



# Federal Emergency Management Agency

Washington, D.C. 20472

## LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Missoula Missoula County Montana	NO PROJECT	2D HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS UPDATED TOPOGRAPHIC DATA BASE MAP CHANGES
	COMMUNITY NO.: 300049		
IDENTIFIER	Butler Creek	APPROXIMATE LATITUDE AND LONGITUDE: 46.934, -114.097 SOURCE: Other      DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM*      NO.: 30063C1190E      DATE: July 6, 2015		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: March 7, 2019 PROFILE: 185P (NEW) SUMMARY OF DISCHARGES TABLE: 10	

Enclosures reflect changes to flooding sources affected by this revision.

\* FIRM - Flood Insurance Rate Map

### FLOODING SOURCE AND REVISED REACH

Butler Creek - From approximately 310 feet downstream of U.S. Highway 10 West to approximately 1,180 feet upstream of I-90.

### SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Butler Creek	No BFEs*	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone X (Unshaded)	Zone X (Shaded)	YES	NONE

\* BFEs - Base Flood Elevations

### DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacbbit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration

22-08-0126P

102-I-A-C



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**LETTER OF MAP REVISION  
DETERMINATION DOCUMENT (CONTINUED)**

**OTHER COMMUNITIES AFFECTED BY THIS REVISION**

**CID Number:** 300048      **Name:** Missoula County, Montana

**AFFECTED MAP PANELS**

TYPE: FIRM    NO.: 30063C1190E    DATE: July 6, 2015  
TYPE: FIRM    NO.: 30063C1180E    DATE: July 6, 2015

**AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT**

DATE OF EFFECTIVE FLOOD INSURANCE STUDY: March 7, 2019  
PROFILE: 185P (NEW)  
SUMMARY OF DISCHARGES TABLE: 10

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### COMMUNITY INFORMATION

#### APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

#### COMMUNITY REMINDERS

We based this determination on the base (1-percent-annual-chance) flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

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Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:


Jeanine D. Petterson  
Director, Mitigation Division  
Federal Emergency Management Agency, Region VIII  
Denver Federal Center, Building 710  
P.O. Box 25267  
Denver, CO 80225-0267  
(303)235 4830

### STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Although the proposed area of revision is shown on the effective FIRM as located within the Unincorporated Areas of Missoula County, a portion of this area has been annexed by the City of Missoula.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

  
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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at [https://www.floodmaps.fema.gov/fhm/bfe\\_status/bfe\\_main.asp](https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp)

#### LOCAL NEWSPAPER

Name: *The Missoulian*

Dates: January 13, 2023 and January 20, 2023

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

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**Table 10: Summary of Discharges**

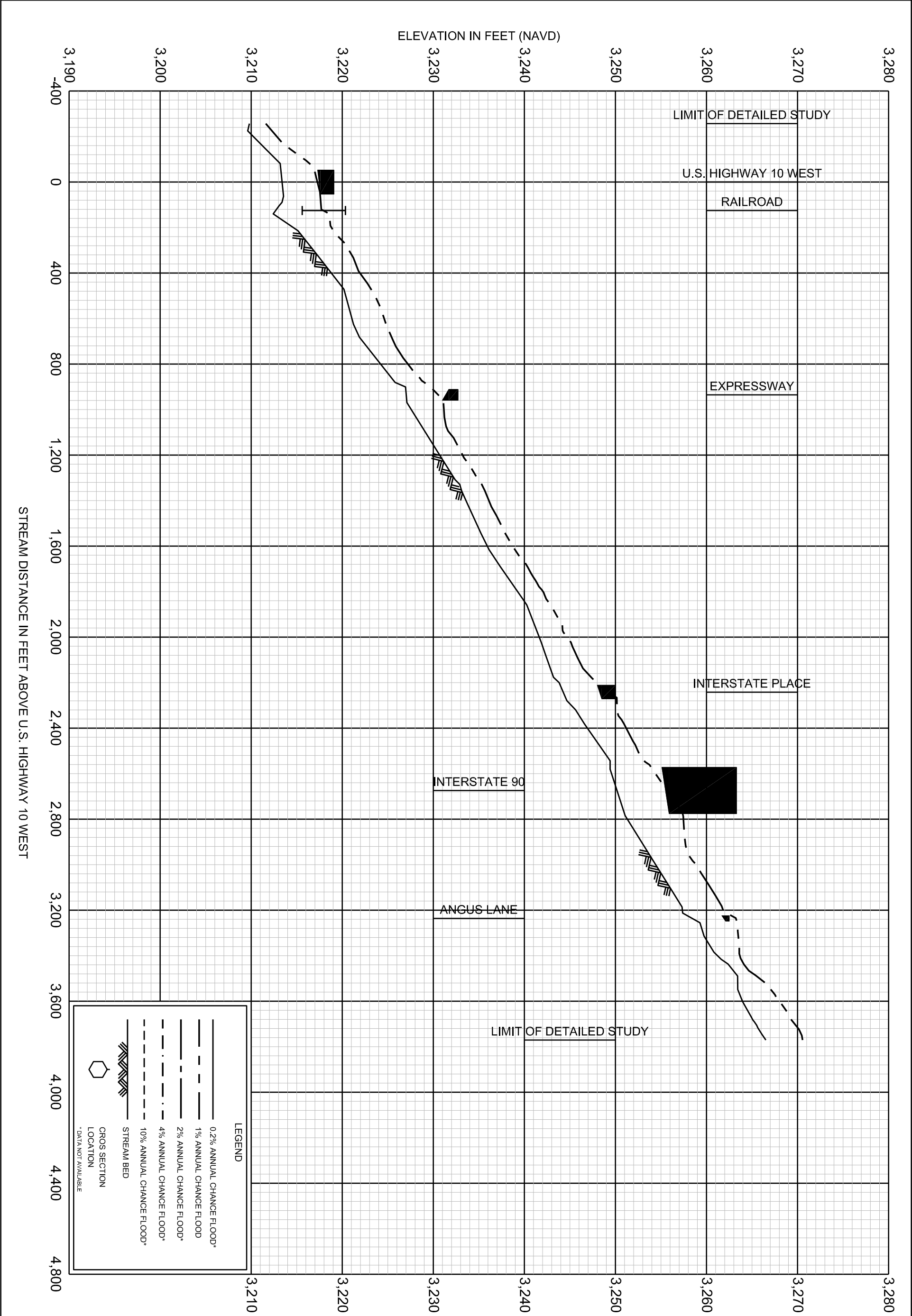
Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Bitterroot River	At confluence with Clark Fork	2,842	20,900	*	29,700	31,800	42,000
Bitterroot River	At 4.3 miles below confluence of Lolo Creek	2,720	20,400	*	29,000	31,000	41,000
Bitterroot River	Just upstream of confluence of Lolo Creek	2,450	19,200	*	27,200	29,100	38,500
Blackfoot River	At USGS Gage No. 3400	2,290	16,800	*	22,500	25,000	31,200
Butler Creek	Just upstream of Interstate 90	9.28	*	*	*	380	*
Clark Fork	At downstream Limit of Detailed Study	9,272	49,250	*	61,000	67,000	86,000
Clark Fork	At USGS Gage No. 3530 below Missoula	9,003	47,000	*	58,000	64,000	82,000
Clark Fork	At USGS Gage No. 3405 above Missoula	5,999	27,000	*	38,200	42,500	56,000
Clark Fork	Just upstream of confluence of Blackfoot River	3,668	15,000	*	22,500	26,000	35,500
Clearwater River	At downstream Limit of Detailed Study	220	3,040	*	3,840	4,180	4,860
Clearwater River	Just upstream of confluence of Morrell Creek	140	2,340	*	2,940	3,170	3,650
Grant Creek	At Interstate Highway 90	25	245	*	380	465	730

REVISED DATA



\*Not Calculated for this Flood Risk Project

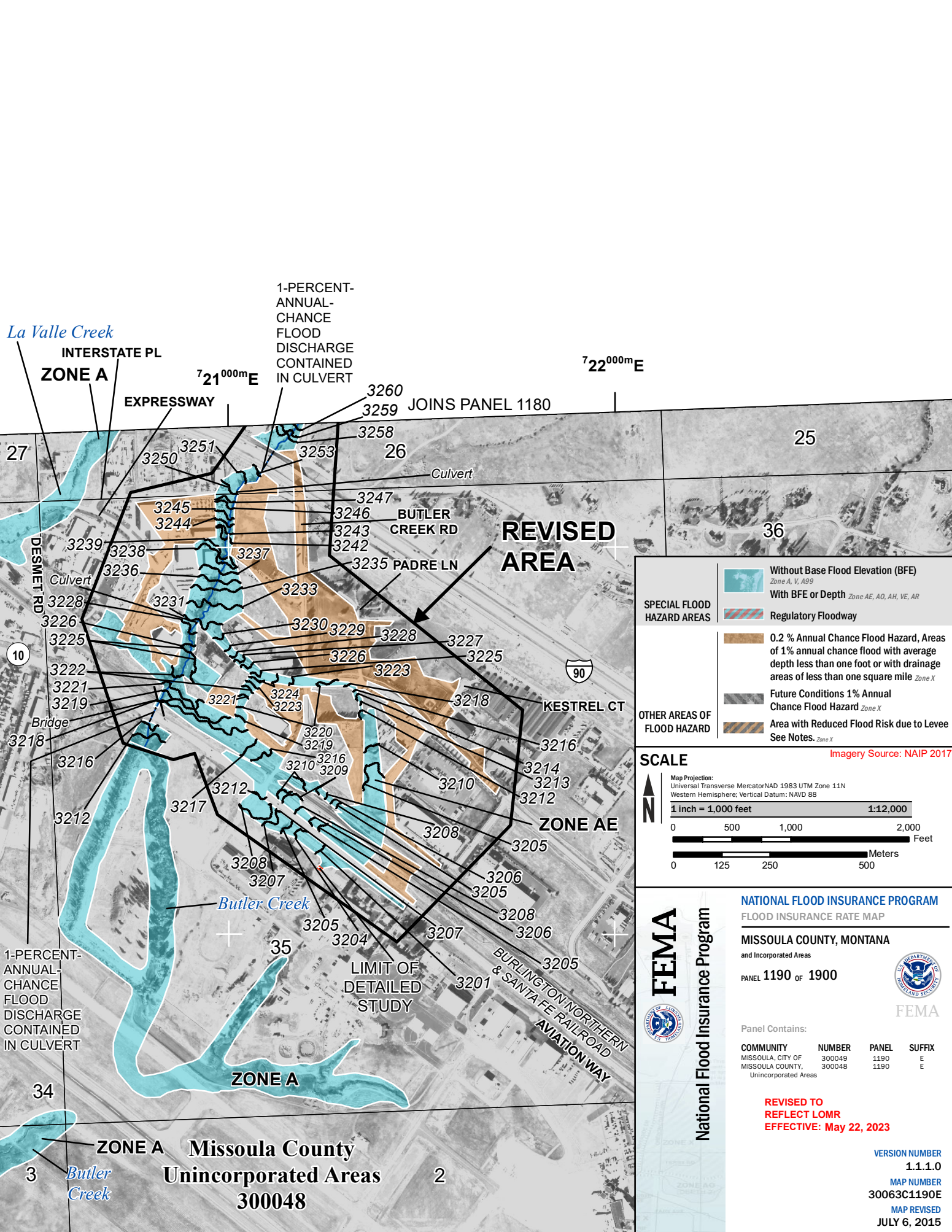
**REVISED TO REFLECT LOMR EFFECTIVE: May 22, 2023**



**LEGEND**

	0.2% ANNUAL CHANCE FLOOD*
	1% ANNUAL CHANCE FLOOD
	2% ANNUAL CHANCE FLOOD*
	4% ANNUAL CHANCE FLOOD*
	10% ANNUAL CHANCE FLOOD*
	STREAM BED
	CROSS SECTION LOCATION

\* DATA NOT AVAILABLE



La Valle Creek

INTERSTATE PL  
ZONE A

1-PERCENT-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

7 22<sup>000</sup>mE

EXPRESSWAY

3260  
3259 JOINS PANEL 1180

27

7 21<sup>000</sup>mE

26

25

DESNETT RD




10

90




36

REVISED AREA

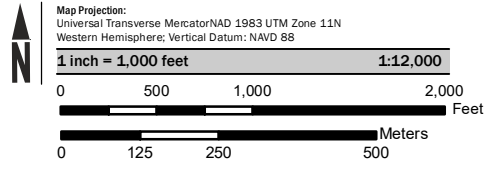
SPECIAL FLOOD HAZARD AREAS

-  Without Base Flood Elevation (BFE)  
*Zone A, V, A99*
-  With BFE or Depth *Zone AE, AO, AH, VE, AR*
-  Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

-  0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
-  Future Conditions 1% Annual Chance Flood Hazard *Zone X*
-  Area with Reduced Flood Risk due to Levee  
See Notes, *Zone X*

SCALE



Imagery Source: NAIP 2017

1-PERCENT-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

LIMIT OF DETAILED STUDY

34

ZONE A

3  
Butler Creek

ZONE A Missoula County  
Unincorporated Areas  
300048

2

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM  
FLOOD INSURANCE RATE MAP

MISSOULA COUNTY, MONTANA  
and Incorporated Areas

PANEL 1190 OF 1900



Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MISSOULA, CITY OF	300049	1190	E
MISSOULA COUNTY, Unincorporated Areas	300048	1190	E

REVISED TO REFLECT LOMR  
EFFECTIVE: May 22, 2023

VERSION NUMBER  
1.1.1.0  
MAP NUMBER  
30063C1190E  
MAP REVISED  
JULY 6, 2015