

Montana Stream Restoration Committee

A multi-agency effort to streamline permitting

Presented at:

AMFM Conference | March 1, 2024

By: Traci Sears, DNRC Floodplain

Background

- Lewis and Clark Conservation District (CD)
 - drafted a letter to DNRC Water - Operations
 - impediments during permitting process
 - regarding restoration and stream habitat projects
- DNRC takes the lead and forms a stakeholder interest group
 - seeking mutually beneficial compromises from agencies involved in the permitting process
 - while constructing solutions that stayed within the regulatory framework.

Montana Joint Stream Restoration Committee (JSRC) Formed - 2017

- A multi-agency committee
- Formed to investigate potential avenues to improve the process for permitting small stream restoration projects in rural areas.



Montana Joint Stream Restoration Committee

Multi-Agency

- **Local Conservation District(s) (CD)**
- **Local Floodplain Administrator (FPA)**
- **MT Fish, Wildlife and Parks (FWP)**
- **MT Dept of Environmental Quality (DEQ)**
- **U.S. Army Corps of Engineers (USACE)**
- **MT DNRC – Lands - *Re: Navigable River***
- **MT Department of Emergency Service (DES)**



Joint Stream Restoration Committee

The Committee is specifically investigating ways to:

- Reduce the complexity and engineering costs associated with floodplain requirements for rural stream restoration projects.

Projects areas have no potential for impact on structures, properties, or other infrastructure.

The goals are to establish guidelines which could:

1. Help stream-line the permitting application process.
2. Provide potential funding sources for stream restoration projects; and
3. Significantly reduce engineering costs associated with proposed projects.

The committee works closely with FEMA Region VIII personnel and is dedicated to finding ways to modify permitting and engineering requirements to help complete these small restoration projects in a timely and cost-effective manner.

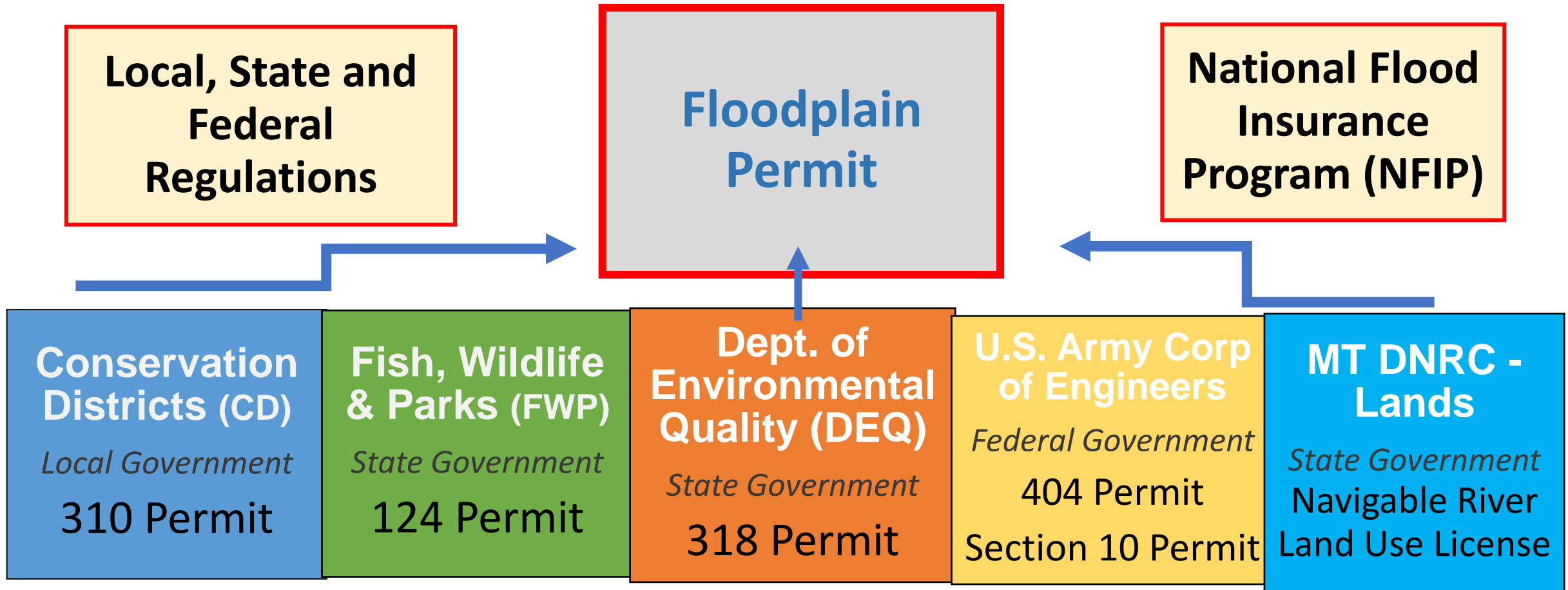
Three Key Issues for Restoration Projects

ISSUE 1: All other applicable permits must be obtained prior to issuing floodplain permits (Federal Law)

ISSUE 2: Time constraints in the permitting process.

ISSUE 3: Engineering requirements – especially in floodways

Issue 1: Must obtain all applicable permits



Local, State and Federal Regulations

Floodplain Permit

National Flood Insurance Program (NFIP)

Conservation Districts (CD)
Local Government
310 Permit

Fish, Wildlife & Parks (FWP)
State Government
124 Permit

Dept. of Environmental Quality (DEQ)
State Government
318 Permit

U.S. Army Corp of Engineers
Federal Government
404 Permit
Section 10 Permit

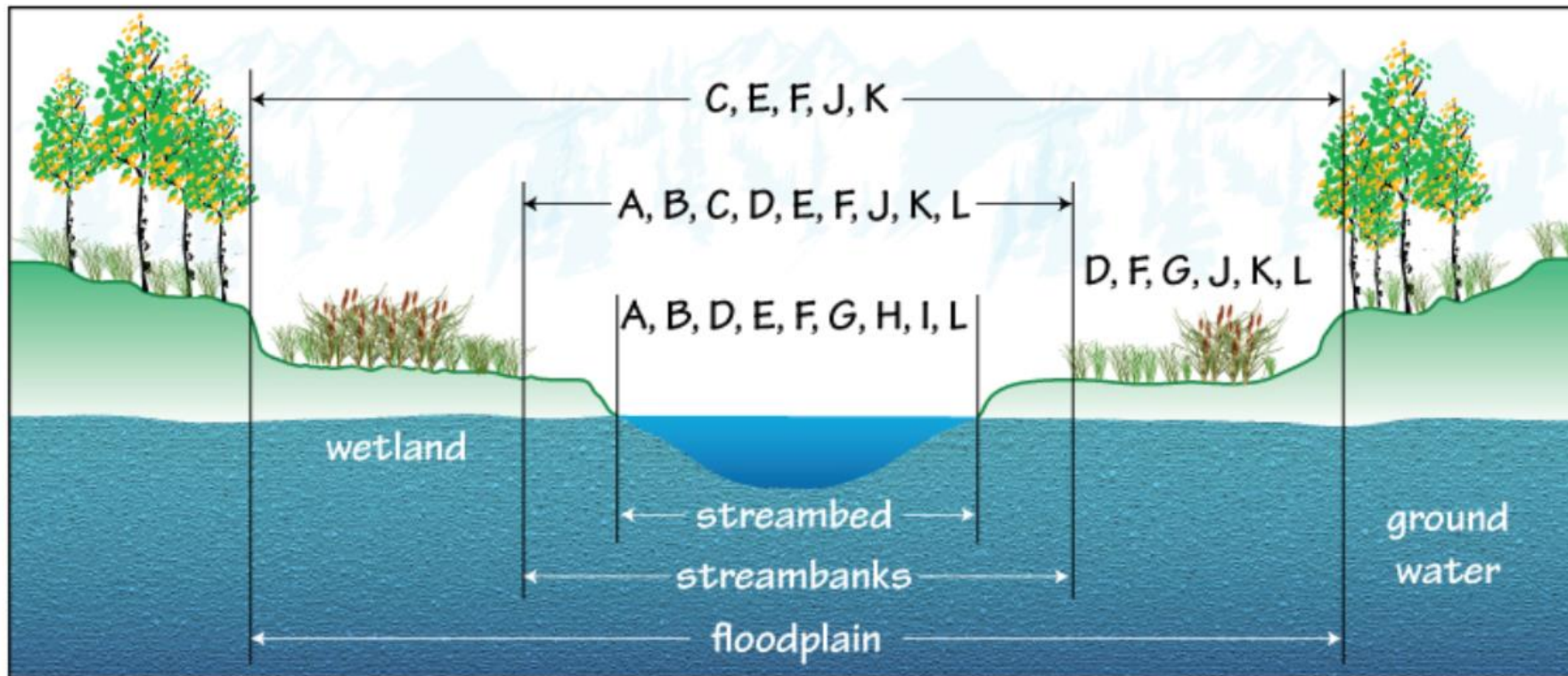
MT DNRC - Lands
State Government
Navigable River
Land Use License

Issue 1: Must obtain all applicable permits

What permits do I need?

<https://dnrc.mt.gov/Licenses-and-Permits/Stream-Permitting/>

Stream projects may fall under numerous laws and the associated permits depending on the where the proposed project will take place: streambed, streambanks, wetlands, or floodplain.



NOTE: The above graphic is only meant as a guide, please consult the permit descriptions to determine which permits are needed.



NFIP Roles & Responsibilities



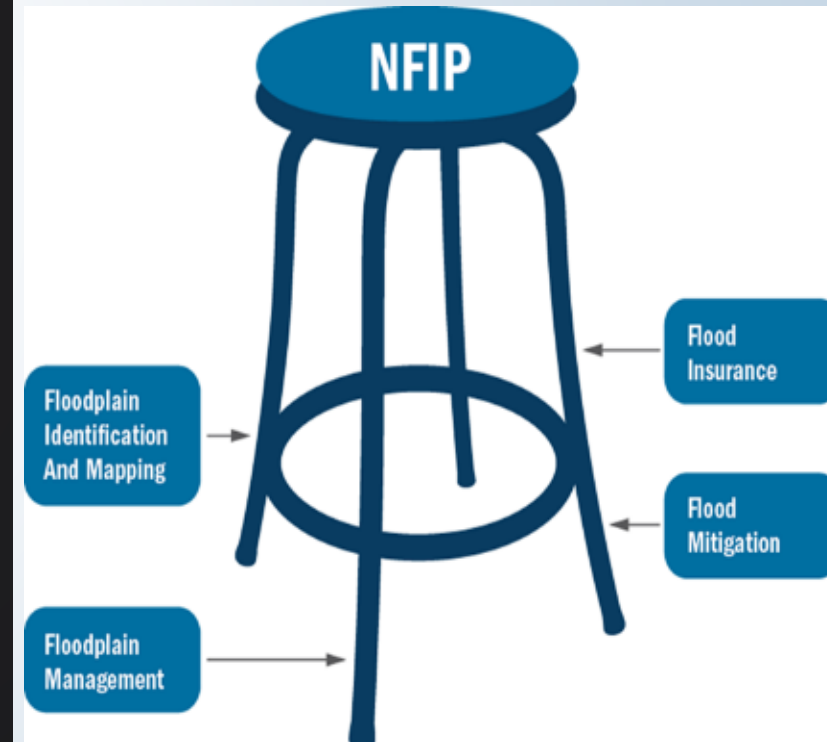
Established 1968

NFIP NATIONAL FLOOD INSURANCE PROGRAM

FEMA estimates that each dollar spent on mitigation will save four dollars in response costs over the long term.



FEMA





FEMA

Administers the National Flood Insurance Program



STATE OF MONTANA

Coordinates administration of the National Flood Insurance Program with FEMA



LOCAL COMMUNITIES

Enforce National Flood Insurance Program requirements via a local floodplain ordinance

Issue 1: No Rise Analysis Regulations

Title 44 of the Code of Federal Regulations, Section 60.3(d)(3), states:

“A community shall prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway

unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice

that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.”

Stream Habitat and Restoration Permits

1

Stream and
Habitat
Restoration
Projects

2

Beaver
Mimicking

3

Fish
Ladders

4

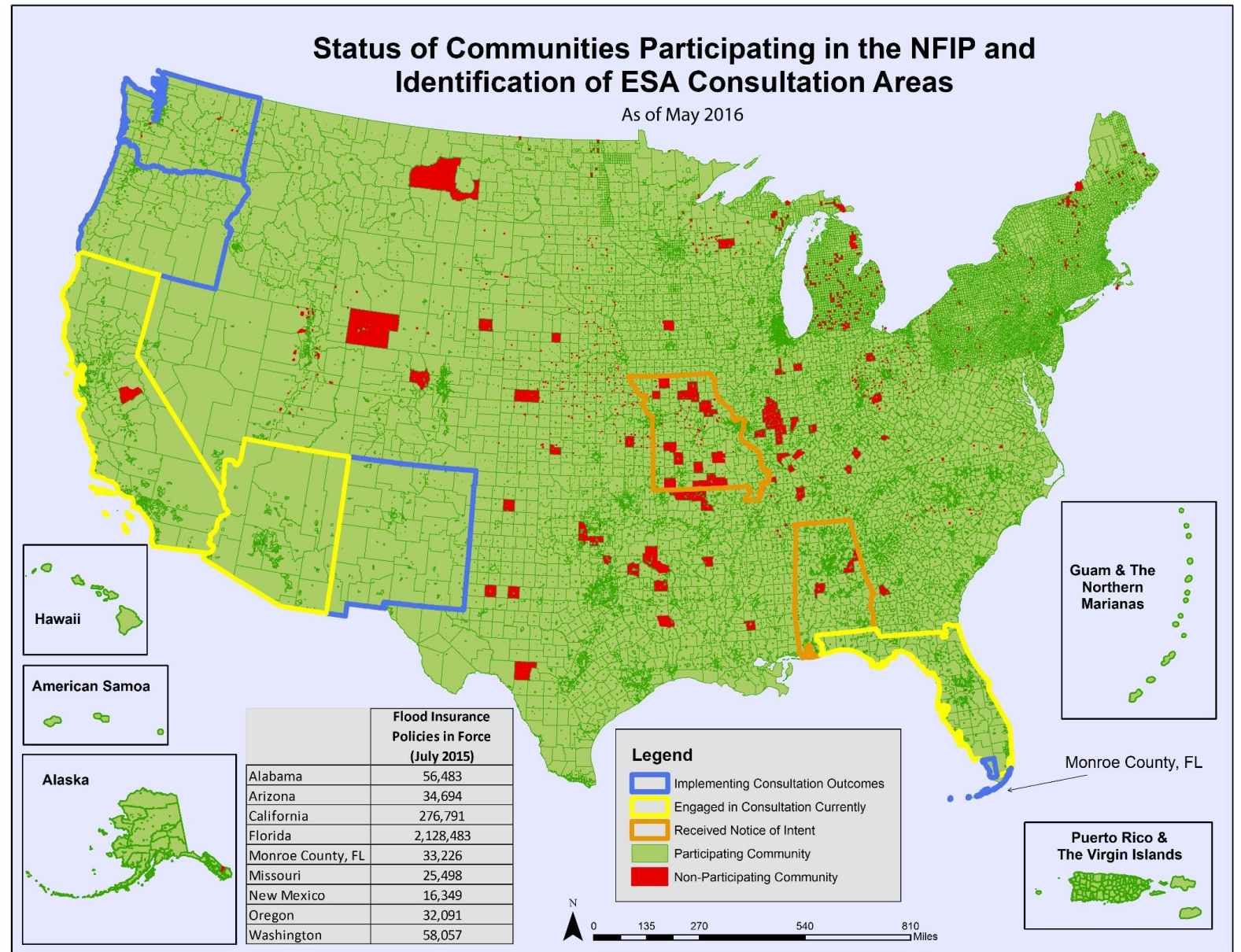
Fish Habitat
Supplement

5

Fish
Screens

Issue 1: All Applicable Permits – Federal Law

(44 Code of
Federal
Regulations
(CFRs) 60.3(a)(2))



Endangered Species Act (ESA) Compliance



ESA, Section 7: ALL federal agencies are required to consult with **NMFS? to ensure that any action that is authorized, funded or carried out by that agency does not jeopardize the continued existence of endangered species or result in the destruction or adverse modification of the critical habitat of such species.**

POLICY ON FISH ENHANCEMENT STRUCTURES IN THE FLOODWAY

APPENDIX E - POLICY ON FISH ENHANCEMENT STRUCTURES IN THE FLOODWAY

U.S. Department of Homeland Security
Region X
130 228th Street, SW
Bothell, WA 98021-9796



FEMA

Policy on Fish Enhancement Structures in the Floodway

The balance required between anadromous fish and the human environment is unique to the Northwest. Maintaining that balance often makes implementing regulations a challenge. Sometimes the local, State and Federal regulations contradict each other. This is the case with fish enhancement structures.

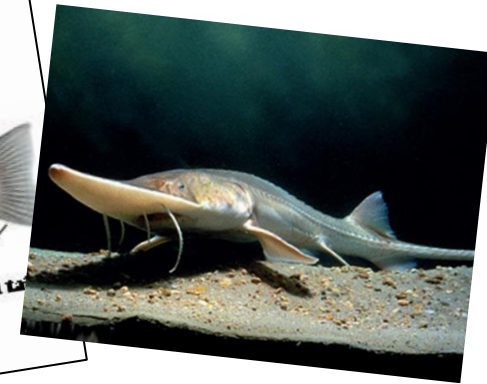
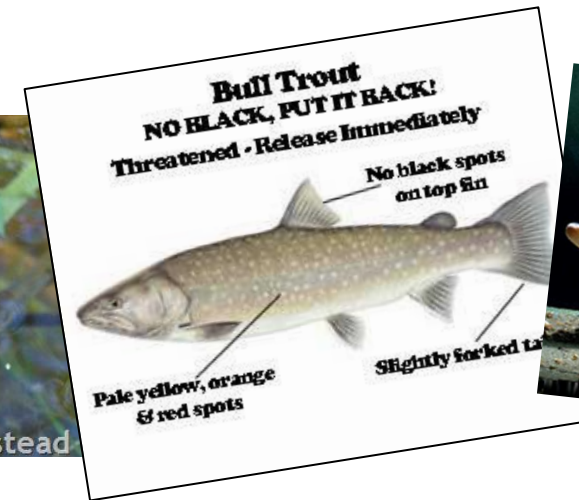
FEMA's regulations require communities to prohibit encroachments in regulated floodways unless provided with a no-rise analysis. The current listing and proposed listing of certain anadromous fish species as Threatened or Endangered requires the restoration of their habitat to ensure their survivability. Restoring that habitat often entails encroaching in the floodway. A strict interpretation of this standard could require a relatively expensive analysis that might exceed the cost of the enhancement project.

FEMA recognizes this. While we believe the best course of action is to preserve the floodway encroachment standard as it exists, an informed judgment regarding fish enhancement structures can be made as to exceptions for which less than the maximum hydraulic analyses are required. The community official often does not have the qualifications to make an informed judgment regarding the impacts of these structures on flood hazards. Therefore, FEMA will allow the community to defer to the "judgment" of a qualified professional regarding such impacts. Such qualified hydraulic or hydrology professionals would include staff of Rural Conservation and Development and the Natural Resource Conservation Service. It would also include similarly qualified staff of fisheries, natural resource, or water resources agencies.

PERMITTING AND MAP CHANGES

Endangered Species Act

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.

ESA consultation is the responsibility of the applicant.



Issue 2: Time Constraints in the Permit Process

Contractors not experienced in floodplain management or regulations

Work conducted in the regulated Floodway

Floodplain application public notification process

Incomplete permit applications

Not conducting pre-application meetings with all agencies

Not understanding floodplain management requirements

Not working with local floodplain administrators in project development phase

Issue 2 – Time Constraints for Permitting



MONTANA FLOODPLAIN 2023 RESOURCE SEMINAR November 14- November 16, 2023

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Unraveling the Complexities of the Floodplain Program

The DNRC's Montana Floodplain Resource Seminar offers no-cost training on topics related to management and administration of Montana's floodplain program. Workshops are available to community members and professionals, including floodplain administrators, county planners, and DES personnel, and any other interested parties. All sessions will be hosted via Zoom.

Please use the link(s) below to access to the Resource Seminar.

To access/attend the seminar, a link for each day is given below. You can access one or all workshops and adjust your participation to best fit your schedule.

For assistance, questions, or more information, please contact:

Traci Sears, Montana NFIP/CAP Coordinator at Ph (406) 444-6654 / Email: tsears@mt.gov
Shylea Wingard, MT NFIP/CAP Assistant at Ph (406) 581-5254 Email: shylea.wingard@mt.gov

SEMINAR ACCESS VIA ZOOM

DAY 1: Topic: Know Your Risk - Mapping – Montana Floodplain Resource Seminar

Time: NOVEMBER 14th, 2023, 08:00 AM Mountain Time (US and Canada)

Join Zoom Meeting

<https://mt-gov.zoom.us/j/83204055875?pwd=VmtGaHtsFZJYndrVmc4K1pBMWQ3QT09>

Meeting ID: 832 0405 5875

Password: 441700

DAY 2: Topic: Permitting Process During and After a Disaster– Montana Floodplain Resource Seminar

Time: NOVEMBER 15th, 2023, 08:00 AM Mountain Time (US and Canada)

Join Zoom Meeting

<https://mt-gov.zoom.us/j/82288237379?pwd=OFVxTUo0ZWVhEUKtyeS83OUJEMy9tQT09>

Meeting ID: 822 8823 7379

Password: 936477

DAY 3: Topic: Community Preparedness – Montana Floodplain Resource Seminar

Time: NOVEMBER 16th, 2023, 08:00 AM Mountain Time (US and Canada)

Join Zoom Meeting

<https://mt-gov.zoom.us/j/82280674589?pwd=OEh1elhNNGFnMUJsMVZEbm5yMiUyZz09>

Meeting ID: 822 8067 4589

Password: 071340



White Paper – Floodplain Permitting for Montana Stream Restoration Projects

Prepared For: Joint Stream Restoration
Committee

September 30, 2021



10 Questions to ask a Perspective Stream Restoration Professional (4/6/2020 DRAFT)

1. Do you, or anyone in your firm, have a formal education in fluvial geomorphology, stream hydraulics, bioengineering, or stream restoration?
2. Are you, or anyone in your firm, a Licensed Professional Engineer (PE) in the State of Montana?
3. What experience do you, or your firm, have with the Montana floodplain permitting process and other permits (310, 404, 124, etc.) generally required for working within riparian areas, on stream banks, or in the water?
4. What experience do you, or your firm, have performing restoration work in general, and specifically within a FEMA mapped regulatory floodplain?
5. What experience do you, or anyone in your firm, have with conducting topographic land surveys and bathymetric surveys for the purposes of modeling the hydraulics required for a stream restoration project and/or working within a FEMA 100 yr. floodplain?
6. What experience do you, or anyone in your firm, have in identifying Reference Reaches for a stream restoration project, including conducting pebble counts and woody debris inventories?
7. What experience do you, or anyone in your firm, have in hydrology, specifically for calculating/identifying the 2 yr., 5 yr., 10 yr., 25 yr., and FEMA regulatory 100 yr. flood flows?
8. What experience do you, or your firm, have with conducting hydraulic modeling (i.e. HEC-RAS) for use in stream restoration projects, and FEMA 100 yr. floodplain effective models?
9. Have you, or anyone in your firm, ever performed a 'No Rise Certification' of some sort or Letter Of Map Change (LOMC) within a FEMA regulatory floodplain?
10. What stream restoration projects have you, or you firm, been involved with. Please be specific about the project details and the extent of your involvement. Are references available?

2023



Issue 3: Engineering Requirements

Projects located in the regulated Floodway
require a No-Rise Analysis

Projects within the regulated floodplain are
required to withstand the 100-year floodplain

Costs associated with hiring an Engineer

Time constraints with Engineering
requirements

Issue 3: Engineering Requirements

FEMA will waive costs of filing CLOMRs and LOMRs for Stream Restoration Projects that meet criteria

Information for Hazard Mitigation Assistance Reviews

JOB AID: FLOODPLAIN AND STREAM RESTORATION



Floodplain and stream restoration (FSR) projects are used primarily to reduce flood risk and erosion by providing stable reaches, and may also mitigate drought impacts. FSR projects restore and enhance the floodplain, stream channel and riparian ecosystem's natural function. They provide baseflow recharge, water supply augmentation, floodwater storage, terrestrial and aquatic wildlife habitat, and recreation opportunities by restoring the site's soil, hydrology and vegetation conditions that mimic pre-development channel flow and floodplain connectivity.

The purpose of this Job Aid is to help communities applying for Hazard Mitigation Assistance (HMA) grants to comply with the technical feasibility and effectiveness, and environmental and historic preservation (EHP) requirements of the application. This Job Aid provides a checklist of information required by FEMA to determine grant eligibility and to complete a thorough review of the application. FEMA must review all applications to ensure that proposed activities comply with all applicable statutory, regulatory, and programmatic requirements. Therefore, certain information must be provided with the grant application for FEMA to make an eligibility determination. Early submission of accurate and complete information by the applicant will facilitate FEMA's review process and the release of HMA funds.

For more information, Applicants and Subapplicants are encouraged to refer to the Job Aid Supplements and



PROPERTY INFORMATION

	with App. Submittal	Pre-Award
■ Provide a vicinity map with address and project boundaries	X	
■ Identify project location by latitude and longitude in decimal degrees	X	
■ Provide site photographs documenting impaired or scoured streams, disconnected floodplains, bank erosion conditions, vegetation conditions, and existing stormwater structures	X	
■ Provide current property ownership information, including any easements or covenants	X	
■ Discuss watershed development plans/future land use plans	X	
■ Provide a copy of the flood insurance rate map (FIRM) showing project location	X	
■ Include geologic and hydrogeologic information (e.g., aquifer types, aquifer and vadose zone characteristics, subsurface homogeneity/heterogeneity, hydrologic conductivity, transmission rates, storage coefficients, water temperatures). Include copies of investigation reports.	X	
■ Indicate current land use types (e.g., residential, commercial, etc.) on and near the project site	X	
■ Show on a map all existing surface water bodies, stormwater structures, floodplains, wetlands, woodlands, and riparian habitat information. Indicate which bodies of water (e.g., river, stream, wetland, or pond) are located within 200 feet of the project.	X	



SUMMARY: The Joint Stream Restoration Committee (JSRC) was created to:

- Bring interested parties together to share concerns.
- Seek a solution to project delays and high costs for permitting.
- Aid local, state and federal agencies in designing and constructing projects to ensure they do not:
 - Adversely affect the flood hazard on other properties,
 - Are reasonably safe from flooding,
 - Assure that the carrying capacity of the Floodway is not reduced.

Montana Joint Stream Restoration Committee

What Now?

- Work with multi-agency reps
- Continue to investigate potential avenues to improve the stream permitting process
- Currently working to revise the joint permit application



National Discussions and Educational Opportunities

Natural materials versus hard rock

Extending mitigation grants for Stream Restoration Projects

Proposed legislation for stream restoration projects

Best Practices for stream habitat and stream restoration projects in designated floodplains.

Difference between stream restoration and bank stabilization

Stream restoration is difficult when being used to protect a structure

Legislative Recommendations

- Future conditions should have transparent and defensible information. Information that is vetted at the local level and has gone through extensive review and local approval.
- USF&W should have a simple permitting process for endangered species since they have the expertise to adequately evaluate the endangered species information.
- USF&W should also have maps, tools, and resources for local officials and the public.
- USF&W should have biologists available to assist local communities with questions and reviews on endangered species-specific information.
- **Do not implement additional roadblocks for rural landowners who continue to be stewards of the land.**
- Have extensive coordination on rule changes with local partners including rural and small communities especially in rural states.
- Work with federal, state, and local wildlife stakeholders and partners on reasonable regulations that do not overlap areas of responsibilities.
- **Work with local conservation districts on ideas of how to improve habitats for Endangered Species such as specific regulations for Stream Restoration Projects that can improve habitat. They by far work with the large, rural, and agricultural communities and property owners. In some areas, these property owners are the ones who manage the largest amount of high flood risk areas.**
- The regulations should not be a one size fits all approach based solely on urban areas and resources.
- Successful rule changes should incorporate extensive coordination with local communities and state partners.

National Groups Addressing the Issues

- DNRC Floodplain - working with:
 - **Association of State Floodplain Managers (*ASFPM*)**
 - **USACE Silver Jackets Programs (*Silver Jackets*)**
- Conservation Districts - working with:
 - **The Montana Association of Conservation Districts (*MACD*)**
 - **The National Association of Conservation District (*NACD*)**

Both ASFPM and MACD are working with FEMA to address Stream Habitat and Restoration Projects