

Montana Floodplain Management Issues



Module 3

Montana's Challenges!

Under this segment, we will look at the issues that provide challenges for Montana Floodplain Managers. These include:

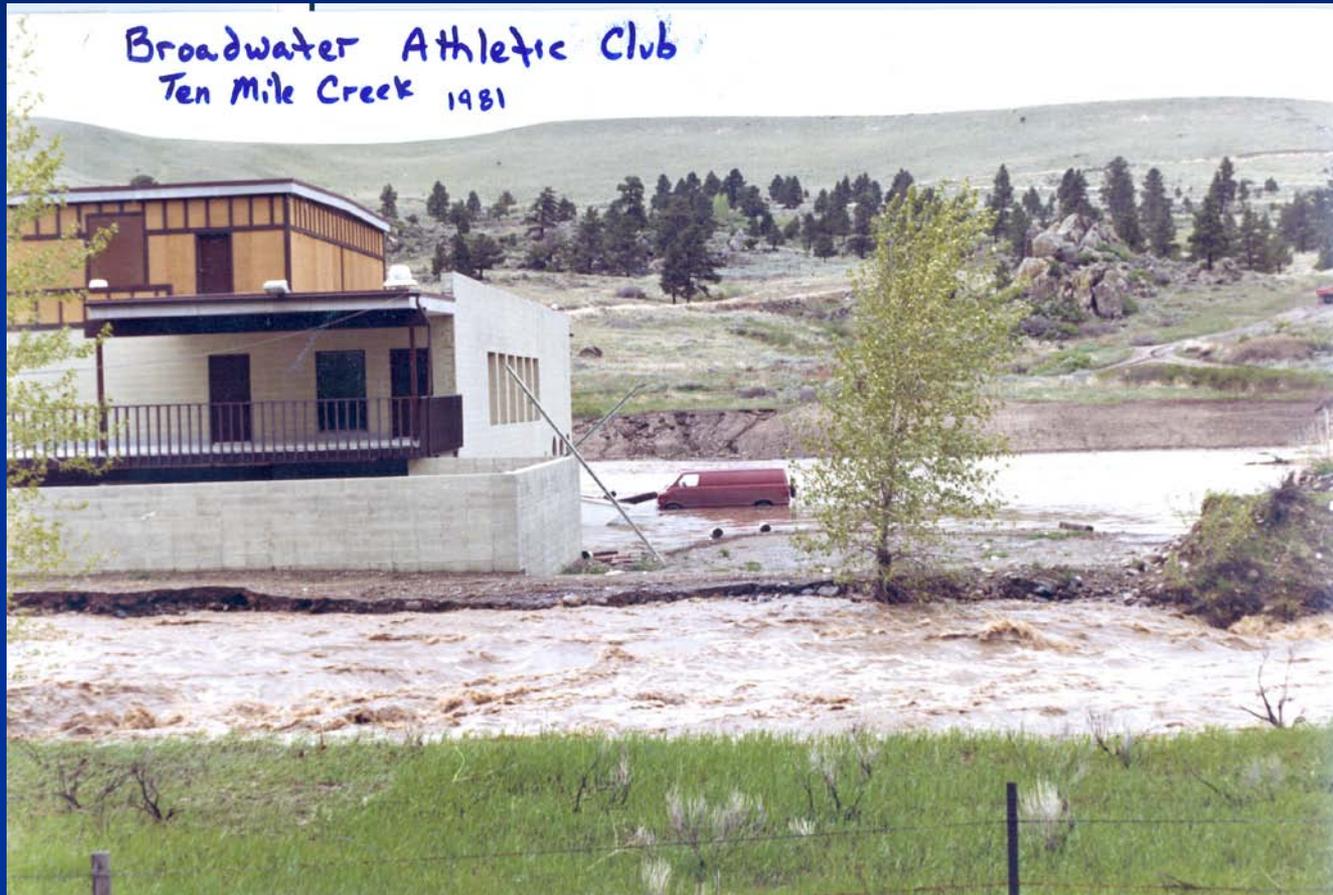
- *Permitting options*

- *The lack of good mapping*

- *Ordinance enforcement*

 - Substantial Improvement/Damage*

What is Dry to today, can change drastically during a flood event.



High and Dry Access During Flood Events - Be Prepared



Are Property Owners Prepared to Be Cut Off During and After Flood Events – How Do You Educate Them?



Building Differently – Looking at the Elevation of Existing Structures



Higher State Standards – Advantage of Elevating Homes



Is This an Ideal Location For a Critical Facility?

High Water at Harvat Ranch June 16, 1918

(Park County News
March 12, 1959)



John Hellesmark supplied this picture which needs no explanation. Remember?

Roles and Responsibilities

The Community Role:

- Issuing or denying floodplain development/building permits.
- Inspecting all development to assure compliance with the local regulations.
- Maintaining records of floodplain development.
- Assisting in the preparation and revision of flood maps.
- Assist residents in obtaining information on flood hazards, map data, flood insurance and proper construction measures.

What is Floodplain Management?

A decision-making process that aims to achieve the wise use of the nations floodplains. “Wise use” means both reduced flood losses and protection of the natural resources and functions of floodplains.

Floodplain management has 2 components:

- 1) Structural
- 2) Non-structural

The Floodplain Administrator

Who is it?

The individual who administers and enforces a community's floodplain ordinance.

Is usually designated this role by ordinance.

Needs to be backed by enforcement provisions.

Depending upon the ordinance, this person could be:

City Engineer

Building official

Mayor

Clerk

Zoning Administrator

Sanitarian

Other Official

The Duties of the Floodplain Administrator

Interpret the floodplain.

Make permit applications available to Developers.

Check applications for completeness.

Check development locations on floodplain maps.

Determine if development affects the floodway.

Require additional Federal/State/local permits when applicable.

Review watercourse alterations.

Utilize best available data.

Additional Duties of the FPA

Must deny a permit that does not meet the provisions of the ordinance.

Monitor the progress of a development once it has begun.

Insure that construction occurs in accordance with approved plans.

Obtain certification of the elevation of the lowest floor (Elevation Certificate).

Maintain records of floodplain development.

Permits

- Permits are required under the NFIP to ensure that proposed development projects meet the regulatory requirement.
- The most effective way to meet this element is through other regulatory requirements that have a permitting requirement. These can include:

Building code

Zoning Code

Subdivision code

Sanitary Sewer Code

The Key



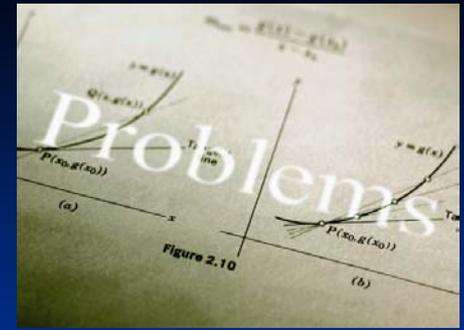
The key to an effective permitting process is the linkage to a program that has an established process for site specific inspection.

To have an effective floodplain management program, you must be able to monitor what is occurring in your floodplains.

You must be empowered to be able to enact your regulatory scope at any and all phases of a project's development.

Having the scope of multiple regulations apply to a project will increase your level of effectiveness in the management of your floodplains.

The Problem



There are no State mandates for building codes or land use planning through zoning codes.

These 2 mechanisms are considered to be the most effective tools for effective permitting.

This creates a diverse level of regulatory capability at the local level.

Permitting and inspection requires staff and financial resources, which most smaller rural jurisdictions don't have.

Floodplain Management Terminology

What is Development?

In the eyes of the NFIP, development is:

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

What are your options?

First, you need to identify your capabilities.

Do you have the following:

A Building Code

A Zoning Code

A Sanitary Sewer Code

Any regulatory provision that could empower you to stop and illegal or improper development.

Permitting

What are your options?

Second, does that regulatory capability include a site inspection mechanism?

These could include:

- ➡ *A Building Inspector*
- ➡ *A Sanitarian*
- ➡ *A zoning official*

Permitting

What are your options?

Finally, does that regulatory capability have sufficient scope to address all elements of “development” as required under your Flood Ordinance?

Will this give your site inspection access to:

Residential Construction, including improvements to existing structures.

Non-residential construction, including improvements to existing structures

Filling, grading or land disturbing activity

Permitting

What are your options?

Keep in mind, you are trying to identify a capability that will enhance your ability to manage your floodplain.

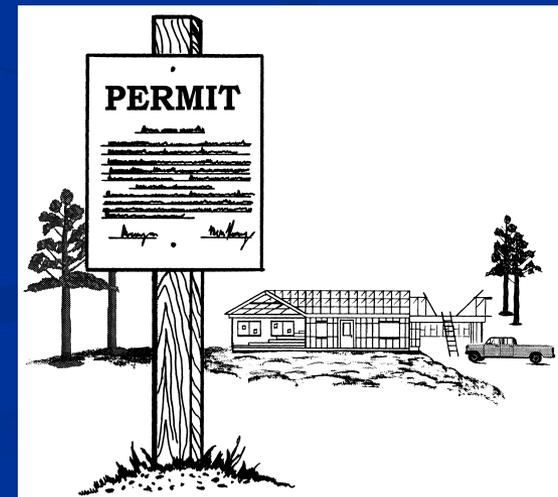
You are not looking to replace your floodplain development permit requirement.

You want to identify possible linkages to existing programs that empower you to better implement your floodplain management *program*.

The Permit

Communities participating in the NFIP must require development permits within the designated 100-year floodplain.

This permit along with all development plans, must be submitted for approval to the FPA before any *development* within the floodplain can begin.



What Information should the Permit Contain?

The location of the proposed development.

A site map.

A description of the proposed activity.

The flood zone, BFE and floodway applications for the site.

Elevation of ground site prior to the development.

Elevation to which the lowest floor of the structure must be built.

Elevation to which the structure will be flood-proofed if applicable (non-residential only).

Conditions of the development (i.e.: special regulatory provisions, elevation certificate, or phase inspection requirements).

A space for approving or denying the permit.

When is a Permit required?

New Construction

Substantial Improvement or repair to a substantially damaged property.

Placement of a manufactured home.

Mining, dredging, filling or grading.

Roads, bridges and culverts.

Altering or relocating stream channels.

Travel trailers placed on a site for more than 180 days.

Storage of materials including gas or liquid storage tanks.

The Permit Review Process

- STEP ONE** Review the application package for completeness
- STEP TWO** Review the application package for compliance with technical requirements
- STEP THREE** On-site inspection
- STEP FOUR** Approve or deny the application
- STEP FIVE** Inspect the site work

Floodplain Management Terminology

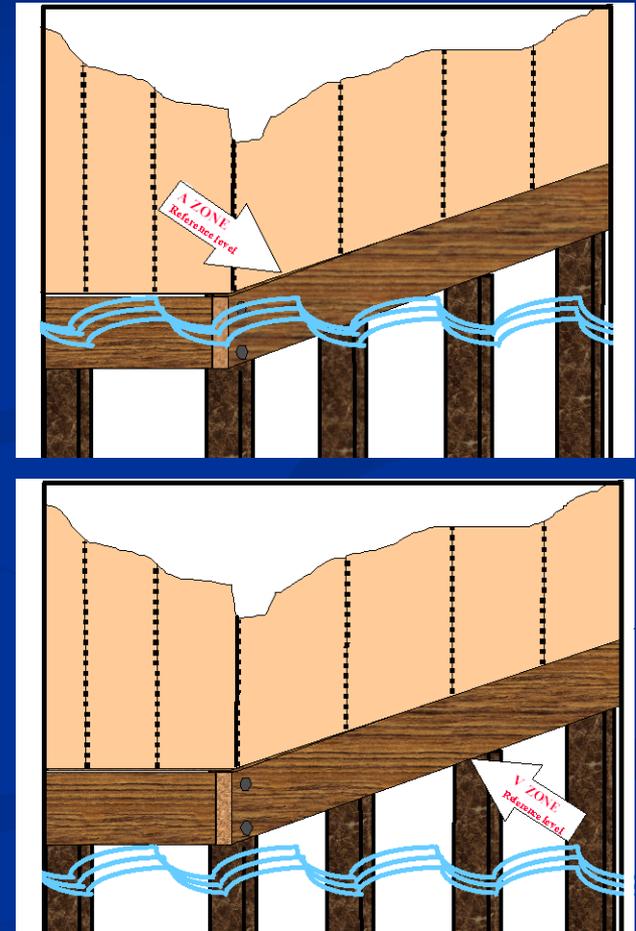
Freeboard

- A margin of safety added to the base flood elevation to account for waves, debris, miscalculations, impacts from new development, or lack of data. Often applied as an elevation standard.

Floodplain Management Terminology

Lowest Floor

- Means the lowest floor of the lowest enclosed area, *including basement (and possibly crawl space for insurance purposes.)* An unfinished or flood resistant enclosure.



Floodplain Management Terminology

Substantial Improvement/Damage

- Any reconstruction, rehabilitation, repair, addition or other improvement to a building, the cost of which equals or exceeds 50% of the market value of the building before the start of construction of the improvement or repair.

Substantial Damage

Damage of any origin sustained by a structure whereby the cost to restore the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred



Formula: Improvement Cost/Market Value

Improvement Cost

- All structural costs, interior finishing elements, utility and service equipment including materials, labor, built-in appliances, overhead, profit
- Can exclude plans, surveys, permit fees, outside items, **pre-cited** violations of health, sanitary or safety codes
- Estimate prepared by general contractor, professional estimator, or community
- Community must review and make final judgment (using experience, building code valuation tables, etc.)

Market Value

- Price a willing buyer and seller agree upon
- Pertains to building only – any value re location relates to land
- Professional appraiser estimate is desirable – but must exclude value of land; can't use "income capitalization" that bases value on property, not building
- ACV, the replacement cost minus a depreciation percentage is OK (replacement cost not acceptable)
- Assessed value or assessed value to reflect market value is acceptable

Types of Substantial Improvements

- Lateral additions, such as new family room
- Vertical additions, such as new second floor bedrooms, bathroom
- Reconstruction, such as converting a seasonal house to a permanent residence
- Rehabilitation, e.g., upgrading a kitchen, bathroom, other areas
- Combination of improvements



Floodplain Management Support Mechanisms



- The duties and responsibilities of a Floodplain Administrator are diverse.
- The FPA must wear many hats and have access to many programmatic elements of local community government.
- This can often be overwhelming to new personnel assigned the duties of the FPA.

Floodplain Management Support Mechanisms



Your are not alone! There is an abundance help out there to help you do your job.

It is a goal of the DNRC Floodplain Management Program to empower the FPA to better manage their floodplain.

This empowerment comes from:

- Providing tools, templates and technical assistance.

- Establishing floodplain management as program, not as an element of personnel responsibility.

- Linking to other established programs that will support and enhance your efforts

The Floodplain Management Toolkit

Flood Insurance



Know the impacts of your decisions on the cost of flood Insurance.

It is possible to by insurance on a non-compliant structure, ***but it will cost!***

Use the possible savings on the cost of insurance as justification for higher regulatory standards.

The Floodplain Permit Activity

Noah Arks

Let's review a permit from the beginning to the end:

1. General information about the property.
2. Violation
3. Joint Permit Application
4. Checking for Application Completeness
5. Site Visit
6. Issuing the Permit