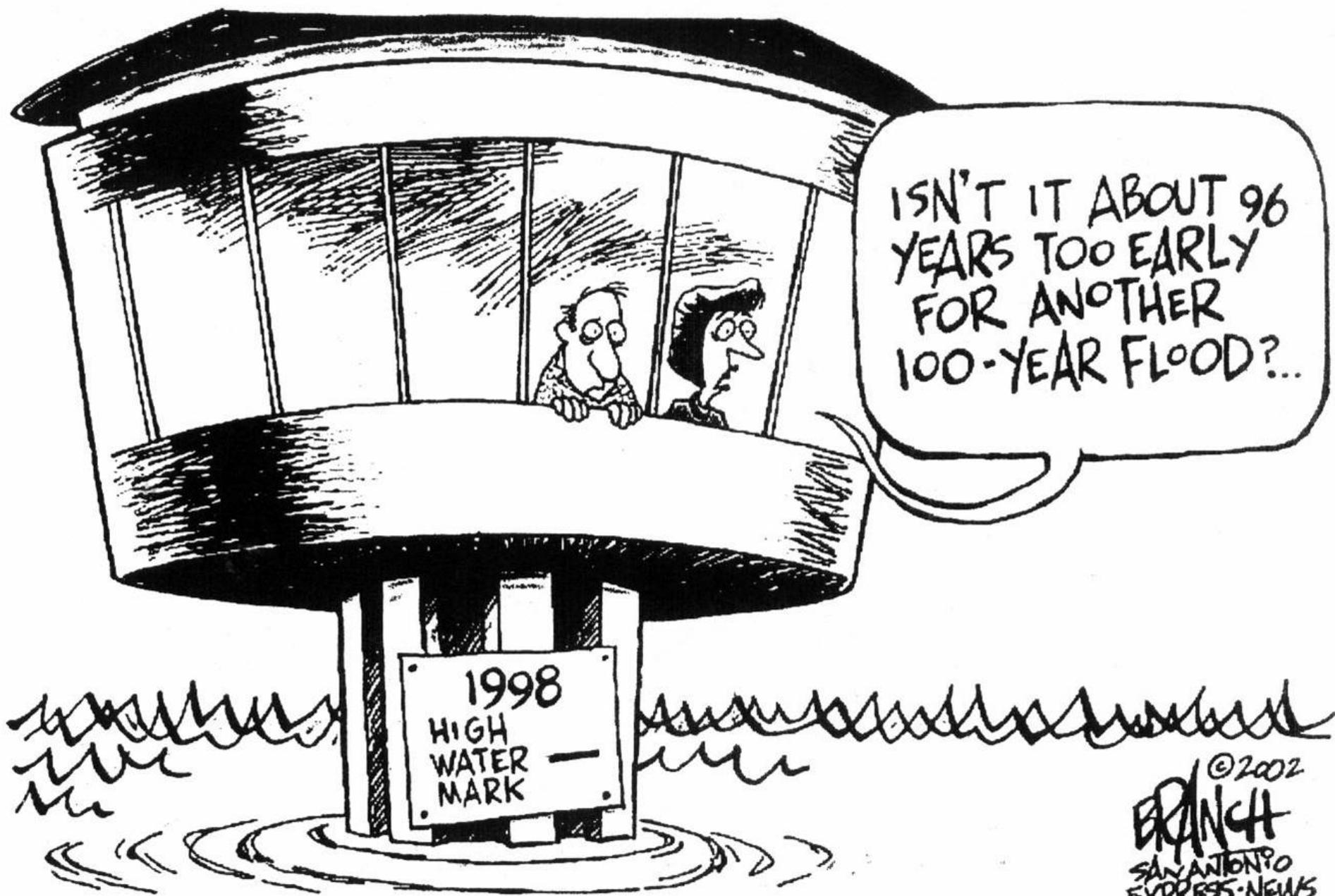




THE NATIONAL FLOOD INSURANCE PROGRAM

A voluntary program based on a mutual agreement between the Federal government, the state and the local community:

In exchange for **adopting** and **enforcing** a floodplain management ordinance, Federally-backed flood insurance is made available to property owners throughout the community.



ISN'T IT ABOUT 96
YEARS TOO EARLY
FOR ANOTHER
100-YEAR FLOOD?...

1998
HIGH
WATER
MARK —

©2002
BRANCH
SAN ANTONIO
EXPRESS-NEWS

NFIP Goals

- Reduce the loss of life and property caused by flooding
- Reduce rising disaster relief costs caused by flooding
- Reduce the reliance on flood disaster relief dollars by providing an alternate means of protection for an individuals home

Accomplishing NFIP Goals

- Publish maps to identify high-risk areas
- Inform and educate the public to raise awareness of flooding risks
- Make federally-backed flood insurance coverage available to property owners
- Mitigate repetitive loss properties

Accomplishing NFIP Goals

- Discourage floodplain development and its risks through education and regulation
- Require new and substantially improved structures to be elevated to the flood protection elevation
- Prohibit new development within floodways

Federal Role

- Risk identification (Map Production)
- Establish minimum development/building protection standards
- Provide affordable flood insurance coverage
- Inform and educate the public
- Provide technical assistance

State Role

- Establish additional development standards
- Promulgate effective regulations
- Provide technical assistance and data
- Evaluate and document community/agency floodplain management activities
- Inform and educate the public

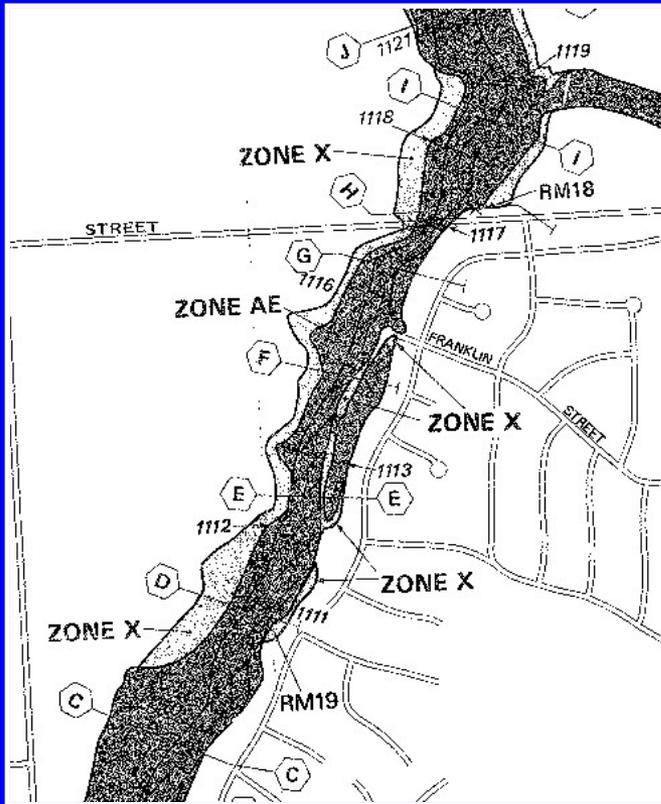
Local Role

- Adopt local floodplain management regulations that meet Federal/State laws
- Regulate development by permitting and inspecting construction activities
- Maintain records of floodplain development and mapping activities
- Inform and educate the public

Special Flood Hazard Area

SFHA's are the darkly shaded areas on a Flood Hazard Boundary Map or a Flood Insurance Rate Map. SFHA's represent the area of the base flood.

Definition of Base Flood



A flood that has a one-percent chance of being equaled or exceeded in any given year. It often is referred to as the “100-year” flood or Base Flood.

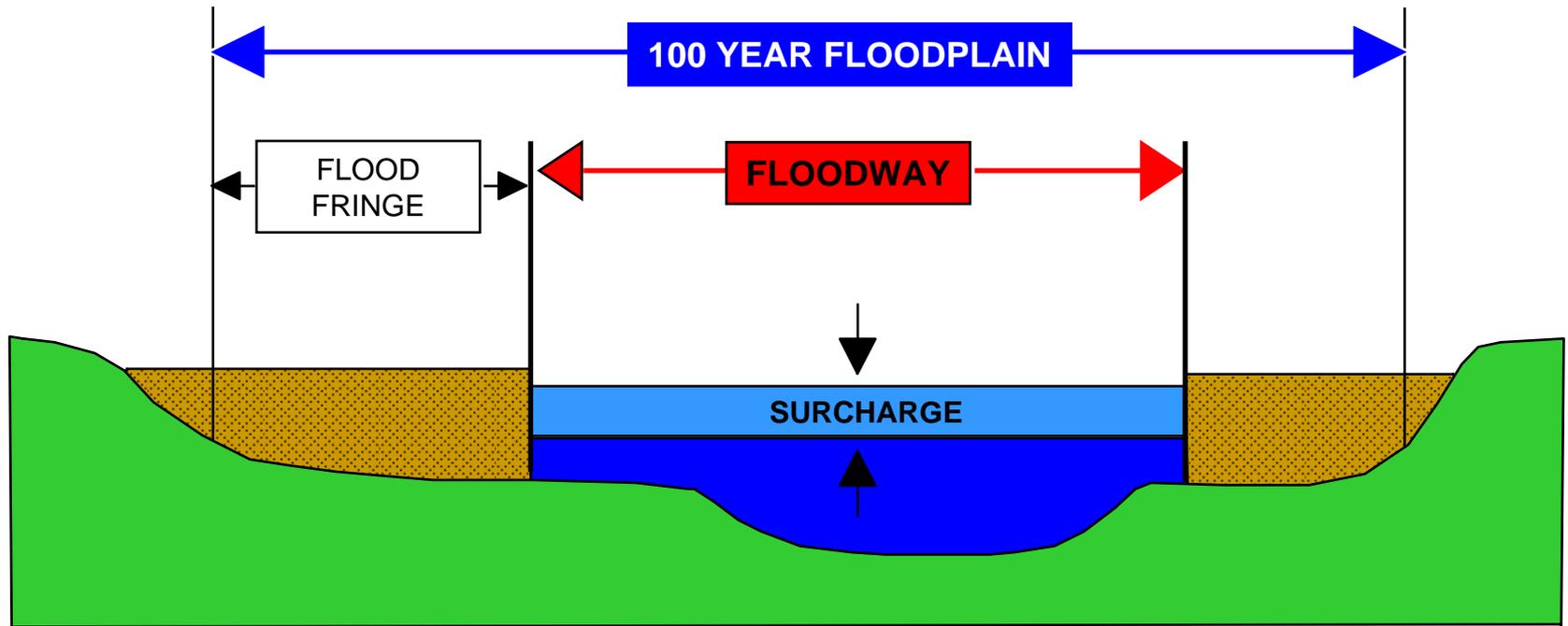
Definition of Floodway

The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.

Definition of Flood Fringe

That portion of the floodplain outside of the floodway which is covered by flood water during the regional flood. The term “floodfringe” is generally associated with standing water rather than flowing water.

Floodway Schematic



FLOODWAY + FLOODWAY FRINGE = 100 YEAR FLOODPLAIN

Determining Your Flood Risk

- Nearly everyone is at risk of flooding
- High Risk – Identified Zone A, Special Flood Hazard Area on the flood maps
- Medium Risk – Shaded Zone X areas on the maps
- Low Risk – Unshaded Zone X areas on the maps

Flood Risk Probabilities

30-year mortgage period

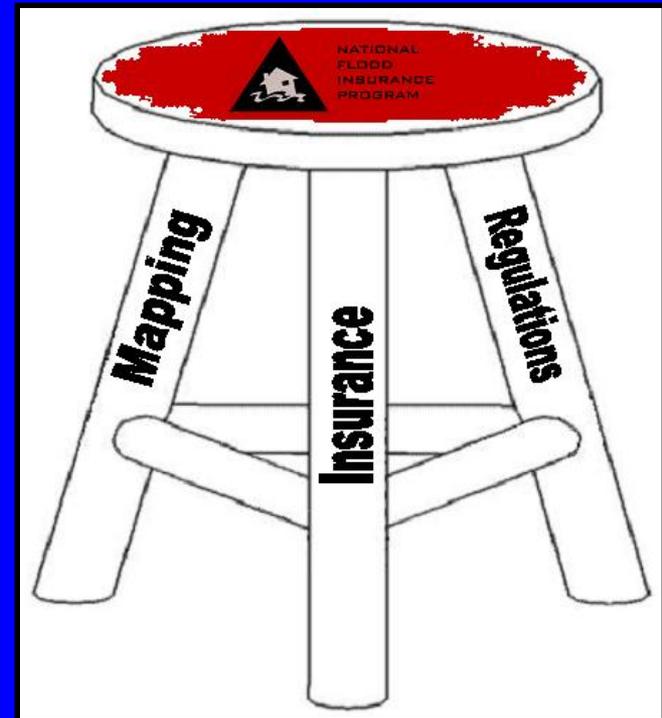
- 9% chance of a house fire
- 26% chance of inundation by a “1% annual chance flood” for a house in SFHA
- 39% over a 50 year period
- Over 30% of all flood insurance claims are for structures outside of the SFHA

Is that last bullet point right?

- Yes, flood damages occur in all areas of the country, not just along major rivers
- In urban areas stormwater flooding can be a bigger problem than riverine flooding
- In rural areas many smaller streams are not mapped and may never be mapped
- Map Modernization not fixing this problem

How Do We Manage Risk?

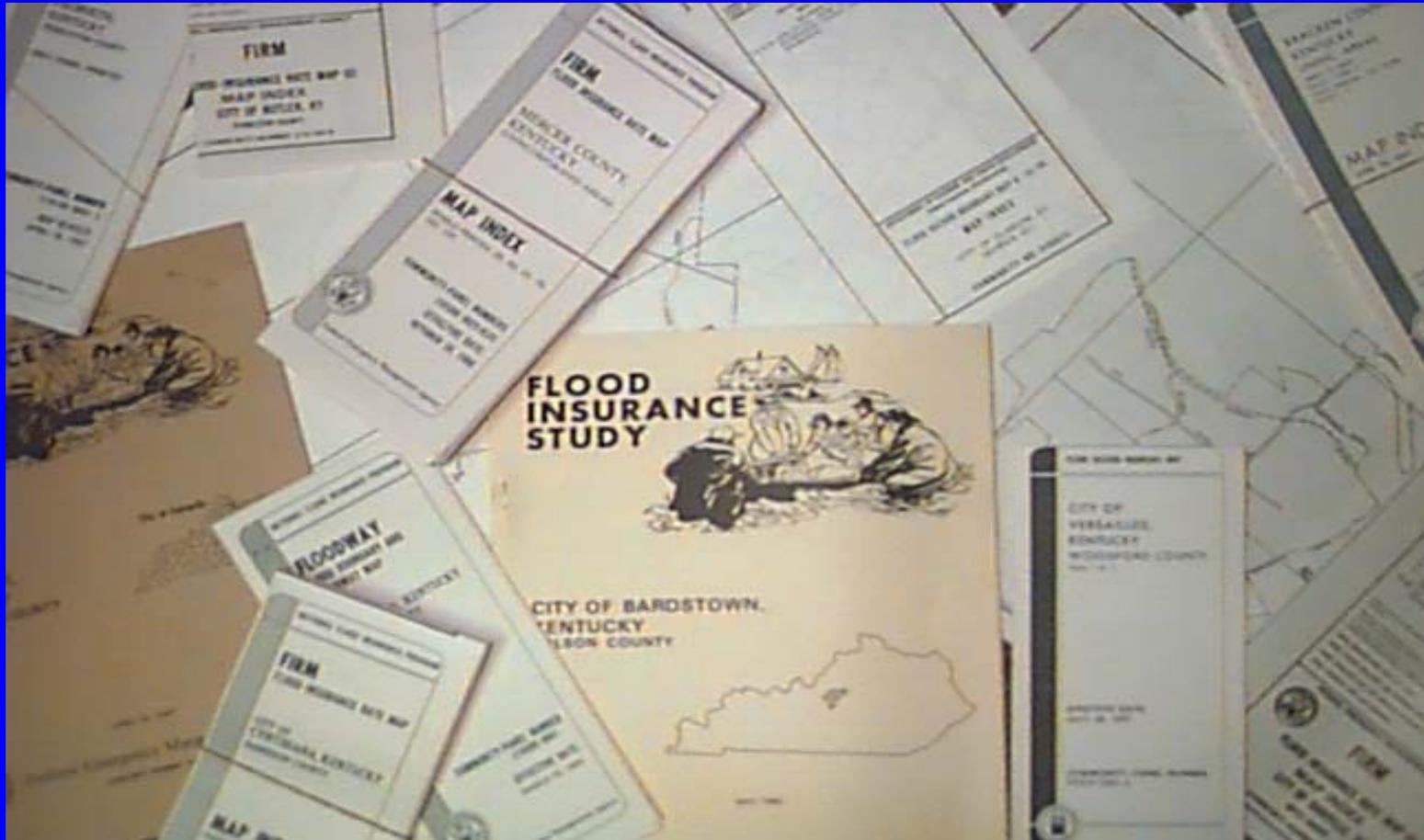
- National Flood Insurance Program
 - Flood Insurance
 - Risk Identification (Mapping)
 - Risk Reduction via Floodplain Management Regulations



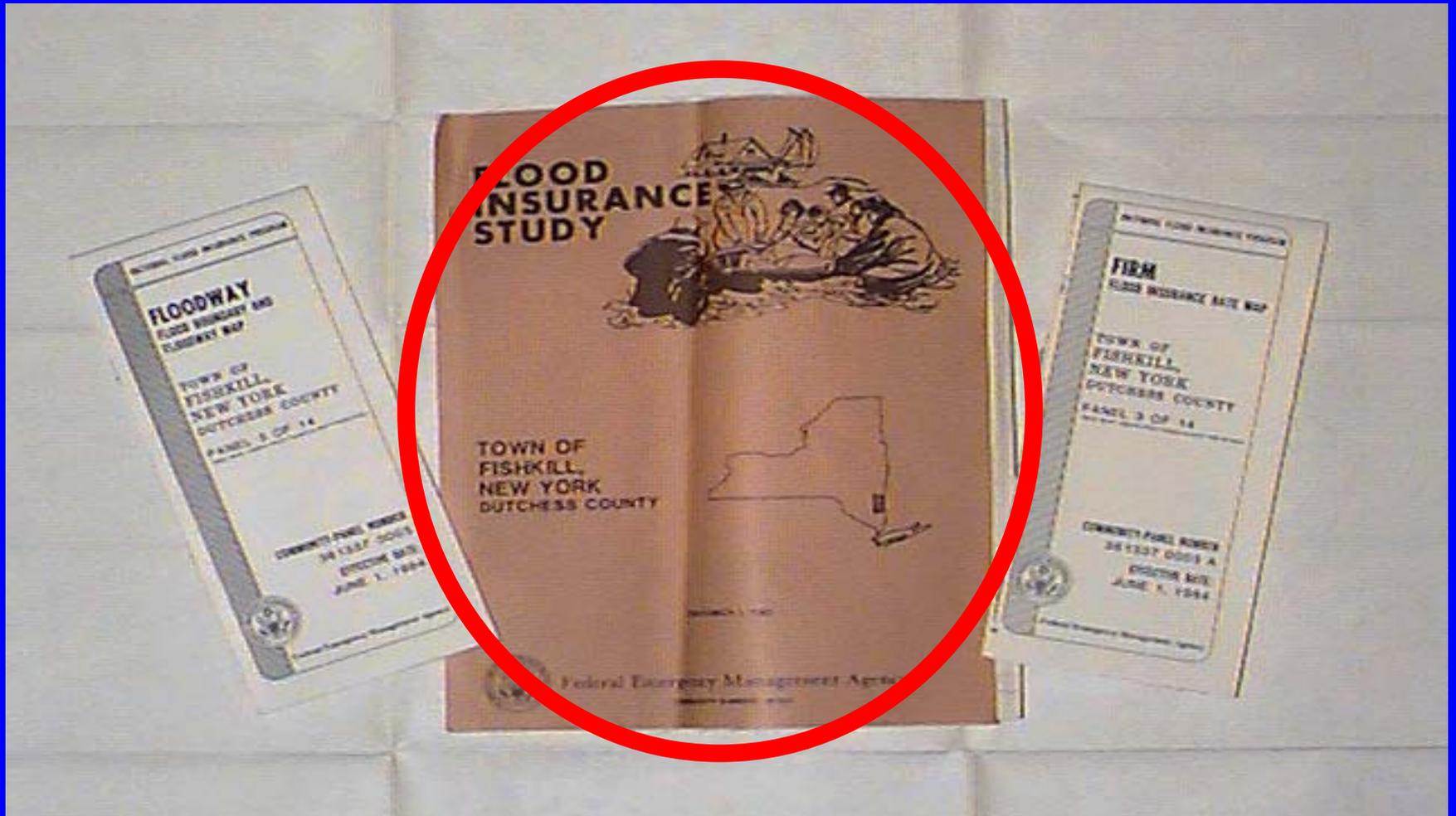


Nick Anderson © 2012 + 05 www.nickanderson.com

Mapping and Map Changes



Flood Insurance Study



FIS Narrative

- Background, authority, scope
- Principal flood problems
- Existing proposed flood control projects
- Engineering methods used
- Floodplain management/insurance applications

The FIRM and FIS Report:

- Identifies Special Flood Hazard Areas,
- Identifies the location of specific property,
- May estimate BFE at a specific site,
- Determines flood insurance zone at a specific site
- May determine the regulatory floodway

Riverine

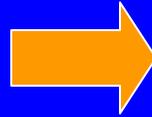
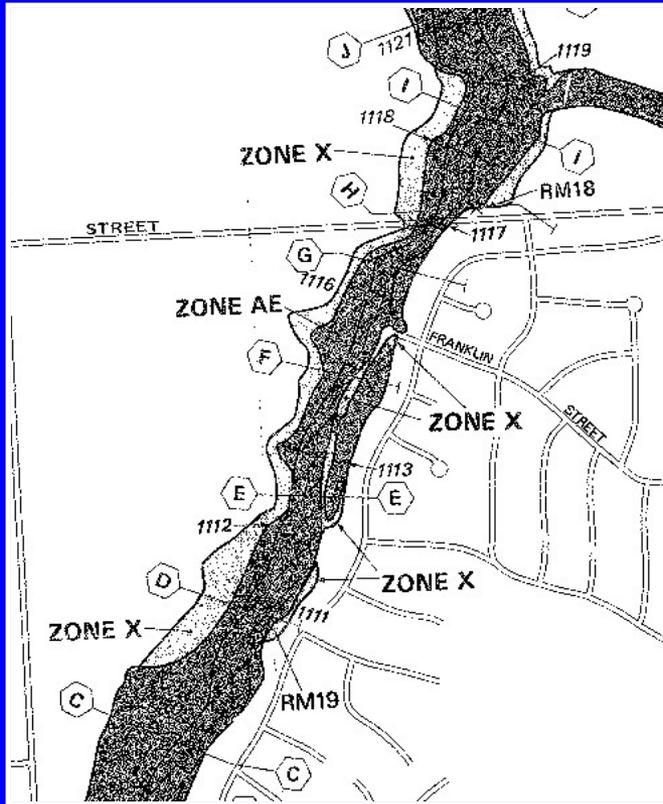
Special Flood Hazard Areas

- **Zone A** - No BFE's determined.
- **Zone AE, A1-30** - BFE's determined.
- **Zone AH** - Flood depths of 1 to 3 feet, areas of ponding; BFE's determined.
- **Zone AO** - Flood depths of 1 to 3 feet, sheet flow; average depths determined.

Types Of Maps

- Flood Insurance Rate Map (FIRM)
- Flood Hazard Boundary Map (FHBM)
- Flood Boundary Floodway Map (FBFM)

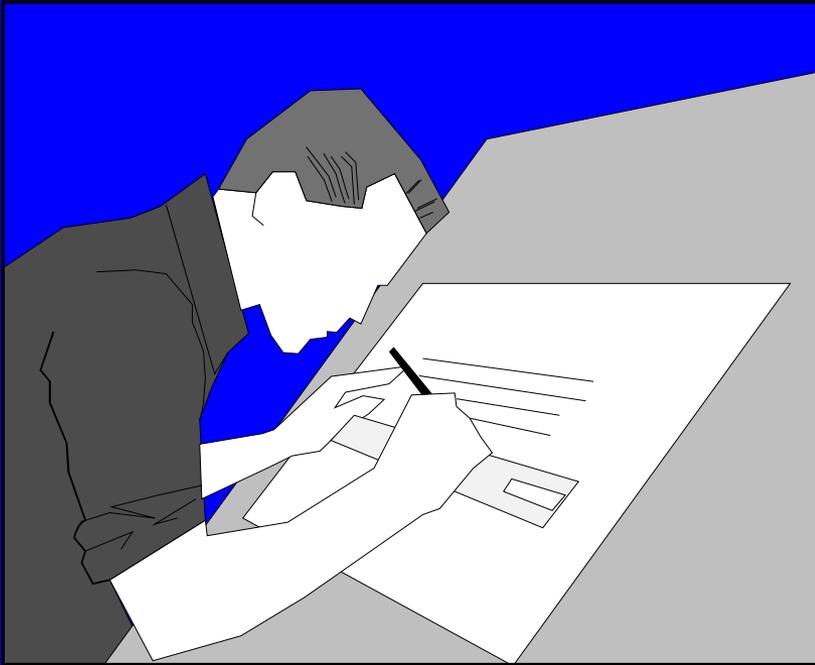
FIRM



DFIRM



Map Corrections



- Map Amendments
- Map Revisions

LOMA

- Pre-existing structures or land that are mistakenly included within the SFHA
- Applicant must provide a property survey
- Only reviewed by FEMA
- Issued by FEMA as a Letter of Map Amendment (LOMA)
- Fee: \$ 0

Map Revisions

- For development within the SFHA
- Map Revisions are used for physical changes to watercourses and floodplains
- Revisions are also used to incorporate better technical data
- Issued by FEMA as either a Physical Map Revision or a Letter of Map Revision

LOMR

- Map is accurate, but owner wants to remove structure/land from SFHA
- Must submit an engineering study revising flood elevations or floodway
- Reviewed by FEMA and DNR
- Issued as a Letter of Map Revision
- Fee: \$4400 minimum

LOMR-F

- Map is accurate, but owner wants to remove structure/land from SFHA
- Must fill property to two feet above the flood elevation and have dryland access
- Reviewed by FEMA and DNR
- Issued as a Letter of Map Revision-Fill
- Fee: \$425

Physical Map Revision - Process

- Identify flooding sources to be studied
- FIS contractor undertakes study
- FEMA holds final community meeting
- The 90-day appeal period starts
- FEMA resolves appeals/protests, if received

FEMA AE BASICS

- In floodway, an H & H study by a licensed P.E. must be performed before work can commence
- If the project causes any increase in RFE, practicable alternatives must be analyzed and used if feasible – cost is not a factor

FEMA AE BASICS

- Practicable alternatives analysis would be submitted as part of CLOMR process
- When completed, LOMR data must be adopted by community
- All affected property owners must be notified of any RFE increase
- For increases, flood easements must still be obtained before project can proceed

FEMA Concerns

- Participating communities must submit data for projects that raise or lower the RFE in AE zones
- This is critical for properly applying floodplain management standards and for insurance rating
- This includes structures, roads, bridges, fill, storage, subdivisions

FEMA Concerns

- Option is to apply for a CLOMR
– Conditional Letter of Map
Revision
- Requires alternative analysis,
community concurrence, no
insurable structures impacted,
notify adjacent owners

FEMA Zone A Basics

- Need FEMA approval for:
- Projects of 5 acres/50 lots
- Projects that alter mapped area, ie. changes in flow or flood heights due to new/replacement bridges, culverts, dams, fill, etc.
- If fill or structures are proposed, must keep a record of all increases to assure that the total increase does not exceed one foot
- No insurable structures can be impacted

LOMC Requirements

- AE Zone - *floodway change*:
- Crossings with BFE increase – either redesign project or obtain easements and complete alternatives analysis for LOMR
- Crossings with BFE decrease or no change – need CLOMR before permit issued; LOMR in 6 months
- Community responsible for LOMC

LOMC Requirements

- AE Zone – *no floodway change*:
- Crossings with BFE increase - either redesign project or obtain easements and complete alternatives analysis for CLOMR
- Crossings with BFE decrease or no change – complete no-rise certificate; no CLOMR required

LOMC Requirements

- A Zone – if not exempt, submit h & h data to develop a floodway on effective FIRM
- If not in floodway, no LOMR needed, submit data in 6 months
- If in floodway, does project cause an elevation increase?

LOMC Summary

- In AE zones, LOMC needed when:
- New data is produced and used for development or for map update
- When new study revises existing effective data
- When physical changes are made in floodplain (eg. channelization, stream realignment, new dam)

CLOMR Process

- Alternatives analysis – must consider feasible alternatives
- What is “feasible”? Similar to variance standards? (no practicable alternative, unnecessarily burdensome)
- Project costs alone cannot justify BFE increases

CLOMR Process

- Review process in Executive Order 11988 – federal directive to avoid floodplain impacts when undertaking agency projects
- If a project must be sited in a floodplain, agency must design or modify its action to minimize potential harm and explain why this action is necessary

CLOMR Process

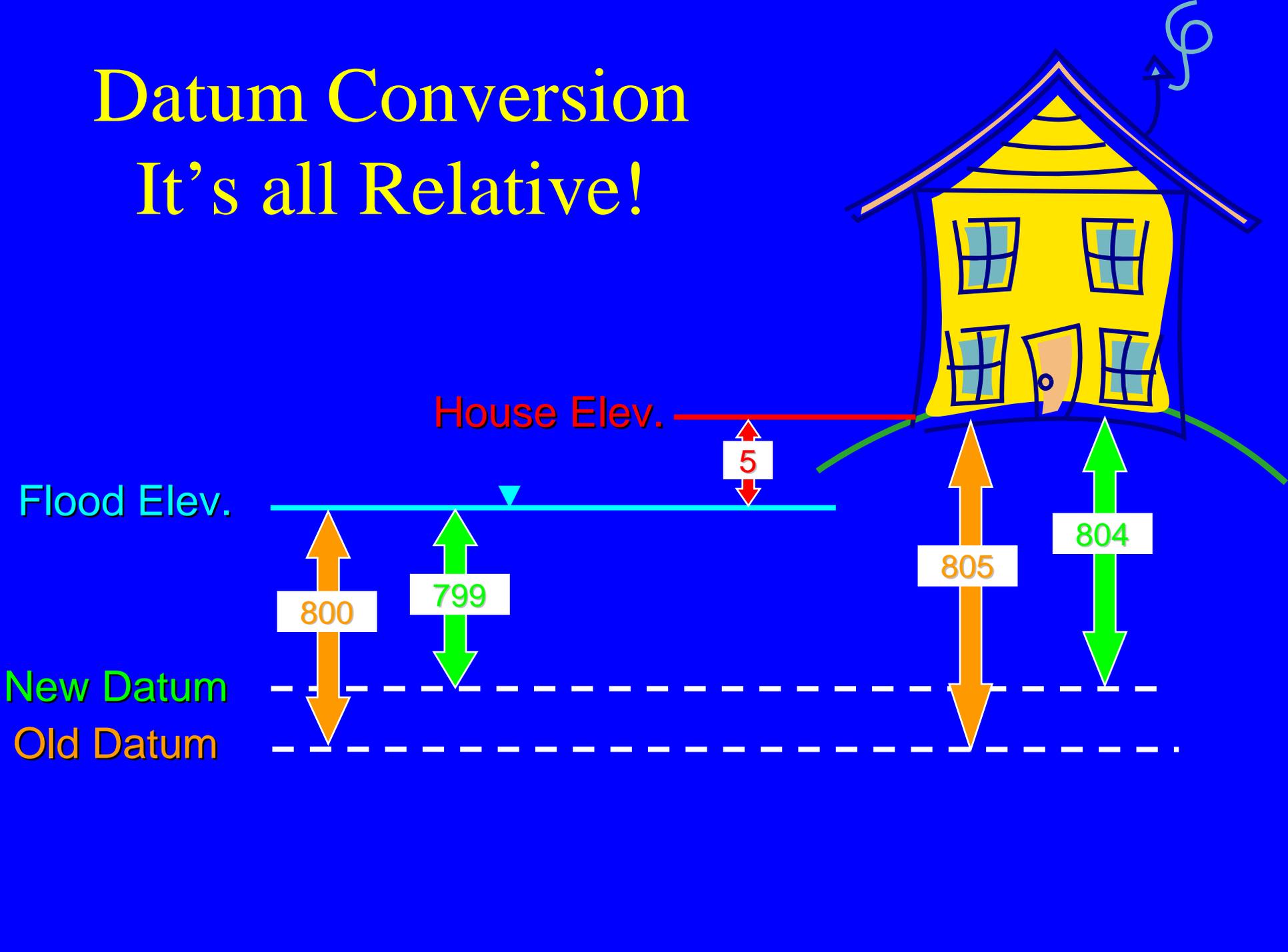
- Explain why action is proposed in floodplain
- Explain how action conforms to applicable state/federal regs
- List alternatives that were considered and why the proposed action was selected
- Provide a public review and comment period

CLOMR Process

- Complete alternatives analysis
- Document individual legal notice to impacted property owners
- Concurrence of CEO's from impacted communities
- Certification that no insurable structures are impacted
- Submit required technical studies and documents

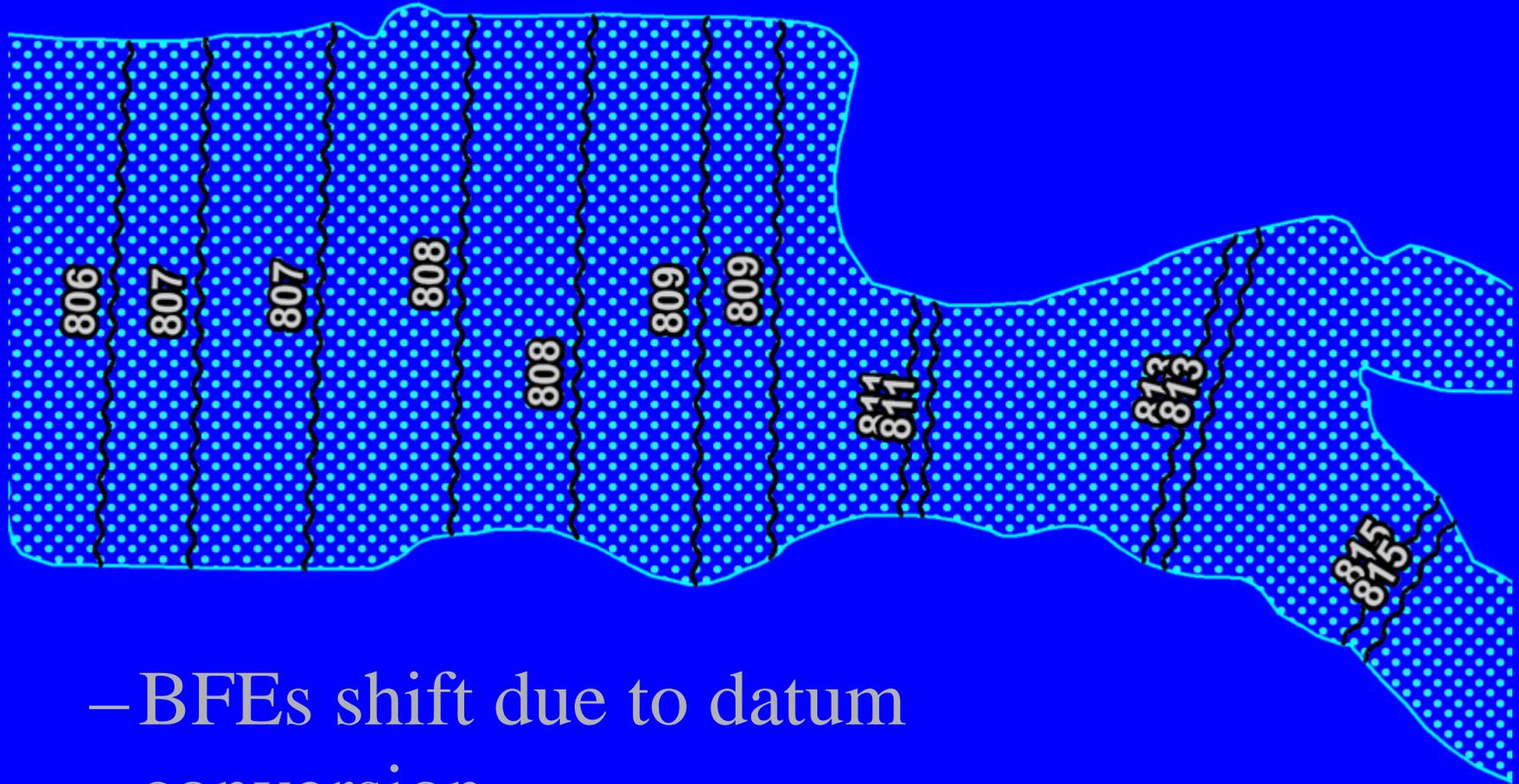
Datum Conversion

It's all Relative!



Datum Conversion

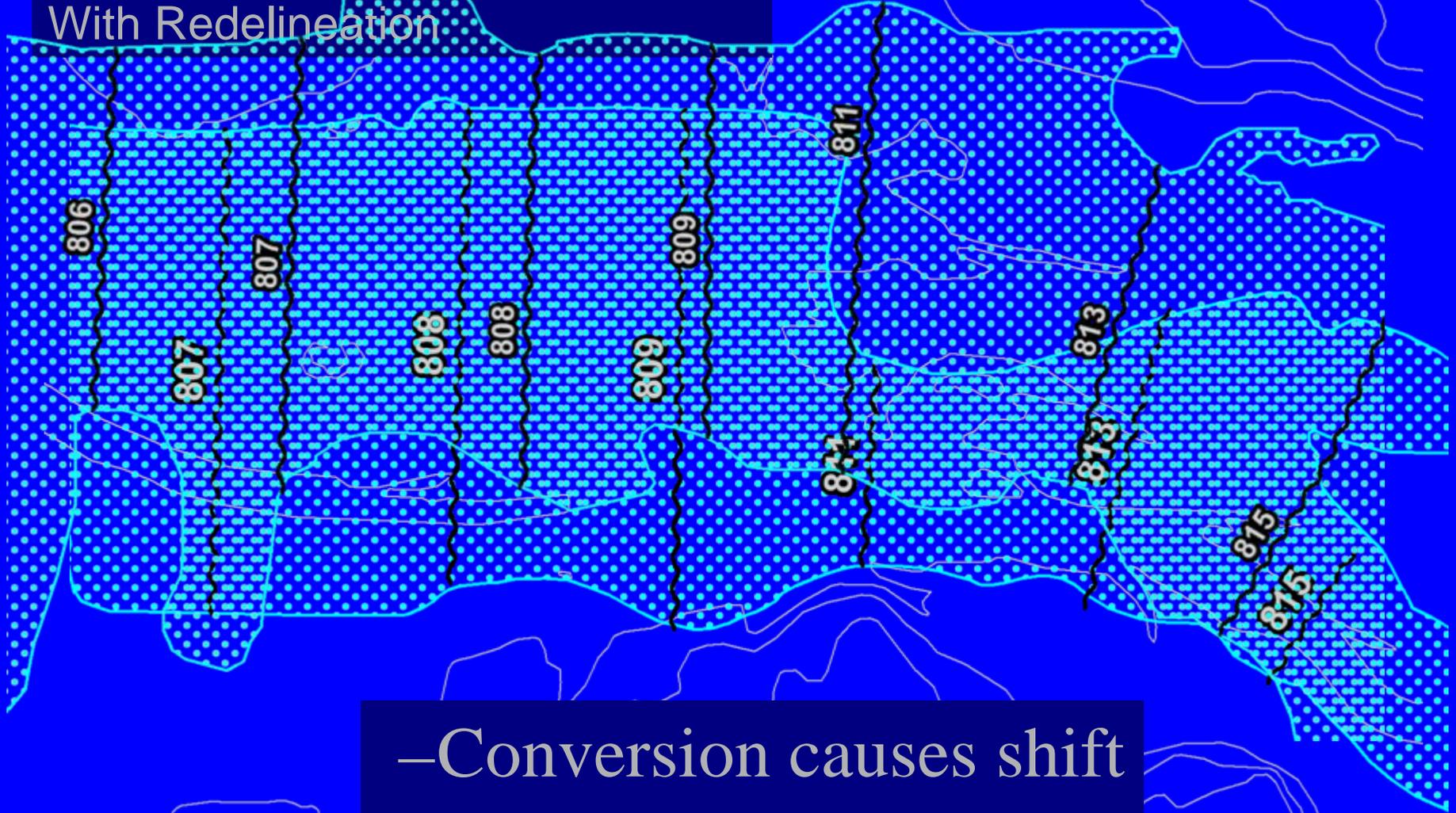
No Redelineation



- BFEs shift due to datum conversion
- No change to floodplain shape

Datum Conversion

With Redelineation



- Conversion causes shift
- Floodplain change due to redelineation

What happened to my LOMCs?

- All LOMCs addressed in the Summary of Map Actions (SOMA)

- Four categories

- Incorporated
- Not Incorporated (validated)
- Superseded
- Redetermined

- Local officials need to be sure to review the prelim SOMA for completeness

SOMA-1

PRELIMINARY SUMMARY OF MAP ACTIONS

Community: LUCAS COUNTY Community No: 390359

To assist your community in maintaining the Flood Insurance Rate Map (FIRM), we have summarized below the previously issued Letter of Map Change (LOMC) actions (i.e., Letters of Map Revision (LOMRs) and Letters of Map Amendment (LOMAs)) that will be affected by the preparation of the enclosed revised FIRM panel(s).

1. LOMCs Incorporated

The modifications effected by the LOMCs listed below have been reflected on the Preliminary copies of the revised FIRM panels. In addition, these LOMCs will remain in effect until the revised FIRM becomes effective.

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
102	00-05-127P	12/01/2000	GOOD DITCH - CRYSTAL CREEK SUBD.	39095C0064D	39095C0064E
102	00-05-281P	01/25/2001	SLYSTONE DITCH (STATION 116+00 TO STATION 144+00)	39095C0236D	39095C0236E 39095C0240E
102	04-05-4066P	09/30/2004	SHARP DITCH RELOCATION	39095C0034D	39095C0236E 39095C0240E

2. LOMCs Not Incorporated

The modifications effected by the LOMCs listed below have not been reflected on the Preliminary copies of the revised FIRM panels because of scale limitations or because the LOMC issued had determined that the lot(s) or structure(s) involved were outside the Special Flood Hazard Area, as shown on the FIRM. These LOMCs will be revalidated free of charge 1 day after the revised FIRM becomes effective through a single revalidation letter that reaffirms the validity of the previous LOMCs.

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	93-05-472A	04/16/1993		3903590080B	39095C0212E
LOMA	93-05-1059W	09/30/1993	LOT 86, 87 & 88 - BANCROFT WOODS	3903590050B	39095C0082E
LOMA	94-05-1356A	10/07/1994	N 88' OF LOT 35 & E 20' OF LOT 36 - KINGSWOOD, PLAT 2	3903590015B	39095C0082E
LOMA	95-05-2496A	10/23/1995	761 S. FULTON COUNTY ROAD	3903590095B	39095C0380E
LOMA	96-05-754A	01/19/1996	5140 SHORELAND AVENUE	3903590025B	39095C0105E
LOMA	96-05-3234A	09/06/1996	LOT 20 - RENAISSANCE BEACH LANDS	3903590070B	39095C0145E

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Regulations



Definition of Development

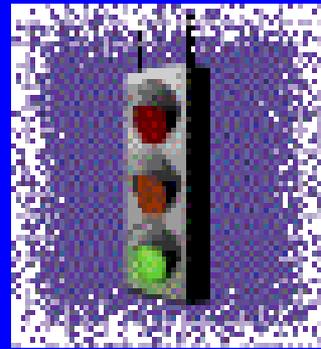
“...means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.”

Definition of Lowest Floor

“...means the lowest floor of the lowest enclosed area, **excluding basement.**

Basement is defined as “any enclosed area of a building having its floor subgrade, ie, below ground level on all sides.

Basic NFIP Regulations



- Ensure that all proposed development is reasonably safe from flooding
- Ensure that the lowest floor of any new or substantially damaged or improved structure within the SFHA is elevated to or above the base flood elevation.
- Ensure that development within the floodway does not increase flood heights.

Wisconsin Regulations

- Lowest floor 2 feet above flood elevation
- Dryland access required
- No development in floodway
- Limits on nonconforming structures
- We map true (zero rise) floodway
- 2-foot standard for filling to remove

Flood Insurance Basics

- Homeowners insurance does not cover flooding
- Anyone in a participating community can buy flood insurance
- Available to homeowners, business owners, renters, condo unit owners, and condo associations
- Sold by insurance agents or through the NFIP
- Claims are paid regardless of disaster declaration
- No payback requirement

When is Flood Insurance Mandatory?

- As a condition of any Federal grants or other financial assistance to repair or construct insurable structures within the SFHA including certain forms of flood disaster aid.
- As a condition of any mortgage from a federally-backed (VA, FHA), federally-insured or regulated lender for the repair, purchase or construction of insurable structures within the SFHA.

Insurance Policy Types

- **SFIP (Standard Flood Insurance Policy)**
 - Typical policy issued for SFHA structures
- **PRP (Preferred Risk Policy)**
 - Issued for structures outside the SFHA
 - Rates as low as \$119 per year
 - PRP zones cannot be grandfathered

Effects of Map Changes on Flood Insurance

- –Lower risk to higher risk (“Grandfathering”)
- –Higher risk to lower risk (“Conversion”)
- –Vertical Datum

Eligible Structure

- Walls And Roof
 - Principally Above Ground
 - Manufactured Home
 - Foundation
 - Anchored
 - Utilities
- No structures over water



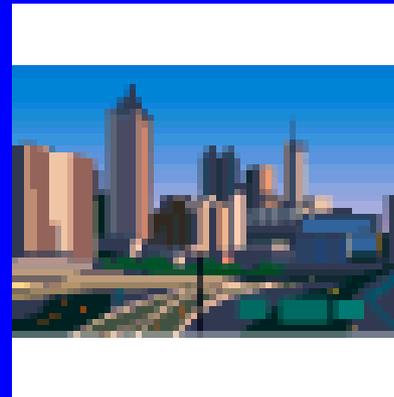
Rating Elements

- Community Name
- Number of Floors
- Construction Date
- Elevation Difference
- Emergency vs. Regular
- Occupancy Type
- Basement
- Flood Zone
- CRS Discount
- No. of Floors

Available Levels of Coverage

Regular Phase

	<u>Structure</u>	<u>Content</u>
Single Family Home	\$250,000	\$100,000
Non-Residential	\$500,000	\$500,000



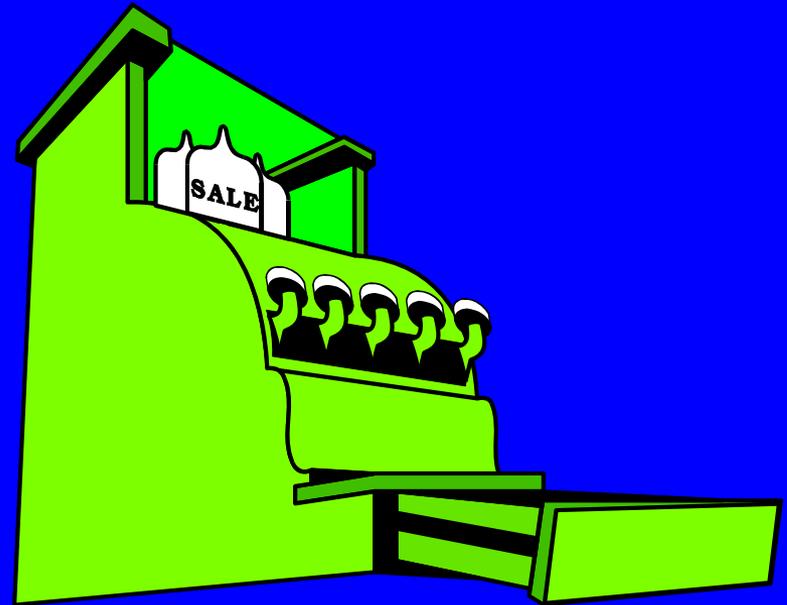
Building / Contents Coverage

- Contents Coverage NOT Automatic
- Emphasis Usually On Building Coverage
- Basement coverage limited to mechanicals
- Groundwater/sewer back-up not covered



Cost Comparison

- Single family structure, no basement, post-FIRM, Zone AE
- Coverage:
 - Structure \$100,000
 - Contents \$50,000



Insurance Premiums



Lowest Floor

Elevation

Annual Premium

2-feet above BFE

\$600

1-foot above BFE

\$800

At BFE

\$1000

1-foot below BFE

\$1800

Grandfathering

- Insurance rates may change with new maps
- Key is to buy policy before effective date
- You can “lock in” lower rates based on existing map if flood elevations increase
- Continuous coverage is recommended
- For Post-FIRM, proof that structure was built in full compliance will suffice

Grandfathering

- Applies to Pre-FIRM *and* Post-FIRM structures
- Can be purchased up to the day before the map's effective date
- Policy can be assigned to a new owner

Grandfather Rules

*\$200K/\$80K Building/Contents May 2008



Not Grandfathered:

- \$2,074 SFIP (AE Zone)
- \$6,222 in 3 years

Grandfathered:

- \$ 326 PRP (1st year)
- \$1,208 SFIP-X (yr 2-3)
- \$2,742 in 3 years

Grandfather Rules

Post-FIRM - built after initial FIRM date

New Business (Built-in-Compliance Rule)

- If a building was constructed in compliance with a FIRM
 - Can obtain policy with zone and BFE from the map in force at the time of construction
 - Proof must be submitted to the company
 - Continuous coverage not required

Proof Required

- A copy of the *previous* flood map showing the previous zone
- An Elevation Certificate
- A letter from community official
- *Always* use the BFE that provides best rate

Post-FIRM: Old BFE vs. Current

“Locked” Old BFE (+1):

- **\$ 707 SFIP**
- **\$2,121 in 3 years**

• **Current BFE (-1):**

- **\$ 5,224 SFIP**
- **\$15,672 in 3 years**

Which Zone Do You Use?

- 200,000 building/\$80,000 contents; May 2008 rates; Post-FIRM
- **“Locked” X Zone:**
- **\$ 326 PRP (1st year)**
- **\$1,208 SFIP-X (yr 2 & 3) = \$2,742 in 3 years**
- **New AE Zone (+0 BFE):**
- **\$ 326 PRP (1st year)**
- **\$1,246 SFIP (yr 2 & 3) = \$2,818 in 3 years**

Which Zone Do You Use?

- 200,000 building/\$80,000 contents; May 2008 rates; Post-FIRM
- **Locked” X Zone:**
- **\$ 326 PRP (1st year)**
- **\$1,208 SFIP-X (yr 2 & 3) = \$2,742 in 3 years**
- **New AE Zone (+2 BFE):**
- **\$ 326 PRP (1st year)**
- **\$ 504 SFIP (yr 2 & 3) = \$1,334 in 3 years**

Zone X May Not Be Best Rate

- **“Locked” in Post-FIRM X Zone BEFORE map revision:**
- **\$ 326* PRP (1st year)**
- **\$1,208* SFIP-X (yr 2 & 3) = \$2,742 in 3 years**

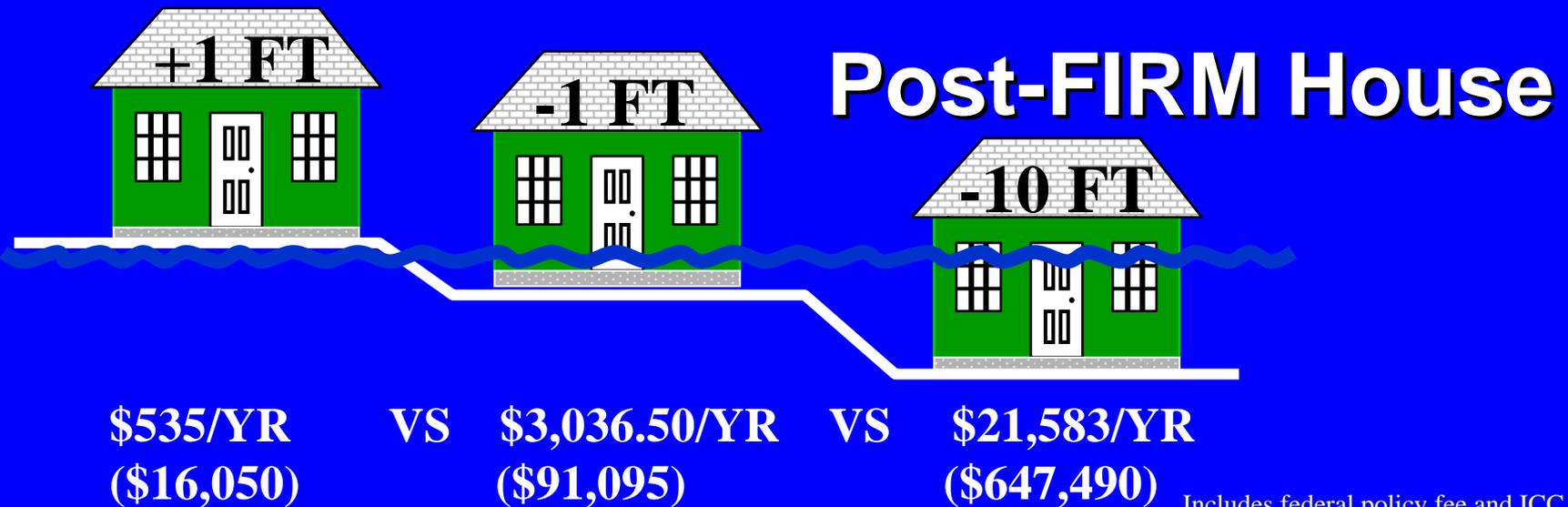
- **“Locked” in Post-FIRM X Zone AFTER map revision:**
- **\$1,208* SFIP (1st year)**
- **\$1,208* SFIP (yr 2 & 3) = \$3,624 in 3 years**

- **New Post-FIRM AE Zone (+2):**
- **\$ 504* SFIP (1st year)**
- **\$ 504* SFIP (yr 2 & 3)**
- **\$1,512 in 3 years**

Grandfathering

- Property Owner Options
- –Buy policy *before* the map changes;
- Post-FIRM show proof of compliance;
- –Already has a policy and keeps the prior zone and base flood elevation for rating as long as continuous coverage is maintained;
- –Uses the zone that provides the lowest rate

Flood Insurance Costs for 30-Year Loan



Includes federal policy fee and ICC premium

Building (\$75,000) and contents (\$20,000)

Single family, one floor, no basement

Flood Hazard Determinations

- Why was my building put in the floodplain?
- New study data = map change
- New elevation data = map change
- Old study can't be validated = map change
- Lender doesn't know building location

Common Problems

- If lender notifies you that you're in the floodplain, first call should be to lender
- In many cases a third party flood zone determination company makes decision
- It may not have detailed survey data
- It may not have aerial photos
- Ask lender if they will accept this info

Strategies to Consider

LOMA Out As Shown

- Used when new survey data is not needed to show that the structure is not in SFHA
- Must submit FEMA MT-EZ form, effective FIRM panel, plat map or deed and tax assessors map
- Other data showing location of structure on lot may be required

Strategies to Consider

- If owner obtains a determination showing property out of the floodplain and lender still requires insurance, contact FEMA for LODR (Letter of Determination Review)
- Must be agreed upon by both parties
- FEMA reviews info that lender used
- Issues a decision on flood zone location

Strategies to Consider

- If this doesn't work, next step is a LOMA
- Owner will need an elevation certificate prepared by Registered Land Surveyor
- Submitted to and evaluated by FEMA
- If map in error, FEMA will issue LOMA which removes insurance requirement
- Lender can still require flood insurance

Insurance Resources

- Flood Insurance Information

www.FloodSmart.gov

www.fema.gov/library/index.jsp

- Flood Mapping

www.msc.fema.gov

www.dnr.state.wi.us/org/water/wm/dsfm/flood/mapping.htm

- FEMA Map Assistance Center
- 877-FEMA-MAP (336-2627)

QUESTIONS???

