

DNRC's "Engineering" Technical Assistance Program



DESCRIPTION and PROTOCOL

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Specialist

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DNRC's Engineering Technical Assistance Program

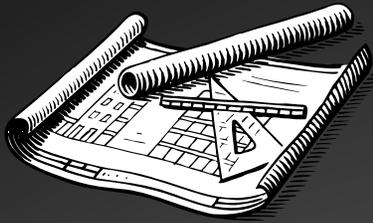
Presentation Overview:

- Introduction and Description
- The Review Process
- Protocol, Roles, & Responsibilities
- Tools and Resources
- Proposed SOP Policy

SUBMITTAL REQUIREMENTS FOR FLOODPLAIN PERMIT APPLICATION

To initiate the permit process, you will need to submit a copy of the following information to this office. These instructions apply to all construction/projects within any designated 100-year floodplain as delineated on the FHMB, FIRM, SCS/NRCS floodplain maps, COE floodplain maps, etc. You will need to submit a number of items listed below at a minimum.

1. A list of adjacent property owners and their mailing addresses (You can get this information from the County GIS office or through a title company).
2. A letter from each property owner where the project will be completed authorizing the proposed work.
3. A detailed site plan, drawn to scale, showing the following:
 - Property boundary lines of the subject property and those in the immediate vicinity of the project.
 - Approximate location of all floodplain boundaries in the vicinity of the project as depicted on the floodplain maps.
 - Location of existing improvements in the vicinity of the project, including driveways, roads, culverts, bridges, buildings, wells, septic systems, and other improvements
 - Location of all existing physical features in the vicinity of the project, including ponds, swales, streams, and irrigation ditches.
 - Location and dimensions of all proposed improvements, including driveways, roads, culverts, bridges, ponds, buildings, wells, and other structures
 - Location for all fill that will be brought into the floodplain
4. A statement specifying the amount of fill that will be placed within the floodplain and supporting calculations.
5. For a house submit:
 - The existing ground elevation at the location of the proposed house and the calculated height of the 100-year floodplain (will need to work with a surveyor to obtain this information)
 - Calculations for the amount of fill (in cubic yards) to be placed in the floodplain:
Residential structures shall be constructed on suitable fill with a permanent foundation such that the lowest floor (including basement) level is two or more feet above the base flood elevation. The suitable fill shall be at a level no lower than the base flood elevation extending 15 feet at that elevation beyond the structure in all directions.
 - Specifications for the fill material (type, size, etc.)
6. For any other building submit:
 - Drawing of the building
 - Statement indicating which of the two development standards will apply:
 - (a) If the structure is designed to allow internal flooding of the lowest floor, use of the floor shall be limited to such uses as parking, loading areas, and storage of equipment or materials not appreciably affected by flood water. Further, the floors and walls shall be designed and constructed of materials resistant to flooding up to an elevation of 2 or more feet above the elevation of the base flood. Structures designed to allow internal flooding shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the exit and entry of flood waters.
 - (b) Structures whose lowest floors are used for purposes other than parking, loading or storage of materials resistant to flooding shall be flood proofed up to an elevation no lower than 2 feet above the elevation of the base flood. Flood proofing shall include impermeable membranes or materials



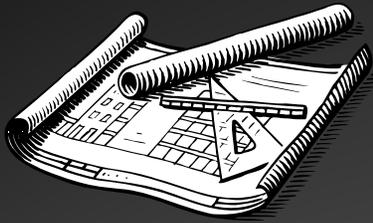
DNRC Engineering Technical Assistance

- **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.

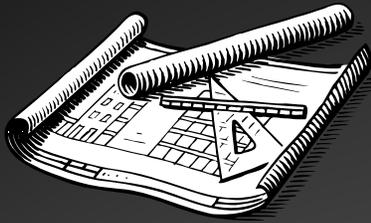


DNRC Engineering Technical Assistance

General Services Provided

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

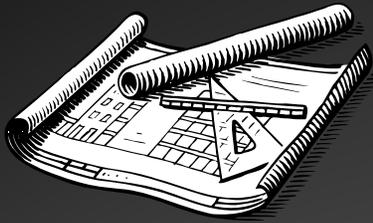
- Floodplain Development Permit Applications,
- Subdivision Floodplain delineations and Flood Hazard Evaluations,
- Letter of Map Changes (LOMCs) – CLOMR, LOMR, LOMA, etc.,
- Floodplain Studies,
- Proposed projects near or within a regulated floodplain,
- Variances, General Consultation, & Site Visits



DNRC Engineering Technical Assistance

Services NOT included per current DNRC policy

- Subdivisions – No Statements for Waivers – i.e. DNRC approval to waive floodplain delineations and/or flood hazard evaluations in accordance with local subdivision regulations.
- New floodplain studies with data provided by County.
- Variances: Per ARM 36.15.204 (d)... require DNRC review and Approval, however under our current policy, we will only provide recommendations.



The DNRC Technical Review Process

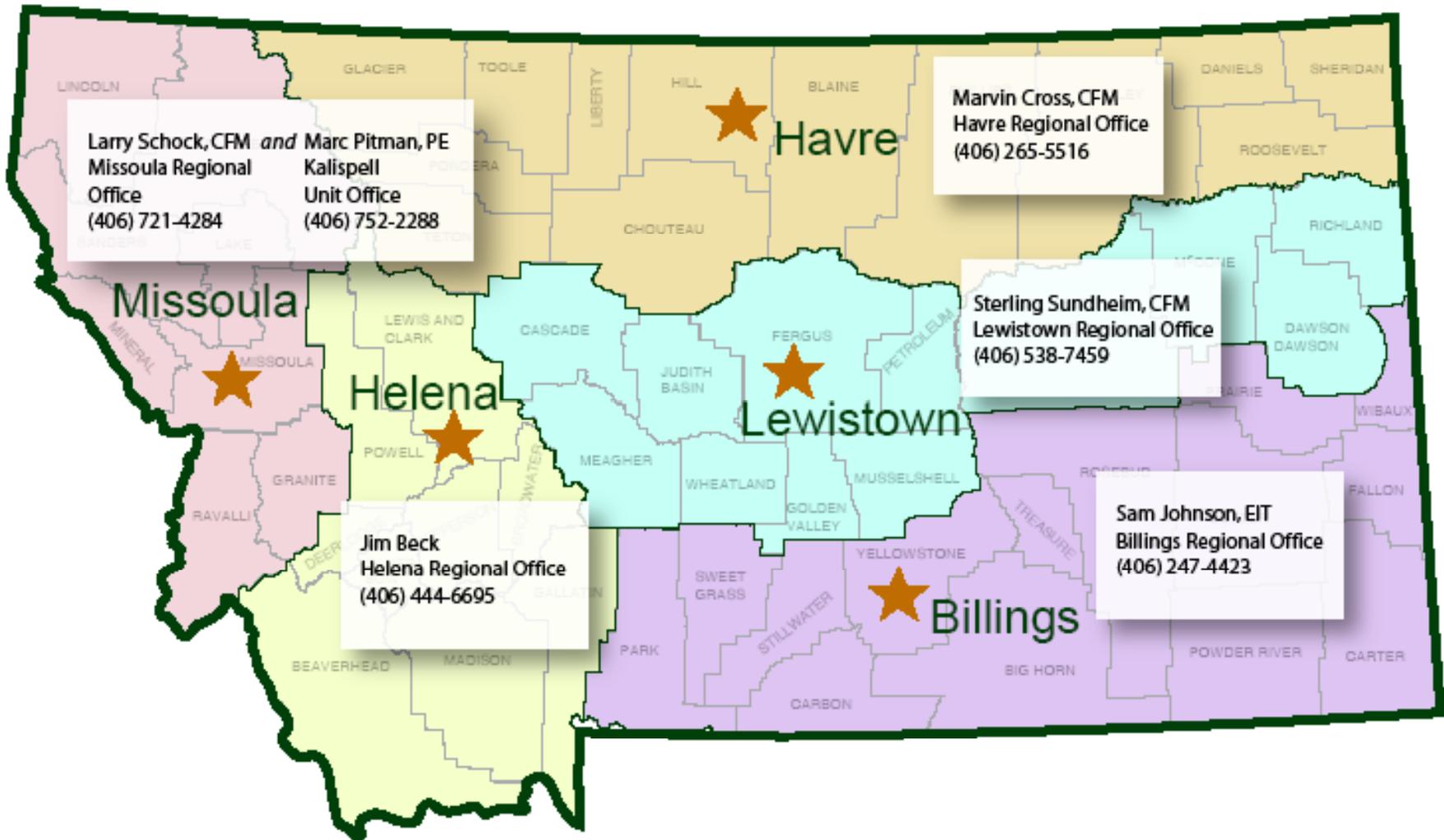
Introduction - How it Works...an overview:

- **Step 1:** Community (typically the Floodplain Administrator) submits written technical assistance request directly to DNRC Regional Engineering Specialist (RES).
- **Step 2:** RES complete the reviews and return written itemized comments and recommendations back to the community representative.
- **Step 3:** Community makes final determination regarding the sufficiency and adequacy of the technical submittal to satisfy the local permit requirements.

The DNRC Technical Review Process

Step 1 Details:

- FPA – Due diligence - review application for completeness
- Contact your Regional Engineer Specialist (RES):
The State is divided into 5 regions, served by 6 RES
- Note – Not all RES are Licensed Engineers; however all are seasoned and experienced professionals.
- Training – On-going opportunities; most recently held Streambank Stabilization Training in Dec. 2009.



DNRC Regional Engineer Specialists

www.mtfloodplain.mt.gov

- **Region I – Helena:** Jim Beck (406) 444-6999
jibeck@mt.gov
- **Region II – Missoula:** Larry Schock, CFM (406) 721-4284
lschock@mt.gov
- **Kalispell Unit Office:** Marc Pitman, PE, CFM (406) 752-2288
(Flathead County) mpitman@mt.gov
- **Region III – Havre:** Marvin Cross, CFM (406) 265-5516
mcross@mt.gov
- **Region IV – Lewistown:** Sterling Sundheim, CFM (406) 538-7459
ssundheim@mt.gov
- **Region V – Billings:** Sam Johnson, EIT (406) 247-4423
sam.johnson@mt.gov

DNRC Regional Engineer Specialists

Job Duties and Workload

- Regional Engineer Specialists serve multiple DNRC departments including:
 - Floodplain Program technical assistance
 - Dam Safety Program
 - Water Rights
 - State Water Projects
 - Miscellaneous Assigned Roles & Responsibilities



The Technical Review Process

Step 1 Details (continued):

- Submit written assistance request (email or other) along with all pertinent documentation necessary to complete the review – i.e. complete copy of permit application/materials.
- Discuss Schedule – when do you need review completed by? (DNRC min turnaround of 2 wks, PLAN accordingly)
- Site Visit may be necessary.
- Additional Data/Information may need to be requested from the Applicant in order to complete the review.
- With communities approval, DNRC may perform courtesy reviews prior to the formal permit submittal. For complex projects, this can help streamline the technical review process.

The Technical Review Process

Step 2 Details: Review completed by RES

- Your Regional Engineering Specialist will complete the technical review, coordinating directly with the community representative through the process.
- RES are supported by the State Floodplain Engineer for additional support, guidance and expertise as needed.
- RES provide itemized comments and recommendations from their professional evaluation of the technical submittal and it's conformance with the local regulations.

The Technical Review Process

Step 3 Details: Community determines adequacy

- Community makes final determination regarding the sufficiency and adequacy of the technical submittal to satisfy the local permit requirements.
- Community may choose what to do with DNRC recommendations
- Community is the 'Decider', and is also accountable for their decisions

Program Protocol

- Defined lines of Communication: DNRC staff – Community representative (typically FPA)
- DNRC Communication with Applicant/Engineer: Only with approval of community, and prefer community participation. **(DNRC does not speak for or represent the community)**
- Applicant questions relating to permits should be addressed to the Community, not DNRC.
- Multiple review exchanges – all previous issues resolved...
- DNRC Limited Resources – Communities encouraged to maximize use of their own technical resources.

Program Roles & Responsibilities

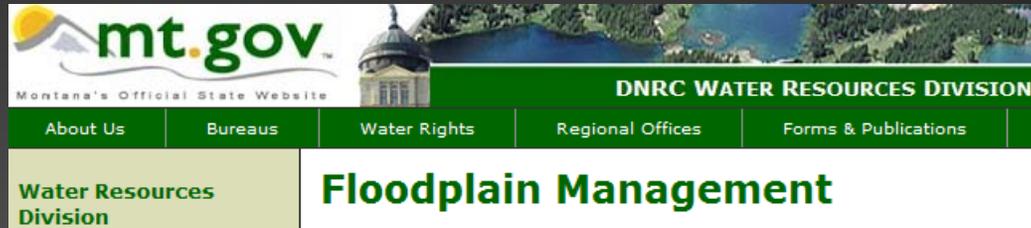
- DNRC review comments serve as professional recommendations, not mandates or approvals from the State.
- It is the community's responsibility to make the final determination regarding the sufficiency and adequacy of technical submittals to meet the local permit requirements.
- DNRC's role is to provide technical assistance when requested, not to oversee or become involved in the day to day management of the community's floodplain program.

Program Roles & Responsibilities (cont.)

- Applicants and their representatives (consultant, engineer, surveyor, etc.):
 - Responsible to prepare/submit complete applications in accordance with local regulations/requirements.
 - It is not the States role to walk applicants through the process.
 - When PE certification is required – Licensees shall perform services only in the areas of their competence (ARM 24.183.2203).

DNRC Website Tools and Resources

DNRC Website



- (www.mtfloodplain.mt.gov/) or (www.dnrc.mt.gov/wrd/water_op/floodplain/default.asp)
- The Montana DNRC Water Resources Division Floodplain Management website is specifically designed to assist the local Floodplain Administrators, the consulting community, and the general public.
- The page contains a host of valuable information and links to other helpful websites.

DNRC Website Tools and Resources

Contacts

- Local Floodplain Administrators
- State Floodplain Staff
- State Regional Engineers and Area of Responsibility map
- Federal Agencies

DNRC Website Tools and Resources

Professional Associations

- AMFM, Association of Montana Floodplain Managers
- ASFPM, Associations of State Floodplain Managers
- FMA, Floodplain Managers Association

DNRC Website Tools and Resources

Permitting Information

- Joint Permit Application and instructions
- Submittal Requirements for Floodplain Permit Applications
 - Specifically designed to assist the applicant and the consultant.
- Floodplain Permit Review Checklist
 - Specifically designed for the local Floodplain Administrator
- Guide to Stream Permitting in Montana
 - A good document that identifies and briefly explains all of the permits needed when working near water

DNRC Website Tools and Resources

Ordinances, Rules, and Regulations

- Local Community Floodplain Ordinances
- 2006 Draft Interim Model Ordinance
 - A draft example ordinance
- State
 - Montana Code Annotated, MCA's
 - Administrative Rules, ARM's
- Federal
 - Code of Federal Regulations, CFR's

DNRC Website Tools and Resources

Floodplain Mapping

- Results of the Montana Unmet Floodplain Mapping Needs Survey
- Map Modernization
- Effective DFIRM's
- Montana DFIRM Information
- FEMA Map Service Center
 - Good source for FEMA information and Firmette's

DNRC Website Tools and Resources

Guidelines for Base Flood Elevation Identification

- Guidelines For Water Course Surveys
 - This document is geared for engineers and surveyors however, it can be used by anyone who wants to understand the type of topographic data that is needed in order to construct a reasonable HEC-RAS model
- Guidelines For Obtaining Base Flood Elevations (BFE) in Unmapped or A Zone Areas
 - This document is geared for engineers and hydrologists who want to understand what type of data is required to construct a reasonable HEC-RAS model and what is required to be submitted for DNRC review.

DNRC Website Tools and Resources

Floodplain Insurance

- FloodSmart
 - The National Floodplain Insurance Program (NFIP) website
- Community Rating System (CRS) information
 - Provides links that will take you to websites that will explain this program and provide contact information
- Insurance Agents Trained in Floodplain Insurance
 - Includes a link that insurance agents can use for additional NFIP information

DNRC Website Tools and Resources

No Adverse Impact

- No Adverse Impacts (NAI) is defined as “an approach that ensures the action of any property owner, public or private, does not adversely impact the property and rights of others.”
- The objective of NAI is the safe and proper development of land subject to hazard.
- Provides a link to NAI information and an online resources

DNRC Website Tools and Resources

FEMA Letter Of Map Change Process and Resources

- Letter of Map Revision (LOMA) for single lot only
- Conditional Letter Of Map Revision (CLOMR)
- Letter of Map Revision based on Fill (LOMR-F)
- Letter Of Map Revision (LOMR)
- Elevation Certificates
- Floodproofing Certificate
- NFIP Reference and Outreach Materials

Tools and Resources

Training and Certification

- This area of the DNRC website contains a host of information about :
 - Training Opportunities
 - Materials used in past workshops and seminars
 - Resources Library Information
 - Certified Floodplain Manager testing and certification
 - FEMA Emergency Management Institute Training Courses



Proposed New SOP Policy

Revisions to the process:

- Community responsible to evaluate completeness of submittal and coordinate with applicant. DNRC will offer additional training and tools (checklist) to help FPAs.
- DNRC comments & recommendations – provided in list itemized 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.



Proposed New SOP Policy

Adoption Process:

- Currently soliciting for your input, comments, and recommendations.... please submit to:

Bri Shipman: bshipman@mt.gov
- Plan to begin implementing statewide by winter 2010

Thank You – Questions?



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