

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 2



SISKIYOU COUNTY, CALIFORNIA

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
DORRIS, CITY OF*	060442
DUNSMUIR, CITY OF	060363
ETNA, CITY OF	060364
FORT JONES, TOWN OF	060365
MONTAGUE, CITY OF	060451
MT. SHASTA, CITY OF*	060452
SISKIYOU COUNTY, UNINCORPORATED AREAS	060362
TULELAKE, CITY OF*	060087
WEED, CITY OF	060649
YREKA, CITY OF	060367

*No Special Flood Hazard Areas Identified

**PRELIMINARY DATE:
MARCH 28, 2024**

REVISED:

TBD

FLOOD INSURANCE STUDY NUMBER
06093CV001B
Version Number 2.6.4.6



FEMA

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<u>Flood Profiles</u>	<u>Panel</u>
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Cottonwood Creek	04-06 P
Greenhorn Creek	07-08 P
Humbug Gulch	09-12 P
Indian Creek	13-15 P
Klamath River	16-24 P
Oregon Slough	25-27 P
Sacramento River	28-32 P
Shasta River	33-34 P
Squaw Valley Creek	35-39 P
Yreka Creek	40-44 P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT SISKIYOU COUNTY, CALIFORNIA

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60, *Criteria for Land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal Government. Congress also recognized that most of these flood-prone buildings were built

by individuals who did not have sufficient knowledge of the flood hazard to make informed decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRMs for the community or after December 31, 1974, whichever is later. These buildings are generally referred to as "Post-FIRM" buildings.

1.2 Purpose of this Flood Insurance Study Report

This Flood Insurance Study (FIS) Report revises and updates information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community's regulations.

1.3 Jurisdictions Included in the Flood Insurance Study Project

This FIS Report covers the entire geographic area of Siskiyou County, California.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC-8) sub-basins affecting each, are shown in Table 1. The FIRM panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

Jurisdictions that have no identified SFHAs as of the effective date of this study are indicated in the table. Changed conditions in these communities (such as urbanization or annexation) or the availability of new scientific or technical data about flood hazards could make it necessary to determine SFHAs in these jurisdictions in the future.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Dorris, City of ¹	060442	18010205	06093C0775D	
Dunsmuir, City of	060363	18020005	06093C3025D, 06093C3431D ² , 06093C3432D, 06093C3434D	
Etna, City of	060364	18010208	06093C2458E, 06093C2459E	

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Fort Jones, Town of	060365	18010208	06093C2001E, 06093C2002E	
Montague, City of	060451	18010207	06093C1585D	
Mt. Shasta, City of ¹	060452	18020005	06093C3025D	
Siskiyou County, Unincorporated Areas	060362	17100309, 18010205, 18010207, 18010208, 18010209, 18010210, 18020002, 18020003, 18020004, 18020005, 18010204, 18010206	06093C0025D ² ,	
			06093C0050D ² ,	
			06093C0075D ² ,	
			06093C0100D ² ,	
			06093C0125D ² ,	
			06093C0150D ² ,	
			06093C0175D ² ,	
			06093C0190D ² ,	
			06093C0195D,	
			06093C0225D ² ,	
			06093C0250D ² ,	
			06093C0275D,	
			06093C0300D,	
			06093C0325D ² ,	
			06093C0350D ² ,	
			06093C0375D,	
			06093C0400D,	
			06093C0425D ² ,	
			06093C0450D ² ,	
			06093C0455D ² ,	
06093C0460D ² ,				
06093C0465D,				
06093C0470D,				
06093C0500D ² ,				
06093C0525D ² ,				
06093C0550D ² ,				
06093C0575D ² ,				
06093C0600D,				
06093C0605D ² ,				
06093C0610D,				
06093C0615D ² ,				
06093C0620D ² ,				
06093C0630D,				
06093C0635D ² ,				
06093C0640D,				
06093C0645D,				
06093C0675D,				
06093C0700D,				
06093C0725D,				
06093C0750D,				
06093C0775D,				
06093C0800D,				
06093C0825D,				
06093C0850D,				
06093C0875D,				

Table 1: Listing of NFIP Jurisdictions (*continued*)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Siskiyou County, Unincorporated Areas (<i>continued</i>)	060362	17100309, 18010205, 18010207, 18010208, 18010209, 18010210, 18020002, 18020003, 18020004, 18020005, 18010204, 18010206	06093C0900D ² ,	
			06093C0925D ² ,	
			06093C0930D ² ,	
			06093C0935D ² ,	
			06093C0940D ² ,	
			06093C0945D ² ,	
			06093C0955D ² ,	
			06093C0960D ² ,	
			06093C0965D ² ,	
			06093C0970D ² ,	
			06093C0980D ² ,	
			06093C0985D ² ,	
			06093C0990D ² ,	
			06093C0995D ² ,	
			06093C1005D ² ,	
			06093C1010D ² ,	
			06093C1015D ² ,	
			06093C1020D ² ,	
			06093C1030D ² ,	
			06093C1035D ² ,	
06093C1040D ² ,				
06093C1045D ² ,				
06093C1055D ² ,				
06093C1060D ² ,				
06093C1065D ² ,				
06093C1070D ² ,				
06093C1100D ² ,				
06093C1125D ² ,				
06093C1150D ² ,				
06093C1175D ² ,				
06093C1200D ² ,				
06093C1225D ² ,				
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06093C1275D ² ,				
06093C1300D ² ,				
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06093C1350D ² ,				
06093C1375D ² ,				
06093C1400D ² ,				
06093C1425D ² ,				
06093C1450D ² ,				
06093C1475D ² ,				
06093C1500E ² ,				
06093C1505D ² ,				
06093C1510D ² ,				
06093C1515E ² ,				
06093C1520E ² ,				
06093C1539E ² ,				
06093C1550E ² ,				
06093C1555D ² ,				

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
<p>Siskiyou County, Unincorporated Areas (continued)</p>	<p>060362</p>	<p>17100309, 18010205, 18010207, 18010208, 18010209, 18010210, 18020002, 18020003, 18020004, 18020005, 18010204, 18010206</p>	<p>06093C1556D, 06093C1557D, 06093C1558D, 06093C1559D, 06093C1565D, 06093C1570D, 06093C1585D, 06093C1600D, 06093C1625D, 06093C1650D, 06093C1675D, 06093C1700D, 06093C1725D, 06093C1750D, 06093C1775D², 06093C1800D², 06093C1825D², 06093C1850D², 06093C1875D, 06093C1900D, 06093C1925D, 06093C1950D², 06093C1975D, 06093C2001E, 06093C2002E, 06093C2003E, 06093C2004E, 06093C2008E, 06093C2010E, 06093C2011E, 06093C2012E, 06093C2013E, 06093C2014E, 06093C2020E, 06093C2050D, 06093C2075D, 06093C2080E, 06093C2085E, 06093C2087E, 06093C2090E, 06093C2091E, 06093C2092E, 06093C2093E, 06093C2094E, 06093C2100D, 06093C2125D, 06093C2150D², 06093C2175D, 06093C2200D, 06093C2225D, 06093C2250D², 06093C2275D,</p>	

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Siskiyou County, Unincorporated Areas (continued)	060362	17100309,	06093C2300D ² ,	
		18010205,	06093C2325D ² ,	
		18010207,	06093C2350D,	
		18010208,	06093C2375D,	
		18010209,	06093C2400D,	
		18010210,	06093C2425D ² ,	
		18020002,	06093C2450D,	
		18020003,	06093C2456E,	
		18020004,	06093C2457E,	
		18020005,	06093C2458E,	
		18010204,	06093C2459E,	
		18010206	06093C2466E,	
			06093C2467E,	
			06093C2468E,	
			06093C2469E,	
			06093C2475E ² ,	
			06093C2501E,	
			06093C2502E,	
			06093C2503E,	
			06093C2504E,	
	06093C2510E,			
	06093C2511E,			
	06093C2512E,			
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	06093C2567D,			
	06093C2570D,			
	06093C2600D,			
	06093C2625D ² ,			
	06093C2650D ² ,			
	06093C2675D,			
	06093C2700D,			
	06093C2725D ² ,			
	06093C2750D ² ,			
	06093C2775D ² ,			
	06093C2800D,			
	06093C2825D,			
	06093C2850D,			
	06093C2875D,			

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Siskiyou County, Unincorporated Areas (continued)	060362	17100309, 18010205, 18010207, 18010208, 18010209, 18010210, 18020002, 18020003, 18020004, 18020005, 18010204, 18010206	06093C2900E, 06093C2905E, 06093C2908E, 06093C2910E, 06093C2915E, 06093C2916E, 06093C2920E, 06093C2950E, 06093C2975D ² , 06093C3000D, 06093C3025D, 06093C3030D ² , 06093C3035D ² , 06093C3040D ² , 06093C3041D ² , 06093C3042D ² , 06093C3043D ² , 06093C3044D, 06093C3055D ² , 06093C3060D ² , 06093C3063D, 06093C3065D, 06093C3070D, 06093C3100D, 06093C3125D, 06093C3150D, 06093C3175D ² , 06093C3200D, 06093C3225D ² , 06093C3250D, 06093C3275D, 06093C3300D, 06093C3325D, 06093C3350D ² , 06093C3375D ² , 06093C3400D ² , 06093C3425D ² , 06093C3430D ² , 06093C3431D ² , 06093C3432D, 06093C3433D, 06093C3434D, 06093C3440D ² , 06093C3441D, 06093C3442D ² , 06093C3455D ² , 06093C3457D, 06093C3460D, 	

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Siskiyou County, Unincorporated Areas (continued)	060362	17100309,	06093C3465D ² ,	
		18010205,	06093C3470D,	
		18010207,	06093C3500D,	
		18010208,	06093C3525D,	
		18010209,	06093C3550D,	
		18010210,	06093C3575D,	
		18020002,	06093C3600D,	
		18020003,	06093C3625D,	
		18020004,	06093C3650D ² ,	
		18020005,	06093C3675D ² ,	
18010204,	06093C3700D,			
18010206	06093C3725D,			
		06093C3750D ²		
Tulelake, City of ¹	060087	18010204	06093C0875D	
Weed, City of	060649	18010207	06093C2560D, 06093C2567D, 06093C2600D	
Yreka, City of	060367	18010207	06093C1100D, 06093C1125D, 06093C1556D, 06093C1557D, 06093C1558D, 06093C1559D, 06093C1570D, 06093C1600D	

¹ No Special Flood Hazard Areas Identified
² Panel Not Printed

1.4 Considerations for using this Flood Insurance Study Report

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1-percent-annual-chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1-percent-annual-chance and 0.2-percent-annual-chance floodplains; and 1-percent-annual-chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

- Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 30, "Map Repositories," within this FIS Report.

- New FIS Reports are frequently developed for multiple communities, such as entire counties. A countywide FIS Report incorporates previous FIS Reports for individual communities and the unincorporated area of the county (if not jurisdictional) into a single document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for Siskiyou County became effective on January 19, 2011. Refer to Table 27 for information about subsequent revisions to the FIRMs.

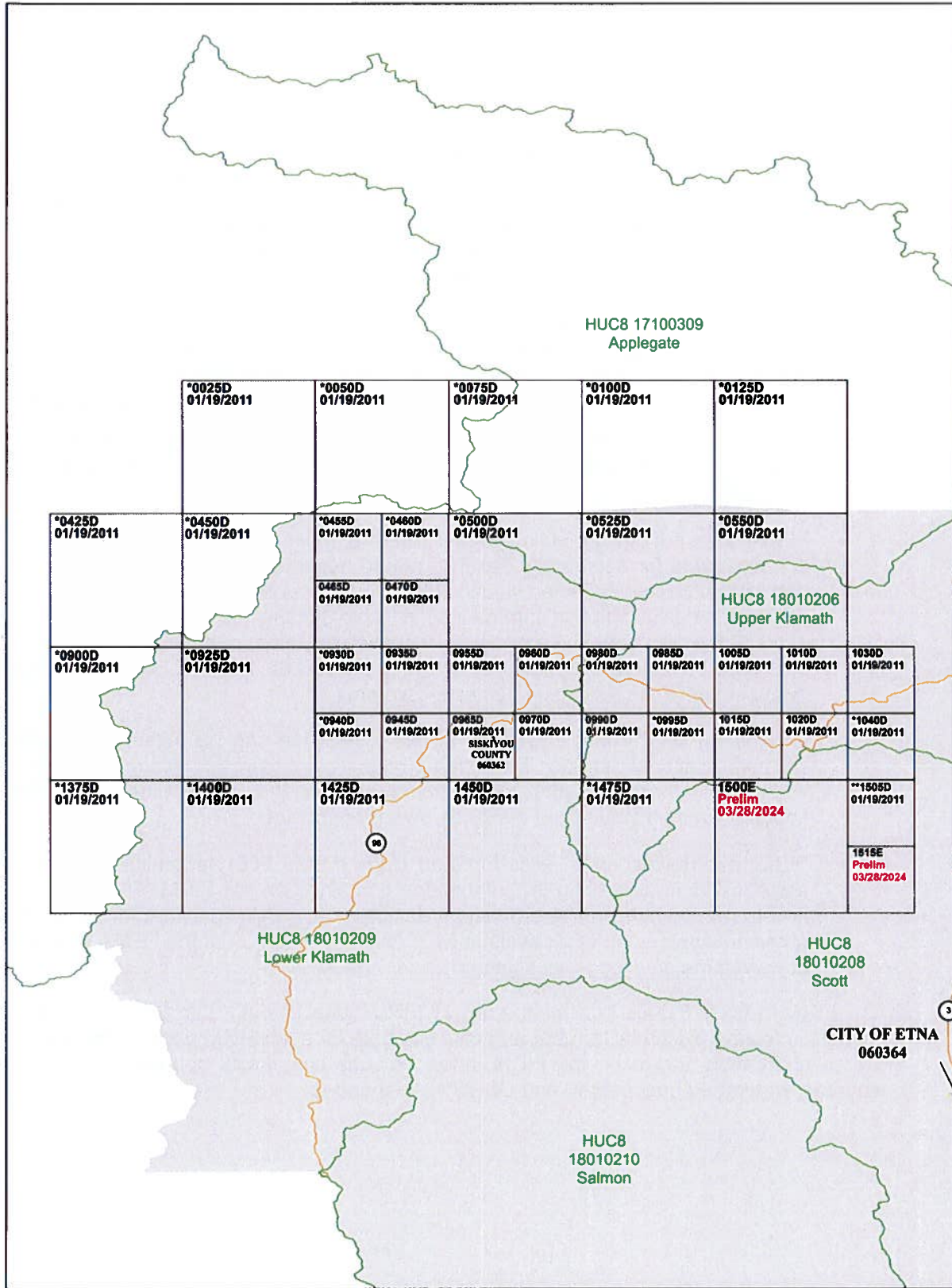
- FEMA does not design, build, inspect, operate, maintain, or certify levees. FEMA is responsible for accurately identifying flood hazards and communicating those hazards and risks to affected stakeholders. FEMA has identified one or more levee systems in this jurisdiction summarized in Table 8 of this FIS Report. For FEMA to accredit the identified levee systems, the levee systems must meet the criteria of the Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10), titled "Mapping of Areas Protected by Levee Systems."

Information on the levee systems in this jurisdiction can be obtained from the USACE National Levee Database (<https://levees.sec.usace.army.mil/>). For additional information, the user should contact the appropriate jurisdiction floodplain administrator and the levee owner or sponsor.

- FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at www.fema.gov/flood-maps/tutorials.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Siskiyou County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and USGS HUC-8 codes.

Figure 1: FIRM Index




1 inch = 32,642 feet 1:301,700
 0 12,500 25,000 50,000 75,000 feet
 Map Projection: GCS WGS 1984
 Vertical Datum: NAVD88

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)
 SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

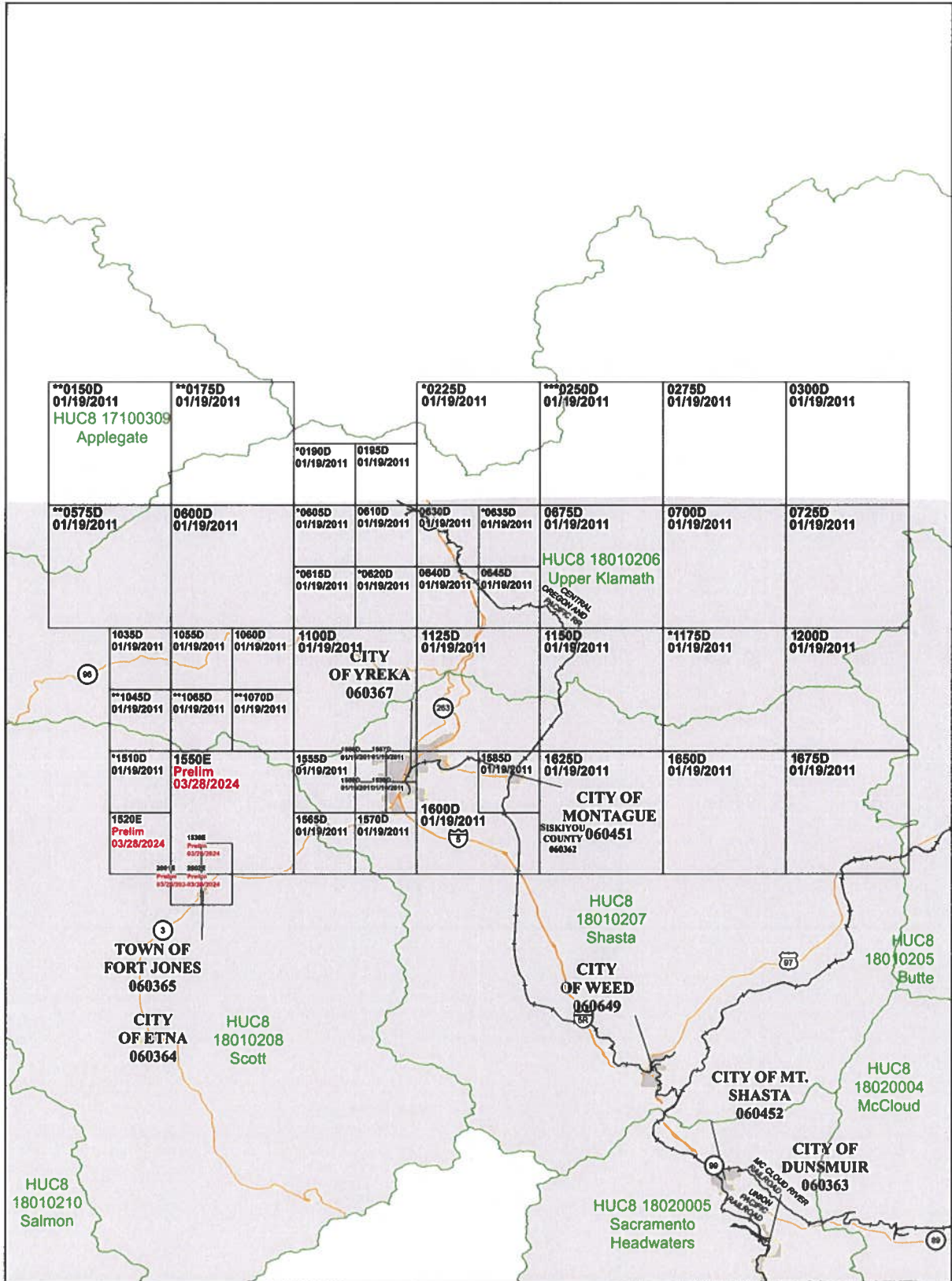
* PANEL NOT PRINTED - AREA IN ZONE D
 **PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D, REST OF PANEL IN ZONE X

NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP INDEX
 SISKIYOU COUNTY, CALIFORNIA And Incorporated Areas
 PAGE 1 OF 6
 PANELS PRINTED:
 0465, 0470, 0935, 0945, 0955, 0960, 0965, 0970, 0980, 0985, 0990, 1005, 1010, 1015, 1020, 1030, 1425, 1450, 1500, 1515



FEMA
 MAP NUMBER 06093CIND1B
 EFFECTIVE DATE Prelim Issue Date: 03/28/2024

Figure 1: FIRM Index (continued)



Map Projection: GCS WGS 1984
 Vertical Datum: NAVD88
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D; REST OF PANEL IN ZONE X
 **PANEL NOT PRINTED - AREA IN ZONE D
 ***PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

SISKIYOU COUNTY, CALIFORNIA And Incorporated Areas

PAGE 2 OF 6

PANELS PRINTED:

0195, 0275, 0300, 0600, 0610, 0630, 0640, 0645, 0675, 0700, 0725, 1035, 1055, 1060, 1100, 1125, 1150, 1200, 1520, 1539, 1550, 1555, 1556, 1557, 1558, 1559, 1565, 1570, 1585, 1600, 1625, 1650, 1675, 2001, 2002

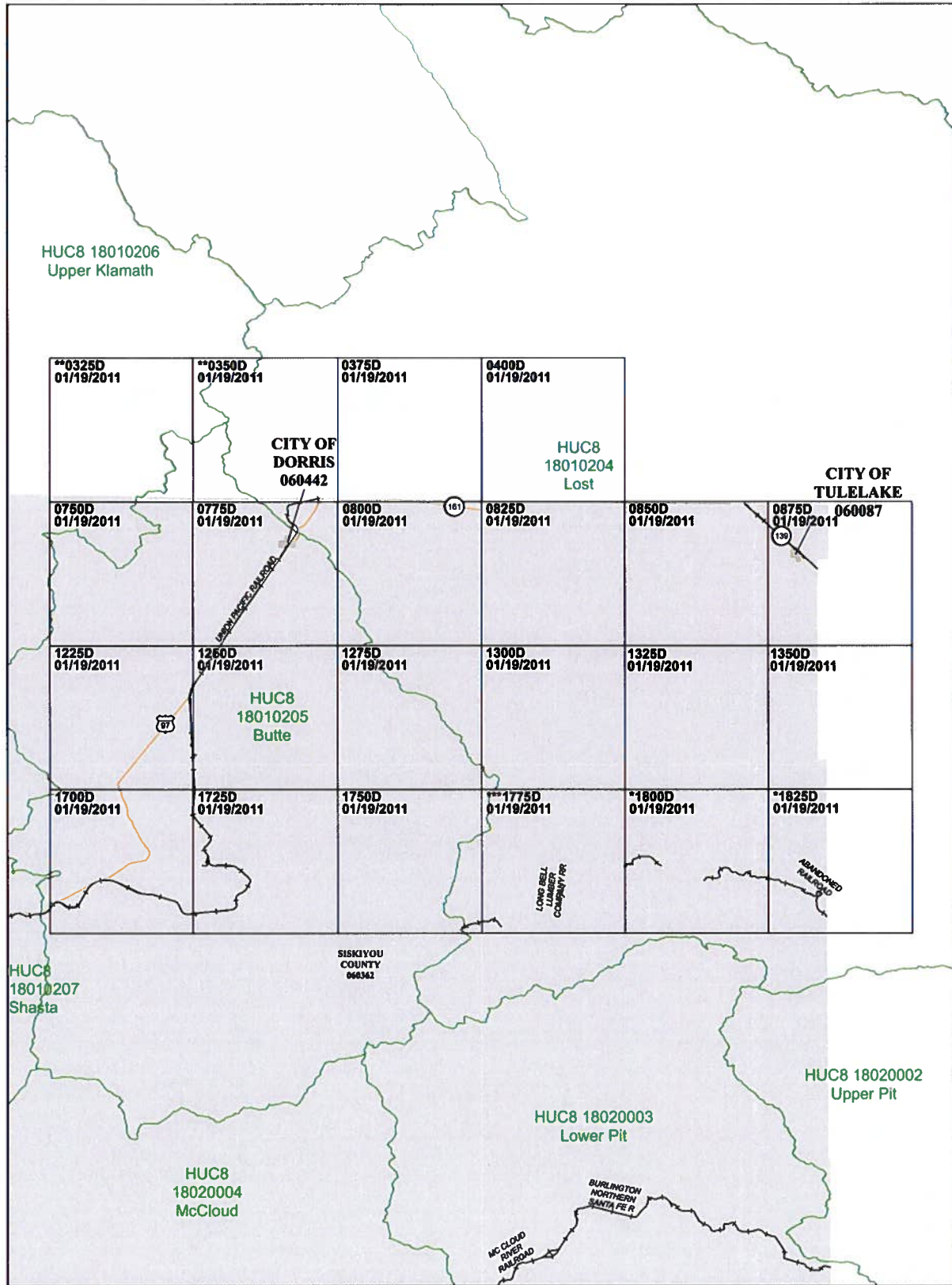


FEMA

MAP NUMBER
06093CIND2B

EFFECTIVE DATE
Prelim Issue Date: 03/28/2024

Figure 1: FIRM Index (continued)



1 inch = 30,131 feet 1:361,569
 0 12,500 25,000 50,000 75,000 feet
 Map Projection: GCS WGS 1984
 Vertical Datum: NAVD88

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - AREA IN ZONE D
 **PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS
 ***PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D; REST OF PANEL IN ZONE X

NATIONAL FLOOD INSURANCE PROGRAM

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SISKIYOU COUNTY, CALIFORNIA And Incorporated Areas

PAGE 3 OF 6

PANELS PRINTED:

0375, 0400, 0750, 0775, 0800, 0825, 0850, 0875, 1225, 1250, 1275, 1300, 1325, 1350, 1700, 1725, 1750



FEMA

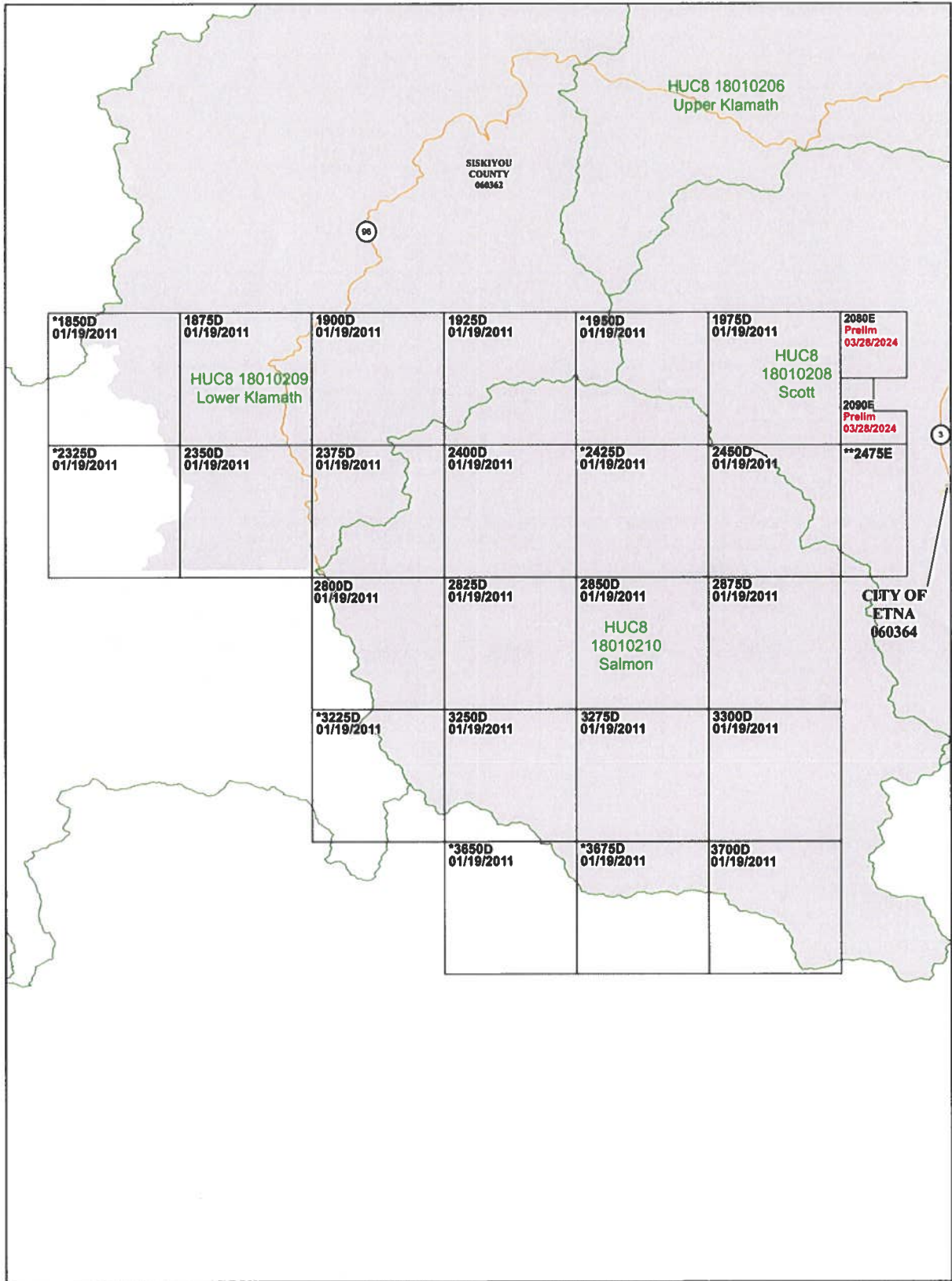
MAP NUMBER

06093CIND3B

EFFECTIVE DATE

Prelim Issue Date: 03/28/2024

Figure 1: FIRM Index (continued)



Map Projection:
GCS WGS 1984
Vertical Datum: NAVD88

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SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - AREA IN ZONE D
**PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D; REST OF PANEL IN ZONE X

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PANELS PRINTED:

1875, 1900, 1925, 1975, 2080, 2090, 2350, 2375, 2400, 2450, 2800, 2825, 2850, 2875, 3250, 3275, 3300, 3700

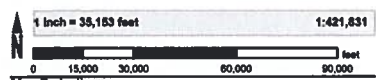
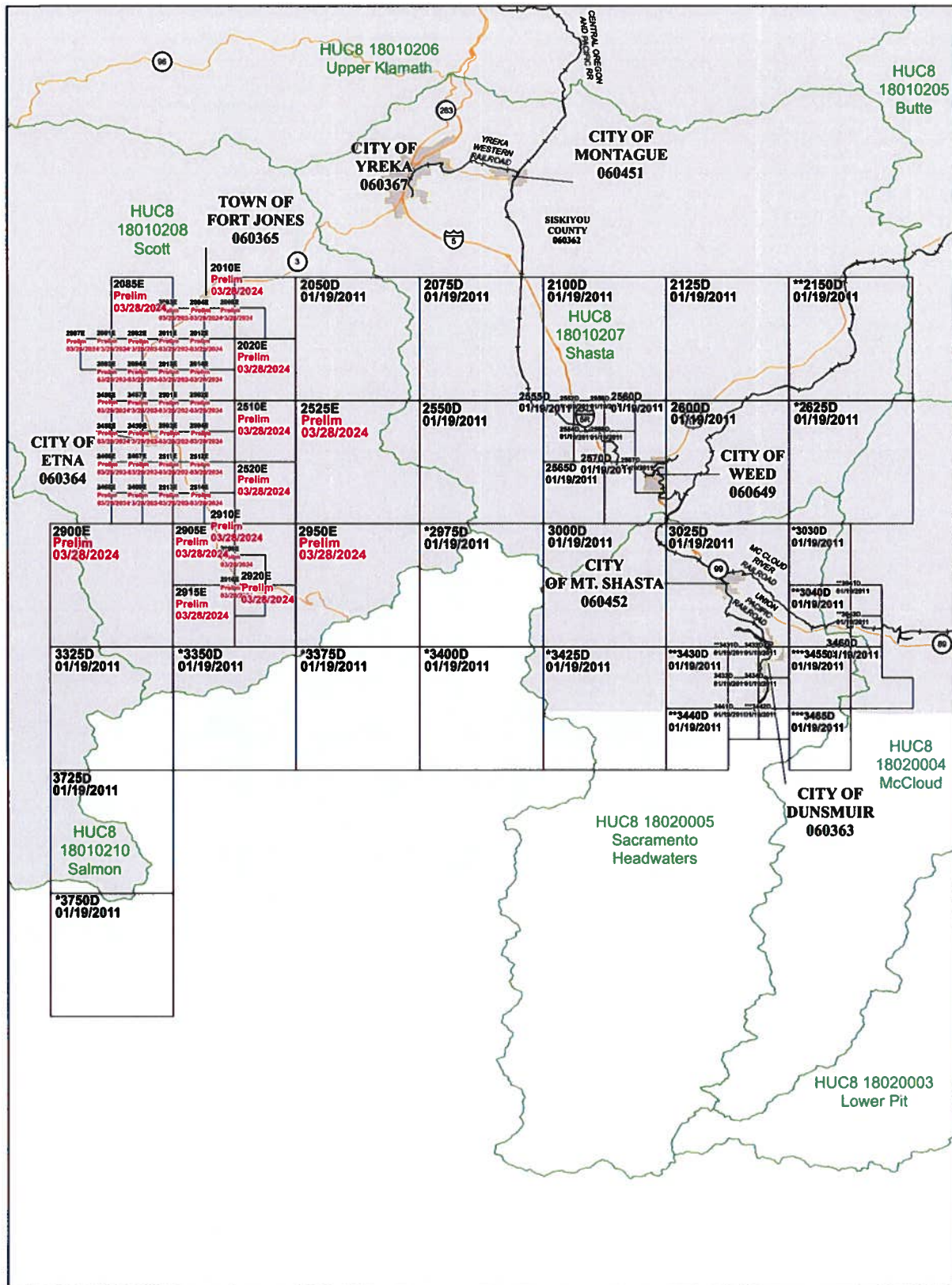


FEMA

MAP NUMBER
06093CIND4B

EFFECTIVE DATE
Prelim Issue Date: 03/28/2024

Figure 1: FIRM Index (continued)



THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION


* PANEL NOT PRINTED - AREA IN ZONE D
**PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D; REST OF PANEL IN ZONE X
***PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP INDEX

SISKIYOU COUNTY, CALIFORNIA And Incorporated Areas

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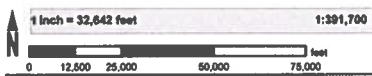
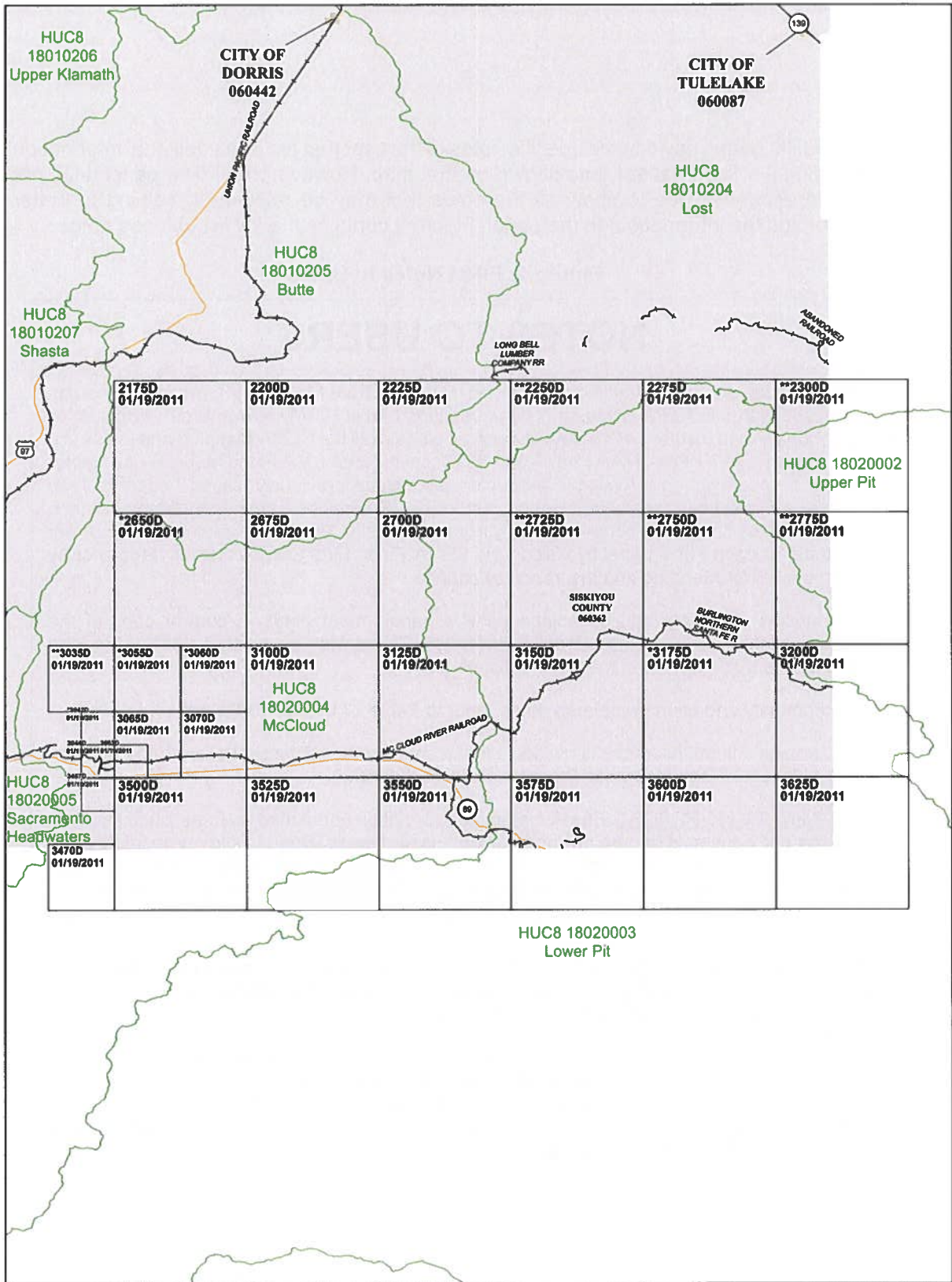
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2003, 2004, 2008, 2010, 2011, 2012, 2013, 2014, 2020, 2050, 2075, 2085, 2087, 2091, 2092, 2093, 2094, 2100, 2125, 2456, 2457, 2458, 2459, 2466, 2467, 2468, 2469, 2501, 2502, 2503, 2504, 2510, 2511, 2512, 2513, 2514, 2520, 2525, 2550, 2552, 2554, 2555, 2556, 2558, 2560, 2585, 2587, 2570, 2600, 2900, 2905, 2908, 2910, 2915, 2916, 2920, 2950, 3000, 3025, 3325, 3432, 3433, 3434, 3441, 3460, 3725


FEMA

MAP NUMBER
06093CIND5B

EFFECTIVE DATE
Prelim Issue Date: 03/28/2024

Figure 1: FIRM Index (continued)



Map Projection:
GCS WGS 1984
Vertical Datum: NAVD88

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - NATIONAL FOREST IN ZONE D, REST OF PANEL IN ZONE X
**PANEL NOT PRINTED - AREA IN ZONE D

NATIONAL FLOOD INSURANCE PROGRAM
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SISKIYOU COUNTY, CALIFORNIA And Incorporated Areas

PAGE 6 OF 6

PANELS PRINTED:

2175, 2200, 2225, 2275, 2700, 3044, 3063, 3065, 3070, 3100, 3125, 3150, 3200, 3457, 3470, 3500, 3525, 3550, 3575, 3600, 3625



FLMA

MAP NUMBER
06093CIND88

EFFECTIVE DATE
Prelim Issue Date: 03/28/2024

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

Figure 2: FIRM Notes to Users

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at msc.fema.gov. Available products may include 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 website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Mapping and Insurance eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 27 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

PRELIMINARY FIS REPORT: FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

Figure 2. FIRM Notes to Users (continued)

FLOODWAY INFORMATION: 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 FIS Report for this jurisdiction.

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may have reduced flood hazards due to flood control structures. Refer to Section 4.3 "Dams and Other Flood Hazard Reduction Measures" of this FIS Report for information on flood control structures for this jurisdiction.

PROJECTION INFORMATION: The projection used in the preparation of the map was Universal Transverse Mercator (UTM) Zone 10. The horizontal datum was the North American Datum of 1983 NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM 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 conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 30 of this FIS Report.

BASE MAP INFORMATION: Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020. The 2011 panels used base map information provided by the Siskiyou County Department of Public Works and the U.S. Census Bureau. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

The 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 may reflect stream channel distances that differ from what is shown on the map.

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

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Siskiyou County, California, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 27 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

Figure 2. FIRM Notes to Users (continued)

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for Siskiyou County, California, effective TBD.

NON-ACCREDITED LEVEE SYSTEM: This panel contains a levee system that has not been accredited and is therefore not recognized as reducing the 1-percent-annual-chance flood hazard.

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Siskiyou County.

Figure 3: Map Legend for FIRM



<p>SPECIAL FLOOD HAZARD AREAS: The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.</p>	
	Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)
Zone A	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
Zone AE	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
Zone AH	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
Zone AO	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
Zone AR	The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
Zone A99	The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
Zone V	The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
Zone VE	Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.
	Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM (continued)







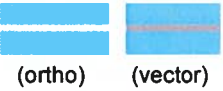






OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.
	Area with Reduced Flood Hazard due to Accredited or Provisionally Accredited Levee System: Area is shown as reduced flood hazard from the 1-percent-annual-chance or greater flood by a levee system. Overtopping or failure of any levee system is possible. See Notes to Users for important information.
	Area with Undetermined Flood Hazard due to Non-Accredited Levee System: Analysis and mapping procedures for non-accredited levee systems were applied resulting in a flood insurance rate zone where flood hazards are undetermined, but possible.
OTHER AREAS	
	Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.
	Unshaded Zone X: Areas of minimal flood hazard.
FLOOD HAZARD AND OTHER BOUNDARY LINES	
	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet
GENERAL STRUCTURES	
 Aqueduct Channel Culvert Storm Sewer	Channel, Culvert, Aqueduct, or Storm Sewer
 Dam Jetty Weir	Dam, Jetty, Weir
	Levee, Dike, or Floodwall

Figure 3: Map Legend for FIRM (continued)















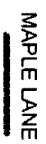









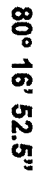
 <i>Bridge</i>	Bridge
REFERENCE MARKERS	
 22.0	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
 20.2	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
 21.1	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
 17.5	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
 8	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
 513	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
 <i>Missouri Creek</i>	River, Stream or Other Hydrographic Feature
 234	Interstate Highway
 234	U.S. Highway
 234	State Highway
 234	County Highway

Figure 3: Map Legend for FIRM (continued)

 MAPLE LANE	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
 RAILROAD	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
	Name of Land Grant
	Section Number
	Range, Township Number
	Horizontal Reference Grid Coordinates (UTM)
	Horizontal Reference Grid Coordinates (State Plane)
	Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and Siskiyou County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1-percent-annual-chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 22), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1-percent and 0.2-percent-annual-chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1-percent-annual-chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM. Figure 3, "Map Legend for FIRM", describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within Siskiyou County, respectively.

Table 2, "Flooding Sources Included in this FIS Report," lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 12. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1-percent-annual-chance floodplain corresponds to the SFHAs. The 0.2-percent-annual-chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data. The procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines) or ponding)	Area (mi ²) (estuaries (Y/N)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Alder Creek	Siskiyou County, Unincorporated Areas	Confluence with Sniklaw Creek	Approximately 0.4 miles upstream from Big Meadows Road	18010208	0.8	N		A	2021
Big Carmen Creek	Siskiyou County, Unincorporated Areas	Confluence with Grouse Creek	Approximately 4.423 feet upstream from the confluence with Grouse Creek	18010208	0.8	N		A	2021
Big Mill Creek	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 1 mile upstream from the divergence of Big Mill Creek Overflow	18010208	1.4	N		A	2021
Big Mill Creek Overflow	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Divergence from Big Mill Creek	18010208	0.5	N		A	2021
Boles Creek	Weed, City of	At Central Oregon and Pacific Railroad	Approximately 0.1 miles upstream from Boles Street	18010207	0.5	N		AE, AO	1979
Boulder Creek	Siskiyou County, Unincorporated Areas	Confluence with South Fork Scott River	Approximately 5.145 feet upstream from the confluence with South Fork Scott River	18010208	1.0	N		A	2021
Cedar Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River and Facey Gulch	Approximately 2.360 feet upstream of 3 State Highway	18010208	2.7	N		A	2021
Cottonwood Creek	Siskiyou County, Unincorporated Areas	Approximately 0.3 miles upstream from the confluence with Klamath River	Approximately 1.1 miles upstream from Front Street	18010206	2.8	N		AE	1979

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Crystal Creek	Siskiyou County, Unincorporated Areas	Approximately 0.6 miles downstream of Holzhauser Lane	Approximately 0.4 miles upstream of 3 State Highway	18010208	3.1		N	A	2021
Dockery Gulch	Siskiyou County, Unincorporated Areas	Confluence with McConaughy Gulch	Approximately 1,850 feet upstream from McConaughy Gulch Road	18010208	0.6		N	A	2021
East Fork Scott River	Siskiyou County, Unincorporated Areas	Approximately 4,171 feet upstream from the confluence of Long Gulch	Just downstream from the confluence of Meadow Gulch	18010208	8.8		N	A	2021
East Fork Scott River	Siskiyou County, Unincorporated Areas	Confluence with South Fork Scott River	Approximately 4,171 feet upstream from the confluence of Long Gulch	18010208	0.8		N	AE	2022
Emigrant Creek	Siskiyou County, Unincorporated Areas	Confluence with Mill Creek	Approximately 1.4 miles upstream of Mill Creek Road	18010208	2.8		N	A	2021
Etna Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 1.6 miles upstream from the confluence of Whisky Creek	18010208	6.2		N	AE	2022
Facey Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River and Cedar Gulch	Approximately 8,380 feet upstream of East Callahan Road	18010208	2.3		N	A	2021
Fox Creek	Siskiyou County, Unincorporated Areas	Confluence with South Fork Scott River	Approximately 2,139 feet upstream from the confluence with South Fork Scott River	18010208	0.4		N	A	2021

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRMA	Date of Analysis
French Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 1.2 miles upstream from the confluence of Horse Range Creek	18010208	7.4		N	A	2021
Graveyard Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 0.8 miles upstream from Scott River Road	18010208	1.2		N	A	2021
Greenhorn Creek	Yreka, City of	Confluence with Yreka Creek	At Greenhorn Dam Spillway / Greenhorn Reservoir	18010207	0.6		N	AE	1979
Grouse Creek	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 0.5 miles upstream from the confluence of Big Carmen Creek	18010208	1.7		N	A	2021
Hamlin Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 182 feet downstream from Scarface Road	18010208	3.7		N	A	2021
Hayes Gulch	Siskiyou County, Unincorporated Areas	Confluence with Grouse Creek	Approximately 2,200 feet upstream from confluence with Grouse Creek	18010208	0.4		N	A	2021
Heartstrand Gulch	Siskiyou County, Unincorporated Areas	Confluence of Scott River	Approximately 3.5 miles upstream from Eastside Road	18010208	5.2		N	A	2021
Horse Range Creek	Siskiyou County, Unincorporated Areas	Confluence with French Creek	Approximately 2,290 feet upstream from the confluence of French Creek	18010208	0.4		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Horseshoe Gulch	Siskiyou County, Unincorporated Areas	Confluence with McConaughy Gulch	Approximately 8,914 feet upstream from the confluence with McConaughy Gulch	18010208	1.7		N	A	2021
Hull Gulch	Siskiyou County, Unincorporated Areas	Confluence with Emigrant Creek	Approximately 4,420 feet upstream of Quartz Valley Road	18010208	1.2		N	A	2021
Humbug Gulch	Siskiyou County, Unincorporated Areas; Yreka, City of	Confluence with Yreka Creek	Approximately 3,972 feet upstream of Lane Street	18010207	1.6		N	AE	1979
Hurds Gulch	Siskiyou County, Unincorporated Areas	Confluence of Scott River	Approximately 9,720 feet upstream of Eastside Road	18010208	3.6		N	A	2021
Indian Creek	Siskiyou County, Unincorporated Areas	Confluence of Scott River	Approximately 1,840 feet downstream from the confluence of Bloody Gulch	18010208	2.9		N	A	2021
Indian Creek	Siskiyou County, Unincorporated Areas	Confluence with Klamath River	Approximately 2.4 miles upstream from the confluence of Slater Creek	18010209	5.8		N	AE	1979
Indian Gulch	Siskiyou County, Unincorporated Areas	Confluence with McConaughy Gulch	Approximately 2,800 feet upstream of McConaughy Gulch Road	18010208	0.9		N	A	2021
Johnson Creek	Siskiyou County, Unincorporated Areas	Approximately 0.4 miles upstream from 3 State Highway	Approximately 1.3 miles upstream from 3 State Highway	18010208	0.9		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Johnson Creek	Etna, City of; Siskiyou County, Unincorporated Areas	Approximately 0.5 miles downstream from 3 State Highway	Approximately 0.2 miles downstream from 3 State Highway	18010208	0.3		Y	AE	2022
Johnson Creek	Etna, City of; Siskiyou County, Unincorporated Areas	Approximately 0.2 miles downstream from 3 State Highway	Approximately 0.4 miles upstream from 3 State Highway	18010208	0.6		N	AE	2022
Kangaroo Creek	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 4,000 feet upstream from Masterson Road	18010208	1.0		N	A	2021
Kidder Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 0.2 miles upstream from 3 State Highway	18010208	0.8		Y	AE	2022
Kidder Creek	Siskiyou County, Unincorporated Areas	Approximately 0.2 miles upstream from 3 State Highway	Approximately 2.2 miles upstream from 3 State Highway	18010208	7.1		N	AE	2022
Kiamath River	Siskiyou County, Unincorporated Areas	Approximately 2.2 miles downstream from Walker Bridge Connection Road	Approximately 0.5 miles upstream from the confluence of Little Humbug Creek	18010206	4.6		Y	AE	1985
Kiamath River	Siskiyou County, Unincorporated Areas	Approximately 243 feet downstream from the confluence of West Grider Creek	Approximately 0.1 miles downstream from the confluence of Walker Gulch	18010206	4.3		Y	AE	1985
Kiamath River	Siskiyou County, Unincorporated Areas	Approximately 1.0 mile downstream from the confluence of Elk Creek	Approximately 3.1 miles upstream of Elk Creek Road	18010209	5.3		Y	AE	1985

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Long Gulch	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 4,000 feet upstream from East Callahan Road	18010208	0.8		N	A	2021
McConaughy Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 170 feet downstream of the confluence of Trail Gulch	18010208	2.3		N	A	2021
McConaughy Gulch	Siskiyou County, Unincorporated Areas	Approximately 170 feet downstream from the confluence of Trail Gulch	Approximately 4.2 miles upstream from the confluence of Dockery Gulch	18010208	5.7		N	A	2021
Meamber Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 0.7 miles upstream from Scott River Road	18010208	0.8		N	A	2021
Meamber Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 2,700 feet upstream from Scott River Road	18010208	0.6		N	A	2021
Meeks Meadow Creek	Siskiyou County, Unincorporated Areas	Confluence with North Fork French Creek	Approximately 600 feet upstream from unnamed road	18010208	0.2		N	A	2021
Messner Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 2,350 feet upstream from East Callahan Road	18010208	0.8		N	A	2021
Mill Creek	Siskiyou County, Unincorporated Areas	Confluence with Shackleford Creek	Approximately 7,630 feet upstream of the confluence of Emigrant Creek	18010208	3.7		N	A	2021
Miners Creek	Siskiyou County, Unincorporated Areas	Confluence with French Creek	Approximately 520 feet upstream of Miners Creek Road	18010208	5.0		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRIM	Date of Analysis
Moffett Creek	Fort Jones, Town of; Siskiyou County, Incorporated Areas	Confluence with Scott River	Approximately 364 feet upstream from Scott River Road	18010208	0.6		Y	AE	2022
Moffett Creek	Fort Jones, Town of; Siskiyou County, Incorporated Areas	Approximately 364 feet upstream from Scott River Road	Just downstream from the confluence of McAdam Creek	18010208	2.0		N	AE	2022
Mule Creek	Siskiyou County, Incorporated Areas	Confluence with East Fork Scott River	Approximately 3,200 feet upstream from confluence of East Fork Scott River	18010208	0.7		N	A	2021
North Fork French Creek	Siskiyou County, Incorporated Areas	Confluence with French Creek	Approximately 980 feet upstream of the confluence of Meeks Meadow Creek	18010208	2.2		N	A	2021
Noyes Valley Creek	Siskiyou County, Incorporated Areas	Confluence with East Fork Scott River	Approximately 8 miles upstream of Masterson Road	18010208	9.2		N	A	2021
Oak Gulch	Siskiyou County, Incorporated Areas	Confluence with Cedar Gulch	Approximately 2,070 feet upstream of State Highway	18010208	0.6		N	A	2021
Oregon Slough	Montague, City of; Siskiyou County, Incorporated Areas	Approximately 1.3 miles upstream from the confluence with Shasta River	Approximately 347 feet downstream from Ager Road	18010207	1.0		N	AE, AO	1979
Oro Fino Creek	Siskiyou County, Incorporated Areas	Confluence with Scott River	Approximately 1.4 miles upstream of Quartz Valley Road	18010208	6.7		N	A	2021
Osterred Gulch	Siskiyou County, Incorporated Areas	Confluence with Wildcat Creek	Approximately 1,600 feet upstream from confluence with Wildcat Creek	18010208	0.3		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Patterson Creek	Siskiyou County, Unincorporated Areas	Confluence with Kidder Creek	At crossing with 3 State Highway	18010208	7.1		N	AE	2022
Patterson Creek	Siskiyou County, Unincorporated Areas	At crossing with 3 State Highway	Approximately 13,000 feet upstream of 3 State Highway	18010208	2.5		N	A	2022
Paynes Lake Creek	Siskiyou County, Unincorporated Areas	Confluence with French Creek	Approximately 2,700 feet upstream from the confluence with French Creek	18010208	0.5		N	A	2021
Rattlesnake Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 6,720 feet upstream of Scott River Road	18010208	2.3		N	A	2021
Sacramento River	Dunsmuir, City of; Siskiyou County, Unincorporated Areas	At Siskiyou County boundary	Approximately 0.2 miles upstream of Cave Avenue / Simpson Street	18020005	4.3		Y	AE	1979
Scott River	Siskiyou County, Unincorporated Areas	Confluence with Klamath River	Approximately 3,090 feet downstream from the confluence of Meamber Gulch	18010208	22.3		N	A	1985
Scott River	Siskiyou County, Unincorporated Areas	Approximately 3,090 feet downstream from the confluence of Meamber Gulch	Approximately 2,370 feet upstream of Indian Creek confluence	18010208	8.5		N	A	2021
Scott River	Siskiyou County, Unincorporated Areas	Approximately 2,370 feet upstream of Indian Creek confluence	Approximately 2,400 feet downstream of confluence with Moffett Creek	18010208	0.6		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Scott River	Siskiyou County, Incorporated Areas	Approximately 2,400 feet downstream of confluence with Moffett Creek	Approximately 840 feet upstream of 3 State Highway	18010208	1.8		Y	AE	2022
Scott River	Siskiyou County, Incorporated Areas	Approximately 840 feet upstream of 3 State Highway	Fay Lane	18010208	17.2		N	AE	2022
Scott River	Siskiyou County, Incorporated Areas	Fay Lane	Approximately 1,830 feet upstream from the confluence of Wildcat Creek	18010208	6.3		N	A	2021
Scott River	Siskiyou County, Incorporated Areas	Approximately 1,830 feet upstream from the confluence of Wildcat Creek	Confluence of East Fork Scott River and South Fork Scott River	18010208	0.6		N	AE	2022
Shackleford Creek	Siskiyou County, Incorporated Areas	Confluence with Scott River	Confluence of Mill Creek	18010208	3.6		N	A	2021
Shackleford Creek	Siskiyou County, Incorporated Areas	Confluence of Mill Creek	Approximately 4,220 feet upstream of Quartz Valley Road	18010208	1.7		N	A	2021
Sharps Gulch	Siskiyou County, Incorporated Areas	Confluence with Hurds Gulch	Approximately 3,860 feet upstream of Eastside Road	18010208	1.5		N	A	2021
Shasta River	Siskiyou County, Incorporated Areas	Approximately 575 feet downstream of Edgewood Road	Approximately 1.0 mile upstream from the confluence of Beaghton Creek	18010207	2.1		N	AE	1979

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Shell Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 7,760 feet upstream of the confluence of Unnamed Stream SH-01	18010208	4.2		N	A	2021
Sniktaw Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 5,220 feet upstream of Big Meadows Road	18010208	3.1		N	A	2021
South Fork Scott River	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 40 feet upstream of South Fork Road	18010208	1.5		N	AE	2022
South Fork Scott River	Siskiyou County, Unincorporated Areas	Approximately 40 feet upstream of South Fork Road	Approximately 1.5 miles upstream from the confluence of Fox Creek	18010208	4.3		N	A	2021
Squaw Gulch	Siskiyou County, Unincorporated Areas	Confluence with Cedar Gulch	Approximately 840 feet upstream from 3 State Highway	18010208	0.3		N	A	2021
Squaw Valley Creek	Siskiyou County, Unincorporated Areas	At Cemetery Road	Approximately 112 feet upstream of McCloud River Railroad	18020004	3.1		N	AE, AO	2004
Sugar Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 1,200 feet upstream from Sugar Creek Road	18010208	5.4		N	A	2021
Taylor Creek	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 5,700 feet upstream from confluence with East Fork Scott River	18010208	1.2		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRIM	Date of Analysis
Thompson Gulch	Siskiyou County, Unincorporated Areas	Confluence with Wildcat Creek	Approximately 950 feet upstream from the confluence with Wildcat Creek	18010208	0.2		N	A	2021
Tiger Fork	Siskiyou County, Unincorporated Areas	Approximately 50 feet west of Sugar Creek	Approximately 1,100 feet upstream from Sugar Creek	18010208	0.2		N	A	2021
Trail Gulch	Siskiyou County, Unincorporated Areas	Confluence with McConaughy Gulch	Approximately 7,500 feet upstream from confluence of McConaughy Gulch	18010208	1.6		N	A	2021
Tyler Gulch	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 2,580 feet upstream of Scott River Road	18010208	1.3		N	A	2021
Unamed Stream EF-01	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 1,400 feet upstream from confluence of East Fork Scott River	18010208	0.3		N	A	2021
Unamed Stream EF-02	Siskiyou County, Unincorporated Areas	Confluence with East Fork Scott River	Approximately 3,000 feet upstream from Masterson Road	18010208	0.8		N	A	2021
Unamed Stream HS-01	Siskiyou County, Unincorporated Areas	Confluence with Heartstrand Gulch	Approximately 3,530 feet upstream of the confluence of Unamed Stream	18010208	1.1		N	A	2021
Unamed Stream HS-02	Siskiyou County, Unincorporated Areas	Confluence with Unamed Stream	Approximately 3,100 feet upstream of the confluence with Unamed Stream	18010208	0.6		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Unnamed Stream MC-01	Siskiyou County, Unincorporated Areas	Confluence with McConaughy Gulch	Approximately 2,000 feet upstream from McConaughy Gulch Road	18010208	0.9		N	A	2021
Unnamed Stream MI-01	Siskiyou County, Unincorporated Areas	Confluence with Miners Creek	Approximately 2,750 feet upstream from confluence with Miners Creek	18010208	0.6		N	A	2021
Unnamed Stream NF-01	Siskiyou County, Unincorporated Areas	Confluence with North Fork French Creek	Approximately 3,100 feet upstream from unnamed road	18010208	0.9		N	A	2021
Unnamed Stream NV-01	Siskiyou County, Unincorporated Areas	Confluence with Noyes Valley Creek	Approximately 1,800 feet upstream from confluence with Noyes Valley Creek	18010208	0.4		N	A	2021
Unnamed Stream SC-01	Siskiyou County, Unincorporated Areas	Approximately 850 feet upstream of Scarface Road	Approximately 2,400 feet upstream of Scarface Road	18010208	0.3		N	A	2021
Unnamed Stream SC-01	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 850 feet upstream of Scarface Road	18010208	2.5		N	A	2021
Unnamed Stream SC-03	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 6,120 feet upstream of East Callahan Road	18010208	2.6		N	A	2021
Unnamed Stream SF-01	Siskiyou County, Unincorporated Areas	Confluence with South Fork Scott River	At Boulder Road	18010208	0.2		N	A	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or (estuaries or ponding)	Area (mi ²)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Unnamed Stream SF-02	Siskiyou County, Unincorporated Areas	Confluence with South Fork Scott River	Approximately 1,600 feet upstream from confluence with South Fork Scott River	18010208	0.3		N	A	2021
Unnamed Stream SH-01	Siskiyou County, Unincorporated Areas	Confluence with Shell Gulch	Approximately 6,070 feet upstream of the confluence with Shell Gulch	18010208	1.2		N	A	2021
Unnamed Stream SK-01	Siskiyou County, Unincorporated Areas	Confluence with Shackelford Creek	Approximately 4,570 feet upstream of Dangel Lane	18010208	2.0		N	A	2021
Unnamed Stream SU-01	Siskiyou County, Unincorporated Areas	Confluence with Sugar Creek	Approximately 1,440 feet upstream of Sugar Creek Road	18010208	0.6		N	A	2021
Whisky Creek	Siskiyou County, Unincorporated Areas	Confluence with Etna Creek	Approximately 2,600 feet upstream from Sawyers Bar Road	18010208	0.8		N	A	2021
Whitney Creek	Siskiyou County, Unincorporated Areas	Valley floor, approximately 2.0 miles below the apex at U.S. Hwy 97	At U.S. Hwy 97	18010207	2.2		N	AO	1985
Wildcat Creek	Siskiyou County, Unincorporated Areas	Confluence with Scott River	Approximately 3,540 feet upstream from the confluence of Osteried Gulch	18010208	4.6		N	A	2021
Yreka Creek	Siskiyou County, Unincorporated Areas; Yreka, City of	Approximately 6,675 feet downstream of State Highway 3 (Montague Road)	Approximately 0.9 miles upstream from Westside Road	18010207	5.5		N	AE, AO	1979

2.2

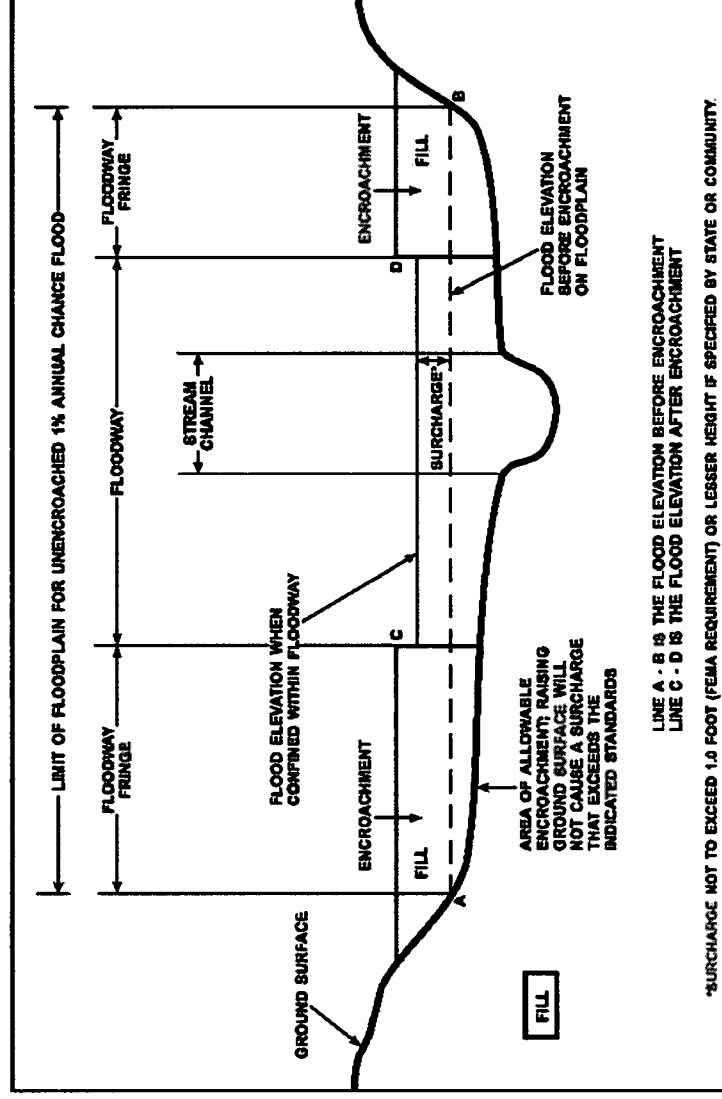
Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1-percent-annual-chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1-percent-annual-chance flood. The floodway fringe is the area between the floodway and the 1-percent-annual-chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1-percent-annual-chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 4.

To participate in the NFIP, Federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

Figure 4: Floodway Schematic



Floodway widths presented in this FIS Report and on the FIRM were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. For certain stream segments, floodways were adjusted so that the amount of floodwaters conveyed on each side of the floodplain would be reduced equally. The results of the floodway computations have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

All floodways that were developed for this Flood Risk Project are shown on the FIRM using the symbology described in Figure 3. In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

2.3 Base Flood Elevations

The hydraulic characteristics of flooding sources were analyzed to provide estimates of the elevations of floods of the selected recurrence intervals. The BFE is the elevation of the 1-percent-annual-chance flood. These BFEs are most commonly rounded to the whole foot, as shown on the FIRM, but in certain circumstances or locations they may be rounded to 0.1 foot. Cross section lines shown on the FIRM may also be labeled with the BFE rounded to 0.1 foot. Whole-foot BFEs derived from engineering analyses that apply to coastal areas, areas of ponding, or other static areas with little elevation change may also be shown at selected intervals on the FIRM.

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM. For example, the user may use the FIRM to determine the stream station of a location of interest and then use the profile to determine the 1-percent annual chance elevation at that location. Because only selected cross sections may be shown on the FIRM for riverine areas, the profile should be used to obtain the flood elevation between mapped cross sections. Additionally, for riverine areas, whole-foot elevations shown on the FIRM may not exactly reflect the elevations derived from the hydraulic analyses; therefore, elevations obtained from the profile may more accurately reflect the results of the hydraulic analysis.

2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

2.5 Coastal Flood Hazard Areas

This section is not applicable to this Flood Risk Project.

2.5.1 Water Elevations and the Effects of Waves

This section is not applicable to this Flood Risk Project.

Figure 5: Wave Runup Transect Schematic
[Not Applicable to this Flood Risk Project]

2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

This section is not applicable to this Flood Risk Project.

2.5.3 Coastal High Hazard Areas

This section is not applicable to this Flood Risk Project.

Figure 6: Coastal Transect Schematic
[Not Applicable to this Flood Risk Project]

2.5.4 Limit of Moderate Wave Action

This section is not applicable to this Flood Risk Project.

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

For flood insurance applications, the FIRM designates flood insurance rate zones as described in Figure 3, "Map Legend for FIRM." Flood insurance zone designations are assigned to flooding sources based on the results of the hydraulic or coastal analyses. Insurance agents use the zones shown on the FIRM and depths and base flood elevations in this FIS Report in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

The 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (e.g. Zones A, AE, V, VE, etc.), and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood zones in Siskiyou County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Dorris, City of	X
Dunsmuir, City of	A, AE, AO
Etna, City of	A, AE, AH, AO, X
Fort Jones, Town of	AE, X
Montague, City of	AE, AO, X
Mt. Shasta, City of	X

Table 3: Flood Zone Designations by Community (continued)

Community	Flood Zone(s)
Siskiyou County, Unincorporated Areas	A, AE, AH, AO, D, X
Tulelake, City of	X
Weed, City of	A, AE, AO, X
Yreka, City of	A, AE, AO, X

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

Table 4 contains a description of the characteristics of the HUC-8 sub-basins within which each community falls. The table includes the main flooding sources within each basin, a brief description of the basin, and its drainage area.

Table 4: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Applegate	17100309	Applegate River	Applegate River, covering a valley of the Siskiyou Mountain Range	770
Butte	18010205	Butte Creek	Butte Creek	607
Lost	18010204	Lost River	Lost River	3,024
Lower Klamath	18010209	Klamath River	Lower Klamath River	1,531
Lower Pit	18020003	Bear Creek	Bear Creek	2,637
McCloud	18020004	McCloud River	Upstream section of McCloud River	681
Sacramento Headwaters	18020005	Sacramento River	South Fork Sacramento River	592
Salmon	18010210	Salmon River	Where Klamath River changes into Salmon River	751
Scott	18010208	Scott River	Scott River, from confluence with Klamath River	814
Shasta	18010207	Shasta River	Shasta River	794
Upper Klamath	18010206	Klamath River	Klamath River	1,423
Upper Pit	18020002	Pit River	Covers Pit River, North Fork Pit River, Warm Springs Valley, Moon Lake, and Schafter Mountain	2,681

4.2 Principal Flood Problems

Table 5 contains a description of the principal flood problems that have been noted for Siskiyou County by flooding source.

Table 5: Principal Flood Problems

Flooding Source	Description of Flood Problems
Boles Creek	Overflow in 1974 from Boles Creek caused shallow flooding of Main and Grove Streets, Lake Avenue, and Eureka Way as flows exceeded the capacities of the culverts under Lake and Main Streets. Flow also ponded upstream from the embankment of U.S. Highway 97.
East Fork Scott River	Historical flooding has largely been due to shallow-flooding events. In 1974, flooding in south-central Siskiyou County caused damage to roads, bridges, and structures near Callahan.
Etna Creek	The principal flood problem on Etna Creek has been that, although the main channel capacity is large, it has been blocked by natural dams, shifting most of the flow out onto the floodplain. The damming is caused by debris lodging in the channel, followed by buildup of cobbles and gravel.
Humbug Gulch	Flooding along Humbug Gulch has caused property damage along Gold Street, Pine Street, Lane Street, West Miner Street, North Street, Yama Street, and West Lennox Street.
Klamath River	The flood of 1964 caused considerable damage by washing away bridges and flooding structures in the communities of Happy Camp and Seiad Valley.
Moffett Creek	During large flood events, the channel capacity of Moffett Creek is exceeded in the vicinity of the upstream end of Marble View Avenue, and the overflow spreads out onto the very flat floodplain. This overflow continues flowing southwest, without re-entering the channel, as broad, shallow, and fairly slow-moving sheet flow. Much of the residential area of Fort Jones is subject to shallow flooding from the overflow of Moffett Creek. The sheet flow ponds behind the Scott River Road embankment where some overflows the road and some returns to the channel.
Panther Creek	A significant flood event occurred between December 29, 1996, and January 1, 1997. Over 11 inches of precipitation fell on a deep existing snowpack triggering flooding. Evidence suggests that the flooding was mainly due to the rain-on-snow effects which caused substantial snowpack runoff. Panther Creek experienced flows heavily laden with sediment.
Sacramento River	Historical flooding has largely been due to shallow-flooding events. In 1974, flooding in south-central Siskiyou County caused damage to roads, bridges, and structures near Dunsmuir. The flood of January 16, 1974 was estimated to have a peak discharge of 21,000 cfs. Damages in the City of Dunsmuir area were estimated to be \$4.2 million, with 25 homes destroyed. Additionally, the bridge connecting Scherrer Avenue and South First Street constricted the flow from the Sacramento River, causing an increase in water-surface elevation of approximately 3 feet immediately upstream of the bridge.
Squaw Valley Creek	A significant flood event occurred between December 29, 1996, and January 1, 1997. Over 11 inches of precipitation fell on a deep existing snowpack triggering flooding. Evidence suggests that the flooding was mainly due to the rain-on-snow effects which caused substantial snowpack runoff. Squaw Valley Creek experienced relatively clear flows and transport of woody debris.

Table 5: Principal Flood Problems (continued)

Flooding Source	Description of Flood Problems
Whitney Creek	Flooding is due to an anomalous event where a high-intensity thunderstorm occurs on the northwest side of Mt. Shasta in Bolam and Whitney Glacier area. The extremely steep slopes and limited perviousness of the glaciers cause the runoff to be rapidly translated into a flash flood (debris flow), which carries debris onto the alluvial fan below U.S. Highway 97. Historically, flows have covered the highway and completely plugged the undercrossing.
Yreka Creek	Flood problems on Yreka Creek have historically consisted of damage to bridges and erosion of streambanks. The erosion has in turn caused problems with structures along the banks.

Table 6 contains information about historic flood elevations in the communities within Siskiyou County.

**Table 6: Historic Flooding Elevations
[Not Applicable to this Flood Risk Project]**

4.3 Dams and Other Flood Hazard Reduction Measures

Table 7 contains information about non-levee flood hazard reduction measures within Siskiyou County such as dams or jetties. Levee systems are addressed in Section 4.4 of this FIS Report.

Table 7 : Dams and Other Flood Hazard Reduction Measures

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Greenhorn Reservoir	Greenhorn 1010	Dam	0.7 miles upstream of confluence with Yreka Creek	Maintained by City of Yreka
Lake Siskiyou	Box Canyon	Dam	At W A Barr Road	Maintained by Siskiyou County Flood Control and Water Conservation District
Shasta River	Shasta River Dam No. 60	Dam	Located in the southern portion of Shasta Valley	Also known as Dwinnell Dam, this dam is owned and operated by the Montague Water Conservation District

4.4 Levee Systems

For purposes of the NFIP, FEMA only recognizes levee systems that meet, and continue to meet, minimum design, operation, and maintenance standards that are consistent with comprehensive floodplain management criteria. The Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10) describes the information needed for FEMA to determine if a levee system reduces the flood hazard from the 1-percent-annual-chance flood. This information must be supplied to FEMA by the community or other party when a flood risk study or restudy is conducted, when FIRMs are revised, or upon FEMA request. FEMA reviews the information for the purpose of establishing the appropriate

flood hazard zone.

Levee systems that are determined to reduce the hazard from the 1-percent-annual-chance flood are accredited by FEMA. FEMA can also grant provisional accreditation to a levee system that was previously accredited on an effective FIRM and for which FEMA is awaiting data and/or documentation to demonstrate compliance with 44 CFR 65.10. These levee systems are referred to as Provisionally Accredited Levees, or PALs. Provisional accreditation provides communities and levee owners with a specified timeframe to obtain the necessary data to confirm the levee system's accreditation status. Accredited levee systems and PALs are shown on the FIRM using the symbology shown in Figure 3. If the required information for a PAL is not submitted within the required timeframe, or if information indicates that a levee system no longer meets 44 CFR 65.10, FEMA will consider the levee system as non-accredited and issue an effective FIRM showing the levee-impacted area as a SFHA or Zone D.

FEMA coordinated with the USACE, the local communities, and other organizations to compile a list of levee systems that exist within Siskiyou County. Table 8, "Levee Systems," lists all accredited levee systems, PALs, and non-accredited levee systems that have been verified with the National Levee Database (NLD) and shown on the FIRM for this FIS Report. The Levee ID shown in this table may not match numbers based on other identification systems that were listed in previous FIS Reports. The following FIRM panels dated January 19, 2011, show levee symbology for features that are no longer recognized as levee systems in the NLD and are not included in the table: 06093C0375D, 06093C0400D, 06093C0750D, 06093C0775D, 06093C0800D, 06093C0825D, 06093C0850D, 06093C0875D, 06093C1200D, 06093C1225D, 06093C1250D, 06093C1300D, 06093C1325D, 06093C1350D, 06093C2075D, 06093C2552D, 06093C2554D, 06093C2555D, 06093C2556D, 06093C2558D, 06093C2560D, 06093C2565D, 06093C2567D, 06093C2570D, 06093C3433D and 06093C3441D. Future FIRM updates will occur that remove those levee symbols. Levee systems identified in the table are displayed on the FIRM with notes to users to indicate their flood hazard mapping status.

Please note that the information presented in Table 8 is subject to change at any time. For that reason, the latest information regarding the levee systems presented in the table may be obtained by accessing the NLD. For additional information, contact the levee owner/sponsor or the local community shown in Table 30.

Table 8: Levee Systems

Community	Flooding Source(s)	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panel(s)	Levee Owner(s) / Sponsor(s)
Siskiyou County, Unincorporated Areas	Beaughton Creek	1905050152	Siskiyou County Levee 118	Non-Accredited	06093C2560D	
Siskiyou County, Unincorporated Areas	Boles Creek	1905050151	Siskiyou County Levee 119	Non-Accredited	06093C2570D	

Table 8: Levee Systems (continued)

Community	Flooding Source(s)	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panel(s)	Levee Owner(s) / Sponsor(s)
Siskiyou County, Unincorporated Areas	Boles Creek	1905050150	Siskiyou County Levee 120	Non-Accredited	06093C2570D	
Siskiyou County, Unincorporated Areas	Boles Creek	1905050148	Siskiyou County Levee 72	Non-Accredited	06093C2567D	
Siskiyou County, Unincorporated Areas	Boles Creek	1905050149	Siskiyou County Levee 82	Non-Accredited	06093C2567D 06093C2570D	
Siskiyou County, Unincorporated Areas	Boles Creek	1905050147	Siskiyou County Levee 92	Non-Accredited	06093C2567D	
Siskiyou County, Unincorporated Areas	Butte Creek	5305000004	Butte Creek #1	Non-Accredited	06093C1700D	Siskiyou County PWD
Siskiyou County, Unincorporated Areas	Butte Creek	5305000005	Butte Creek #3	Non-Accredited	06093C1225D	Siskiyou County PWD
Siskiyou County, Unincorporated Areas	Garrick Creek	1905050276	Siskiyou County Levee 112	Non-Accredited	06093C2556D	
Siskiyou County, Unincorporated Areas	Garrick Creek	1905050275	Siskiyou County Levee 79	Non-Accredited	06093C2558D	
Siskiyou County, Unincorporated Areas	Garrick Creek	1905050087	Siskiyou County Levee 84	Non-Accredited	06093C2560D	
Siskiyou County, Unincorporated Areas	Garrick Creek	1905050084	Siskiyou County Levee 115	Non-Accredited	06093C2560D	
Siskiyou County, Unincorporated Areas	Garrick Creek	1905050018	Siskiyou County Levee 116	Non-Accredited	06093C2560D	
Siskiyou County, Unincorporated Areas	Lost River	1905050171	Klamath County Levee 5	Non-Accredited	06093C0850D	
Siskiyou County, Unincorporated Areas	Meiss Lake	1905050232	Siskiyou County Levee 12	Non-Accredited	06093C1225D	
Siskiyou County, Unincorporated Areas	Meiss Lake	1905050092	Siskiyou County Levee 48	Non-Accredited	06093C0750D	
Siskiyou County, Unincorporated Areas	Panther Creek	1905050234	Siskiyou County Levee 32	Non-Accredited	06093C1225D	

Table 8: Levee Systems (continued)

Community	Flooding Source(s)	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panel(s)	Levee Owner(s) / Sponsor(s)
Siskiyou County, Unincorporated Areas	Panther Creek	1905050181	Siskiyou County Levee 47	Non-Accredited	06093C1225D	
Siskiyou County, Unincorporated Areas	Parks Creek	1905050046	Siskiyou County Levee 29	Non-Accredited	06093C2554D	
Siskiyou County, Unincorporated Areas	Parks Creek	1905050086	Siskiyou County Levee 31	Non-Accredited	06093C2554D	
Siskiyou County, Unincorporated Areas	Parks Creek	1905050045	Siskiyou County Levee 60	Non-Accredited	06093C2554D	
Siskiyou County, Unincorporated Areas	Sam's Neck Drain	5305000047	Meiss Lake	Non-Accredited	06093C0750D 06093C1225D	Siskiyou County PWD
Siskiyou County, Unincorporated Areas	Sam's Neck Drain	5305000048	Meiss Lake - LB	Non-Accredited	06093C0750D 06093C1225D	Siskiyou County PWD
Siskiyou County, Unincorporated Areas	Sam's Neck Drain	5305000021	Meiss Lake - RB	Non-Accredited	06093C0750D 06093C1225D	Siskiyou County PWD
Siskiyou County, Unincorporated Areas	Scott River	1905050218	Siskiyou County Levee 58	Non-Accredited	06093C2501E	State of California
Siskiyou County, Unincorporated Areas	Shasta River Canal	1905050145	Siskiyou County Levee 67	Non-Accredited	06093C2570D	
Siskiyou County, Unincorporated Areas	Tule Lake Sump	1905050173	Klamath County Levee 2	Non-Accredited	06093C0850D	
Siskiyou County, Unincorporated Areas	Tule Lake Sump	1905050263	Siskiyou County Levee 113	Non-Accredited	06093C0850D 06093C0875D 06093C1350D	
Siskiyou County, Unincorporated Areas	Unnamed	1905050184	Siskiyou County Levee 100	Non-Accredited	06093C0775D	
Siskiyou County, Unincorporated Areas	Unnamed	1905050205	Siskiyou County Levee 106	Non-Accredited	06093C0875D	
Siskiyou County, Unincorporated Areas	Unnamed	1905050183	Siskiyou County Levee 111	Non-Accredited	06093C0775D	
Siskiyou County, Unincorporated Areas	Unnamed	1905050134	Siskiyou County Levee 95	Non-Accredited	06093C0875D	

Table 8: Levee Systems (continued)

Community	Flooding Source(s)	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panel(s)	Levee Owner(s) / Sponsor(s)
Siskiyou County, Unincorporated Areas	Unnamed	1905050135	Siskiyou County Levee 97	Non-Accredited	06093C0875D	
Siskiyou County, Unincorporated Areas	Unnamed	1905050185	Siskiyou County Levee 99	Non-Accredited	06093C0775D	

SECTION 5.0 – ENGINEERING METHODS

For the flooding sources in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded at least once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2-percent-annual-chance, respectively, of being equaled or exceeded during any year.

Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

In addition to these flood events, the “1-percent-plus”, or “1%+”, annual chance flood elevation has been modeled and included on the flood profile for certain flooding sources in this FIS Report. While not used for regulatory or insurance purposes, this flood event has been calculated to help illustrate the variability range that exists between the regulatory 1-percent-annual-chance flood elevation and a 1-percent-annual-chance elevation that has taken into account an additional amount of uncertainty in the flood discharges (thus, the 1% “plus”). For flooding sources whose discharges were estimated using regression equations, the 1%+ flood elevations are derived by taking the 1-percent-annual-chance flood discharges and increasing the modeled discharges by a percentage equal to the average predictive error for the regression equation. For flooding sources with gage- or rainfall-runoff-based discharge estimates, the upper 84-percent confidence limit of the discharges is used to compute the 1%+ flood elevations.

5.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak elevation-frequency relationships for floods of the selected recurrence intervals for each flooding source studied. Hydrologic analyses are typically performed at the watershed level. Depending on factors such as watershed size and shape, land use and urbanization, and natural or man-made storage, various models or methodologies may be applied. A summary of the hydrologic methods applied to develop the discharges used in the hydraulic analyses for each stream is provided in Table 12. Greater detail (including the assumptions, analysis, and results) is available in the archived project documentation.

Table 9: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				0.2% Annual Chance
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	
Alder Creek	Approximately 260 feet Southwest of the end of Big Meadows Road	167	224	267	311	432	416
Area Tributary to Squaw Valley Creek	East of McCloud	210	*	360	570	*	790
	South of McCloud	1.7	*	420	650	*	910
Big Carmen Creek	Approximately 550 feet upstream of NF-40N03	651	821	948	1,074	1,288	1,381
Big Mill Creek	Approximately 5,050 feet upstream from Big Mill Creek Overflow	1,911	2,482	2,915	3,346	4,211	4,379
Big Mill Creek Overflow	At the confluence with Big Mill Creek	0.21	39	52	61	70	92
Boles Creek	South Pacific Railroad culvert to Grove Street	**	200	375	460	*	720
	Grove Street to Main Street	**	190	360	440	*	690
	Main Street to Interstate Highway 5	**	160	300	370	*	580
	Upstream of Interstate 5	**	140	265	325	*	510
Boulder Creek	Approximately 5,145 feet upstream from confluence with South Fork Scott River	12.66	2,060	2,845	3,432	4,009	5,390
Cedar Gulch	At the confluence with Oak Gulch	3.36	506	658	774	889	1,162
	At the confluence with Squaw Gulch	2.25	338	440	517	593	776
	Approximately 2,360 feet upstream of 3 State Highway	1.10	166	216	254	292	381
Clark Creek	At South 3 State Highway	4.53	643	886	1,071	1,258	1,739

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	0.2% Annual Chance
Cottonwood Creek	At Henley Horn Brook Road	90	4,300	*	8,000	10,100	*	16,200
Crystal Creek	Approximately 1,900 feet upstream of 3 State Highway culvert	3.97	550	725	863	1,005	1,250	1,366
Dockery Gulch	Approximately 1,850 feet upstream from McConaughy Gulch Road	1.12	149	195	232	265	348	358
East Fork Scott River	At the confluence with Noyes Valley Creek	113.90	12,376	16,402	19,390	22,298	27,890	29,056
	At the confluence with Grouse Creek	82.20	9,873	12,939	15,181	17,410	21,910	22,642
	At the confluence with Kangaroo Creek	68.03	8,897	11,518	13,446	15,372	19,046	19,925
	At the confluence with Meadow Gulch	49.60	5,851	6,624	10,026	11,473	14,215	14,917
Emigrant Creek	Approximately 7,140 feet upstream of Mill Creek Road	5.42	581	798	961	1,127	1,629	1,529
Etna Creek	At the confluence with Whisky Creek	25.44	2,638	3,577	4,305	5,045	6,775	6,842
	Approximately 2,300 feet Northeast of the Zone D corner	20.61	2,191	2,965	3,563	4,169	5,450	5,640
Facey Gulch	Approximately 8,380 feet upstream of East Callahan Road	2.42	365	476	559	642	811	839
Fox Creek	Approximately 1,470 feet upstream from Blue Jay Creek	7.40	917	1,265	1,527	1,793	2,539	2,422
French Creek	At the confluence with Miners Creek	36.76	3,558	4,913	5,969	6,986	9,834	9,477

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance
French Creek <i>(continued)</i>	At the confluence with North Fork French Creek	21.96	2,935	3,566	4,173	5,875	5,661
	At the confluence with Paynes Lake Creek	13.62	1,820	2,212	2,589	2,644	3,512
	Approximately 5,120 feet upstream of French Creek Road	9.16	887	1,225	1,488	1,741	2,451
Graveyard Gulch	Approximately 450 feet North of the Ashley Lane intersection	1.76	196	263	314	365	489
Greenhorn Creek	At the City of Yreka corporate limits	12.0	900	1,800	2,200	*	3,700
Grouse Creek	Intersection with NF-40N03	10.33	2,869	3,618	4,177	4,737	5,678
Hamlin Gulch	Approximately 390 feet SW of the intersection of Scarface Road and South Hamlin Gulch Road	14.84	2,489	3,269	3,860	4,460	5,924
Hayes Gulch	Approximately 2,200 feet upstream from confluence with Grouse Creek	0.60	184	232	268	304	364
Heartstrand Gulch	Approximately 780 feet West of the end of Cynthia Drive	10.92	1,680	2,220	2,640	3,068	4,094
Horse Range Creek	Approximately 750 feet upstream from Horse Range Lane	4.30	416	574	698	817	1,150
Horseshoe Gulch	Approximately 250 feet upstream from unnamed road	3.77	502	659	784	907	1,176
Hull Gulch	Approximately 4,420 feet upstream of Quartz Valley Road	0.60	64	88	106	124	179
Humbug Gulch	At the City of Yreka corporate limits	3.8	400	*	750	900	*
							1,500

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	0.2% Annual Chance
Hurds Gulch	Approximately 9,720 feet upstream of Eastside Road	6.88	1,540	2,011	2,372	2,736	3,724	3,635
Indian Creek (Zone A)	Approximately 1,840 feet downstream of the confluence with Bloody Gulch	18.02	1,885	2,463	2,903	3,363	4,244	4,474
Indian Creek (Zone AE)	At mouth to the confluence to Doolittle Creek	133.0	15,000	*	27,500	34,500	*	55,500
	Upstream of the confluence with Doolittle Creek	121.0	13,500	*	25,000	31,000	*	50,000
Indian Gulch	Approximately 2,800 feet upstream of McConaughy Gulch Road	1.13	151	198	236	272	353	364
Johnson Creek	Approximately 3,600 feet upstream from Marybill Lane	2.13	438	577	689	805	1,122	1,107
Kangaroo Creek	Approximately 4,200 feet upstream from Masterson Road	6.19	826	1,071	1,251	1,432	1,774	1,861
Kidder Creek	At the confluence with Patterson Creek	59.65	4,492	6,344	7,763	9,184	12,683	12,541
	Approximately 13,000 feet upstream of 3 State Highway	26.96	2,217	3,036	3,651	4,279	5,711	5,765
Klamath River	Downstream of the confluence of Elk Creek	7,330	73,000	*	164,000	220,000	*	405,000
	Elk Creek to Indian Creek	7,230	67,000	*	150,000	202,000	*	372,000
	Upstream of the confluence of Indian Creek	7,090	58,000	*	130,000	174,000	*	320,000
	Downstream of Grider and Seiad Creek confluence	6,980	55,000	*	123,000	165,000	*	300,000
	Grider and Seiad Creeks to Walker Creek	6,890	60,000	*	115,000	155,000	*	280,000
	Upstream of Walker Creek	6,870	49,000	*	114,000	153,000	*	277,000

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				0.2% Annual Chance
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	
Kiamath River	At the Town of Kiamath	5,875	17,000	*	59,000	92,000	*
Local Drainage	McCloud Community	0.8	200	*	330	450	*
	South of McCloud Community	0.3	50	*	90	140	*
Long Gulch	Approximately 4,000 feet upstream from East Callahan Road	1.58	290	381	449	518	683
McAdam Creek	Approximately 7,300 feet upstream of Moffett Creek Gulch	27.03	2,782	3,662	4,354	5,061	6,436
McConaughy Gulch	At the confluence with Trail Gulch	18.67	2,486	3,266	3,887	4,495	5,829
	At the confluence with Horseshoe Gulch	14.49	1,930	2,535	3,017	3,489	4,525
	At the confluence with Dockey Gulch	8.62	1,147	1,507	1,793	2,074	2,689
	At the confluence with Unnamed Stream MC-01	7.46	993	1,304	1,552	1,795	2,327
	At the intersection of Bear Cat Road	4.95	659	866	1,030	1,192	1,545
	Approximately 300 feet downstream of Meamber Creek Road	3.09	343	461	550	640	889
Meamber Gulch	Approximately 2,700 feet upstream from Scott River Road	3.08	342	460	549	638	887
Meeks Meadow Creek	Approximately 600 feet upstream from unnamed road	2.34	226	312	379	444	625
Messner Gulch	Approximately 2,350 feet upstream from East Callahan Road	1.95	293	381	448	515	650

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	0.2% Annual Chance
Mill Creek	At the confluence with Emigrant Creek	19.63	2,104	2,889	3,479	4,082	5,900	5,537
	Approximately 7,630 feet upstream of the confluence of Emigrant Creek	9.49	1,017	1,396	1,682	1,973	2,852	2,676
Miners Creek	At the confluence with Unnamed Stream MI-01	7.92	766	1,058	1,285	1,504	2,118	2,041
	Approximately 520 feet upstream of Miners Creek Road	4.54	440	607	737	863	1,215	1,171
Moffett Creek	At the confluence with McAdam Creek	123.70	10,347	13,982	16,717	19,692	26,075	27,271
Mule Creek	Approximately 3,200 feet upstream from confluence of East Fork Scott River	3.74	814	1,057	1,241	1,424	1,792	1,864
North Fork French Creek	At the confluence with Unnamed Stream NF-01	7.86	761	1,050	1,276	1,493	2,102	2,026
	Approximately 980 feet upstream of the confluence of Meeks Meadow Creek	4.98	482	665	808	946	1,331	1,283
Noyes Valley Creek	At the intersection of Limekiln and Gazelle Callahan Road	25.89	2,292	3,091	3,682	4,278	5,628	5,650
	Approximately 36,000 feet upstream from Gazelle-Callahan Road	20.56	1,820	2,455	2,924	3,397	4,469	4,486
Oak Gulch	Approximately 2,070 feet upstream of 3 State Highway	0.99	149	193	227	261	330	334
Oregon Slough	At City of Montague corporate limits	28.0	840	*	1,620	1,900	*	2,700

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				0.2% Annual Chance	
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance		
Oro Fino Creek	Approximately 1,770 feet West of the intersection of Meyers Road and Kidder Creek Road	10.29	753	1,030	1,234	1,443	1,975	1,934
Osterried Gulch	Approximately 1,600 feet upstream from confluence with Wildcat Creek	1.27	186	244	288	330	427	431
Patterson Creek	Approximately 13,000 feet upstream of 3 State Highway	23.95	2,353	3,223	3,925	4,629	6,420	6,337
Paynes Lake Creek	Approximately 2,500 feet upstream from Homestead Lane	3.07	297	410	498	583	821	791
Rattlesnake Creek	Approximately 6,720 feet upstream of Scott River Road	8.84	948	1,265	1,506	1,750	2,382	2,341
Sacramento River	At Interstate Highway 5 near the City of Dunsmuir	163.0	13,000	*	22,000	27,000	*	40,000
Scott River (Base Level Engineering)	At the intersection of Fay Lane	215.21	21,284	30,738	37,226	44,691	62,900	61,261
Scott River (Base Level Engineering)	At the confluence with Wildcat Creek	193.82	18,687	25,997	31,431	36,830	46,730	49,546
Scott River (Base Level Engineering)	At the confluence with East Fork Scott River	160.13	16,043	22,006	26,456	30,873	40,678	41,264
Scott River (Detailed 2D)	At the confluence with Moffett Creek	600.86	25,201	38,475	48,786	59,150	84,006	84,939
Scott River (Detailed 2D)	At Horn Lane	418.47	22,321	34,268	43,391	52,525	69,848	74,705
Scott River (Detailed 2D)	At the confluence with French Creek	266.64	19,954	29,915	37,431	44,860	58,780	62,062
Shackelford Creek	At the confluence of Mill Creek	42.56	3,770	5,350	6,557	7,779	16,264	10,731
Shackelford Creek	Approximately 4,220 feet upstream of Quartz Valley Road	19.07	1,650	2,372	2,917	3,467	5,957	4,802

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	0.2% Annual Chance
Sharps Gulch	Approximately 3,860 feet upstream of Eastside Road	2.52	564	737	869	1,002	1,364	1,331
Shasta River	At downstream Edgewood Road Bridge	70.0	4,800	*	9,400	11,700	*	20,000
	At Central Oregon and Pacific Railroad Bridge	*	4,600	*	9,150	11,200	*	19,200
	Upstream from the confluence of Parks Creek Diversion	*	3,700	*	8,000	9,700	*	17,000
Shell Gulch	Approximately 7,760 feet upstream of the confluence of Unnamed Stream SH-01	6.38	1,247	1,653	1,963	2,283	3,516	3,063
Sniktaw Creek	Approximately 5,220 feet upstream of Big Meadows Road	6.33	704	945	1,128	1,312	1,823	1,755
South Fork Scott River	At the confluence with Boulder Creek	43.97	5,079	7,200	8,761	10,345	17,135	14,025
	Approximately 2,200 feet Northeast of the intersection of NF-40N30	28.02	3,489	4,814	5,813	6,826	9,667	9,219
Squaw Gulch	Approximately 840 feet upstream from 3 State Highway	0.76	115	150	176	202	255	264
Squaw Valley Creek	At logging road above McCloud River Railroad	10.5	700	*	1,220	2,010	*	2,910
Sugar Creek	At the confluence with Tiger Fork	13.61	1,642	2,261	2,717	3,181	4,480	4,271
	At the confluence with Unnamed Stream SU-01	9.55	1,152	1,587	1,907	2,233	3,145	2,998
	Approximately 1,200 feet upstream from Sugar Creek Road	5.80	700	964	1,158	1,356	1,910	1,821

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	
Taylor Creek	Approximately 5,700 feet upstream from confluence with East Fork Scott River	2.05	376	494	582	671	885	879
Thompson Gulch	Approximately 950 feet upstream from confluence with Wildcat Creek	0.60	88	115	135	155	201	203
Tiger Fork	Approximately 1,100 feet upstream from Sugar Creek	1.51	182	251	301	353	497	473
Trail Gulch	Approximately 7,500 feet upstream from confluence of McConaughy Gulch	2.56	341	448	533	616	799	823
Tyler Gulch	Approximately 2,580 feet upstream of Scott River Road	4.05	434	579	689	801	1,090	1,072
Unnamed Stream EF-01	Approximately 1,400 feet upstream from confluence of East Fork Scott River	0.93	170	223	263	303	400	397
Unnamed Stream EF-02	Approximately 3,100 feet upstream from Masterson Road	0.61	81	105	123	141	175	183
Unnamed Stream HS-01	Approximately 3,530 feet upstream of the confluence of Unnamed Stream HS-02	1.14	176	232	276	321	428	430
Unnamed Stream HS-02	Approximately 3,100 feet upstream of the confluence with Unnamed Stream HS-01	0.36	55	73	87	101	135	136
Unnamed Stream MC-01	Approximately 2,000 feet upstream from McConaughy Gulch Road	1.43	191	251	298	344	447	460
Unnamed Stream MI-01	Approximately 2,750 feet upstream from confluence with Miners Creek	1.40	132	182	221	258	364	350

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	0.2% Annual Chance
Unnamed Stream NF-01	Approximately 3,100 feet upstream from unnamed road	1.98	192	265	322	377	531	511
Unnamed Stream NV-01	Approximately 1,800 feet upstream from confluence with Noyes Valley Creek	1.15	102	137	163	190	250	251
Unnamed Stream OF-01	Approximately 4,000 feet upstream of Lighthill Road	0.74	54	74	89	104	142	139
Unnamed Stream SC-01	Approximately 2,400 feet upstream of Scarface Road	3.34	418	555	657	763	1,025	1,014
Unnamed Stream SC-03	Approximately 6,120 feet upstream of East Callahan Road	2.42	157	219	265	311	409	424
Unnamed Stream SF-01	Approximately 740 feet upstream of South Fork Road, and at Boulder Road	0.94	211	281	335	389	1,098	515
Unnamed Stream SF-02	Approximately 1,600 feet upstream from confluence with South Fork Scott River	0.88	197	262	313	363	1,025	481
Unnamed Stream SH-01	Approximately 6,070 feet upstream of the confluence with Shell Gulch	1.77	347	460	546	635	997	851
Unnamed Stream SK-01	Approximately 4,570 feet upstream of Dangel Lane	0.97	67	99	122	145	303	199
Unnamed Stream SU-01	Approximately 1,440 feet upstream of Sugar Creek Road	1.97	237	327	393	460	648	617
Unnamed Tributary to Panther Creek	At Modoc Avenue	6.8	780	*	1,340	2,050	*	2,820
	At McCloud River Railroad	5.5	490	*	880	1,380	*	1,950
	At confluence with Panther at West Colombero Drive	1.0	120	*	220	340	*	480
	At confluence with Panther Creek above Hill Street	1.0	110	*	200	300	*	460

[Not Applicable to this Flood Risk Project]

Table 10: Summary of Non-Coastal Stillwater Elevations

[Not Applicable to this Flood Risk Project]

Figure 7: Frequency Discharge-Drainage Area Curves

*Not calculated for this Flood Risk Project
 **Drainage Area Not Applicable Due to Volcanic Geology

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Plus Annual Chance	
Whisky Creek	Approximately 2,600 feet upstream from Sawyers Bar Road	1.61	171	232	278	356	426	441
	At the confluence with Thompson Gulch	7.31	1,072	1,407	1,658	1,902	2,461	2,482
	At the intersection of Wildcat Creek Road	5.81	851	1,117	1,316	1,510	1,954	1,970
	At the confluence with Osterried Gulch	4.58	671	881	1,038	1,191	1,542	1,554
	Approximately 3,540 feet upstream from the confluence of Osterried Gulch	1.53	225	295	347	399	516	520
Yreka Creek	At Yreka Municipal Sewage Treatment Plan	42.5	3,000	*	6,000	8,000	*	14,000
	At confluence of Humbug Gulch	*	2,550	*	5,150	7,000	*	12,300
	At confluence of Greenhorn Creek	*	1,650	*	3,330	4,400	*	7,600
	At confluence of Juniper Creek	12.6	950	*	1,900	2,600	*	4,600

Table 9: Summary of Discharges (continued)

Table 11: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record	
					From	To
Sacramento River	11341400	USGS	Near Mt. Shasta (Below Box Canyon Dam)	135	1960	1978
	11341500	USGS	At Castella	256	1911	1923
	11342000	USGS	At Delta	425	1945	1978
	11342500	USGS	At Antler	460	1911, 1920	1941

*Data not available

5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM.

Floodways were developed for Scott River, Moffett Creek, and Johnson Creek using a hybrid 1D-2D model and by adhering to the 2D floodway development guidance detailed in the FEMA's "Floodway Analysis and Mapping (December 2020)" guidance. Evaluation lines for the 2D floodway areas were defined and floodway data were reported in Table 23, "Floodway Data."

Siskiyou County Levee 58 along the left bank of the Scott River near the confluence with Etna Creek was modeled and mapped using natural valley analysis procedures. The natural valley analysis was run for each flood frequency event.

For streams for which hydraulic analyses were based on cross sections, locations of selected cross sections are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 6.3), selected cross sections are also listed in Table 23, "Floodway Data."

A summary of the methods used in hydraulic analyses performed for this project is provided in Table 12. Roughness coefficients are provided in Table 13. Roughness coefficients are values representing the frictional resistance water experiences when passing overland or through a channel. They are used in the calculations to determine water surface elevations. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

Table 12: Summary of Hydrologic and Hydraulic Analyses

Flowing Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Alder Creek	Confluence with Snikaw Creek	Approximately 0.4 miles upstream from Big Meadows Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Big Carmen Creek	Confluence with Grouse Creek	Approximately 4,423 feet upstream from the confluence with Grouse Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Big Mill Creek	Confluence with East Fork Scott River	Approximately 1 mile upstream from the divergence of Big Mill Creek Overflow	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Big Mill Creek Overflow	Confluence with East Fork Scott River	Divergence from Big Mill Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Boles Creek	At Central Oregon and Pacific Railroad	Approximately 0.1 miles upstream from Boles Street	Flood Frequency Analysis	USGS step- backwater Computer E- 431	02/01/1979	AE, AO	
Boulder Creek	Confluence with South Fork Scott River	Approximately 5,145 feet upstream from the confluence with South Fork Scott River	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Cedar Gulch	Confluence with Scott River and Facey Gulch	Approximately 2,360 feet upstream of 3 State Highway	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Cottonwood Creek	Approximately 0.3 miles upstream from the confluence with Klamath River	Approximately 1.1 miles upstream from Front Street	Log-Pearson Type III	USGS step-backwater Computer Program J-635	04/01/1979	AE	
Crystal Creek	Approximately 0.6 miles downstream of Holzhauser Lane	Approximately 0.4 miles upstream of 3 State Highway	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Dockery Gulch	Confluence with McConaughy Gulch	Approximately 1,850 feet upstream from McConaughy Gulch Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
East Fork Scott River	Approximately 4,171 feet upstream from the confluence of Long Gulch	Just downstream from the confluence of Meadow Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
East Fork Scott River	Confluence with South Fork Scott River	Approximately 4,171 feet upstream from the confluence of Long Gulch	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Emigrant Creek	Confluence with Mill Creek	Approximately 1.4 miles upstream of Mill Creek Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Etna Creek	Confluence with Scott River	Approximately 1.6 miles upstream from the confluence of Whisky Creek	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Facey Gulch	Confluence with Scott River and Cedar Gulch	Approximately 8,380 feet upstream of East Callahan Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits	Study Limits	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Confluence with South Fork Scott River	2,139 feet upstream from the confluence with South Fork Scott River	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
French Creek	Confluence with Scott River	Approximately 1.2 miles upstream from the confluence of Horse Range Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Graveyard Gulch	Confluence with Scott River	Approximately 0.8 miles upstream from Scott River Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Greenhorn Creek	Confluence with Yreka Creek	At Greenhorn Dam Spillway / Reservoir	HEC-1	HEC-2	09/01/1979	AE	
Grouse Creek	Confluence with East Fork Scott River	Approximately 0.5 miles upstream from the confluence of Big Carmen Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Hamlin Gulch	Confluence with Scott River	Approximately 182 feet downstream from Scarface Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Hayes Gulch	Confluence with Grouse Creek	Approximately 2,200 feet upstream from confluence with Grouse Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Heartstrand Gulch	Confluence of Scott River	Approximately 3.5 miles upstream from Eastside Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Horse Range Creek	Confluence with French Creek	Approximately 2,290 feet upstream from the confluence of French Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Horseshoe Gulch	Confluence with McConaughy Gulch	Approximately 8,914 feet upstream from the confluence with McConaughy Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Hull Gulch	Confluence with Emigrant Creek	Approximately 4,420 feet upstream of Quartz Valley Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Humbug Gulch	Confluence with Yreka Creek	Approximately 3,972 feet upstream of Lane Street	HEC-1	HEC-2	09/01/1979	AE	
Hurds Gulch	Confluence of Scott River	Approximately 9,720 feet upstream of Eastside Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Indian Creek	Confluence of Scott River	Approximately 1,840 feet downstream from the confluence of Bloody Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Indian Creek	Confluence with Klamath River	Approximately 2.4 miles upstream from the confluence of Slater Creek	Log-Pearson Type III	Field Surveys	04/01/1979	AE	
Indian Gulch	Confluence with McConaughy Gulch	Approximately 2,800 feet upstream of McConaughy Gulch Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flowing Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Johnson Creek	Approximately 0.4 miles upstream from 3 State Highway	Approximately 1.3 miles upstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Johnson Creek	Approximately 0.5 miles downstream from 3 State Highway	Approximately 0.2 miles downstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE w/ Floodway	
Johnson Creek	Approximately 0.2 miles downstream from 3 State Highway	Approximately 0.4 miles upstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Kangaroo Creek	Confluence with East Fork Scott River	Approximately 4,000 feet upstream from Masterson Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Kidder Creek	Confluence with Scott River	Approximately 0.2 miles upstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE w/ Floodway	No floodway data table. Entire reach controlled by flooding from Scott River.
Kidder Creek	Approximately 0.2 miles upstream from 3 State Highway	Approximately 2.2 miles upstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Kiamath River	Approximately 2.2 miles downstream from Walker Bridge Connection Road	Approximately 0.5 miles upstream from the confluence of Little Humbug Creek	Log-Pearson Type III	HEC-2	02/01/1985	AE w/ Floodway	
Kiamath River	Approximately 243 feet downstream from the confluence of West Gider Creek	Approximately 0.1 miles downstream from the confluence of Walker Gulch	Log-Pearson Type III	HEC-2	02/01/1985	AE w/ Floodway	
Kiamath River	Approximately 1.0 mile downstream from the confluence of Elk Creek	Approximately 3.1 miles upstream of Elk Creek Road	Log-Pearson Type III	HEC-2	02/01/1985	AE w/ Floodway	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Long Gulch	Confluence with East Fork Scott River	Approximately 4,000 feet upstream from East Callahan Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
McConaughy Gulch	Confluence with Scott River	Approximately 170 feet downstream of the confluence of Trail Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
McConaughy Gulch	Approximately 170 feet downstream from the confluence of Trail Gulch	Approximately 4.2 miles upstream from the confluence of Dockery Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Meamber Creek	Confluence with Scott River	Approximately 0.7 miles upstream from Scott River Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Meamber Gulch	Confluence with Scott River	Approximately 2,700 feet upstream from Scott River Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Meeks Meadow Creek	Confluence with North Fork French Creek	Approximately 600 feet upstream from unnamed road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Messner Gulch	Confluence with Scott River	Approximately 2,350 feet upstream from East Callahan Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Mill Creek	Confluence with Shackleford Creek	Approximately 7,630 feet upstream of the confluence of Emigrant Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Miners Creek	Confluence with French Creek	Approximately 520 feet upstream of Miners Creek Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits	Study Limits	Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Moffett Creek	Confluence with Scott River	Approximately 364 feet upstream from Scott River Road	Approximately 364 feet upstream from Scott River Road	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE w/ Floodway	
Moffett Creek	Approximately 364 feet upstream from Scott River Road	Just downstream from the confluence of McAdam Creek		HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Mule Creek	Confluence with East Fork Scott River	Approximately 3,200 feet upstream from confluence of East Fork Scott River		HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
North Fork French Creek	Confluence with French Creek	Approximately 980 feet upstream of the confluence of Meeks Meadow Creek		HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Noyes Valley Creek	Confluence with East Fork Scott River	Approximately 8 miles upstream of Masterson Road		HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Oak Gulch	Confluence with Cedar Gulch	Approximately 2,070 feet upstream of 3 State Highway		HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Oregon Slough	Approximately 1.3 miles upstream from the confluence with Shasta River	Approximately 347 feet downstream from Ager Road		Flood Frequency Analysis	Field Surveys	04/01/1979	AE, AO	
Oro Fino Creek	Confluence with Scott River	Approximately 1.4 miles upstream of Quartz Valley Road		HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Osterred Gulch	Confluence with Wildcat Creek	Approximately 1,600 feet upstream from Wildcat Creek		HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Patterson Creek	Confluence with Kidder Creek	At crossing with 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Patterson Creek	At crossing with 3 State Highway	Approximately 13,000 feet upstream of 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	A	
Paynes Lake Creek	Confluence with French Creek	Approximately 2,700 feet upstream from the confluence with French Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Rattlesnake Creek	Confluence with Scott River	Approximately 6,720 feet upstream of Scott River Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Sacramento River	At Siskiyou County boundary	Approximately 0.2 miles upstream of Cave Avenue / Simpson Street	Log-Pearson Type III	HEC-2	04/01/1979	AE w/ Floodway	
Scott River	Confluence with Klamath River	Approximately 3,090 feet downstream from the confluence of Meamber Gulch	Log-Pearson Type III	HEC-2	02/01/1985	A	
Scott River	Approximately 3,090 feet downstream from the confluence of Meamber Gulch	Approximately 2,370 feet upstream of Indian Creek confluence	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Scott River	Approximately 2,370 feet upstream of Indian Creek confluence	Approximately 2,400 feet downstream of confluence with Moffett Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Scott River	Approximately 2,400 feet downstream of confluence with Moffett Creek	Approximately 840 feet upstream of 3 State Highway	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE w/ Floodway	
Scott River	Approximately 840 feet upstream of 3 State Highway	Fay Lane	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Scott River	Fay Lane	Approximately 1,830 feet upstream of Wildcat Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Scott River	Approximately 1,830 feet downstream of confluence with Wildcat Creek	Confluence of East Fork Scott River and South Fork Scott River	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
Shackleford Creek	Confluence with Scott River	Confluence of Mill Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Shackleford Creek	Confluence of Mill Creek	Approximately 4,220 feet upstream of Quartz Valley Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Sharps Gulch	Confluence with Hurds Gulch	Approximately 3,860 feet upstream of Eastside Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Shasta River	Approximately 575 feet downstream of Edgewood Road	Approximately 1.0 mile upstream from the confluence of Beaughton Creek	Regional Analysis	USGS step- backwater computer program J- 635	04/01/1979	AE	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Shell Gulch	Confluence with Scott River	Approximately 7,760 feet upstream of the confluence of Unnamed Stream SH-01	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Sniktaw Creek	Confluence with Scott River	Approximately 5,220 feet upstream of Big Meadows Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
South Fork Scott River	Confluence with East Fork Scott River	Approximately 40 feet upstream of South Fork Road	HEC-HMS 4.3	HEC-RAS 6.0 (Hybrid)	02/28/2022	AE	
South Fork Scott River	Approximately 40 feet upstream of South Fork Road	Approximately 1.5 miles upstream from the confluence of Fox Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Squaw Gulch	Confluence with Cedar Gulch	Approximately 840 feet upstream from 3 State Highway	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Squaw Valley Creek	At Cemetery Road	Approximately 112 feet upstream of McCloud River Railroad	HEC-1	MIKE21	10/01/2004	AE, AO	
Sugar Creek	Confluence with Scott River	Approximately 1,200 feet upstream from Sugar Creek Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Taylor Creek	Confluence with East Fork Scott River	Approximately 5,700 feet upstream from confluence with East Fork Scott River	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits	Study Limits	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Thompson Gulch	Confluence with Wildcat Creek	Approximately 950 feet upstream from the confluence with Wildcat Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Tiger Fork	Approximately 50 feet west of Sugar Creek	Approximately 1,100 feet upstream from Sugar Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Trail Gulch	Confluence with McCaughy Gulch	Approximately 7,500 feet upstream from confluence of McCaughy Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Tyler Gulch	Confluence with Scott River	Approximately 2,580 feet upstream of Scott River Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Unnamed EF-01	Confluence with East Fork Scott River	Approximately 1,400 feet upstream from confluence of East Fork Scott River	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed EF-02	Confluence with East Fork Scott River	Approximately 3,000 feet upstream from Masterson Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed HS-01	Confluence with Heartstrand Gulch	Approximately 3,530 feet upstream of the confluence of Unnamed Stream HS-02	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Unnamed Stream HS-02	Confluence with Unnamed Stream HS-01	Approximately 3,100 feet upstream of the confluence with Unnamed Stream HS-01	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Unnamed Stream MC-01	Confluence with McConaughy Gulch	Approximately 2,000 feet upstream from McConaughy Gulch Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream MI-01	Confluence with Miners Creek	Approximately 2,750 feet upstream from confluence with Miners Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream NF-01	Confluence with North Fork French Creek	Approximately 3,100 feet upstream from unnamed road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream NV-01	Confluence with Noyes Valley Creek	Approximately 1,800 feet upstream from confluence with Noyes Valley Creek	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream SC-01	Approximately 850 feet upstream of Scarface Road	Approximately 2,400 feet upstream of Scarface Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream SC-01	Confluence with Scott River	Approximately 850 feet upstream of Scarface Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Unnamed Stream SC-03	Confluence with Scott River	Approximately 6,120 feet upstream of East Callahan Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits	Study Limits	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Unnamed Stream SF-01	Confluence with South Fork Scott River	At Boulder Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream SF-02	Confluence with South Fork Scott River	Approximately 1,600 feet upstream from confluence with South Fork Scott River	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Unnamed Stream SH-01	Confluence with Shell Gulch	Approximately 6,070 feet upstream of the confluence with Shell Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Unnamed Stream SK-01	Confluence with Shackelford Creek	Approximately 4,570 feet upstream of Dangel Lane	HEC-HMS 4.3	HEC-RAS 5.0.7 (2D Analysis)	09/10/2021	A	
Unnamed Stream SU-01	Confluence with Sugar Creek	Approximately 1,440 feet upstream of Sugar Creek Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Whisky Creek	Confluence with Etna Creek	Approximately 2,600 feet upstream from Sawyers Bar Road	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	
Whitney Creek	Valley floor, approximately 2.0 miles below the apex at U.S. Hwy 97	At U.S. Hwy 97	SCS	Probability based model	02/01/1985	AO	Alluvial fan flooding. See Section 5.4 of the FIS for additional information.
Wildcat Creek	Confluence with Scott River	Approximately 3,540 feet upstream from the confluence of Osterried Gulch	HEC-HMS 4.3	HEC-RAS 5.0.7 (1D Analysis)	09/10/2021	A	

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Yreka Creek	Approximately 6,675 feet downstream of State Highway 3 (Montague Road)	Approximately 0.9 miles upstream from Westside Road	HEC-1	HEC-2	09/01/1979	AE, AO	

Table 13: Roughness Coefficients

Flooding Source	Channel "n"	Overbank "n"
Boles Creek	0.024-0.050	0.050-0.070
Cottonwood Creek	0.034-0.050	0.030-0.070
East Fork Scott River	0.030	0.040-0.120
Etna Creek	0.060-0.120	0.040-0.120
Greenhorn Creek	0.040	0.080
Humbug Gulch	0.024-0.050	0.080-0.100
Indian Creek	0.030-0.040	0.040-0.075
Johnson Creek	0.040-0.060	0.045-0.120
Kidder Creek	0.030	0.030-0.080
Kiamath River (near Happy Camp)	0.030-0.035	0.040-0.075
Kiamath River (near the Town of Kiamath River)	0.030-0.056	0.035-0.075
Kiamath River (near Seliad Valley)	0.030-0.035	0.040-0.060
Moffett Creek	0.030	0.030-0.120
Oregon Slough	0.035-0.040	0.040-0.050
Sacramento River	0.035-0.045	0.030-0.070
Scott River	0.030	0.040
Scott River	0.030	0.030-0.120
Shasta River	0.030-0.040	0.030-0.080
South Fork Scott River	0.030	0.040-0.120
Yreka Creek	0.030-0.040	0.060-0.080

5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

Table 14: Summary of Coastal Analyses

[Not Applicable to this Flood Risk Project]

5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas

[Not Applicable to this Flood Risk Project]

Table 15: Tide Gage Analysis Specifics

[Not Applicable to this Flood Risk Project]

5.3.2 Waves

This section is not applicable to this Flood Risk Project.

5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 16: Coastal Transect Parameters
[Not Applicable to this Flood Risk Project]

Figure 9: Transect Location Map
[Not Applicable to this Flood Risk Project]

5.4 Alluvial Fan Analyses

Alluvial fan flooding can pose significant risk to communities due to uncertain flow paths and the potential for mud and debris flows. Alluvial fans and flooding on alluvial fans show great diversity because of variations in climate, fan history, rates and styles of tectonism, source area lithology, vegetation, and land use. Acknowledging this diversity, FEMA developed an approach that considers site-specific conditions in the identification and mapping of flood hazards on alluvial fans. The FEMA alluvial fan methodology was used to determine the flood depths and velocities on the alluvial fans described in Table 17.

A summary of the peak discharge at the fan apex and results for the 1-percent-annual-chance determinations for all the streams studied by alluvial fan analyses is shown in Table 18, "Results of Alluvial Fan Analyses."

Whitney Creek Fan	At U.S. Hwy 97	Valley floor, approximately 2.0 miles below the apex at U.S. Hwy 97	3,000	AO 1-3'	4	7
Flooding Source	Location From (apex)	Location To (toe)	1% Annual Chance Peak Flow at Fan Apex (cfs)	Flood Zones and Depths (ft)	Minimum Velocity (fps)	Maximum Velocity (fps)

Table 18: Results of Alluvial Fan Analyses

Whitney Creek Fan	At U.S. Hwy 97	Valley floor, approximately 2.0 miles below the apex at U.S. Hwy 97	15.0	Probability based model (Dawdy 1979)	1985	Composite Methods, Geomorphology, Post Flood Hazard Verification, and Historical Information (Dawdy 1979)
Flooding Source	Location From (apex)	Location To (toe)	Drainage Area above Apex (sq mi)	Model(s) Used	Date Analysis was Completed	Method Description

Table 17: Summary of Alluvial Fan Analyses

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at www.ngs.noaa.gov.

The datum conversion locations and values that were calculated for Siskiyou County are provided in Table 19.

Table 19: Countywide Vertical Datum Conversion
[Not Applicable to this Flood Risk Project]

Table 20: Stream-Based Vertical Datum Conversion
[Not Applicable to this Flood Risk Project]

6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown

on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/flood-maps/guidance-partners/guidelines-standards.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Table 21: Base Map Sources

Data Type	Data Provider	Data Date	Data Scale	Data Description
7.5-Minute Quadrangle Grid	Environmental Systems Research Institute	2002	1:24,000	Grid of USGS 7.5-Minute Series Topographic Maps
County Boundaries	United States Geological Survey	2004	1:200,000	2000 county boundary for Siskiyou County
Digital Orthophotos	United States Department of Agriculture	2022	1:24,000	NAIP Imagery
Federal Lands	United States Geological Survey	2010	1:200,000	Spatial and attribute information for Federal Land Areas and Indian Reservations
Geodetic Benchmarks	National Geodetic Survey	2009	1:24,000	National Geodetic Survey reference points (benchmarks) – positions and descriptions
HUC-8 Subbasins	United States Geological Survey	2017	1:200,000	HUC-8 watershed boundaries
Levee Features	National Levee Database	2020	1:24,000	Updated levee polylines
	US Army Corps of Engineers	1997	1:24,000	Levee and berm data shown on FIRMs dated January 19, 2011
National Land Cover Database (NLCD)	United States Geological Survey	2016	1:100,000	NLCD Imagery
PLSS Areas	United States Geological Survey	2005	1:12,000	Public Land Survey System Data
Railroads	US Department of Commerce, US Census Bureau, Geography Division	2006	1:5,000	TIGER/Line Shapefiles (CD-ROM)
Transportation Features	Siskiyou County Department of Public Works	2001	1:6,000	Collection of road centerlines in Siskiyou County, California using vehicle-based GPS
	United States Department of Agriculture, Farm Service Agency	2005	1:12000	Road centerlines digitized from NAIP imagery

Table 21: Base Map Sources (continued)

Data Type	Data Provider	Data Date	Data Scale	Data Description
Water Features	United States Geological Survey	2017	1:24,000	National Hydrography Dataset for the Scott River Watershed. Lakes and stream centerlines

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

Table 22: Summary of Topographic Elevation Data used in Mapping

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Dunsmuir, City of	Sacramento River	Topographic Maps / Contour Lines	5 ft	1:1,200	Caltrans 1952
			80 ft		
Etna, City of	Johnson Creek	2017 QL2 LiDAR	10 cm RMSEz	1 meter at 95% confidence level	USGS 2019b
Fort Jones, Town of	Moffett Creek	2017 QL2 LiDAR	10 cm RMSEz	1 meter at 95% confidence level	USGS 2019b
Montague, City of	Oregon Slough	Topographic Maps / Contour Lines	5 ft	1:24,000	USGS 1922

Table 22: Summary of Topographic Elevation Data used in Mapping (continued)

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Siskiyou County, Unincorporated Areas	Alder Creek	2017 QL2 LIDAR	10 cm RMSEZ	1 meter at 95% confidence level	USGS 2019b
	Big Carmen Creek				
	Big Mill Creek				
	Big Mill Creek Overflow				
	Boulder Creek				
	Cedar Gulch				
	Crystal Creek				
	Dockery Gulch				
	East Fork Scott River				
	Emigrant Creek				
	Etna Creek				
	Facey Gulch				
	Fox Creek				
	French Creek				
	Graveyard Gulch				
	Grouse Creek				
	Hamlin Gulch				
	Hayes Gulch				
	Heartstrand Gulch				
	Horse Range Creek				
	Horseshoe Gulch				
	Hull Gulch				
	Hurds Gulch				
Indian Creek					
Indian Gulch					
Johnson Creek					
Kangaroo Creek					
Kidder Creek					
Long Gulch					
McConaughy Gulch					
Meamber Creek					
Meamber Creek					
Meamber Gulch					
Meeks Meadow Creek					
Messner Gulch					
Mill Creek					
Miners Creek					
Moffett Creek					
Mule Creek					
North Fork French Creek					

Table 22: Summary of Topographic Elevation Data used in Mapping (continued)

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Siskiyou County, Unincorporated Areas <i>(continued)</i>	Oak Gulch	2017 QL2 LiDAR	10 cm RMSEz	1 meter at 95% confidence level	USGS 2019b
	Oro Fino Creek				
	Osterried Gulch				
	Patterson Creek				
	Paynes Lake Creek				
	Rattlesnake Creek				
	Scott River				
	Shackleford Creek				
	Sharps Gulch				
	Shell Gulch				
	Sniktaw Creek				
	South Fork Scott River				
	Squaw Gulch				
	Sugar Creek				
	Taylor Creek				
	Thompson Gulch				
	Tiger Fork				
	Trail Gulch				
	Tyler Gulch				
	Unnamed Stream EF-01				
	Unnamed Stream EF-02				
	Unnamed Stream HS-01				
	Unnamed Stream HS-02				
Unnamed Stream MC-01					
Unnamed Stream MI-01					
Unnamed Stream NF-01					
Unnamed Stream NV-01					
Unnamed Stream SC-01					
Unnamed Stream SC-03					
Unnamed Stream SF-01					
Unnamed Stream SF-02					
Unnamed Stream SH-01					
Unnamed Stream SK-01					
Unnamed Stream SU-01					
Whisky Creek					
Wildcat Creek					
Siskiyou County, Unincorporated Areas	Cottonwood Creek	Topographic Maps / Contour Lines	20 ft	1:24,000	USGS 1957
	Humbug Gulch				
	Indian Creek				
	Oregon Slough				
	Sacramento River				
	Shasta River				
	Yreka Creek				
Siskiyou County, Unincorporated Areas		Topographic Maps / Contour Lines	2 ft	1:1,200	HCSD 1977

Table 22: Summary of Topographic Elevation Data used in Mapping (continued)

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Siskiyou County, Unincorporated Areas	Klamath River Scott River	Topographic Maps / Contour Lines	5 ft	1:4,800	CM2H 1983
Siskiyou County, Unincorporated Areas	Squaw Valley Creek	LIDAR / Contour Lines	2 ft	1:600	NHC 2004
Siskiyou County, Unincorporated Areas	Whitney Creek	Topographic Maps / Contour Lines	40 ft	1:62,500	USGS 1954
Weed, City of	Boles Creek	Topographic Maps / Contour Lines	2 ft	1:600	Caltrans 1973
Yreka, City of	Greenhorn Creek Humbug Gulch Yreka Creek	USACE Flood Maps	N/A	1:16,000	USACE 1976

BFEs shown at cross sections on the FIRMs represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

Table 23: Floodway Data

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION ³	DISTANCE ¹	WIDTH (FEET)	SECTION AREA ² (SQ. FEET)	MEAN VELOCITY ² (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	217	30	76	9.7	2,853.4	2,853.4	2,853.4	0.0
B	513	72	124	5.8	2,861.6	2,861.6	2,861.6	0.0
C	1,115	62	124	5.9	2,877.6	2,877.6	2,877.6	0.0
D	1,466	54	106	6.9	2,887.1	2,887.1	2,887.1	0.0
E	1,712	33	131	5.5	2,892.7	2,892.7	2,892.7	0.0

¹ Feet above limit of detailed study (limit being approximately 2,706 feet downstream of State Highway 3)

² Values reported are calculated along evaluation lines. Refer to the model result grids for modeled variability in elevation and surcharge across the floodway

³Floodway computed by hybrid 1D-2D model at this location

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	SISKIYOU COUNTY, CALIFORNIA	
	AND INCORPORATED AREAS	FLOODING SOURCE: JOHNSON CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY				1% ANNUAL CHANGE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	198,800	830	20,610	10.67	1,075.4	1,075.4	1,075.4	0.0
B	201,100	770	21,280	10.34	1,077.5	1,077.5	1,077.5	0.0
C	202,800	840	17,330	12.69	1,078.0	1,078.0	1,078.0	0.0
D	204,700	494	11,790	17.13	1,079.9	1,079.9	1,079.9	0.0
E	206,400	564	13,570	14.88	1,084.4	1,084.4	1,084.4	0.0
F	207,400	646	14,270	14.15	1,085.4	1,085.4	1,085.4	0.0
G	208,100	434	9,230	20.01	1,086.4	1,086.4	1,086.5	0.1
H	209,400	678	16,360	24.70	1,092.7	1,092.7	1,092.7	0.0
I	210,500	557	12,020	21.88	1,094.9	1,094.9	1,094.9	0.0
J	211,500	699	13,600	12.79	1,097.6	1,097.6	1,097.6	0.0
K	212,800	798	16,610	10.47	1,099.7	1,099.7	1,099.7	0.0
L	214,800	550	12,630	13.78	1,101.1	1,101.1	1,101.1	0.0
M	216,300	703	14,020	12.41	1,103.1	1,103.1	1,103.1	0.0
N	217,300	812	15,820	11.00	1,104.1	1,104.1	1,104.1	0.0
O	219,400	646	16,230	10.72	1,107.0	1,107.0	1,107.0	0.0
P	221,800	829	12,200	14.27	1,108.3	1,108.3	1,108.3	0.0
Q	223,050	635	13,160	13.22	1,110.7	1,110.7	1,110.7	0.0
R	224,550	858	15,000	11.60	1,112.6	1,112.6	1,112.6	0.0
S	227,000	623	12,780	13.62	1,115.3	1,115.3	1,115.3	0.0
T	334,900	382	8,620	19.1	1,363.4	1,363.4	1,363.4	0.0
U	336,700	541	10,590	14.6	1,369.5	1,369.5	1,369.5	0.0
V	338,500	494	9,140	17.0	1,372.7	1,372.7	1,372.7	0.0
W	341,100	457	8,820	17.6	1,378.1	1,378.1	1,390.1	0.9

¹ Feet above county boundary

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SISKIYOU COUNTY, CALIFORNIA
 AND INCORPORATED AREAS

TABLE 23

FLOODWAY DATA

FLOODING SOURCE: KLAMATH RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
X	343,600	451	9,680	16.0	1,386.2	1,386.2	1,386.2	0.0
Y	345,100	580	11,60	13.3	1,390.1	1,390.1	1,390.1	0.0
Z	346,800	560	9,950	15.6	1,393.7	1,393.7	1,394.1	0.4
AA	348,750	354	7,810	19.9	1,400.1	1,400.1	1,400.1	0.0
AB	349,150	583	11,940	13.0	1,405.4	1,405.4	1,405.4	0.0
AC	350,950	473	9,780	15.8	1,408.1	1,408.1	1,408.1	0.0
AD	353,550	469	10,290	14.9	1,413.7	1,413.7	1,413.7	0.0
AE	355,600	489	9,520	16.1	1,416.6	1,416.6	1,416.7	0.1
AF	357,200	483	9,740	15.7	1,420.2	1,420.2	1,420.2	0.0
AG	463,376	316	6,080	15.1	1,677.5	1,677.5	1,678.0	0.5
AH	464,101	418	6,610	13.9	1,680.1	1,680.1	1,680.1	0.0
AI	464,801	638	12,260	7.5	1,684.3	1,684.3	1,684.9	0.6
AJ	465,526	296	6,050	15.2	1,684.4	1,684.4	1,685.0	0.6
AK	466,326	642	12,320	7.5	1,689.7	1,689.7	1,690.6	0.9
AL	467,201	662	11,110	8.3	1,690.1	1,690.1	1,690.9	0.8
AM	468,201	891	12,210	7.5	1,690.9	1,690.9	1,691.8	0.9
AN	468,901	717	10,670	8.6	1,691.3	1,691.3	1,692.1	0.8
AO	469,551	693	7,630	12.1	1,691.3	1,691.3	1,692.1	0.8
AP	470,406	690	11,290	8.1	1,695.0	1,695.0	1,695.7	0.7
AQ	471,201	490	8,640	10.7	1,695.4	1,695.4	1,696.1	0.7
AR	472,046	412	6,710	13.7	1,695.8	1,695.8	1,696.1	0.3
AS	472,726	296	5,390	17.1	1,696.6	1,696.6	1,697.1	0.5
AT	473,566	697	10,780	8.5	1,701.3	1,701.3	1,702.2	0.9
AU	474,366	567	8,990	10.2	1,701.7	1,701.7	1,702.5	0.8
AV	475,951	675	8,910	10.3	1,706.8	1,706.8	1,706.9	0.1

¹ Feet above county boundary

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY SISKIYOU COUNTY, CALIFORNIA AND INCORPORATED AREAS	FLOODWAY DATA FLOODING SOURCE: KLAMATH RIVER
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Table 23: Floodway Data (continued)

1% ANNUAL CHANGE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)		FLOODWAY					LOCATION	
INCREASE	WITH FLOODWAY	WITHOUT FLOODWAY	REGULATORY	MEAN VELOCITY (FEET/ SEC)	SECTION AREA (SQ. FEET)	WIDTH (FEET)	DISTANCE ¹	CROSS SECTION
0.1	1,707.6	1,707.5	1,707.5	13.1	7,020	516	476,926	AW
0.5	1,710.7	1,710.2	1,710.2	9.9	9,270	598	477,826	AX
0.0	1,711.0	1,711.0	1,711.0	10.4	8,820	501	478,701	AY
0.0	1,711.0	1,711.0	1,711.0	19.3	4,770	430	479,351	AZ
0.0	1,716.2	1,716.2	1,716.2	7.2	12,710	1,261	480,051	BA
0.5	1,717.5	1,717.0	1,717.0	6.3	14,530	1,348	480,806	BB
0.5	1,718.1	1,717.6	1,717.6	6.4	14,430	1,105	481,446	BC
0.5	1,718.1	1,717.6	1,717.6	14.2	6,490	368	482,096	BD
0.0	1,719.9	1,719.9	1,719.9	15.1	6,110	407	482,751	BE
0.3	1,722.6	1,722.3	1,722.3	15.6	5,984	353	483,376	BF
1.0	1,729.5	1,728.5	1,728.5	6.4	14,270	783	484,036	BG
0.9	1,729.6	1,728.7	1,728.7	8.6	10,720	651	484,636	BH
0.9	1,730.2	1,729.3	1,729.3	8.8	10,460	677	485,236	BI
0.8	1,730.4	1,729.6	1,729.6	10.0	9,150	474	485,796	BJ
0.8	1,730.4	1,729.6	1,729.6	13.4	6,840	384	486,296	BK

¹ Feet above county boundary

FEDERAL EMERGENCY MANAGEMENT AGENCY
SISKIYOU COUNTY, CALIFORNIA
AND INCORPORATED AREAS

TABLE 23

FLOODWAY DATA

FLOODING SOURCE: KLAMATH RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION ³	DISTANCE ¹	WIDTH (FEET)	SECTION AREA ² (SQ. FEET)	MEAN VELOCITY ² (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,511	2,545	5,203	2.8	2,725.0	2,725.0	2,725.3	0.3
B	2,745	2,197	5,173	3.2	2,726.0	2,726.0	2,726.4	0.4
C	2,918	2,070	4,393	3.6	2,727.0	2,727.0	2,727.4	0.4

¹ Feet above confluence with Scott River
² Values reported are calculated along evaluation lines. Refer to the model result grids for modeled variability in elevation and surcharge across the floodway
³Floodway computed by hybrid 1D-2D model at this location

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	SISKIYOU COUNTY, CALIFORNIA	
	AND INCORPORATED AREAS	

FLOODWAY DATA		FLOODING SOURCE: SACRAMENTO RIVER		FEDERAL EMERGENCY MANAGEMENT AGENCY SISKIYOU COUNTY, CALIFORNIA AND INCORPORATED AREAS		TABLE 23			
¹ Feet above county boundary ² Data not available ³ Width/width within Siskiyou County Limits									
LOCATION	DISTANCE ¹	CROSS SECTION	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0		200/50 ³	1,450	18.62	2,170.8	2,170.8	2,170.8	0.0
B	130		200	2,170	12.44	2,173.9	2,173.9	2,173.9	0.0
C	990		160	1,540	17.53	2,181.1	2,181.1	2,181.1	0.0
D	2,030	E-AF ²	280	2,110	12.80	2,191.2	2,191.2	2,191.2	0.0
						1% ANNUAL CHANGE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			

Table 23: Floodway Data (continued)

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION ³	DISTANCE ¹	WIDTH (FEET)	SECTION AREA ² (SQ. FEET)	MEAN VELOCITY ² (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	1,393	11,215	4.1	2,713.6	2,713.6	2,713.6	0.0
B	674	959	9,333	5.6	2,714.0	2,714.0	2,714.0	0.0
C	1,004	790	6,852	6.6	2,715.0	2,715.0	2,715.1	0.1
D	1,512	720	6,988	6.9	2,716.0	2,716.0	2,716.3	0.3
E	2,043	1,817	10,806	4.5	2,717.0	2,717.0	2,717.6	0.6
F	6,111	1,352	13,578	3.3	2,725.0	2,725.0	2,725.2	0.2
G	8,409	2,659	14,064	4.4	2,727.0	2,727.0	2,727.4	0.4

¹ Feet above the downstream limit of floodway
² Values reported are calculated along evaluation lines. Refer to the model result grids for modeled variability in elevation and surcharge across the floodway
³Floodway computed by hybrid 1D-2D model at this location

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY SISKIYOU COUNTY, CALIFORNIA AND INCORPORATED AREAS	FLOODWAY DATA FLOODING SOURCE: SCOTT RIVER
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Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams
[Not Applicable to this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

This section is not applicable to this Flood Risk Project.

Table 25: Summary of Coastal Transect Mapping Considerations
[Not Applicable to this Flood Risk Project]

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 30, "Map Repositories").

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA.

To obtain an application for a LOMA, visit www.fema.gov/flood-maps/change-your-flood-zone and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/flood-maps/tutorials.

For more information about how to apply for a LOMA, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/flood-maps/change-your-flood-zone for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Mapping and Insurance eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/flood-maps/tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/flood-maps/change-your-flood-zone and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Siskiyou County FIRM are listed in Table 26.

**Table 26: Incorporated Letters of Map Change
[Not Applicable to this Flood Risk Project]**

6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community’s NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community’s chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the Floods & Maps “Change Your Flood Zone Designation” section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Siskiyou County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBM) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 27, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 27 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.