## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BEEs To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-fool elevations. These BFEs are intended for flood elevation carling purposes only and should be used as the sole source flood elevation information. Accordingly the BFEs are intended for flood elevation information. Accordingly the BFEs are intended for flood elevations.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Sillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Sillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report

The projection used in the preparation of this map was Montana State Plane rise purpection used in the preparation of this map was 85 and 85 fast 87 to 20ne (FIRS zone 2500). The horizontal datum was NAD 85 fast 980 is spheroid. Differences in datum, spheroid, projection or UTM zones used line to roduction. Differences in datum, spheroid, projection and using used to interest production. FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do no affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding convention between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <a href="https://www.ngs.noaa.gov">https://www.ngs.noaa.gov</a> or contact the National Geodetic Survey at the following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for **bench mark**s shown on this map, please contact the Information Services Branch of the Nationa Geodetic Survey at (301) 713-3242, or visit its website at <a href="http://www.ngs.ngaa.gov">https://www.ngs.ngaa.gov</a>.

Base map information shown on this FIRM was derived from NAIP Orthophotograp produced with a one meter ground resolution from photography dated 2005.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the tim of publication. Because changes due to annexations or de-annexations may hav occurred after this map was published, map users should contact appropriat community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community

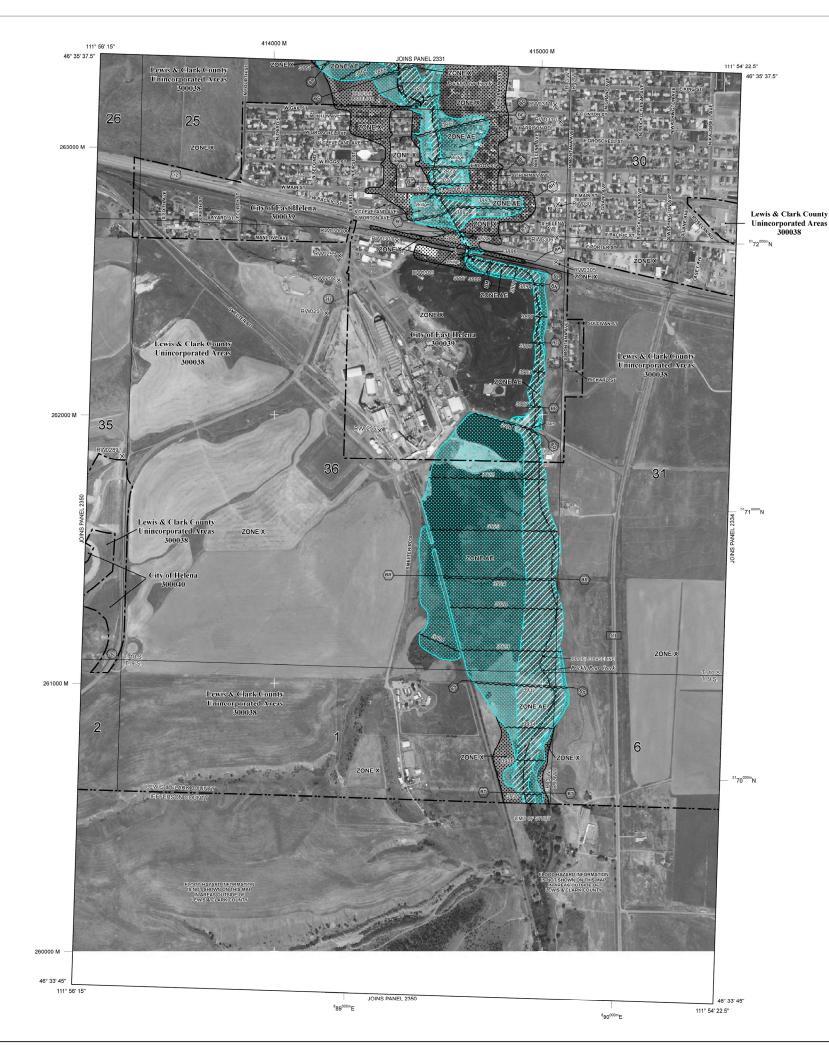
For information on available products associated with this FIRM visit the Map Service Center (MSC) website at <a href="http://msc.tema.gov.">http://msc.tema.gov.</a> Available products may bincule previously issued Letters of Map Change, a Flood insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products, or the Nationa Flood Insurance Program in general, please call the FEMA Map Information exchange (FMIX) at 1-877-FEMA-MAP (1-87/-338-262/) or visit the FEMA website at <a href="https://www.fema.gov/business/mfp">https://www.fema.gov/business/mfp</a>

## Lewis & Clark County Vertical Datum Offset Table

Flooding Source Verti	cal Datum Offset (ft)	Flooding Source	offset (ft)
Blackfoot River	3.7	Orofino Gulch	3.5
East Overflow of Prickly Pear Creek	3.4	Prickly Pear Creek	3.4
Elk Creek	3.3	Silver Creek	3.3
Grizzly Gulch	3.5	South Braid of Prickly Pear Creek	3.4
Last Chance Gulch	3.4	Ten Mile Creek	3.4
North Overflow of Prickly Pear Cree	k 3.4		

Example: To convert Blackfoot River elevations to NAVD 88, 3.7 feet were added to the NGVD 29 elevations.



## LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 19% ANNUAL CHANCE FLOOD

The 19% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 19% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 15% annual charce flood. Areas of Special Flood Hazard include Zores A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 15% annual charce flood.

ZONE A No Base Flood Flevations determined

ZONE AE Base Flood Elevations determined. Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations ZONE AH

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determine

Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently described. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Bevelotins determined.

Coastal flood zone with velocity hazard (wave action); no Base Flood Eleva

ZONE VE

Coastal food zone with velocity hazard (wave action); Base Flood Elevations

1/// FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroschment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. ZONE X

OTHER AREAS

Areas determined to be outside the 0.2% annual chance floodplain

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas

0.2% Annual Chance Floodplain Boundary

Floodway boundary

\_\_\_\_ Zone D boundary CBRS and OPA boundary •••••

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevation flood depths, or flood velocities.

~~ 513~~~ Base Flood Elevation line and value; elevation in feet\*

(EL 987) Base Flood Elevation value where uniform within zone; elevation in

Referenced to the North American Vertical Datum of 1988  $\langle A \rangle$ —⟨A⟩ Cross section line

23 -----23

● M1.5

45° 02' 08", 93° 02' 12"

1000-meter ticks: Montana State Plane Zone (FIPS Zone 2500), Lambert Conformal Conic projection

4989000 M 1000-meter Universal Transverse Mercator grid values, zone 11 <sup>49</sup>89<sup>000m</sup> N

Bench mark (see explanation in Notes to Users section of this FIRM panel)
River Mile
MAP REPOSITORIES
Refer to Map Repositories list on Map Index DX5510 X

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

o determine if flood insurance is available in this community, contact your insurance agen r call the National Flood Insurance Program at 1-800-638-6620. 

MAP SCALE 1" = 500'

250 0 500 1000 FEET METERS



PANEL 2333 OF 2450

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

PANEL 2333E

CONTAINS:

 COMMUNITY
 NUMBER
 PANEL
 SUFFIX

 EAST HELENA, CITY OF
 300039
 2333
 E

 HIELENA, CITY OF
 500040
 2505
 C

 LEWIS & CLARK COUNTY, UNINCORPORATED AREAS
 2333
 E



Federal Emergency Management Agency