MT DNRC Floodplain Program

July 2013

Floodplain 101

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Course Overview

National Flood Insurance Program (NFIP)

Basic Mapping Information

New Effective Mapping and Your Community

Lender Requirements
*Elevation Certificates

Letters of Map Change

Permitting Basics from the Local Perspective

National Flood Insurance Program (NFIP)

***Congress created the National Flood Insurance Program (NFIP) in 1968 as an alternative to taxpayer-funded disaster relief for flood victims.**

***The NFIP is administered by the Federal Emergency Management Agency (FEMA), coordinated by the State of Montana, and is regulated and enforced by the Community.**

National Flood Insurance Program (NFIP)

*The NFIP enables property owners and renters in participating communities to purchase flood insurance.

*In exchange, the State and local communities adopt floodplain management regulations designed to reduce flood risks and future flood damage.

National Flood Insurance Program (NFIP)

3 basic components to the NFIP:

1. Regulations
2. Insurance
3. Mapping

National Flood Insurance Program (NFIP)

- Federal Role
- State Role
- Community Role

National Flood Insurance Program (NFIP)

The Federal Role

*Administer the NFIP through FEMA Regional Offices.

*Provide assistance to State NFIP coordinating agencies.

*Assess community compliance with the NFIP criteria.

National Flood Insurance Program (NFIP)

The Federal Role

*Advise local officials responsible for administering floodplain development regulations.

*Help review and adopt new maps and data.

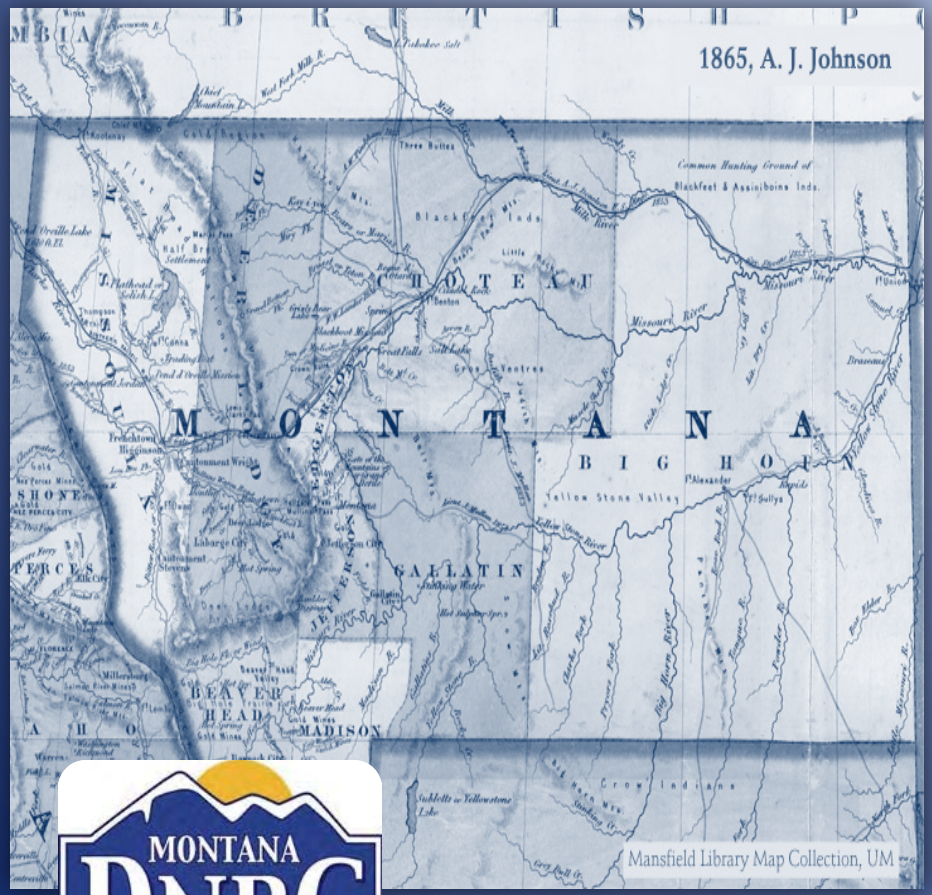
National Flood Insurance Program (NFIP)

The State's Role

*Ensure that communities have the legal authority necessary to adopt and enforce floodplain management regulations.

*Establish minimum State regulatory requirements that meet or exceed the NFIP standards.

National Flood Insurance Program (NFIP)



The State's Role

*Provide technical and specialized assistance to local governments.

*Coordinate activities of various State agencies that affect the NFIP.

*Provide outreach, training, & floodplain management resources.

National Flood Insurance Program (NFIP)

MT DNRC Water Operations Bureau: Floodplain Program Program Staff

Laurence Siroky, Bureau Chief

Traci Sears, NFIP Coordinator – Unit Supervisor

- Mary Guokas, Outreach Coordinator
- Bri Shipman, Training Coordinator
- Tiffany Lyden, Regulations Specialist

Steve Story, Floodplain Engineer – Unit Supervisor

- Mary Gibson, MAP MOD Specialist
-
- Chad Hill, CES

National Flood Insurance Program (NFIP)

MT DNRC Floodplain Program Provides:

*Mapping
*Community Assistance Visits (CAV)
*Ordinance review and Assistance
*General Technical Assistance
*Training
*Outreach
*Floodplain Website
*Floodplain Administrators Database

National Flood Insurance Program (NFIP)

DNRC Engineering Technical Assistance

Program Description: complimentary engineering technical support offered to communities (counties and municipalities) that participate in the NFIP throughout Montana.

Purpose: provide technical assistance to communities with limited resources and expertise to help them evaluate sufficiency of floodplain submittals and make sound floodplain management decisions.

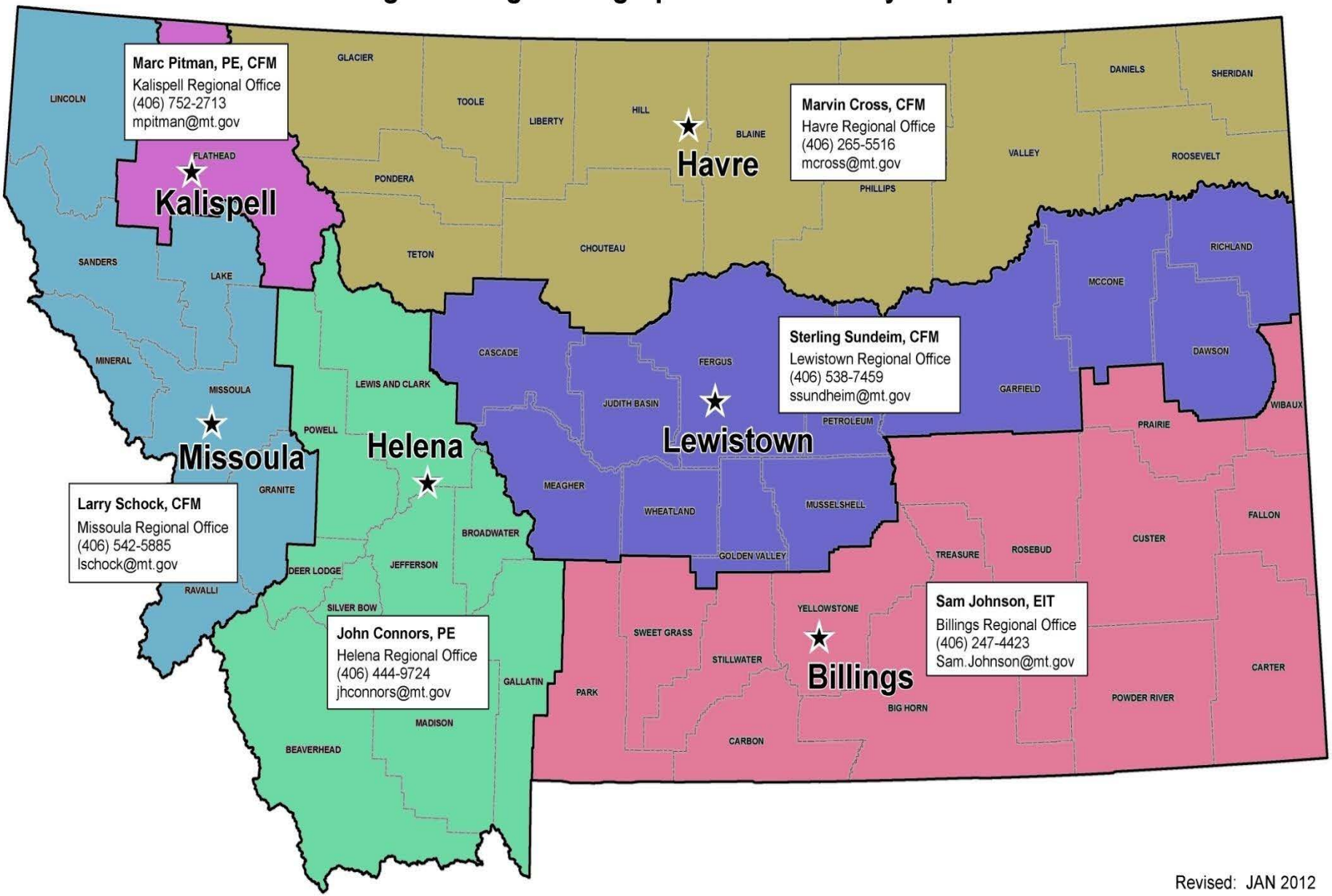
National Flood Insurance Program (NFIP)

MT DNRC Engineering: General Technical Assistance Provided

Floodplain related submittals that involve scientific and engineering analysis, including technical reviews of:

*Floodplain Development Permit Applications
*Subdivision Floodplain delineations and Flood Hazard Evaluations
*Letter of Map Changes (LOMCs) – CLOMR, LOMR, LOMA, etc.
*Floodplain Studies
*Proposed projects near or within a regulated floodplain
*Variances, General Consultation, & Site Visits

DNRC FLOODPLAIN PROGRAM
Regional Engineering Specialist Boundary Map



Revised: JAN 2012

National Flood Insurance Program (NFIP)

DNRC Engineering Technical Assistance Program Protocol:

*Community responsible to evaluate completeness of submittal and coordinate with applicant. DNRC will offer additional training and tools to assist local FPA's.

*DNRC comments & recommendations – provided in itemized list format for tracking multiple review exchanges.

*A maximum of 3 review exchanges will be provided by DNRC per application. After 3rd exchange, community shall issue, deny, or solicit services from 3rd party at their own cost.

National Flood Insurance Program (NFIP)

The Community's Role

***Ensure that the community establishes the necessary legal authority to adopt and enforce floodplain management regulations.**

***Establish minimum community regulatory requirements that meet or exceed the State floodplain regulations and the requirements of the NFIP.**

National Flood Insurance Program (NFIP)

The Community's Role

*Implement a floodplain permitting and enforcement process.

*Require additional Federal/State/local permits when applicable.

National Flood Insurance Program (NFIP)

The Community's Role, Cont'd

*Inspect all development within the regulatory floodplain to ensure compliance with local regulations.

*Assist in the preparation and revision of flood maps.

*Maintain records of floodplain development.

National Flood Insurance Program (NFIP)

The Community's Role, Cont'd

*Assist residents in obtaining information on flood hazards, map data, base flood elevations, flood insurance, and proper construction measures.

*Answer questions from the public.

National Flood Insurance Program (NFIP)

Floodplain Regulations: Community Ordinances

*Must meet or exceed Federal requirements specified in 44 CFR

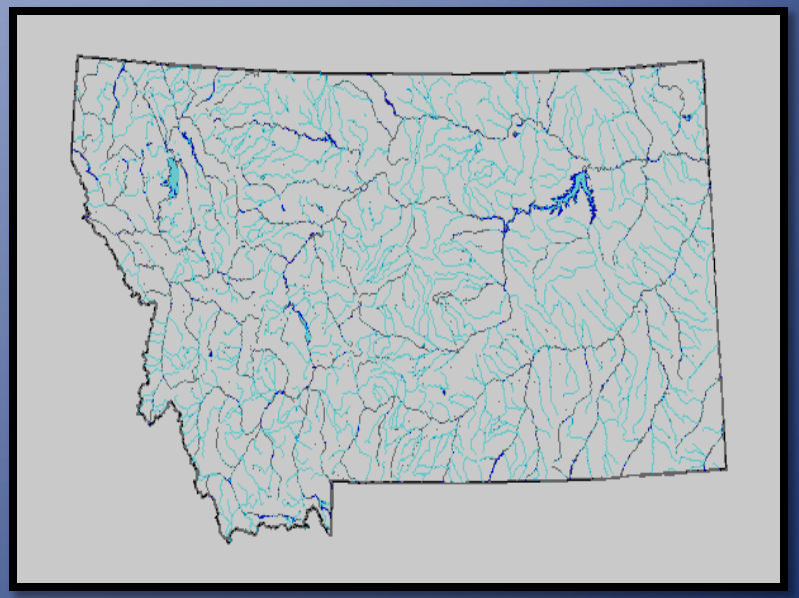
code of federal regulations

*Must meet or exceed State requirements of the Administrative Rules of Montana (ARMs).

National Flood Insurance Program (NFIP)

State Regulations

*MT CODE ANNOTATED (MCA) – STATUTES: laws passed by the legislature. All changes must go through the legislative process and be passed into law before they become effective.



Montana Floodplain and Floodway Management Act
*MCA Title 76, Chapter 5

National Flood Insurance Program (NFIP)

Community Regulations

The State established a model floodplain ordinance based upon the CFR's, MCA's, and ARM's intended to provide guidance for Montana communities in the adoption of their local regulations.

The model ordinance has recently undergone significant revision. The draft model ordinance is available on the Floodplain Program website: www.mtfloodplain.mt.gov

National Flood Insurance Program (NFIP) Basics of Mapping

Special Flood Hazard Area (SFHA):

- The area inundated by floodwaters of the Base Flood.
- The area where the NFIP regulations must be enforced and where flood insurance is mandatory.

Risk Zones	Description
A	Approx. Methods, no BFEs or flood depths are shown
AE, A1-30	Detailed and Limited Detail methods, with BFEs.
AH	Shallow Flooding (ponding), 1-3 ft depths with BFEs, detailed methods
AO	Shallow Flooding (sheet flow), 1-3’ depths, detailed methods, designated by 1’, 2’, or 3’ depth

National Flood Insurance Program (NFIP) Basics of Mapping

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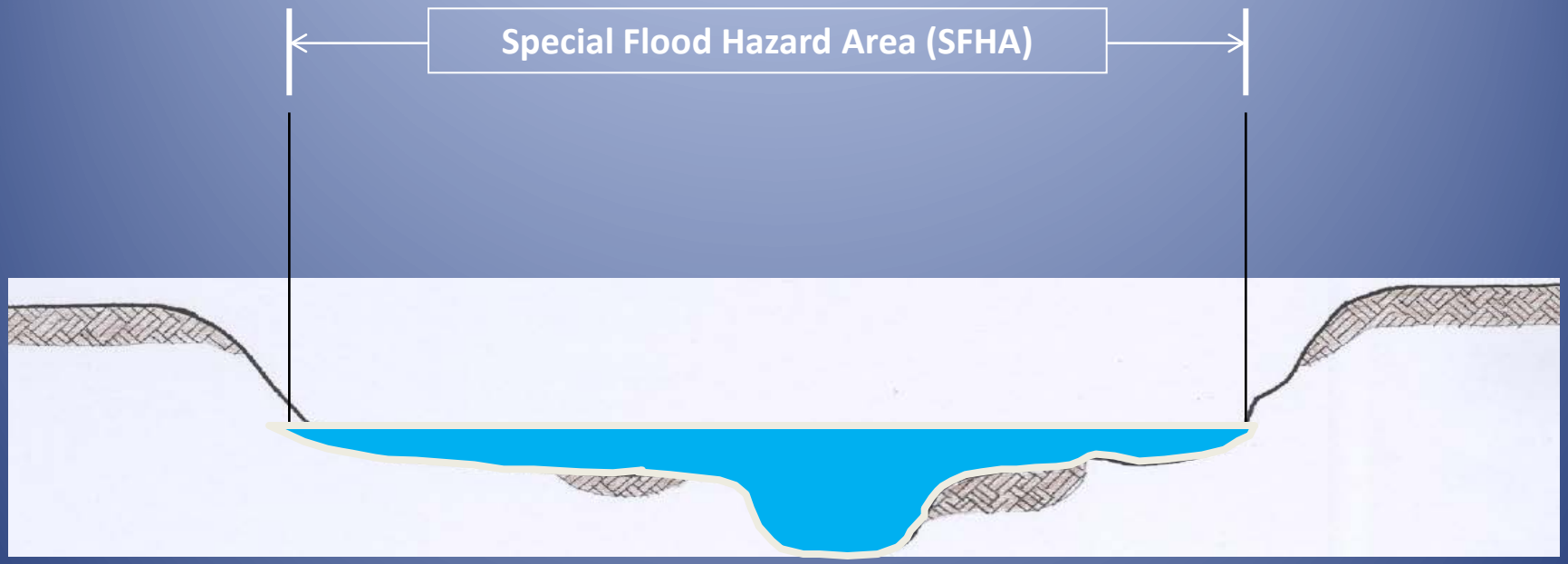
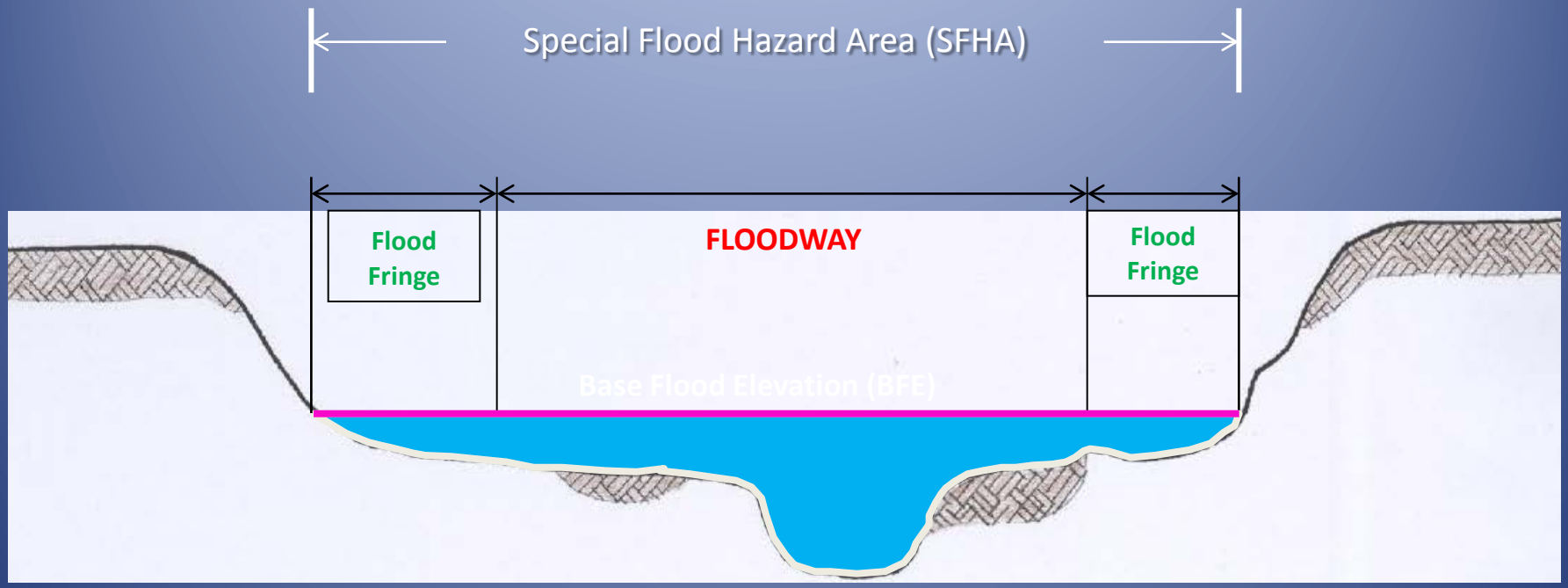
National Flood Insurance Program (NFIP)



Also Known As:

- FEMA 100 yr. Floodplain
- The Area that has a 1% chance of flooding on any given year.
- The point where the BFE intersects the ground.

National Flood Insurance Program (NFIP)

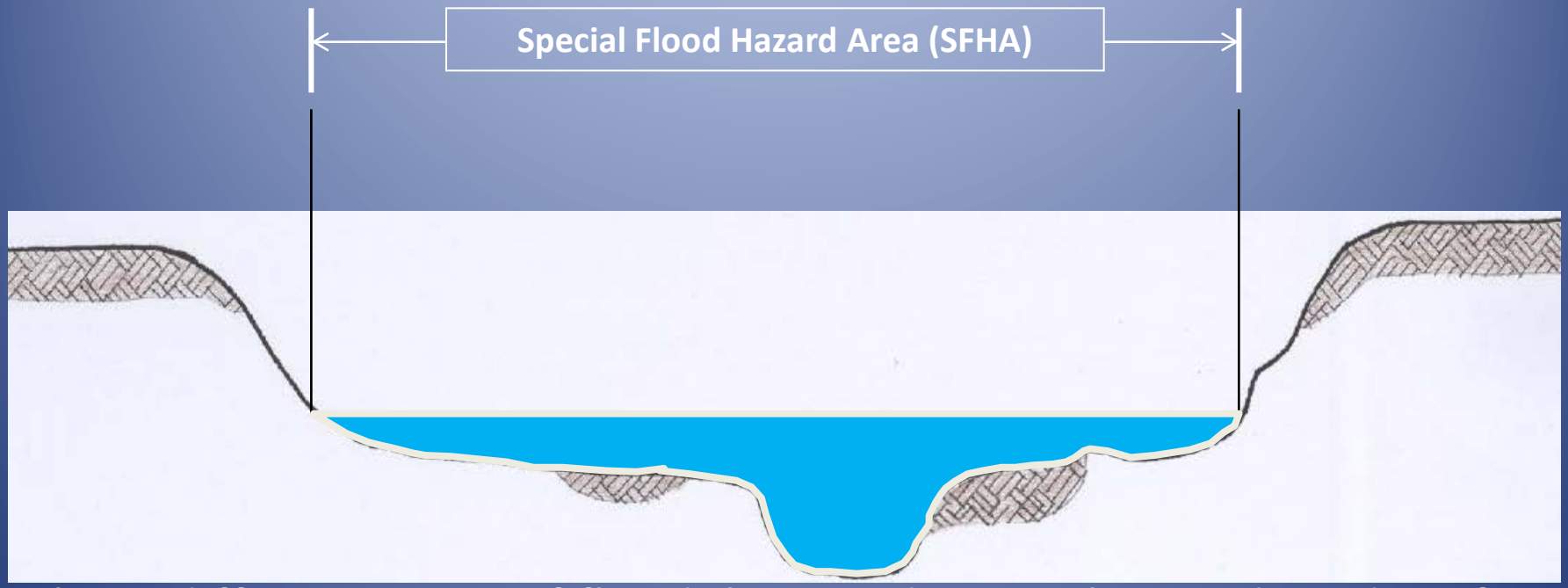


Flood Fringe - Area of the Floodplain that could be encroached upon and used for development by raising the ground.

Encroachment cannot cause more than 0.5 ft. rise.

FLOODWAY – Regulatory Area Only - Limited Development and no Encroachment allowed – Not a Physical Feature.

Types of Floodplain Studies



Three different types of floodplain studies can be used to identify the SFHA:

- Approximate Study
- Limited Detail Study
- Detailed Study

Types of Floodplain Studies

Approximate Study (Zone A) - the SFHA is defined, but no BFEs or flood profiles.

Limited Detailed Study (AE) - SFHA defined and may include BFEs. Profiles and BFEs published in FIS. Study parameters may vary based on available data, budget, etc.

Detailed Study (AE) - the SFHA & 500-yr floodplains are defined, and BFEs are published in FIS. The 10-, 2-, 1-, & 0.2 % annual-chance flood discharges are estimated, and profiles are provided in FIS. Structure geometry from detailed field surveys. Floodway analysis typically performed.

Types of Floodplain Studies

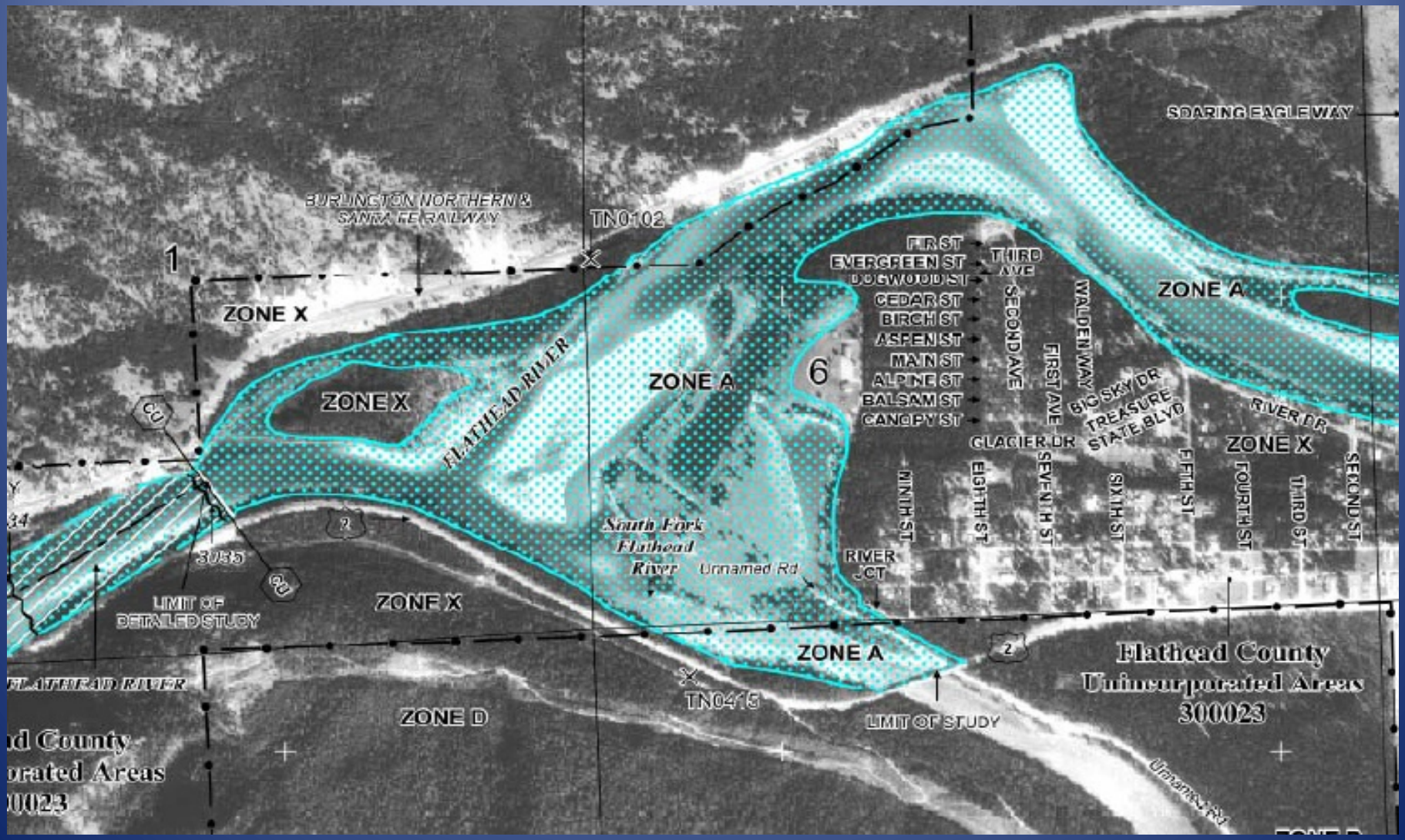
No Base Flood Elevations

No Hydrology

No Hydraulic Modeling

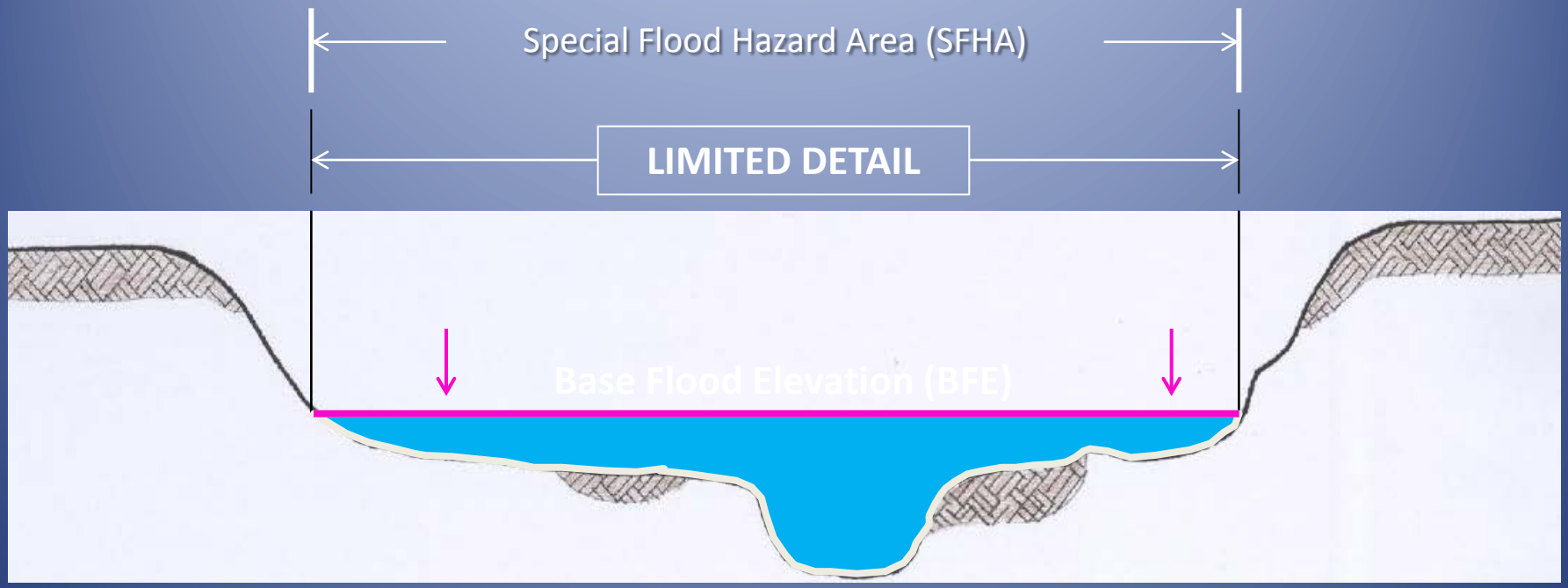
No Flood Profiles

Types of Floodplain Maps



FEMA Digital Flood Insurance Rate Map (DFIRM) - **Approximate Study**
Flathead River – Flathead County

Types of Floodplain Studies

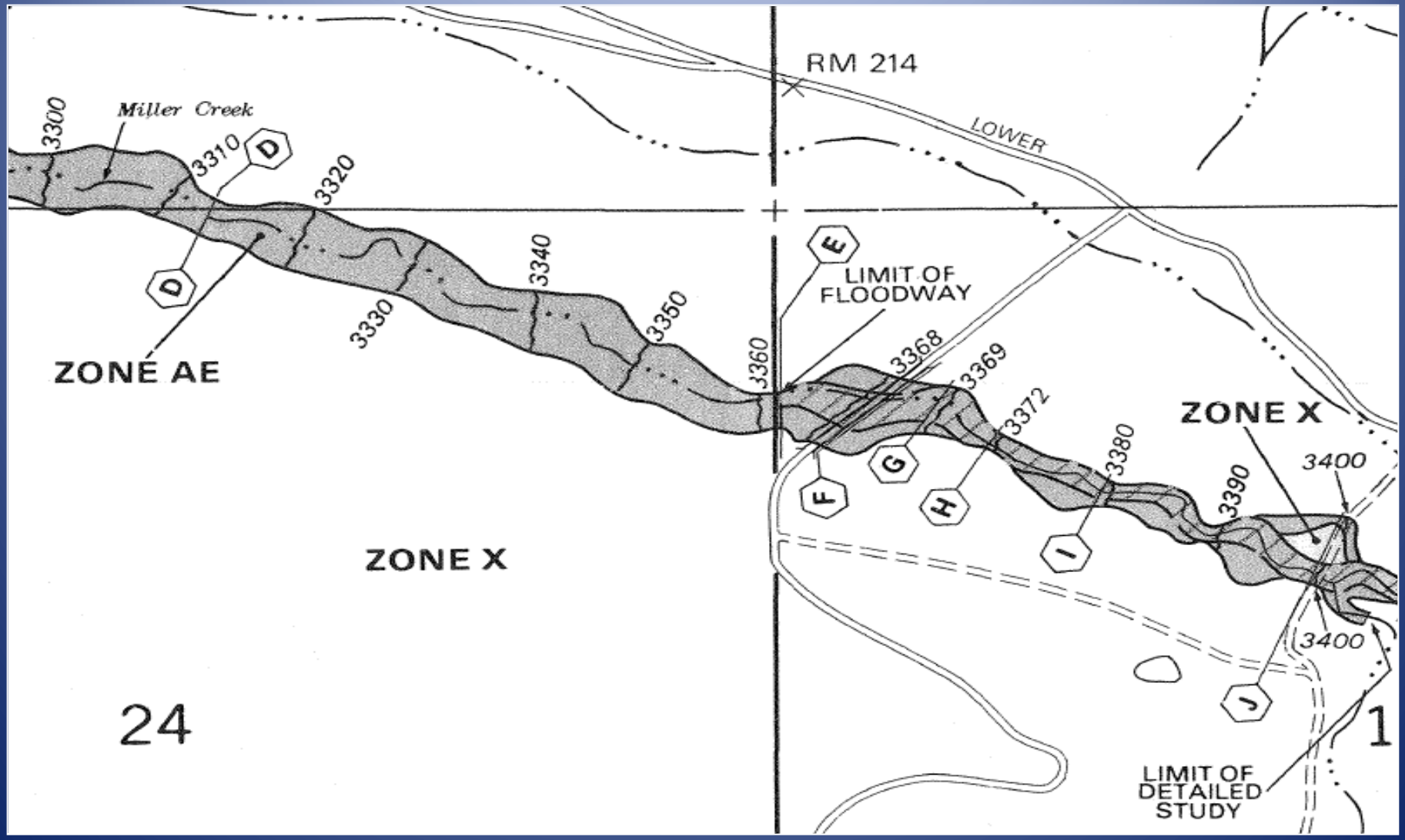


Flood Profiles and BFEs published in FIS.

Has limited Hydrology and Topographic Data

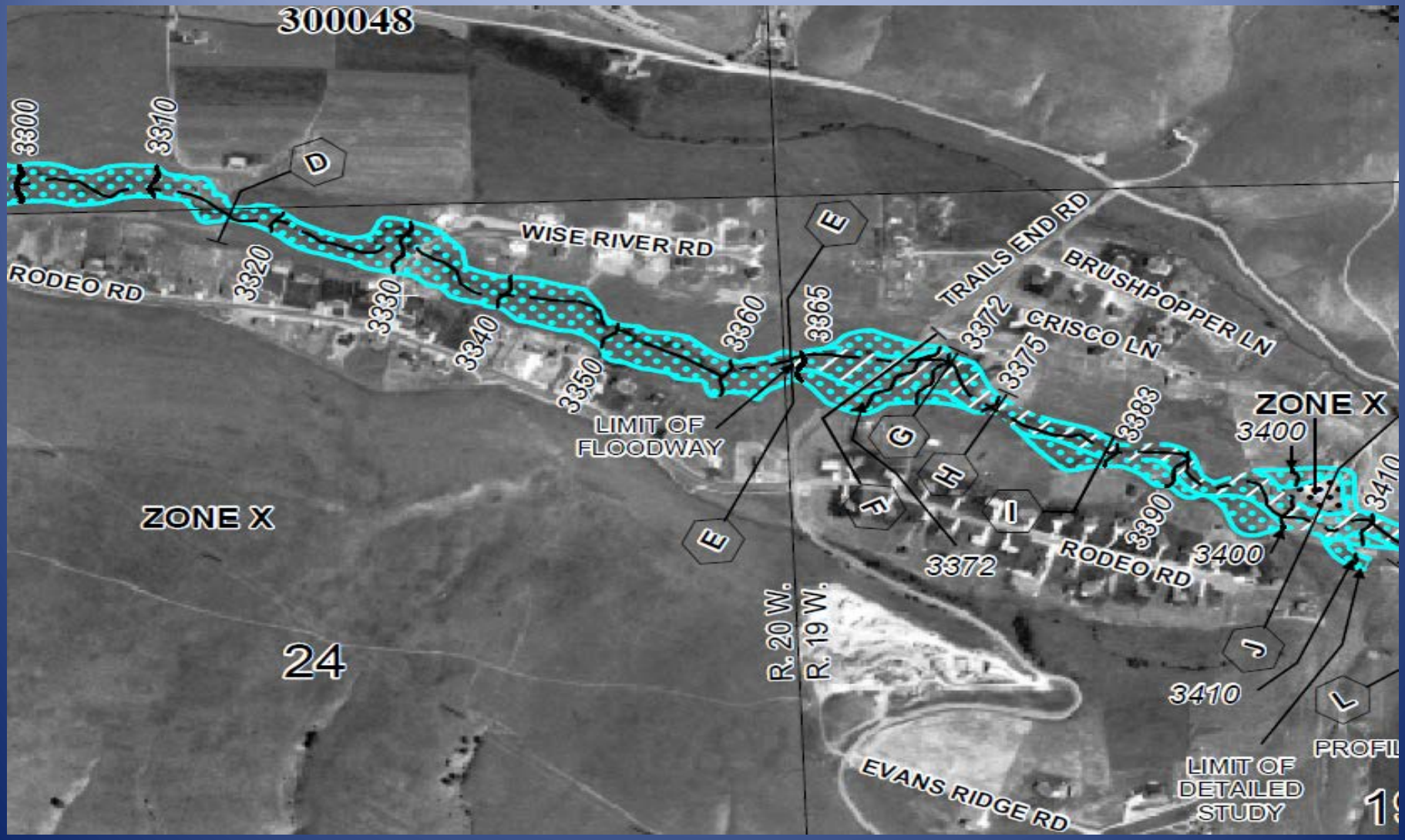
Has Limited Hydraulic Modeling at Bridges and Crossings

Types of Floodplain Maps



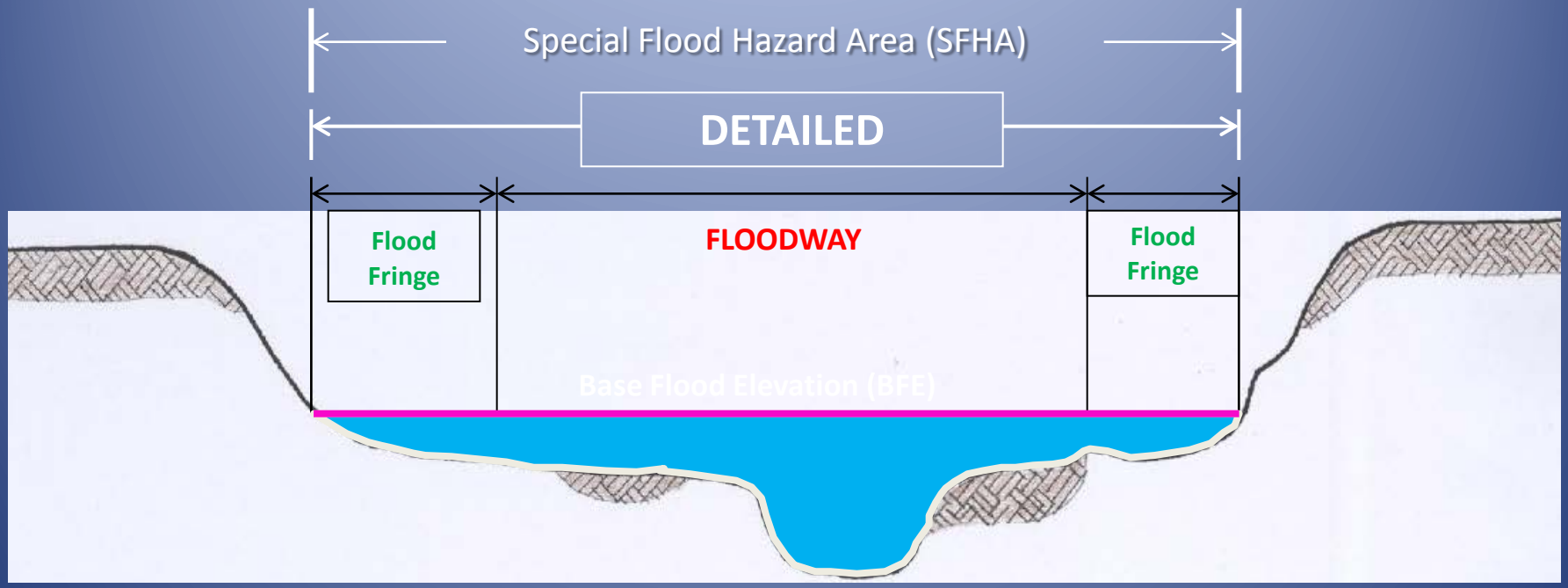
FEMA Flood Insurance Rate Map (FIRM) – **Limited Detail Study**
Miller Creek - Missoula County

Types of Floodplain Maps



FEMA Digital Flood Insurance Rate Map (DFIRM) – **Limited Detail Study**
Miller Creek - Missoula County

Types of Floodplain Studies



Flood Profiles and BFEs are published in FIS.

Based Upon Detailed Hydrology and Topographic data.

Based Upon Detailed Hydraulic Modeling.

Floodway Data Tables are published in the FIS.

Types of Floodplain Maps

FEMA Digital Flood Insurance Rate Map (DFIRM) - **Detailed Study**
Flathead River – Flathead County

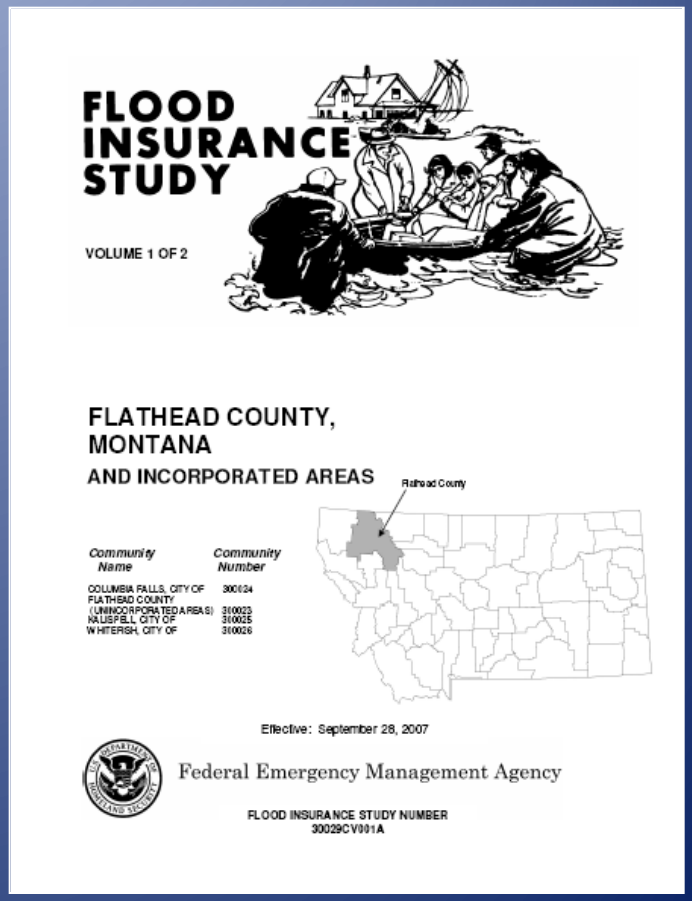
Floodplains: The Basics

Flood Insurance Study (FIS)

The FIS is a compilation and presentation of flood risk data for specific watercourses and lakes within a community.

The FIS report and associated maps delineate the SFHA, designate flood risk zones and establish BFE's.

The FIS serves as the basis for rating flood insurance, regulating floodplain development and carrying out floodplain management measures.


FLOOD INSURANCE STUDY

VOLUME 1 OF 2

FLATHEAD COUNTY, MONTANA

AND INCORPORATED AREAS

Flathead County

Community Name	Community Number
COLUMBIA FALLS, CITY OF	300024
FLATHEAD COUNTY (UNINCORPORATED AREAS)	300023
KALISPELL, CITY OF	300025
WHITEFISH, CITY OF	300026

Effective: September 28, 2007

Federal Emergency Management Agency

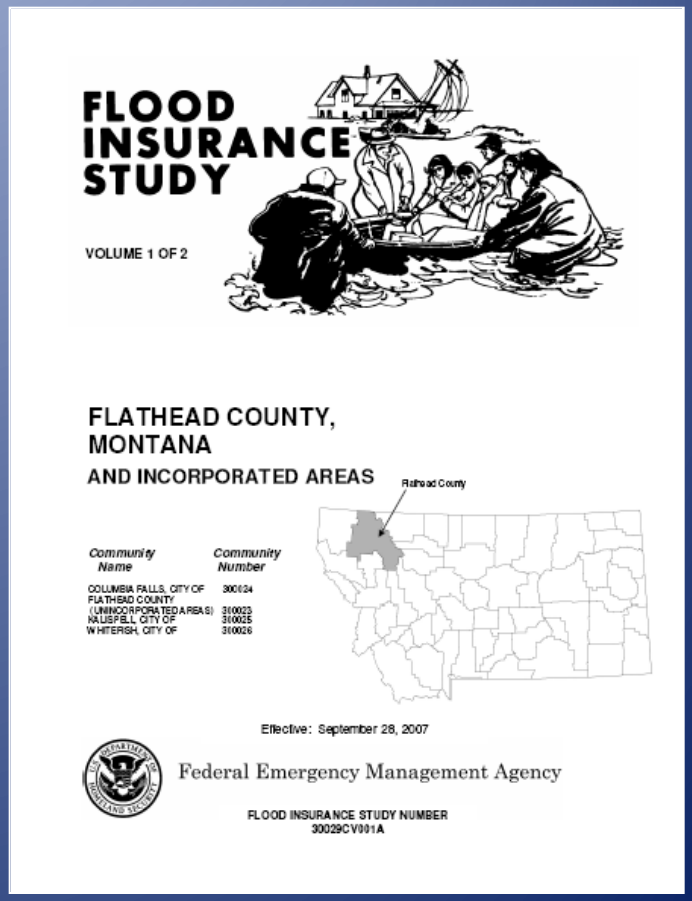
FLOOD INSURANCE STUDY NUMBER 30029CV001A

Floodplains: The Basics

Flood Insurance Study (FIS)

The FIS report has three components:

- *The Flood Insurance Study Report*
- *The FIRM or DFIRM's*
- *Prior to 1986, a separate Flood Boundary and Floodway Map (FBFM) was issued as a component of the FIS*



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Floodplains: The Basics

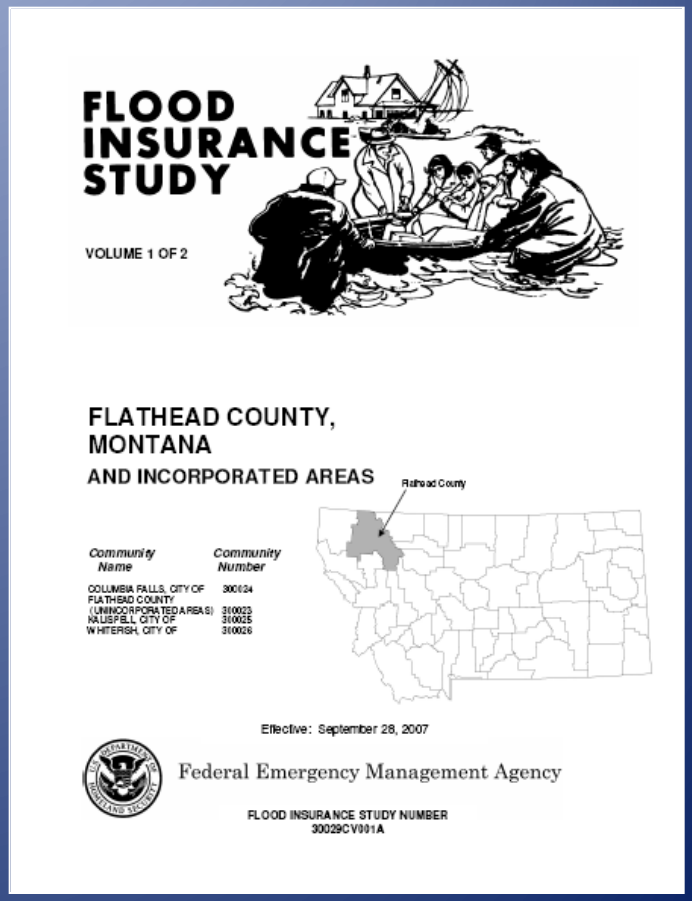
Flood Insurance Study (FIS)

The FIS report is an appraisal of the Community's flood hazards in a narrative that describes:

- *The purpose of the study*
- *Historic floods*
- *The area and flooding sources studied*
- *The engineering methods used*

Contains tables summarizing various flood hazard data.

Contains computed flood profiles.



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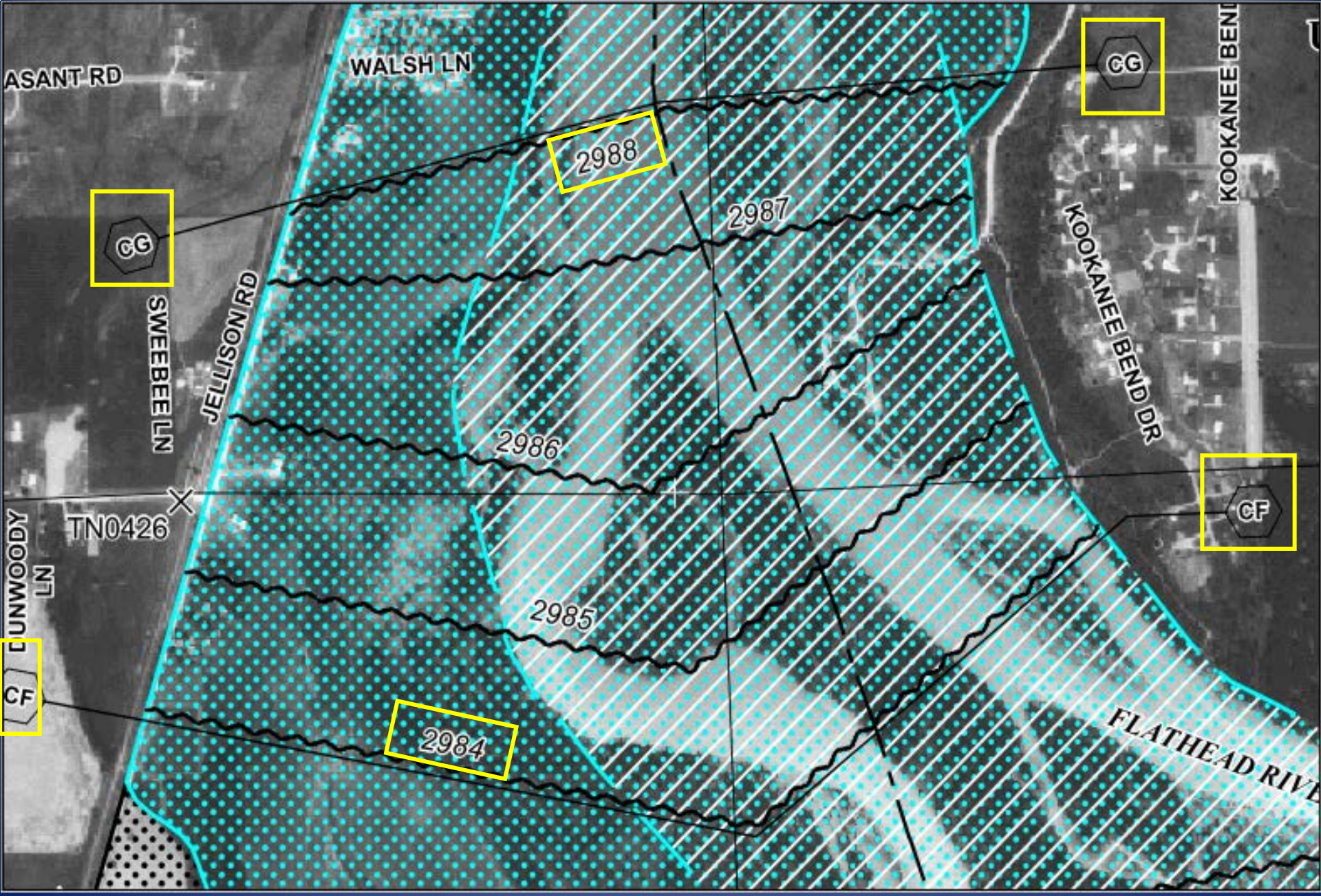


Example – DFIRM

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
FLATHEAD RIVER (cont.)								
BO	145,150	3,251	18,754	4.5	2,933.7	2,933.7	2,934.0	0.3
BP	147,050	2,925	15,369	5.4	2,935.5	2,935.5	2,935.8	0.3
BQ	148,550	3,657	20,632	4.0	2,937.2	2,937.2	2,937.6	0.4
BR	151,050	3,931	9,143	9.1	2,940.7	2,940.7	2,940.7	0.0
BS	153,950	3,194	12,346	6.8	2,945.1	2,945.1	2,945.1	0.0
BT	156,550	2,604	18,187	4.6	2,947.3	2,947.3	2,947.3	0.0
BU	158,650	2,002	7,356	11.4	2,949.5	2,949.5	2,949.5	0.0
BV	160,350	1,252	10,087	8.3	2,953.2	2,953.2	2,953.2	0.0
BW	162,150	971	7,894	10.6	2,956.3	2,956.3	2,956.3	0.0
BX	163,700	1,750	14,184	5.9	2,957.9	2,957.9	2,957.9	0.0
BY	165,550	1,850	7,621	11.0	2,960.2	2,960.2	2,960.2	0.0
BZ	167,300	1,608	12,297	6.8	2,962.7	2,962.7	2,962.7	0.0
CA	170,100	2,013	12,744	6.5	2,966.7	2,966.7	2,966.7	0.0
CB	172,400	1,280	12,883	6.5	2,969.8	2,969.8	2,970.3	0.5
CC	174,500	1,377	12,545	6.6	2,972.7	2,972.7	2,973.2	0.5
CD	178,000	2,506	20,757	4.0	2,977.6	2,977.6	2,978.1	0.5
CE	180,700	2,416	17,097	4.9	2,980.9	2,980.9	2,981.4	0.5
CF	183,600	2,775	19,317	4.4	2,984.0	2,984.0	2,984.3	0.3
CG	186,700	2,125	15,714	5.4	2,988.0	2,988.0	2,988.5	0.5
CH	191,400	730	9,788	8.6	2,993.7	2,993.7	2,994.2	0.5
CI	197,900	469	8,694	9.7	2,997.8	2,997.8	2,998.3	0.5
CJ	200,070	1,181	12,310	7.7	3,004.1	3,004.1	3,004.3	0.2

[1]Feet above confluence with Flathead Lake

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

FLATHEAD COUNTY, MT
AND INCORPORATED AREAS

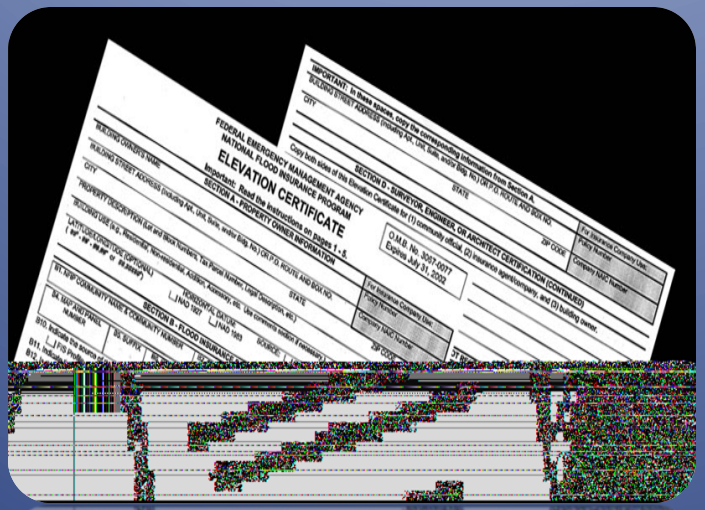
FLOODWAY DATA

FLATHEAD RIVER

Example – Floodway Data Table

The Elevation Certificate

FEMA Form 81-31



The Elevation Certificate

Purpose of the Certificate

*Required to rate post-FIRM and some pre-FIRM buildings

*Determine compliance with floodplain management ordinance

*Support LOMA/LOMR-F

*Prerequisite for the Community Rating System (CRS) Program

What is the Community Rating System (CRS) Program

- A FEMA program that credits a community's activities that are above the minimum federal standard by providing insurance premium discounts.

Goals of CRS

- Reduce/avoid flood damage to insurable property
- Strengthen/support the insurance aspects of the NFIP
- Foster comprehensive floodplain management

Does my community have to participate?

- No! It is voluntary

HOW DO I JOIN?

It's a community based program (rather than individual)

Community submits a letter of interest and provides documentation of activities

HOW LONG IS IT GOOD FOR?

Each year, community must re-certify

Periodically receives a "cycle verification visit"

What are the Benefits

- Insurance Premium Discounts!!!

	SFHA inside	SFHA outside	points
– CRS 10	-	-	<500
– CRS 9	5%	5%	500-999
– CRS 8	10%	5%	1000-1499
– CRS 7*	15%	5%	1500-1999
– CRS 6	20%	10%	2000-2499
– CRS 5	25%	10%	2500-2999
– CRS 4	30%	10%	3000-3499
– CRS 3	35%	10%	3500-3999
– CRS 2	40%	10%	4000-4499
– CRS 1	45%	10%	4500+

The Elevation Certificate

The proverbial "cross-training" shoe!!

***The primary purpose of the Elevation Certificate (E is to rate a flood insurance policy.**

***HOWEVER, it has since become the primary form for documenting building compliance with floodplain regulations.**

***There are disconnects between insurance and compliance, which can often lead to problems in using this form as the sole documentation for building compliance.**

The Elevation Certificate

The EC and the Community Rating System

***Maintaining Elevation Certificates is a participatory prerequisite to the CRS Program**

***Maintaining EC's means:**

-All new construction/substantial improvements must have a completed EC.

-The EC's must be correct and complete.

-Failure to <u>maintain</u> EC's can result in a CRS Program class reduction

The Elevation Certificate

Maintenance Responsibility

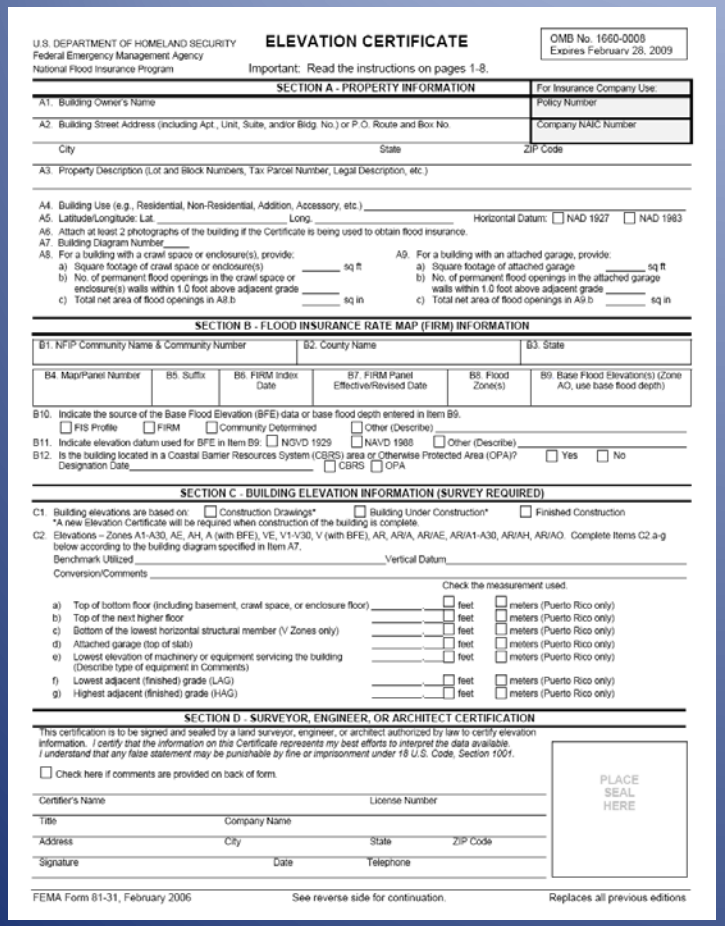
The responsibility of maintaining EC's lies with three parties:

****SURVEYORS: It is their responsibility to read the instructions and complete the EC correctly**

****COMMUNITY: It is the community's responsibility to review each form for completeness and accuracy. If the form is not complete and accurate, it should not be accepted.**

****PROPERTY OWNERS**

The Elevation Certificate



U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expires February 28, 2009

Important: Read the instructions on pages 1-8.

SECTION A - PROPERTY INFORMATION | For Insurance Company Use:

A1. Building Owner's Name | Policy Number

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. | Company NAIC Number

City State ZIP Code

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) _____

A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: ☐ NAD 1927 ☐ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number_____

A8. For a building with a crawl space or enclosure(s), provide:
a) Square footage of crawl space or enclosure(s) _____ sq ft
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A8.b _____ sq in

A9. For a building with an attached garage, provide:
a) Square footage of attached garage _____ sq ft
b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A9.b _____ sq in

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
☐ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other (Describe) _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other (Describe) _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☐ No
Designation Date_____ ☐ CBRS ☐ OPA

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-g below according to the building diagram specified in Item A7.
Benchmark Utilized _____ Vertical Datum _____
Conversion/Comments _____

Check the measurement used.

a) Top of bottom floor (including basement, crawl space, or enclosure floor) _____ ☐ feet ☐ meters (Puerto Rico only)
b) Top of the next higher floor _____ ☐ feet ☐ meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) _____ ☐ feet ☐ meters (Puerto Rico only)
d) Attached garage (top of slab) _____ ☐ feet ☐ meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments) _____ ☐ feet ☐ meters (Puerto Rico only)
f) Lowest adjacent (finished) grade (LAG) _____ ☐ feet ☐ meters (Puerto Rico only)
g) Highest adjacent (finished) grade (HAG) _____ ☐ feet ☐ meters (Puerto Rico only)

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

☐ Check here if comments are provided on back of form.

Certifier's Name License Number

Title Company Name

Address City State ZIP Code

Signature Date Telephone

PLACE SEAL HERE

FEMA Form 81-31, February 2006 See reverse side for continuation. Replaces all previous editions

Can be downloaded at:

http://www.fema.gov/business/nfip/elvinst.shtm

MONTANA DNRC
MT DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

Letters of Map Change (LOMC)

Alterations/Changes to the Flood Insurance Rate Map through Letters of Map Change (LOMCS)

Letters of Map Change (LOMC)

This section will cover:

****How to make changes to the map**

****Special Flood Hazard Area (SFHA) delineation (w/ or w/o BFEs)**

****Base Flood Elevation (BFE) changes**

****SFHA designation**

****What are LOMCs**

****When a lender says you're "in"!**

****When is a LOMR required**

****When is a CLOMR required**

****Approximate A zones and LOMCs**

What is Development

- Any man-made activity in the Special Flood Hazard Area to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, **filling**, grading, paving, excavation or drilling operations or storage of equipment or materials.

- A FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED FOR ANY ACTIVITY IN THE Special Flood Hazard Area (ANY ZONE BEGINNING WITH "A")

What are the flood zone designations and what do they mean?

- Any Zone beginning with "A"
  - **(unnumbered or Approximate) A zones – NO BFEs**
  - A1-A30 (BFEs available)
  - AE (BFEs available)
  - AO (depth)
- **Is regulated and requires a floodplain development permit**
  - Even if the work is done by the community itself (such as Public Works) or by the County Highway department!!!
- Aka "Special Flood Hazard Area", FEMA floodplain, regulatory floodplain, high (flood) risk area, 100-year floodplain, 1% chance of exceedance
- Expensive premiums

What are the flood zone designations and what do they mean?

- Zones B, C, (shaded or unshaded) X
  - Low-to-moderate flood risk
  - NON regulatory
  - Lower insurance premiums
- **Zone D**
  - Area of undetermined flood risk
  - NON regulatory
  - **Expensive premiums (b/c the flood risk is unknown)**

Letters of Map Change (LOMCs)

- There are 6 kinds
  - LOMA, CLOMA, LOMR-F, CLOMR-F, LOMR, CLOMR
- There are 3 forms
  - MT-EZ, MT-1, MT-2
- Most cost money to submit. The more technical the application, the higher the fee.
  - **LOMA – FREE!!!**
  - CLOMA - $500-$700
  - LOMR-F - $325-$800
  - CLOMR-F - $500-$800
  - LOMR/CLOMR - $4,400-$7150
- Some are voluntary actions; others are required
  - LOMAs, LOMR-Fs are voluntary
  - LOMRs are required when the project/property in question is in a reach that has BFEs defined on the FIRM

What is the purpose of a LOMC?

- Through a process collectively called a Letter of Map Change, a property owner, developer, or other entity **may** or **must** (depending on type of project, map information, and other factors) submit a record of site-specific information to FEMA to officially record the change in flood risk.
  - **MAY**: LOMAs and LOMR-F are voluntary
  - **MUST**: LOMRs are required within 6 months of completion of project when BFEs are provided on the FIRM

What are LOMCs?

Letters of Map Change

- **Letter of Map Amendment (LOMA)**
  - Small scale changes, such as a single residential lot at natural grade or multiple structures/lots at natural grade
  - Letter from FEMA - the map is "modified" by the Letter; a new map panel is not produced
  - Effective on the date sent
  - Requires a surveyor – costs are not reimbursable
  - Used to remove a structure/property (if criteria is met) from the SFHA, and thus remove mandatory purchase of flood insurance

What are LOMCs?

Letters of Map Change

- **Letter of Map Revision Based on Fill (LOMR-F)**
  - Small scale changes; residential or commercial structure(s)/lot(s) where fill has been placed to elevate the land to at/above the BFE
    - If fill is placed in floodway, a no-rise certification must be approved by the local Community before the LOMR-F can be processed.
  - Letter from FEMA - map is "modified" by Letter; a new map panel is not produced
  - Effective on the date sent
  - Requires a surveyor – costs are not reimbursible
  - Used to remove a structure(s)/property(s) (if criteria is met) from the SFHA, and thus remove mandatory purchase of flood insurance

What are LOMCs?

Letters of Map Change

- **Letter of Map Revision (LOMR)**
  - Large changes to the map, such as a structural changes like bridge/culvert replacement, channelization, or other flood control projects or subdivisions with structural changes
  - **LOMRs are required within 6 months of completion of project when BFEs are provided on the FIRM**
  - Requires a P.E. to perform a detailed H&H analysis
  - Letter from FEMA - map is “modified” by Letter; “mini-maps” either 8.5x11 or 11x17
  - Must be based upon as built information
  - **Effective date identified in determination letter**
  - Used to:
    - Request a change to the BFE or SFHA
    - Request a change to the regulatory floodway boundary delineation
    - Request a change (to BFE or floodway boundary delineation) involving property and/or structures that have been elevated by fill placed within the regulatory floodway

What are **CONDITIONAL** LOMCs?

- **CONDITIONAL** Letters of Map Change
  - FEMA's comment on a proposed project – used to ensure compliance or project the change in the mapped flood risk
  - **CONDITIONAL** Letter of Map Amendment (CLOMA)
    - **PRE-CONSTRUCTION**
    - FEE TO APPLY
  - **CONDITIONAL** Letter of Map Revision Based on Fill (CLOMR-F)
    - **PRE-CONSTRUCTION**
    - Range of fees
  - **CONDITIONAL** Letter of Map Revision (CLOMR)
    - **PRE-CONSTRUCTION**
    - Large changes to the map
    - Range of fees
    - ***ARE REQUIRED IN SOME CIRCUMSTANCES***

CONDITIONAL LOMCs

- ***CONDITIONAL LOMCs do not remove the mandatory purchase of flood insurance requirement.***
- A CLOMC is FEMA's comment on the proposed plan (are you going down the path of compliance?)
- Does not revise or amend the map.
- **PRECONSTRUCTION!**

LOMC forms

- MT-EZ
  - Single structure/lot
  - Natural grade (no fill)
  - Existing single structure or lot: FREE!! (LOMA)
  - **Proposed** single structure/lot: fee to apply; $500 (CLOMA)
- MT-1
  - Single structure/lot with fill
    - Existing structure/lot; fee to apply: $325-$425 (LOMR-F)
    - **Proposed** single structure/lot; fee to apply: $500 (CLOMR-F)
  - Multiple structure/lots with fill
    - Existing: fee to apply: $700-$800 (LOMR-F)
    - **Proposed**; fee to apply: $700 (CLOMR-F)
  - Multiple structure/lots at natural grade
    - **Existing: FREE!! (LOMA)**
    - **Proposed**; fee to apply: $700 (CLOMA)
  - Fill in floodway
    - **A no-rise must be approved by local Community prior to processing request; no change in BFE allowed**

LOMC forms

- MT-2
  - New hydrology
  - More detailed H&H
  - Modify the BFE, floodway boundary delineation, or SFHA delineation (no BFEs)
  - Record structural changes such as bridge/culvert, channelization/re-alignment, levee construction , or other flood control improvements
  - CLOMRs/LOMRs: range of application fees $4,400 - $7,150
    - FEE EXEMPTIONS
      - » Changes based on mapping/study errors
      - » Changes based on natural changes within the SFHA
      - » Federally funded flood control projects
      - » Changes based on detailed H&H to replace approximate studies
    - **IMPROVEMENTS TO FLOOD MAPS OR STUDIES THAT PARTIALLY OR WHOLLY INCORPORATE MANMADE MODIFICATIONS WITHIN THE SFHA (SUCH AS BRIDGE OR CULVERT REPLACEMENT) WILL NOT BE EXEMPT FROM FEES.**

Letters of Map Amendment

and

Letters of Map Revision based on Fill

What are they used for?

My Lender Says I'm "in"….

- How did this happen?
- What does it mean?
  - Escrow requirements
  - Insurance requirements
- What can I do about it?
  - LOMA/LOMR-F

What are LOMAs and LOMR-Fs?

- Because of topography or limitations of (map) scale, small areas may be inadvertently shown within an SFHA on a FIRM even though the property (either legally defined parcel(s) of land or structure[s]) is on natural ground and is at or above the elevation of the 1-percent-annual-chance flood.
  - Such cases are referred to as "inadvertent inclusions"

What are LOMAs and LOMR-Fs?

- Recognizing that such situations of "inadvertent inclusion" occur, FEMA established administrative procedures to change the designation for these properties via letter (as opposed to republishing the map panel).

- These procedures are referred to as the Letter of Map Amendment (LOMA) process and the Letter of Map Revision Based on Fill, (LOMR-F) process.

  - Through these processes, an individual who owns, rents, or leases property **may** submit certain mapping and survey information to FEMA and request that FEMA issue a document (not a map) that officially removes a property and/or structure from the SFHA.
  - In most cases, the applicant will need to hire a Licensed Land Surveyor or Registered Professional Engineer to prepare an Elevation Certificate for the property.
  - Upon receiving a complete application forms package, FEMA will normally complete its review and issue its determination within 90 days.

What are the data requirements to get out

- Cross section of river
- Elevations
  - Requires a surveyor; costs are not reimbursable
  - structure/property
  - Lowest Adjacent Grade (LAG) or Lowest Lot Elevation (LLE)
- BFE/documentation
  - Quick 2 program or FEMA 265 methods
- Plat map
- FIRMette
- **LOMR-Fs (MT-1 form) only -**
  - **Signed Community Acknowledgement Form**
  - **Application fee**

Out-as-shown

- MT-EZ form only
- **Single residential lot @ natural grade only**
- No survey required
- No fee to submit
- Appropriate for a large tract of land
- Property owner can complete and submit
- Can use Google Earth to determine lat/long of structure

LOMA - Basis of Determination

- Structure only
  - Comparison of the BFE with the elevation of the Lowest Adjacent Grade (LAG) to the structure, **including attached decks, deck posts, stairs, window wells, or garages**.
- Land
  - To remove the SFHA designation from a legally defined property or portion of property (with or w/o a structure), the elevation of the lowest ground on the property must be at or above the BFE.

LOMR-F - Basis of Determination

- Structure only
  - **When fill has been placed**.
  - Comparison of the BFE with the elevation of the Lowest Adjacent Grade (LAG) to the structure, including attached decks, deck posts, stairs, window wells, or garages
  - Completed **Community Acknowledgement Form**.
- Land
  - When fill has been placed.
  - To remove the SFHA designation from a legally defined property or portion of property (with or w/o a structure), the elevation of the lowest ground on the property must be at or above the BFE.
  - Completed **Community Acknowledgement Form**.

LOMA/LOMR-F – Basis of Determination
Special Considerations

- In areas of shallow/sheet flooding (**AO zone**), the **LAG** must be **above** the surrounding grade by an amount equal to or greater than the depth shown on the map.
  - LAG >= AO depth

- If the lowest floor of the building has been elevated on posts, piers, or pilings above the BFE and any portion of the structure (including posts, piers, or pilings) is still below the BFE, **the building will not be removed from the SFHA**.

Effects of LOMA or LOMR-F Determination – for the property owner

- If the determination is for **REMOVAL**, then the requirement for mandatory purchase of flood insurance does not apply.
  - HOWEVER, the lender may choose (since technically they still own the structure) to require the borrower to carry flood insurance. If this situation occurs, the premium will be rated based on low-to-moderate flood risk.
  - With a **REMOVAL** determination, the property owner would send a copy of the FEMA determination to the lender. The lender will send a letter back relieving the property owner of the mandatory purchase requirement. The property owner then takes both the FEMA letter and the lender's letter to the insurance agent to **request a refund** for the current year insurance premium.
  - The property owner can choose to carry flood insurance; the premiums will be lower since the structure/property is determined to be low-to-moderate risk.
  - A copy of the determination is sent to the community repository for record keeping and is also available to download from the FEMA Map Service Center. It is also recommended that a copy of the determination be attached to the deed an/or recorded at the local Clerk and Recorder office.

Effects of LOMA or LOMR-F Determination – for the floodplain manager

- If the determination is for **REMOVAL**, then the requirement for administration (i.e. floodplain development permit) do not apply.
  - Remember – if it is a CLOMA or CLOMR-F, the requirements DO STILL apply.

LOMRs

and

CLOMRs

Compliance with the Endangered Species Act (ESA) for CLOMCs

- The guidance is for the compliance with the Endangered Species Act (ESA) for Letters of Map Change. The purpose of the ESA is to conserve threatened and endangered species and the ecosystems upon which they depend.
- **CLOMR-Fs, CLOMRs**
  - ESA compliance **MUST BE DOCUMENTED** to FEMA **PRIOR** to issuance of CLOMR-F or CLOMR.
  - FEMA **MUST** receive confirmation of a completed consultation (may be conducted with USFWS by phone, email, or letter) of ESA compliance from the U.S. Fish and Wildlife Service. In some circumstances, FEMA may have to participate in the consultation between the CLOMR-F/CLOMR applicant and USFWS.

When is a CLOMR Required

- BFEs provided on map, no floodway defined
- 44 CFR 60.3 (c)(13)
- If the community proposes to allow development that would result in more than a 1.0 foot increase in the BFE*, a CLOMR *with detailed analysis* must first be obtained.
  - **For Montana, the increase is 0.5 foot.**
  - **BTW, floodplain administrators should be requiring from the applicant a detailed analysis to demonstrate what, if any, rise to the BFE will occur.**
    - **Do not approve permit before CLOMR is approved by FEMA!**

When is a CLOMR required

- BFE and floodway defined
- 44 CFR 60.3 (d)(4)
- If the community proposes to allow development totally or partially within the floodway that would result in any (greater than 0.0 foot) increase in the BFE, a CLOMR must be obtained.
- Even if there are to be no proposed changes, as part of the permitting process, the applicant must still demonstrate through detailed analysis that the rise in the floodway is no more than 0.00 feet. (44 CFR 60.3 (d)(3)

WHEN IS A LOMR REQUIRED?

44 CFR 65.3

- A community's base flood elevations may **increase** or **decrease** resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Administrator of the changes by submitting technical or scientific data in accordance with this part. ***Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data.***

When a LOMR is required…

- Who pays?
  - If it is a FEMA mitigation project, who pays?
  - If it is a community sponsored effort, who pays?
  - If it is a developer?
  - If it is the State DOT, who pays?

Community Acknowledge Form

- Required for MT-1 And MT-2 forms

- Provides written assurance by the participating community that they have complied with the appropriate minimum floodplain management requirements of 44 CFR 60.3(a)(3)c

44 CFR 60.3(a)(3) – reasonably safe from flooding

Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall

(i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy,

(ii) be constructed with materials resistant to flood damage,

(iii) be constructed by methods and practices that minimize flood damages, and

(iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

Changing the map

- A LOMC is a letter which reflects an official revision to an effective FIRM or FHBM.
- **LOMCs are issued in place of the physical revision and republication of the effective map.**
- A processed LOMC will change the current effective map (by letter) and thus may impact a floodplain administrators' regulatory requirements and also insurance requirements.
- In some cases, communities are required to ensure the changed flood risk (either increased or decreased) information is reported to FEMA.

Approximate A zones and the LOMC

- **LOMAs, LOMR-Fs**
  - Are voluntary
  - Property owners engineer should develop BFE thru Quick-2 or FEMA 265 methods
  - FEMA can develop BFEs, but will be based on best available information and thus could be more conservative (i.e. higher)
- **LOMRs**
  - Are recommended for approximate A zones if 5 acre/50 lot requirement met

What happens if LOMR is not submitted:

- **CLOMRs**
  - **ARE STRONGLY SUGGESTED!!**

Submitting LOMCs

- Please submit both the review and processing fee and the application package **together** to the following address:

  LOMC Clearinghouse
  847 South Pickett Street
  Alexandria, VA 22304-4605

Timeline for Determinations

- Upon receipt of complete application
- **LOMAs** **60 days**
  - CLOMAs 90 days
- LOMR-FS 90 days
  - CLOMR-Fs 90 days
- LOMRs 90 days
  - CLOMRs 90 days

- **If additional data is needed to process the LOMC request, the applicant is provided 90 days to respond.**

Where can I find copies of in processed LOMCs?

- FEMA Map Service Center
  www.msc.fema.gov
  - P.O. Box 3617 Oakton, Virginia 22124-9617
  - Phone: (877) 336-2627
- There are 3 ways to find a LOMC
  - By Case ID
  - By Map Panel
  - By State/County/Community
- **STATUS OF LOMC CAN ALSO BE FOUND ON FEMA WEBSITE**
  - **Type "Status of Map Change Requests" in FEMA search engine**

Permitting Basics from the Local Perspective

The Joint Application for Proposed Work in Streams, Lakes, & Wetlands in Montana – What is it?

**One or more permits may be required for work on or near a Montana waterway.

**Conservation Districts and other agencies developed a joint form intended to reduce the number of forms that must be completed and submitted to obtain necessary permits.

***Intended to increase coordination and streamline the permitting process.

Permitting Basics from the Local Perspective

Who Uses the Joint Application?

§ Conservation Districts – 310 permits

§ MT Fish, Wildlife, and Parks – SP 124 permits

§ Community Floodplain Administrators – floodplain development permits

§ US Army Corps of Engineers – Section 404/Section 10 permits

§ MT Department of Environmental Quality – 318 (turbidity) Authorizations

§ MT Department of Natural Resources & Conservation – navigable river land use licenses and easements

Permitting Basics from the Local Perspective

The Local Perspective – Joint Application considerations

**Development activities are tied to the local community ordinance. The local ordinance should be carefully reviewed for specific development requirements.

**Per the NFIP, "development" is defined as any human-caused change to improved or unimproved real estate including but not limited to: buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

Permitting Basics from the Local Perspective

Floodplain Administrators and the Application Process: the Notes of the Joint Application Symphony

**Local floodplain administrators play a crucial role in floodplain management.

**Tasked with numerous and varied responsibilities including the local floodplain permitting process.

**For proposed work in Special Flood Hazard Areas, NFIP participating communities require a floodplain development permit.

Permitting Basics from the Local Perspective

Floodplain Administrators and the Application Process: the Notes of the Joint Application Symphony

A Local FPA must:

-ensure that permits are applied for and that applications are complete

-process permit applications

-coordinate with other agencies and programs for additional required permits

-ensure all projects are built according to approved permits

Floodplain Administrators and the Application Process: the Notes of the Joint Application Symphony

1. First Contact
2. The Application – a Breakdown
3. Application Received: Now What?
4. Site Visits
5. Adjacent Landowner Notification
6. Requesting Assistance – DNRC Regional Engineers

Permitting Basics from the Local Perspective

First Contact

No, not this kind of first contact….

Permitting Basics from the Local Perspective

First Contact

***Opportunity to thoroughly gather information, provide clarification about additional activities that may not be clearly defined, and advise about the joint application and its multi-agency use and implications.

***First contact with a potential applicant can yield important details about a proposed project that may not necessarily come to light until the application has already been submitted.

***FPA's should always recommend the applicant contact the agencies listed on the joint application to find out if other permits are required.

***This can save considerable time and angst as well as pre-empt possible violations.

Permitting Basics from the Local Perspective

First Contact

A successful first contact could turn this:

"My buds and I just bought some jet skis, and I want to put a dock and some rocks in. The Kawasaki rep told me to call you."

Permitting Basics from the Local Perspective

Into this:

"I am interested in constructing a boat dock on my property in addition to applying some bank protection measures , i.e. vegetation or perhaps rip-rap, to reduce bank erosion. I have already contacted the USACE, the local conservation district, DEQ, and FWP to inquire about other necessary permits."

Permitting Basics from the Local Perspective

The Application: A Breakdown

1. Before You Begin
2. How to Apply
3. Instructions for Filling out the Joint Application

   A. Applicant Information
   B. Project Site Information
   C. Project Information
   D. Additional Information for Section 404, Section 10, and Floodplain Permits Only

   *Additional Information Required for Floodplain Permit Applications Only
   E. Signature Requirements

Permitting Basics from the Local Perspective

The Application: A Breakdown

***Local FPA: responsible for providing assistance to applicants throughout the permitting process.

***Taking the time to thoroughly explain the joint application and requirements before the application is submitted will enable a proper application submittal and aid in streamlining the permitting process.

Permitting Basics from the Local Perspective

The Application: A Breakdown

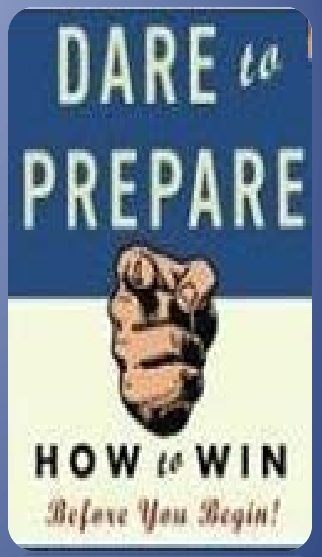
***If FPA knows that a complicated, multi-agency involved project is coming up, should be proactive and start planning to accommodate the short time frame allotted for application review.

***FPA's should strongly encourage a pre-application meeting (first contact) prior to application submittal.

***Typically, per their local floodplain management ordinance, once they have received a correct and complete application, communities have 60 days to approve, approve with conditions, or deny a floodplain permit,

***This timeframe incorporates other required permits from other agencies: these permits MUST be obtained prior to rendering the floodplain permit decision.

Permitting Basics from the Local Perspective



The Application: A Breakdown

Before You Begin – information applicant should obtain before completing application to enable a timely and successful permit approval.

1. **Review "A Guide to Stream Permitting in Montana" to identify which permits may be necessary to a proposed project.**

2. **Advise applicant that a project plan or drawing must be included with the application – some agencies or specific projects may require that this be provided by a professional engineer or other expert.**

3. **Keep in mind design considerations that minimize impacts i.e. sedimentation/erosion during and after project construction. Projects must be designed to maintain the carrying capacity of the water course and preserve/protect river or stream in as natural condition as possible.**

Permitting Basics from the Local Perspective

The Application: A Breakdown

Before You Begin – information applicant should obtain before completing application continued…

4. **Obtain project site legal description and site map.**

5. **Be informed of vegetation and its significance to stream health and stability – minimize vegetation removal and plan to replant bare ground.**

Permitting Basics from the Local Perspective

The Application: A Breakdown

***A floodplain permit is required for new construction or development within designated floodplains.

***All required local, state, and federal permits must be approved before a floodplain application is considered complete.

***The completed application form with original signatures should be routed to each applicable agency. The application should be signed by the applicant, the person responsible for the project, and the landowner.

Permitting Basics from the Local Perspective

Instructions for filling out the Joint Application

A. Applicant Information

*****This section entails all pertinent applicant information and identifies the applicant as the responsible party for the project and the main point of contact for project details, coordination, and permitting questions.**

*****The applicant is charged with obtaining necessary landowner authorization.**

******If the landowner's name and address is different than the applicant's the information must be specified.**

*****Provide contact information for contractors involved in the project.**

*****Good practice for the FPA to cc the landowner on all correspondence since ultimately the landowner is responsible for development on their property.**

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions for filling out the Joint Application

B. Project Site Information

*****Applicant should have a clear understanding of exactly where on the property the project will take place.**

*****Precise directions to the site, Geocode information, and a site map reflecting the project location and identifying landmarks should be included in this section.**

*****The FPA should coordinate with the landowner to schedule site visits.**

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions for filling out the Joint Application

C. Project Information

The floodplain administrator should always request detailed information about EVERYTHING – <u>take nothing at face value</u>.

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions for filling out the Joint Application

C. Project Information

This section of the application provides an opportunity to accurately describe the proposed project and the steps that will be utilized to minimize impacts to the natural integrity of the river or stream.

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions on filling out the Joint Application

C. Project Information

There are 14 specific information considerations on this section of the application, and there are typical deficiencies routinely reflected on sub-par application submittals:

Permitting Basics

Instructions for filling out the Joint Application

C. Project Information-typical deficiencies

1. Type of project (1) – often the applicant checks one box when really multiple selections apply.

2. Proposed construction date (4) – this should include a start date and anticipated completion date.

3. Provide a brief description of the proposed project (6) – "A boat and other stuff". Should be unacceptable!

4. Materials – describe the materials used and how much (10) – "Wood and Rock". What are the real implications? Need to provide specifics on what kind of materials, how many cubic yards or linear feet, and the source of the materials.

5. Describe planned efforts to minimize project impacts (12) – "N/A". The applicant should provide specific details! "N/A" serves as a red flag to floodplain administrators and dictates the need to conduct a site visit.

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions on filling out the Joint Application

C. Project Information – aka DETAILS, DETAILS, DETAILS!

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions on filling out the Joint Application

D. Additional Information for Floodplain Permits

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions on filling out the Joint Application

D. Additional Information for Floodplain Permits

The floodplain administrator should inform the applicant on the requirements of questions 3-6 in this section:

3. A list of adjacent property owners and the corresponding mailing addresses should be included – many communities require a certified adjoining property owner list.

4. All local, state, and federal permits must be in place before a floodplain permit can be issued – copies of each permit must be provided with the joint application.

5. Provide Flood Insurance Study (FIS) information and floodplain map panel numbers for projects in a designated floodplain.

6. Identify any special local planning or zoning considerations.

Permitting Basics from the Local Perspective

The Application: A Breakdown

Instructions on filling out the Joint Application

Additional Information Required for Floodplain Permit Applications Only

Permitting Basics from the Local Perspective

Instructions on filling out the Joint Application

Additional Information Required for <u>Floodplain Permit Applications Only</u>

The floodplain administrator should inform the applicant of the following additional information necessary to submit for a floodplain permit:

1. **A detailed site plan of the proposed project, drawn to scale and meeting the identified specifications.**

2. **A statement clarifying types of material and total amount of proposed fill intended for placement in the floodplain, with accompanying supporting calculations.**

3. **Some projects may require a licensed Montana engineer to design to the following criteria:**

   ***the project can withstand the 100 year flood**
   ***the project will not adversely affect adjacent or surrounding landowners**
   ***the effect of the proposed project on the 100 year base flood elevation**

Application Received – Now What?

***Once a local floodplain administrator receives a complete application, the FPA will review and evaluate the application and shall approve, approve with conditions, or deny the application within 60 days of receiving the correct and complete application.

***For poorly completed applications, FPA's should communicate the application deficiencies to the applicant in writing. Input and recommendations for application modifications should also be documented in writing.

***If the applicant corrects the identified deficiencies and resubmits the application, the FPA shall notify the applicant whether the application contains all required elements.

***This process repeats until the applicant submits an application containing all required components, or the application is withdrawn.

Site Visits

***Site visits are crucial, and it may be necessary for the FPA to conduct more than one.

***A site visit should be conducted as soon as the application is received and before the permit is issued, as well as when work has been completed to ensure compliance with the permit requirements.

***If a structure is a project component, a site visit should be conducted once the foundation is poured. The FPA should coordinate with the property owner to coordinate site visits.

Adjacent Landowner Notification

Local floodplain management ordinances specify notice requirements for floodplain permit applications.

Once a complete permit application has been received, the floodplain administrator should:

1. Prepare public notice and publish at least once in a local newspaper.
2. Serve adjacent property owners notice via first class mail.
3. Provide notice to the State NFIP Coordinator.
4. The notice should allow for a reasonable comment period (15 days or longer).
5. Provide notice to DNRC, FEMA, and adjacent communities for riverine situations prior to any alteration or relocation of a watercourse.

Questions?