeting.

New Business:

There was a discussion of emergency evacuation planning with Adriane Beck, Director & Dept. of Emergency Services Coordinator, Missoula County Office of Emergency Management (OEM). Ms. Beck's email address is abeck@co.missoula.mt.us and her phone number is 406-258-3632.

Note that Joe Baker had compiled an informative handout regarding the work of the Office of Emergency Management, especially as it pertains to the Rattlesnake Valley. This handout is appended to the minutes for this meeting.

OEM has two departments: 1) the Missoula 911Center which takes emergency calls and dispatches the appropriate agency to respond and 2) Disaster and Emergency Services (DES) which is charged with handling larger scale emergencies. DES accomplishes this through prevention, protection, mitigation, response, and recovery. Ms. Beck noted that the DES is in many ways like a local version of FEMA, but without the same level of resources.

DES shares the understandable concerns of residents regarding emergencies in places like the Rattlesnake Valley where homes are located in the urban-wildlife interface and where access in and out of the valley is limited.

DES is presently in the process of updating its Pre-Disaster Mitigation Plan (PDM). The PDM is required by FEMA and is normally updated every five years. The plan analyses and ranks disaster risks and vulnerabilities by examining the history of past disasters and by using science-based prediction modeling. DES is very interested in getting input from the public as it updates the PDM. DES will release an early draft of the plan on June 22, 2023. By the time of the release, DES will also announce opportunities to provide feedback before the plan is finalized. The most recent previous Missoula County PDM (2017) can be viewed on the OEM website:

<https://www.missoulacounty.us/home/showpublisheddocument/25947/636354669135530000>

More important than ranking disasters is mitigating them. This is accomplished through the Emergency Operations Basic Plan and its associated annexes. This plan outlines and prioritizes mitigation strategies that include prevention, preparation, response, and recovery. Since every disaster is different, the PDM does not attempt to account for all possible scenarios. Rather, the plan serves as a flexible framework that provides guidance for coordinating resources, establishing a chain of command during disasters, and scaling up response as needed. See the plan at:

<https://www.missoulacounty.us/government/public-safety/office-of-emergency-management/des/plans>

In response to questions posed by those present, Ms. Beck made several other points.

While FEMA does not require a focus on human-caused disasters, that is certainly part of Missoula disaster planning. In the upcoming PDM, there will be more emphasis on climate change.

DES has some limited grant funding to help create defensible space around structures in the area. For more information, contact Max Rebholz at mreholz@co.missoula.mt.us or Tim LaRoche at tlaroch@co.missoula.mt.us. The OEM website has extensive information about how property owners can reduce the risk of fires in and around their homes or businesses. Go to:

<https://www.missoulacounty.us/government/public-safety/office-of-emergency-management/wildfire-preparedness>

In the last PDM wildfire was the highest ranked disaster risk and hazardous materials spills were ranked second.

Evacuation is only appropriate in emergency situations. The decision to issue an evacuation warning or order is made by the person with the best knowledge based on the type of disaster and the circumstances. Evacuation orders are enforced by local law enforcement agencies. Residents cannot be forced to leave their homes, but if they leave, they can be prohibited from reentering the evacuated area. Evacuations are better if they are stretched out over several stages rather than carried out all at once. Rather than evacuate out of the area, sometimes it is better to direct people to shelter in place or go to a safe zone (e.g., an open field or a large concrete building during a wildfire). Ms Beck believes that the safest strategy is for residents to follow the instructions they get from official sources. Residents are encouraged to sign up for emergency alerts at www.smart911.com

Ms. Beck was questioned about possible alternative evacuation routes out of the Rattlesnake Valley if Van Buren St. and/or Greenough Dr. were blocked or too congested. She said it might be possible to use the road over the Mt. Jumbo Saddle. She was less sure of whether there was a viable road over Waterworks Hill or the North Hills. When asked about the possibility of facilitating evacuation by bridging Rattlesnake Creek at Creek Crossing, she said that there were no plans to do so at this time.

DES frequently stages live drills or “tabletop” drills to simulate disasters in order to test out their protocols and procedures, to look for ways to improve, and to update emergency operations planning. DES would be happy to set up such a drill for any interested group, large or small. Those present thought that the Upper and Lower Rattlesnake Neighborhood Councils should work with the

DES to set up some sort of drill for interested Rattlesnake residents. Doing so would inform residents regarding risks they face, let them know what they can do to mitigate harm, educate them regarding the plans DES has in place, and help generate confidence in officials during times of emergency.

Ms. Beck was asked whether her office has advanced notice when toxic chemicals are transported through the county. She said that most of the time they do not, but it is usually possible to quickly get information from trucking companies or railroads as to what they are transporting in the event of a spill.

In answer to a question Ms. Beck mentioned that some insurance companies are starting to increase insurance premium rates or even refusing to insure homes located in areas that they perceive to be too risk prone.

One other piece of new business: Bob Giordano took the final version of the Rattlesnake Valley Transportation Plan to the Lower Rattlesnake leadership team meeting where it received unanimous support. The plan now needs to be presented to the Missoula City Council.

Next Meeting:

June 13, 2023, 6:15 - 7:45 pm, Rm 410, Missoula Public Library,

Primary Agenda items:

- Lolo Street Bridge reconstruction
- Lolo Street and Greenough Drive pavement striping for pedestrian and bicycle safety

Rattlesnake Transportation Committee – Mission and Purpose

The Rattlesnake Transportation Committee is a subcommittee of the Upper and Lower Rattlesnake Neighborhood Councils. Members of the committee are residents of the neighborhood who volunteered their time to gather monthly (October – June) in public meetings to promote safe, efficient, equitable and accessible transportation options for residents and visitors of the Rattlesnake Valley. Everyone is welcome to attend the meetings and participate to help discuss issues and identify potential solutions to be considered by the Missoula City and County staff.

The committee can be contacted at: rattlesnaketransportationplan@gmail.com

Rattlesnake Transportation Plan

In 2019 the committee began work to update the 2011 Rattlesnake Valley Transportation Summit Study. Working alongside the Missoula City Office of Neighborhoods, a process was put in place to gather input and feedback from residents of the adjoining upper and lower rattlesnake neighborhoods and identify priority issues and potential solutions.

In November of 2021 the Rattlesnake Transportation Plan Update was completed and can be found here: <https://rattlesnaketransportation.org/>

Missoula County Office of Emergency Management (OEM)

The OEM coordinates emergency response and pre-disaster mitigation planning in Missoula County and the City of Missoula.

The OEM is comprised of Missoula's 9-1-1 Center and Missoula County Disaster and Emergency Services (DES).

The Director of the OEM is Adriane Beck, abeck@co.missoula.mt.us, (406) 258-3632.

The Local Emergency Planning Committee (LEPC) is responsible for developing a hazardous substance emergency plan. The Disaster Planning Committee (DPC) has oversight of the plans prepared and managed by DES staff.

The LEPC and DPC hold joint quarterly meetings.

Plans and Responsibilities

The DES is responsible for preparing a number of key planning documents and responsibilities:

1. [Emergency Operations Basic Plan](#) – this is a high level document that determines lead agencies and participating agencies for various types of emergencies. Companion documents are [Emergency Support Functions](#) and the [Functional Annexes](#).
2. The [Pre-Disaster Mitigation Plan](#) (PDM). This is a tool for assessing and prioritizing projects for mitigating damage and casualties from natural disasters. The current plan is from 2017. The plan is updated every five years, and the process to update the plan for 2023 has begun. A [Pre-Disaster Mitigation Plan Survey](#) on Missoula County Voice recently closed. More details on parts of the plan most relevant to the Rattlesnake will be highlighted below.
3. [The Community Wildfire Protection Plan](#). The plan was most recently updated in 2018. A CWPP is a community-based plan focused on identifying and addressing the local threat of wildfire. The CWPP determines what is at risk and provides a roadmap of actions for the community to address wildfire risk. More details on parts of the plan most relevant to the Rattlesnake will be highlighted below.
4. [Evacuations](#). Missoula County utilizes a two-stage evacuation process: [evacuation warnings](#), and [evacuation orders](#). People can sign up for emergency alerts at www.smart911.com.
5. [Hazardous Materials Reporting](#). The County maintains a listing of businesses that handle and store potentially hazardous chemicals. The list isn't publicly available.

Floodplain Administration outside the City of Missoula is handled by the County [Floodplain Administration Program](#). They are working to update the Flood Insurance Rate Maps for the Clark Fork and other rivers in the county. The City also has a [Floodplain Administration](#) program. The floodplain maps that cover the Rattlesnake are:

- a. [Most of the Rattlesnake](#)
- b. [Area near the Clark Fork](#)

Risk Assessment

Part of the Pre-Disaster Mitigation Plan is to assess risks and vulnerabilities. Critical facilities (bridges, hospitals, fire stations, etc.) and vulnerable populations are identified. Hazard profiles are prepared for each identified hazard included the probability of an incident and the potential magnitude of damage. The final rankings for the hazards are;

1. Wildfire
2. Hazardous Material Incidents and Railroad Derailments
3. Flooding
4. Severe Weather and Drought
5. Communicable Disease
6. Avalanche
7. Earthquake

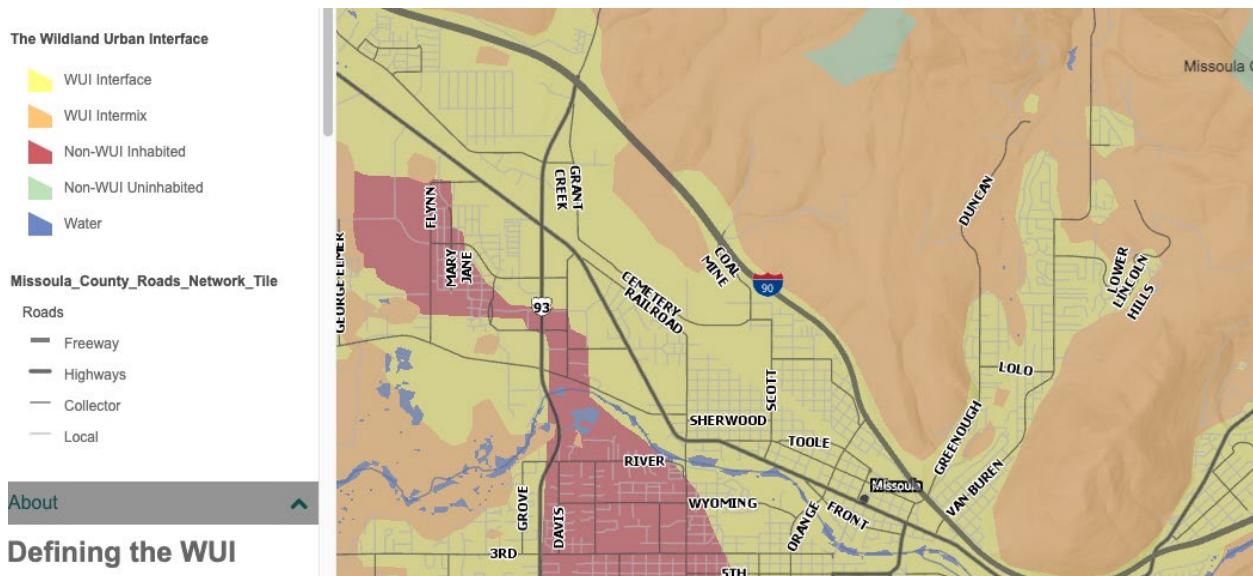
8. Dam Failure

Wildfire

Roughly 2/3s of the fire starts in Missoula County are lightning caused. On average, there are 3,000 – 4,000 strikes a year. Fires in the general Rattlesnake area that were listed in the report include:

Date	Name	Acres	Cause	Structures Lost	Suppression Cost
7/4/2006	Mount Jumbo	333	Fireworks	0	\$139,566
8/3/2007	Jocko Lakes	32,557	Lightning	1 R, 7 OB	\$26,076455
7/9/2009	Mount Sentinel	390	Children	0	\$150,033
7/15/13	Gold Creek	171	Lightning		

All of the Rattlesnake residential area is listed as Wildland Urban Interface or Wildland Urban Intermix.

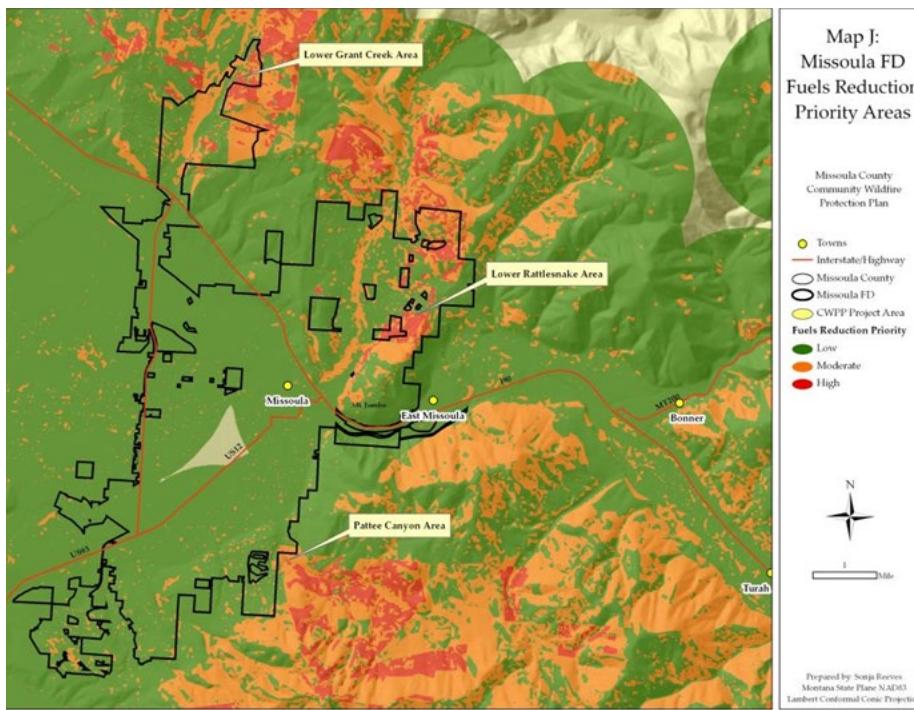


The **Missoula County Community Wildfire Protection Plan (2018)** lists two fuel reduction projects for the Rattlesnake (Rattlesnake EMB's and Rattlesnake Proposed EMB's) but lists them as 'Not sure of status.' The projects aren't listed on the Lolo National Forest site.

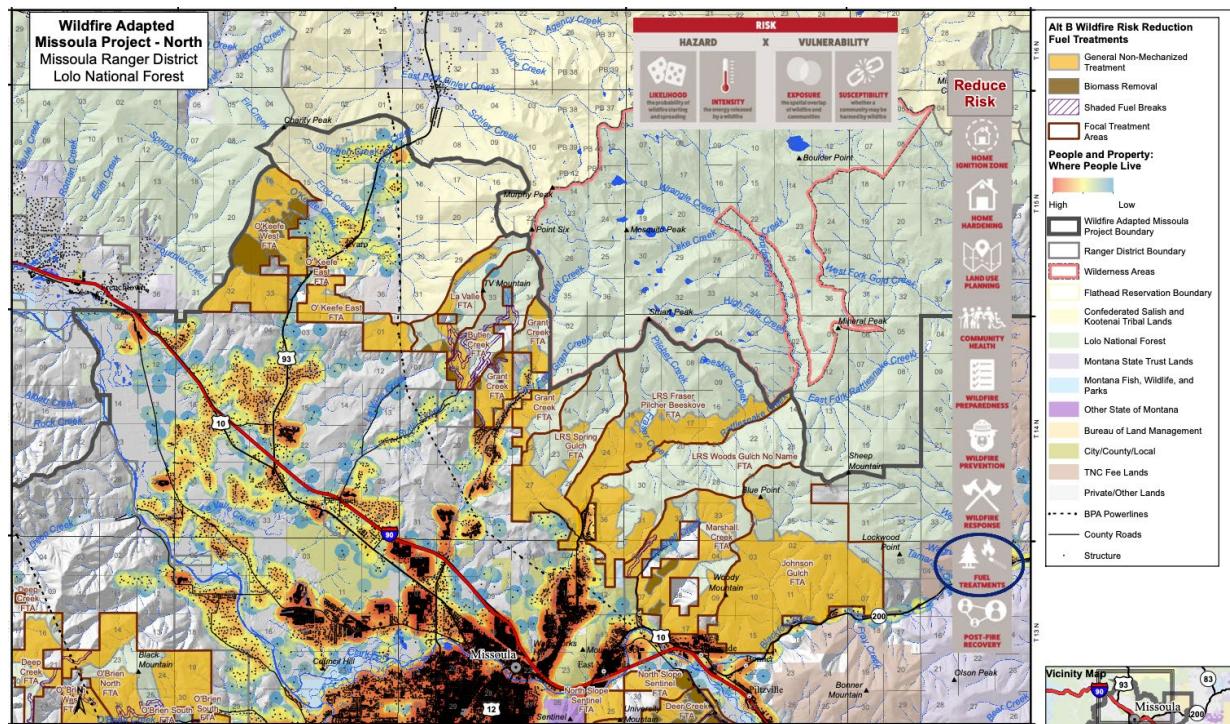
The Rattlesnake Valley is listed as a Critical Egress Area in the CWPP.

One of the identified actions for the OEM is to promote having neighborhoods and communities develop mitigation activities and evacuation plans through programs such as Firewise Communities/USA and Ready, Set, Go! More information is available from [Firesafe Montana](#).

The CWPP has two slightly different maps showing priority areas for fuel reduction. They both include the Rattlesnake as high priority.



The Lolo National Forest has a [Wildfire Adapted Missoula](#) project which identifies areas for mechanized and non-mechanized fuel and vegetation treatments to reduce wildfire hazard. The project map for the Rattlesnake area is here:



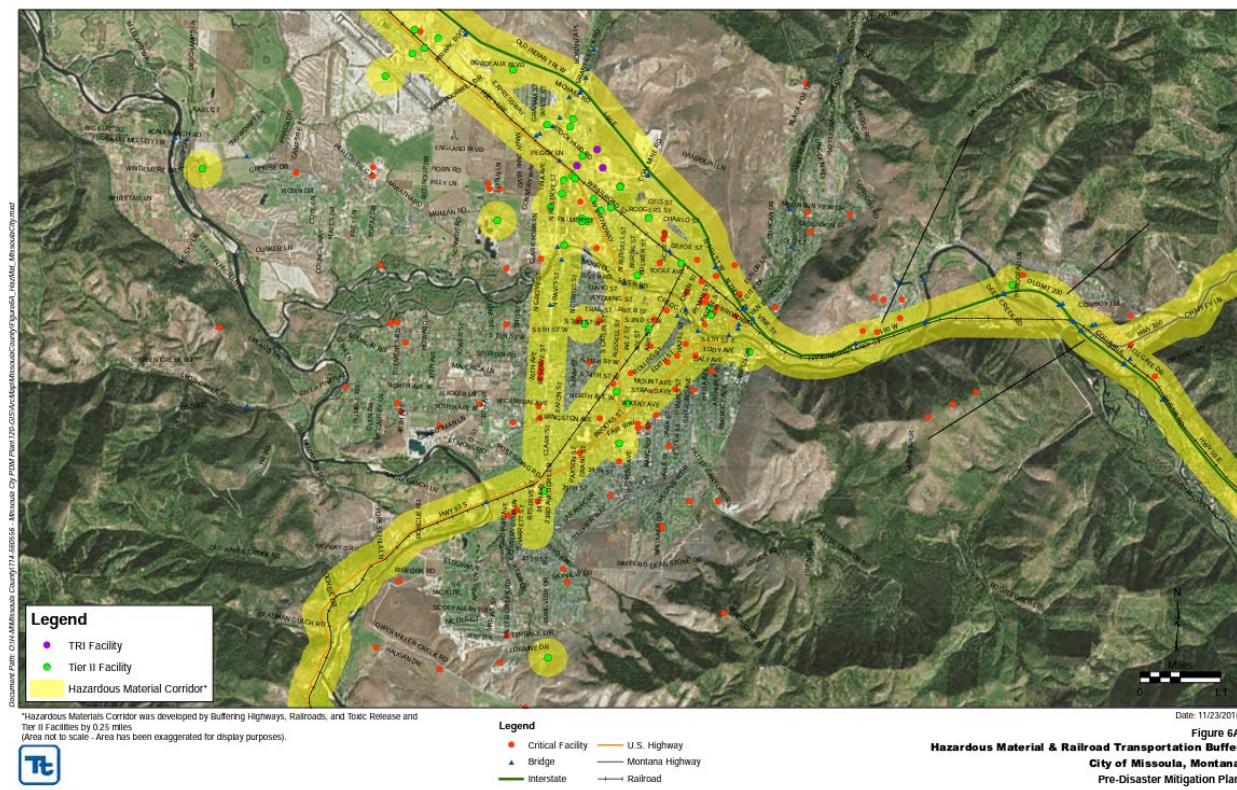
Hazardous Material Incidents & Railroad Derailments

The PDM shows 64 hazardous material releases between 1990 and 2016. These were a mix of industrial spills, railroad derailments, or trucking accidents.

From 1996 – 2016, there were 73 rail accidents in Missoula County, involving 279 cars carrying Haz-Mat, and 59 Haz-Mat cars damaged. Out of those accidents, 58 occurred in the Missoula City area, many in the rail yard. Forty-eight Haz-Mat cars were involved. The only Haz-Mat release from rail accidents in Missoula was 13,000 gallons of alcohol in 2006.

The most serious incident highlighted in the report occurred near Alberton in 1996. Nineteen cars from a Montana Rail Link freight train derailed. Six of the cars contained hazardous materials. One tank car released 130,000 pounds of chlorine, another tank car lost 17,000 gallons of potassium cresylate, and a hopper car spill 85 dry gallons of sodium chorate on the ground. Approximately 350 people were treated for chlorine inhalation, 123 of who sustained injury. Nine people were hospitalized, and one person died.

Part of the lower Rattlesnake is included in the hazardous material corridor around the rail lines and Interstate 90.



Flooding

The largest flood known to occur in Missoula County was in May and June of 1908, and involved Rattlesnake Creek. The Higgins home was washed into the Cedar Street (now Broadway) bridge, carrying it downstream.

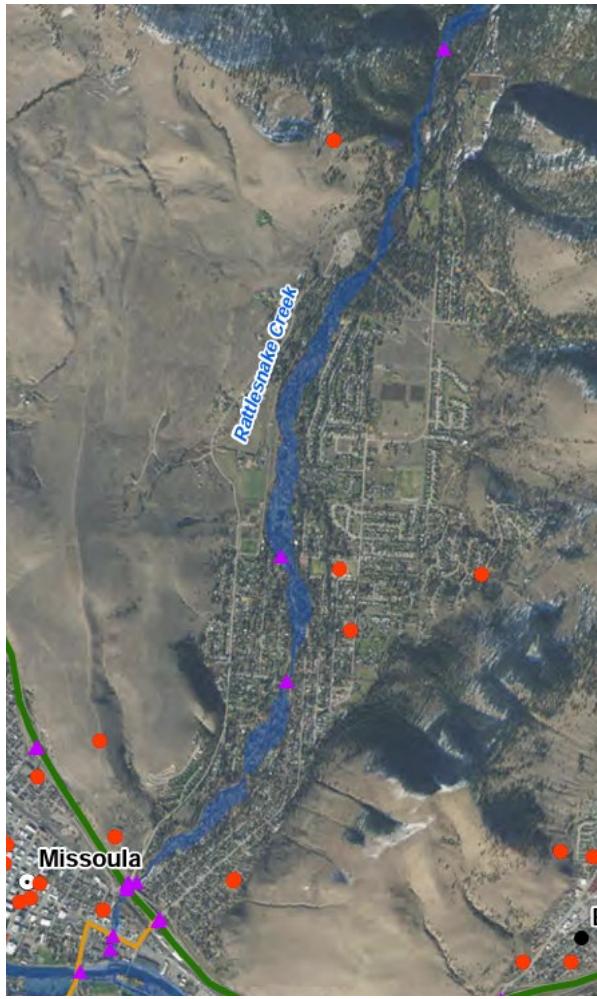
Rattlesnake Creek during the flood of 1908



The maximum flows ever recorded for Rattlesnake Creek were in June 1948 and June 1974. The 1974 event caused bank erosion but very little property damage in Greenough Park.

There are virtually no flood protection measures along Rattlesnake Creek. Rock walls, built many years ago, provide bank stabilization near the downstream end of Greenough Park.

Here is the floodplain map for the Rattlesnake Valley:



Severe Weather Conditions

The PDM plan highlights an August 10, 2015 line of thunderstorms that converged over the Missoula Valley with hurricane force winds. Lightning and downed power lines sparked numerous fires, including one in the lower Rattlesnake Valley at the base of Mount Jumbo. Residents scrambled to douse the fire, saying they were unable to get through to 9-1-1, despite trying for 20 minutes.

Communicable Disease

Welp.

Avalanche

The main avalanche risks around the Rattlesnake Valley are in the Rattlesnake Wilderness and Mount Jumbo. In 2010, two skiers were caught and partially buried in two separate avalanches in the Rattlesnake Wilderness. In 2014, a snowboarder started an avalanche on Mt Jumbo. The snowboarder was caught by the avalanche but was able to self-arrest. At the base of the hill, 1 child was partially buried, one was fully buried but recovered with injuries. Two residents were fully buried and recovered with injuries. One later died from injuries. There is a detailed description of the avalanche in the PDM.

As Montana sees wider ranges between daytime and nighttime temperatures, it is likely that unstable snow layers will form more frequently.

Missoula County subdivision regulations do not currently prevent new construction in avalanche prone areas. There are currently no disclosure requirements for properties located in areas subject to avalanche.

Earthquake

Missoula County lies on the western edge of the Intermountain Seismic Belt. Missoula County is considered to be a region of low seismicity and therefore has a low earthquake hazard. Seismic activity within Missoula County in historic times has been limited to earthquakes of magnitude 5.0 or less. Earthquakes of magnitude 4.0 or greater have been recorded along the Ninemile Fault and Swan Fault. The Jocko and Bitterroot Faults have had a notable lack of earthquake activity.

The Ninemile Fault crosses the Rattlesnake Valley and passes through East Missoula. The map below is from [Faults and Floods of Missoula Valley](#) by J.W. Sears.

Dam Failure

None of the high hazard dams in Missoula County are in the Rattlesnake area. The Rattlesnake Dam removal has been completed and renovation and trail work continue.

There are 10 earthen dams on 8 alpine lakes in the Rattlesnake Wilderness. The dams are now owned by the City of Missoula. Plans are under development to [decommission the Mckinley Lake Dam](#). Background is available in Chapter 9 of the 2018 Water System Master Plan, [Rattlesnake Dams Feasibility Study](#) and in this recent [webinar](#) from the Watershed Education Network.