



Progress Report: 2017 Update to Pre-Disaster Mitigation Plan

The City of Missoula participates in the Community Rating System (CRS) which rewards communities for exceeding minimum standards required for floodplain administration. In order to maintain our CRS rating, the City must complete the CRS Audit. The CRS Audit was completed August 2nd, 2021.

The CRS Audit requires that the City of Missoula provide a progress report for the action items contained in our floodplain management plan. The floodplain management plan for the City of Missoula is the *2017 Update to Pre-Disaster Mitigation Plan*. This is a City/County joint plan. The plan can be viewed on the City website here: <https://ci.missoula.mt.us/2065/Floodplain-Resources>

This evaluation report was prepared by the Permits and Land Use Division of Development Services. Only objectives pertaining to the City and flood hazard mitigation were evaluated for this report. Staff of the Storm Water Management Program of Public Works were contacted to provide updates on the status of project implementation for project 3.2.1. The Office of Emergency Management was contacted to provide updates on the implementation status for projects 3.5.1 and 3.6.3. Implementation of projects 3.3.2 and 3.6.1 was determined by Development Services Staff.

Goal #3: Reduce Exposure to Flooding

Objective 3.2: Implement structural projects to reduce impacts from flooding.

- Project 3.2.1: Maintain and improve the existing storm water infrastructure to mitigate impacts from flash flooding.
 - Planned Activities: Identify problem areas. Coordinate with right-of-way partners, Determine remedy. Obtain funding. Implement.
 - Schedule: Ongoing.
 - Progress: The Storm Water Management Program of the Public Works Department was contacted to provide an update on the implementation of this objective. Since the last audit, the Storm Water Management Program has been able to increase capacity allowing progress to be made on Objective 3.2.1. Public Works and Mobility has been able to respond to storm water maintenance demands both pro-actively by cleaning and replacing dry-wells and reactively in emergency situations. Over the past year, Public Works and Mobility has replaced approximately 20 dry wells within the public right-of-way. The department cleaned approximately 500 dry wells of debris, allowing them function as designed.

Objective 3.3: Conduct mapping/analysis/planning projects to reduce impacts from flooding.

- Project 3.3.2: Evaluate and if appropriate, implement a telemetered river gauge on Rattlesnake Creek to notify community of possible flood surges.

- Planned Activities: Consult with USGS and NWS for input on what type of gauging would be appropriate and best location. Obtain funding for necessary equipment. Install and train on operation
- Schedule: Ongoing – Objective Met.
- Progress: In consultation with USGS and NWS, a 3' x 3' Hoffman box housing a constant flow bubbler, Satlink, and battery was selected as a real-time streamflow gauge for Rattlesnake Creek. This gauge was selected to monitor flows for water availability and instream flow analyses. In addition, a Wire Weight gauge with Veeder counter was installed on the handrail of the City Drive footbridge which is used to obtain surface water elevations used to calibrate the stream gauge monitoring equipment. The gauge and equipment were installed in 2017.

Objective 3.5: Upgrade emergency service capabilities to reduce impacts from flooding.

- Project 3.5.1: Conduct exercises on levee failure/breach.
 - Planned Activities: Coordinate with Disaster Planning Committee and put on training schedule.
 - Schedule: Short Term.
 - Progress: The Office of Emergency Management was contacted to provide an update on the status of this objective. The planned activity has not been implemented due to constraints imposed by COVID over the past year. However, during the 2018 flood the Office of Emergency Management and other agencies met with the Army Corps of Engineers to look at several scenarios including a levee failure in the Orchard Homes area. Impacts of a levee failure in the Orchard Homes Area were analyzed to inform the Office of Emergency Management's response to such an event. While this was not captured as an official exercise, it met Objective 3.5.

Objective 3.6: Implement public outreach and education projects to reduce impacts from flooding.

- Project 3.6.1: Continue to educate the public on the National Flood Insurance Program.
 - Planned Activities: Info on NFIP will continue to be available at City & County Planning offices.
 - Schedule: Ongoing – Objective Met.
 - Progress: The City continues to educate the public on the National Flood Insurance Program. Information about the NFIP can be found on the City of Missoula Website. The public may inquire about the NFIP by phone or email. Development Services no longer allows walk-ins but the public may schedule appointments to receive additional information. City Hall has recently re-opened and staff plan on finding a location in the public portion of the building to place flyers relating to the NFIP, natural functions of the floodplain, and safe floodplain development. Currently, copies of these pamphlets may be requested by phone or email.

- Project 3.6.3: Participate in the National Weather Service's Flood Awareness Program.
 - Planned Activities: Maintain collaboration with NWS. Push out info via social

media.

- Schedule: Ongoing.
- Progress: The Office of Emergency Management was contacted to provide an update on the status of this objective. The Office of Emergency Management continues to collaborate with the National Weather Service's Flood Awareness Program. Any time there is a flood advisory, watch, or warning the Office of Emergency Management initiates daily meetings with the National Weather Service's Flood Awareness Program. The Office of Emergency Management shares public information and public safety messages across agencies.