

# *Regulations and Ordinances*

## *2010 Floodplain Management Conference*

*July 30, 2010  
Kearney, NE*



**FEMA**

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# Topics Today

## **Regulations and Ordinances**

Regulation sources

Regulations (*Types of ordinances*)

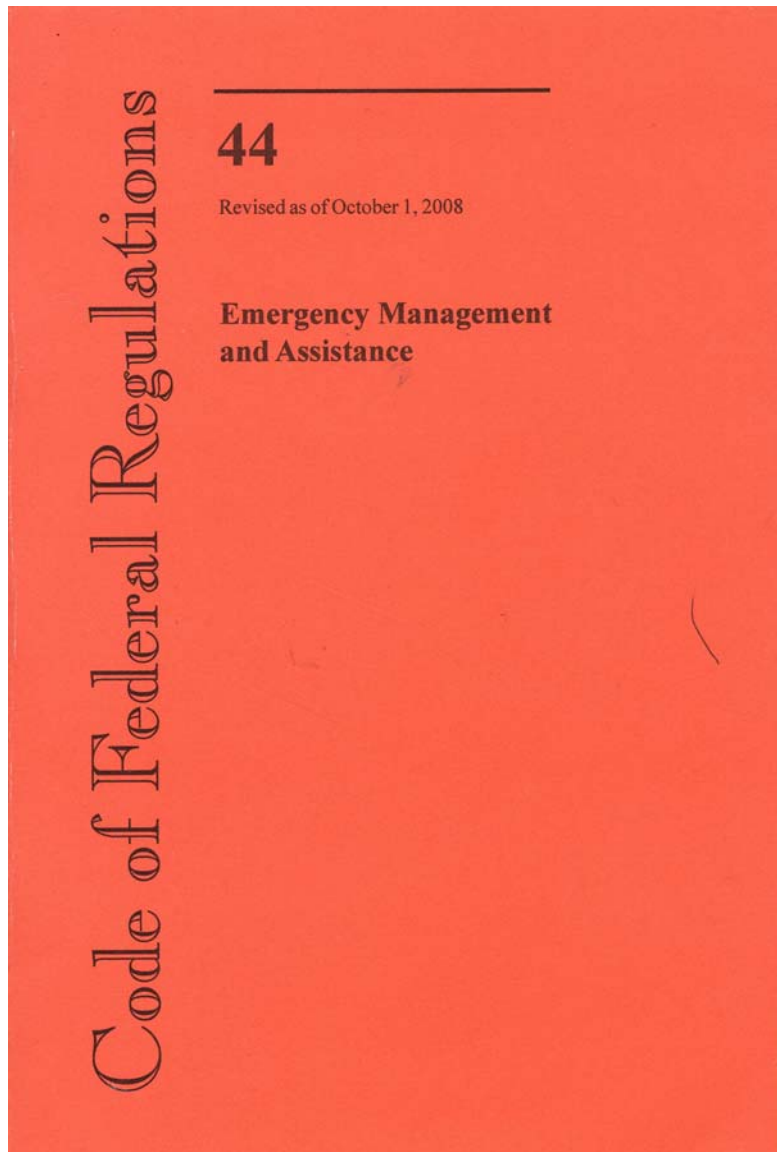
Ordinances/Resolutions

Informational Resources and Available  
Assistance

# Floodplain Management

- Where did it start (for most of us)?
  - 1968 National Flood Insurance Act
  - 1972 Hurricane Agnes
  - 1973 Flood Disaster Protection Act
  - 1993 Midwest flooding

# ***Federal Floodplain Management Regulations***



- Local regulations are based on Title 44, Part 60.3 of the Code of Federal Register (Often referred to as 44 CFR 60.3)

# ***Nebraska Floodplain Management Statutes***

COMPILATION OF STATUTES  
REGARDING THE  
DEPARTMENT OF NATURAL RESOURCES

## **FLOOD PLAIN MANAGEMENT**

- Includes:
- I. Chapter 31, Article 10: Flood Plain
  - II. Neb. Rev. Stat. § 16-6,106: Cities of the First Class Flood Control
  - III. Neb. Rev. Stat. §§ 31-508 & 31-509: Sanitary Districts for Cities 100,000 to 300,000
  - IV. Neb. Rev. Stat. §§ 31-515 & 31-516: Sanitary Districts for Cities 100,000 to 300,000

AUGUST 2007

- Nebraska Revised Statutes, Chapter 31, Article 10: Flood Plain

# ***Nebraska Floodplain Management Regulations***

STATE OF NEBRASKA  
DEPARTMENT OF NATURAL RESOURCES

NEBRASKA ADMINISTRATIVE CODE  
TITLE 455, CHAPTER 1

RULES AND REGULATIONS CONCERNING  
MINIMUM STANDARDS FOR  
FLOODPLAIN MANAGEMENT PROGRAMS

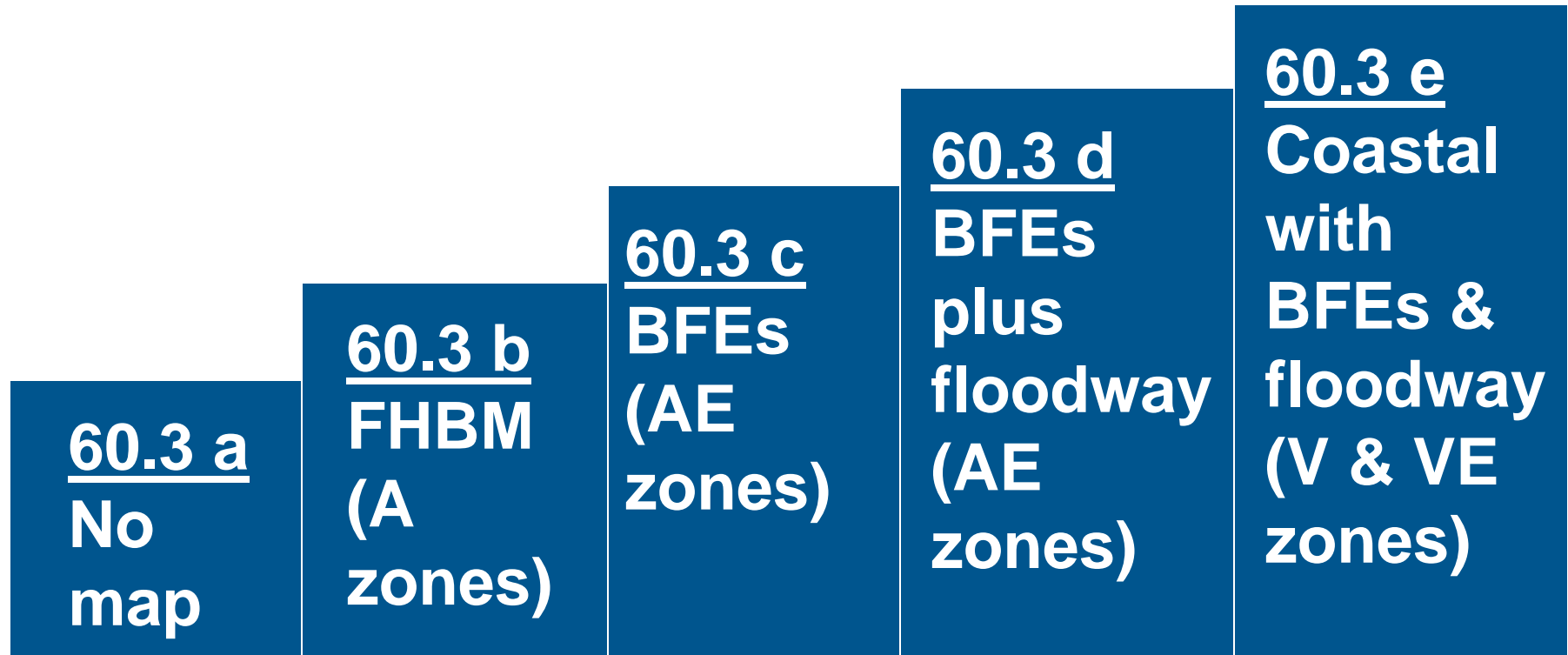
JUNE 2008

- Nebraska Minimum Standards for Floodplain Management Programs (Nebraska Administrative Code: Title 455, Chapter 1)

## ***Floodplain Management Regulations -***

- Based on technical data provided by FEMA**
- Federal and State Minimum Requirements**
- More restrictive regulations are allowed/encouraged**

# 44 CFR 60.3



# ***Floodplain Management Regulations -***

**Build sequentially on previous lesser criteria requirements.**

**All of (a) applies to (b)**

**All of (a) and (b) apply to (c)**

**All of (a), (b), and (c) apply to (d) etc.**

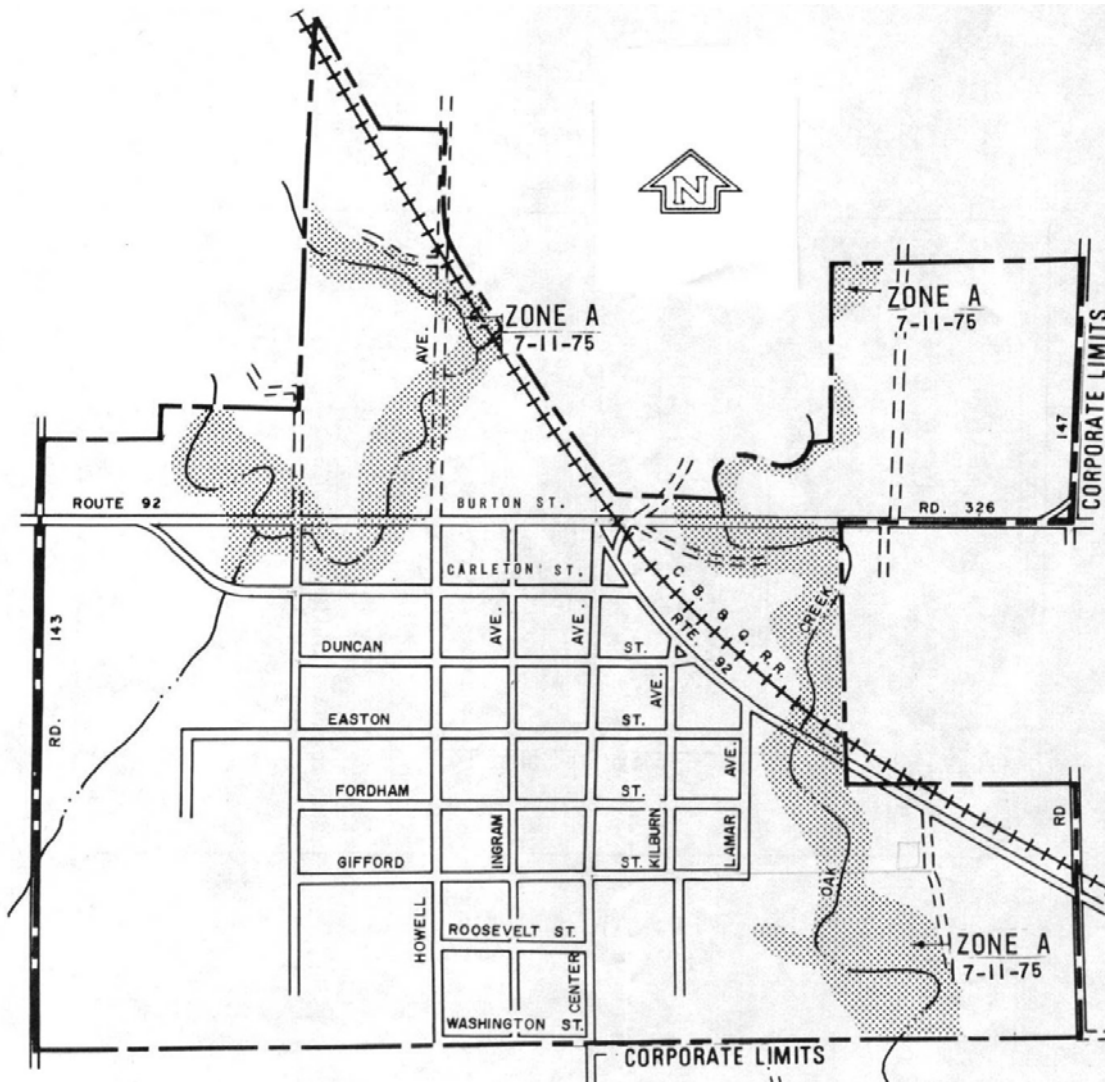
## 60.3 (a)

No flood hazard map provided to  
the community by the NFIP

## 60.3 (a)

- Floodplain development permit for *all* development until flood maps are provided
- Ensure that all new development is reasonably safe from flooding
- Use available data from government agencies or technical assistance can be provided by NDNR or others

# 60.3 (b)



## 60.3 (b)

- Floodplain development permit required for all development in Special Flood Hazard Area (SFHA)
- All new and substantially damaged/improved residential structures must be elevated at least one-foot above the BFE (Nebraska Minimum Standards for Floodplain Development)
- All new and substantially damaged/improved non-residential structures must be elevated and/or dry floodproofed to at least one foot above the BFE
- Development must demonstrate that it and all other existing and anticipated development does not increase the 100-year flood profile more than one-foot at any location

## 60.3 (b)

# Obtaining BFE Information

- Base Flood Elevations (BFEs) are not included on the FIRM
- BFEs will be provided upon request from NDNR
- Other sources may be used (US Army Corps of Engineers, USGS, NRCS, NRDs, Professional engineers)

# 60.3 (c)




## 60.3 (c)

- Standards include all 'b' ordinance requirements
- BFE provided in Flood Insurance Study (FIS) and on the Flood Insurance Rate Map (FIRM)
- Regulatory Floodway is **not** defined

# 60.3 (c) Obtaining BFE Information-Flood Insurance Study (FIS)

## FLOOD INSURANCE STUDY

VOLUME 3 OF 3

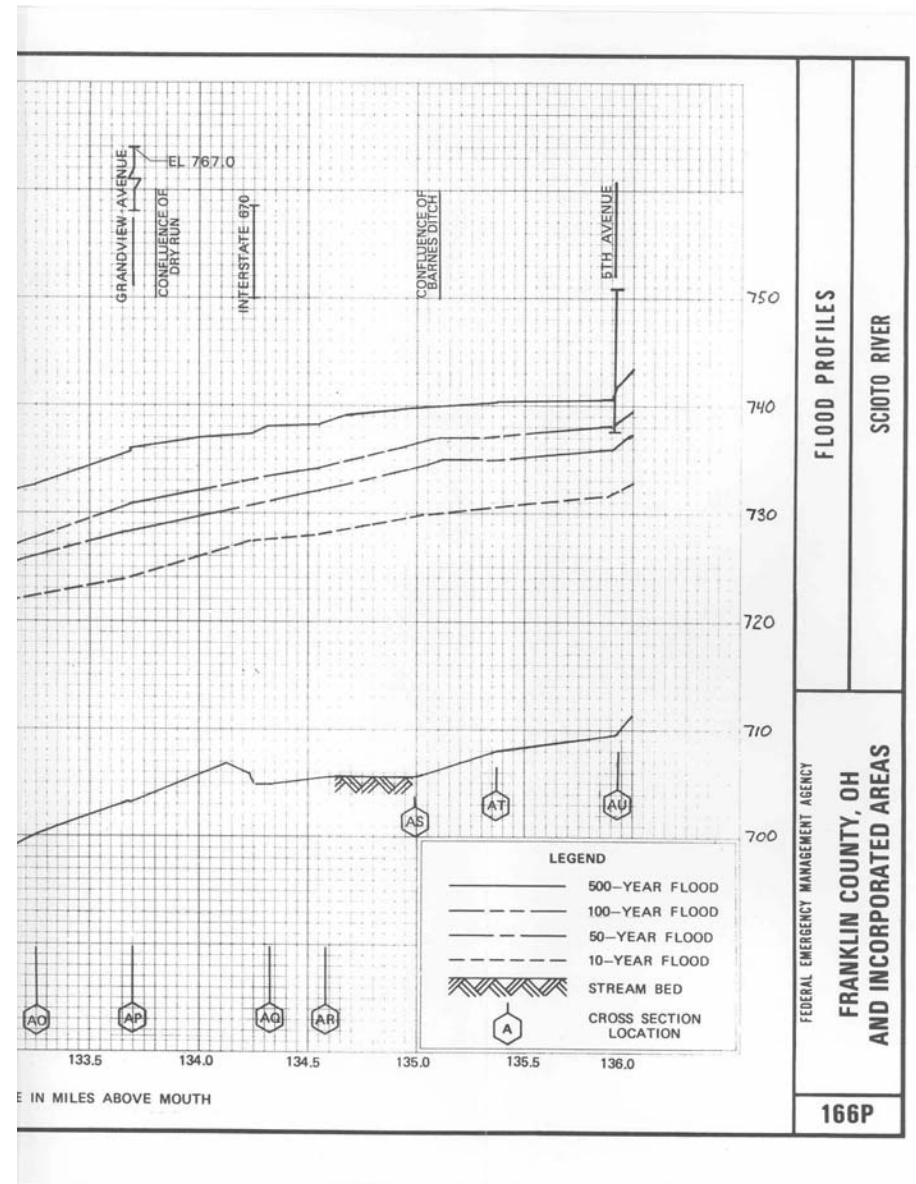


### FRANKLIN COUNTY, OHIO AND INCORPORATED AREAS

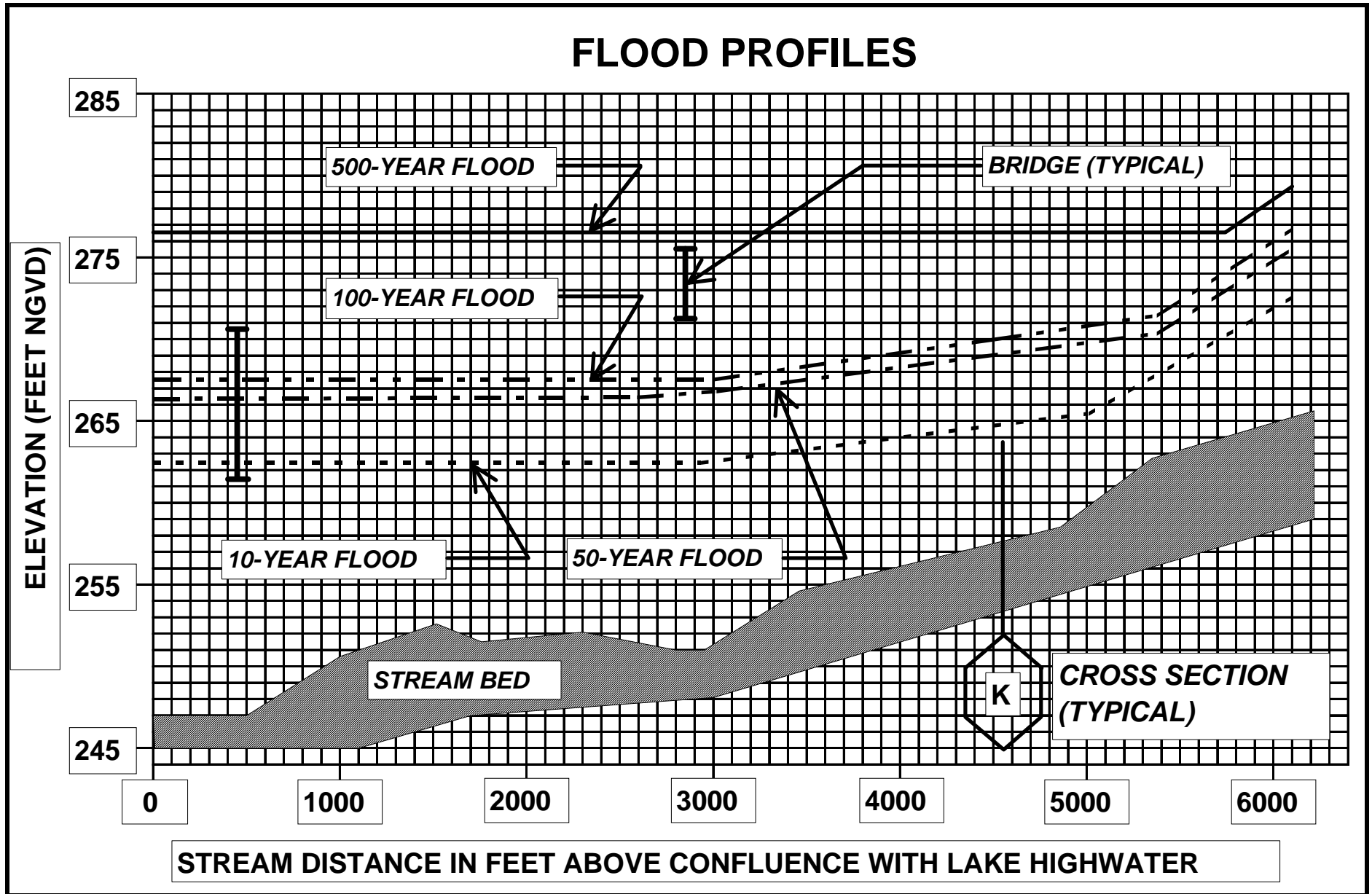
COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER
BEKLEY, CITY OF	390168	HILLIARD, CITY OF	390175
BRICE, VILLAGE OF	390898	LOCKBOURNE, VILLAGE OF	390661
CANAL WINDHESTER, VILLAGE OF	390169	MARBLE CLIFF, VILLAGE OF	390896
COLUMBUS, CITY OF	390110	NEWALBANY, VILLAGE OF	390855
DUBLIN, CITY OF	390673	OBetz, VILLAGE OF	390176
FRANKLIN COUNTY (UNINCORPORATED AREAS)	390167	REYNOLDSBURG, CITY OF	390177
GAHANNA, CITY OF	390111	RIVERLEA, VILLAGE OF	390692
GRANDVIEW HEIGHTS, CITY OF	390112	UPPER ARLINGTON, CITY OF	390178
GROVE CITY, CITY OF	390173	URBANCREST, VILLAGE OF	390893
GROVEPORT, VILLAGE OF	390174	VALLEYVIEW, VILLAGE OF	390669
HARRISBURG, VILLAGE OF	390897	WESTERVILLE, CITY OF	390179
		WHITEHALL, CITY OF	390180
		WORTHINGTON, CITY OF	390181

REVISED:  
APRIL 21, 1999

Federal Emergency Management Agency



# Flood Profile




# 60.3 (d)

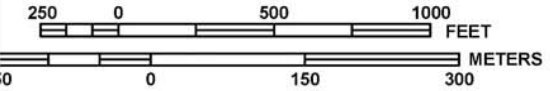


# 60.3 (d) DFIRM





**MAP SCALE 1" = 500'**



**NFIP**

**PANEL 0193H**


**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**DOUGLAS COUNTY,**  
**NEBRASKA**  
**AND INCORPORATED AREAS**

**PANEL 193 OF 360**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
OMAHA, CITY OF	315274	0193	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
31055C0193H

**EFFECTIVE DATE**  
DECEMBER 2, 2005

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT version 2.0. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. Further information about National Flood Insurance Program flood hazard maps is available at <http://msc.fema.gov/>.

## 60.3 (d)

- Standards include all 'b' and 'c' ordinance requirements
- BFE is on Flood Insurance Rate Map (FIRM) and included in Flood Insurance Study (FIS)
- Regulatory Floodway is defined
  - Ensures full flood fringe encroachment will not exceed 1-foot allowed

### 60.3 (d) Obtaining BFE Information

- Same as 60.3 (c) – Obtain from FIS Stream Profile

## 60.3 (d)

### Additional requirements relate to the Regulatory Floodway

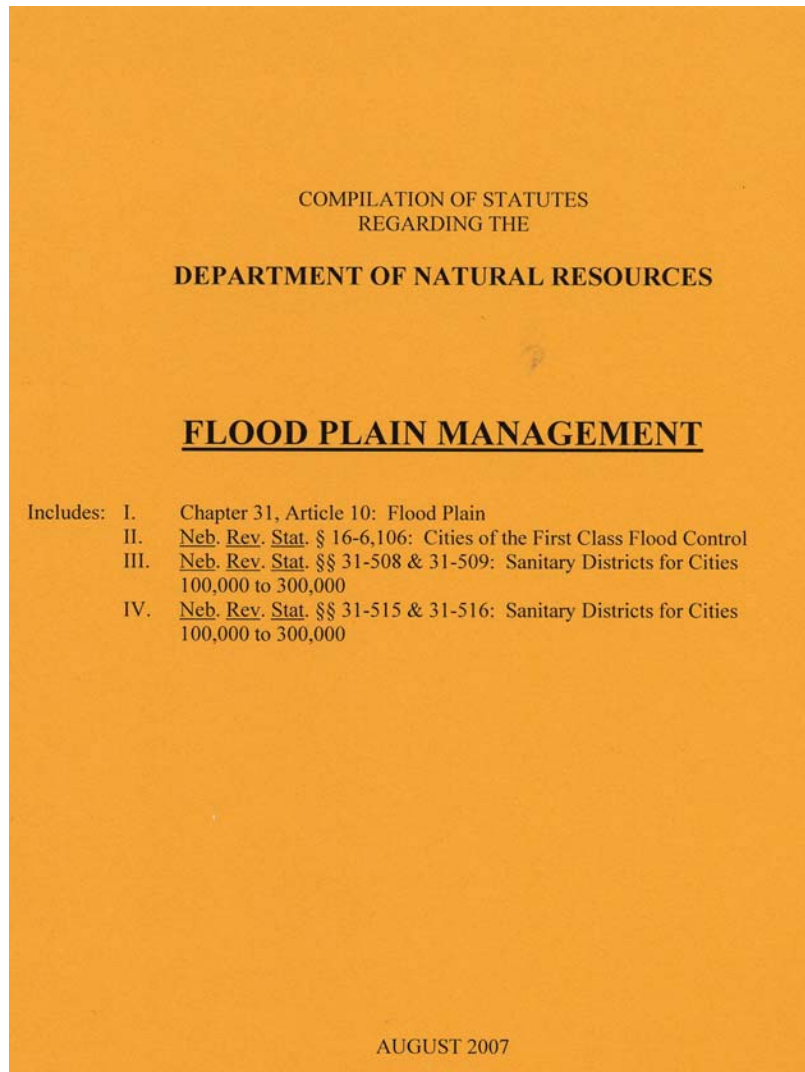
- No new structures for human habitation are allowed in the floodway
- Any development must include "Certification of No-Rise"

*Certification must be provided by a Registered Professional Engineer*

# Floodplain Management Ordinance

# Floodplain Management Ordinance

- Statutory Authority



**Sections 31-1001  
to 31-1022 R.R.S.  
1943 (as amended)**

## Floodplain Management Ordinance

- Statutory Authority
- Finding of Facts (Source of flooding)
  - 59.22: Prerequisites for the sale of flood insurance:*  
“....executive actions indicating a local need for flood insurance and an explicit desire to participate in the NFIP.”

## Floodplain Management Ordinance

- Statutory Authority
- Finding of Facts
- Statement of Purpose
  - *Restrict or prohibit uses which are dangerous to health, safety.....*
  - *Require that uses vulnerable to floods...be provided with flood protection at the time of initial construction*
  - *Protect individuals from buying lands which are unsuitable....because of flood hazard*
  - *Assure that eligibility is maintained.....in the NFIP.*

## Floodplain Management Ordinance

- Statutory Authority
- Finding of Facts
- Statement of Purpose
- Local Administrator Responsibilities

## Floodplain Management Ordinance

- Statutory Authority
- Finding of Facts
- Statement of Purpose
- Local Administrator Responsibilities
- Designation of Current FHBM/FIRM

## Floodplain Management Ordinance

- Statutory Authority
- Finding of Facts
- Statement of Purpose
- Local Administrator Responsibilities
- Designation of Current FHBM/FIRM
- Permits Required

*No person, firm or corporation shall initiate any floodplain development or substantial improvement or cause the same to be done without first obtaining a separate permit for development as defined...*

## Floodplain Management Ordinance

### • **Permits Required**

- Floodplain Development Permit if in SFHA
  - Describe development
  - Exact location of development
  - Indicate usage
  - Include plans and specifications
  - Signature of applicant or his agent
  - (Administrator provides guidance {BFE, freeboard, materials allowable, openings etc.})

**\*\*\*Sample Floodplain Development Permit\*\*\***

# Floodplain Management Ordinance (Continued)

- Development Permit Applications Review
  - All Applications Review**
- Obtain , review, utilize flood elevation data
- Until a Floodway is established, review encroachment
- Residential construction
- Non-residential construction
- New and substantial improvements
- Construction materials
- Construction methods and practices
- Utility placement
- Manufactured home placement
- Recreational vehicles

# Requirements for Building in a Floodplain

- For development located in any A Zone
  - *be constructed with materials and utility equipment resistant to flood damage.*

# Requirements for Building in a Floodplain

For development located in any A Zone

*- be constructed with methods  
and practices that minimize flood  
and flood related damages.*

# Requirements for Building in a Floodplain

For development located in any A Zone

*- Residential structures must have the lowest floor elevated 1-foot above base flood elevation*

# Requirements for Building in a Floodplain

For development located in any A Zone

*- Non-residential structures must be elevated or "dry floodproofed" to an elevation 1 foot above base flood elevation.*

# Requirements for Building in a Floodplain

For development located in any A Zone

*- Manufactured homes and recreational vehicles must be placed in compliance with local ordinance or resolution.*

# Requirements for Building in a Floodplain

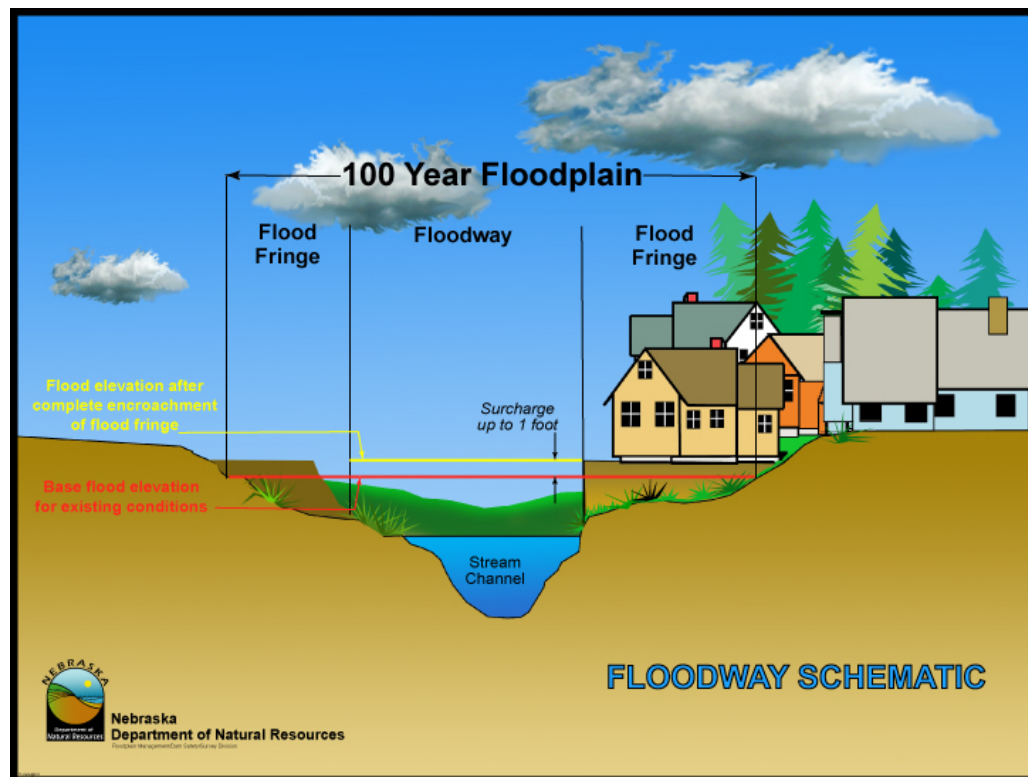
For development located in any A Zone

*- Storage or processing of materials in a floodplain must be in compliance with local ordinance.*

# Requirements for Building in a Floodplain

- For development located in a **floodway**

*- Must obtain an engineering "no-rise" certification.*



# Requirements for Building in a Floodplain

- For development located in a floodway

*- No new structures for human habitation allowed.*

# Manufactured Homes

## ***Location:***

- ***New Manufactured Home Park***
- ***Existing Manufactured Home Park***
- ***Expansion to an Existing.....***
- ***Outside of a Manufactured Home Park***

# Manufactured Homes

## ***Location:***

### New Manufactured Home Park

- ***Adequately Anchored***
- ***Elevated at least 1-foot above BFE***
- ***Additions must be similarly elevated and anchored.***

# Manufactured Homes

## ***Location:***

Expansion to an Existing.....

- *Adequately Anchored*
- *Elevated at least 1-Foot Above BFE*
- *Additions must be similarly elevated and anchored.*

# Manufactured Homes

## ***Location:***

Existing Manufactured Home Park on which a manufactured home has NOT sustained substantial damage

- ***Adequately Anchored***
- ***Elevated 1-foot above BFE***  
***OR 36 inches above grade***
- ***Additions must be similarly elevated and anchored.***

# Manufactured Homes

## ***Location:***

Outside of a Manufactured....

- *Adequately Anchored*
- *Elevated at least 1-Foot above BFE*
- *Additions must be similarly elevated and anchored.*

## Recreational Vehicles

### ***Location:***

In a Special Flood Hazard Area

- ***On site fewer than 180 consecutive days***
  - ***Fully licensed and ready for highway use***
    - ***On its wheels or jacking system***
    - ***Attached to site by quick disconnect devices***
    - ***Has no permanent additions***
- OR**
- ***It is a “building” (Elevated/anchored)***

## ***New or Replacement Water Supply and Sanitary Sewer Systems***

Must be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood water and on-site waste disposal systems to be located so as to avoid impairment or contamination.

## ***Utility and Sanitary Facilities***

Be elevated or floodproofed up to the regulatory flood protection elevation

## ***Storage of Materials or Equipment***

That are in time of flooding buoyant, flammable, explosive or could be injurious to human, animal, or plant life is prohibited.

...may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.

## ***Adequate Drainage***

Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions are required to assure that:

- Need to minimize flood damage
- All public utilities and facilities , such as sewer, gas, electrical and water systems are locate, elevated and constructed to minimize...
- ***Adequate drainage is provided so as to reduce exposure to flood damage***

## ***Large Development***

Proposals for development (including proposals for manufactured home parks and subdivisions) of five (5) acres or fifty (50) lots, whichever is lesser, include within such proposals the base flood elevation.

## ***Recreational Vehicles***

- 1. Be on site for fewer than 180 consecutive days***
- 2. Be fully ready for highway use***
  - 1. On its wheels or jacking system***
  - 2. Attached to quick disconnect utility and security devices***
  - 3. No permanently attached additions***

***OR***

**Meet the permit requirements and the elevation requirements for “manufactured homes”**

# Floodplain Management Ordinance (Continued)

- Subdivision Applications
  - Minimize flooding
  - 5 acres or 50 lots, whichever is lesser include BFEs in SFHA
  - Adequate drainage
  - Utility placement (minimize flood damage)

# Floodplain Management Ordinance (Continued)

- Water and Sewage Systems

*New or replacement water supply systems and/or sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems be located so as to avoid impairment or contamination.*

# Floodplain Management Ordinance (Continued)

- Storage of Material and Equipment
- *The storage or processing of materials that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal or plant life is prohibited.*
- *Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.*

# Floodplain Management Ordinance (Continued)

- Flood Carrying Capacity within a Watercourse
- *Notify adjacent communities and the Nebraska Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.*
- *Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.*

# Floodplain Management Ordinance (Continued)

- Variance Procedures
- Penalties for Violations

# Floodplain Management Ordinance (Continued)

- Abrogation and Greater Restrictions
  - *Not interfere with others, but if this is more restrictive, it shall apply*
- Interpretation
  - *Minimum requirements and liberally construed in favor of the governing body.*
- Warning and Disclaimer of Liability
  - *Greater floods may occur. Does not create liability for flood damages.*
- Severability
  - *If part is adjudged invalid, the remainder shall not be affected*
- Appeal
  - *Due process*
- Conflicting Ordinance/Resolutions
  - *This ordinance shall take precedence over others.*

# Variance

- Appeal board shall hear and decide...
- Decision may be appealed to District Court
- Board shall consider all relevant portions of this ordinance in making decisions

# Variance considerations

- ...injury to others
- Danger to life and property
- ...importance to the community
- Necessity to be near waterfront location
- ...alternate locations
- ..compatibility with existing and anticipated development
- ...relationship with comp plan and floodplain management

# Variance considerations

- ...safety of access in times of flood for emergency vehicles
- ...expecte heights, velocity, duration, rate of rise.....
- ...cost of governmental services during and after flood....repair of public facilities such as gas, sewer, electrical, water, streets.....

# Variance Conditions

- Lot size and similar construction in vicinity
- Historic structure retain designation
- Not allowed if increase to BFE if in floodway
- Minimum necessary considering hazard to afford relief

# Variance Conditions

- Only upon...good and sufficient cause
- ...failure to grant would result in exceptional hardship
- AND
- ..determination that granting will not cause
  - Increase in flood heights
  - Additional threat to public safety, extraordinary public expense, cause nuisance, cause fraud...or conflict with existing local laws or ordinances.

# Variance Conditions

- Written notice signed by community that granting may increase premiums for flood insurance in amounts as high as \$25 for \$100 dollars of coverage

AND

- Construction below base flood level risks life and property
- Notification must be maintained with record of all variance actions...

# Floodplain Management Ordinance (Continued)

- **DEFINITIONS**

Questions?

