



FEMA



SARASOTA  
COUNTY

*"Dedicated to Quality Service"*

**Florida Flood Map Updates  
and the  
National Flood Insurance Program**

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Florida Floodplain Managers Association

## **COURSE SCHEDULE**

1. Floodplain Management
2. The National Flood Insurance Program
3. Flood Risk
4. Map Modernization in Florida
5. Risk MAP

*Please ask questions throughout!*

FLORIDA has more wetlands and flood prone areas than any other state in the lower 48.  
41% of Florida is identified as flood prone (14.25 million acres)



- At least two acres or two properties
- At least partial inundation
- Temporary
- Unplanned

# FLOODPLAIN

- Any land subject to inundation by water from any source with a 1% chance (or greater) in any given year (AKA the 100-year flood)
  - Coastlines
  - Barrier Islands
  - Rivers, Streams, Canals
  - Low-lying Areas

For example: Sarasota County

1% chance = 10 inches of rainfall in 24 hours (100 yr flood)

.02% chance = 12 inches in 24 hours (500 yr flood)

# FLOODPLAIN MANAGEMENT

## – Man-made solutions

- Stormwater utilities, retention, low impact development, dams, levees, seawalls....

## – Preservation

- Natural and Beneficial Functions
- Sand Dunes, Beach Re-nourishment

## – Mitigation

- Plans, Education, Grants

# FLOODPLAIN MANAGEMENT

*The holistic approach  
to reducing flood risks and losses*

– Land Development Regulations

- Where and what can be allowed in high risk areas?

– Construction types –  
Residential/Commercial/Government

- If allowed, how safe is it and where is it place will it adversely impact others?

# What should be considered when developing in a floodplain?

- Urbanization
  - Loss of natural and beneficial functions
    - Floodplains support special eco-systems
    - Floodplains recharge aquifers
    - Floodplains retain natural flows to rivers, streams
  - Loss of life \* Evacuate/Respond
  - Loss of property \* Economics
  - Loss of commerce \* Sustainability





# **WHO MANAGES YOUR WATERSHEDS?**

- Policy – Comprehensive Plans
- Regulations – Enforcement –Mitigation
- Florida- again unique
- Water Management Districts (5) -  
Established to provide flood protection

# **WHO MANAGES YOUR FLOODPLAIN?**

- Policy – Comprehensive Plans
- Regulations – Various Departments
- Enforcement – Various Departments
- Mitigation – Various Departments

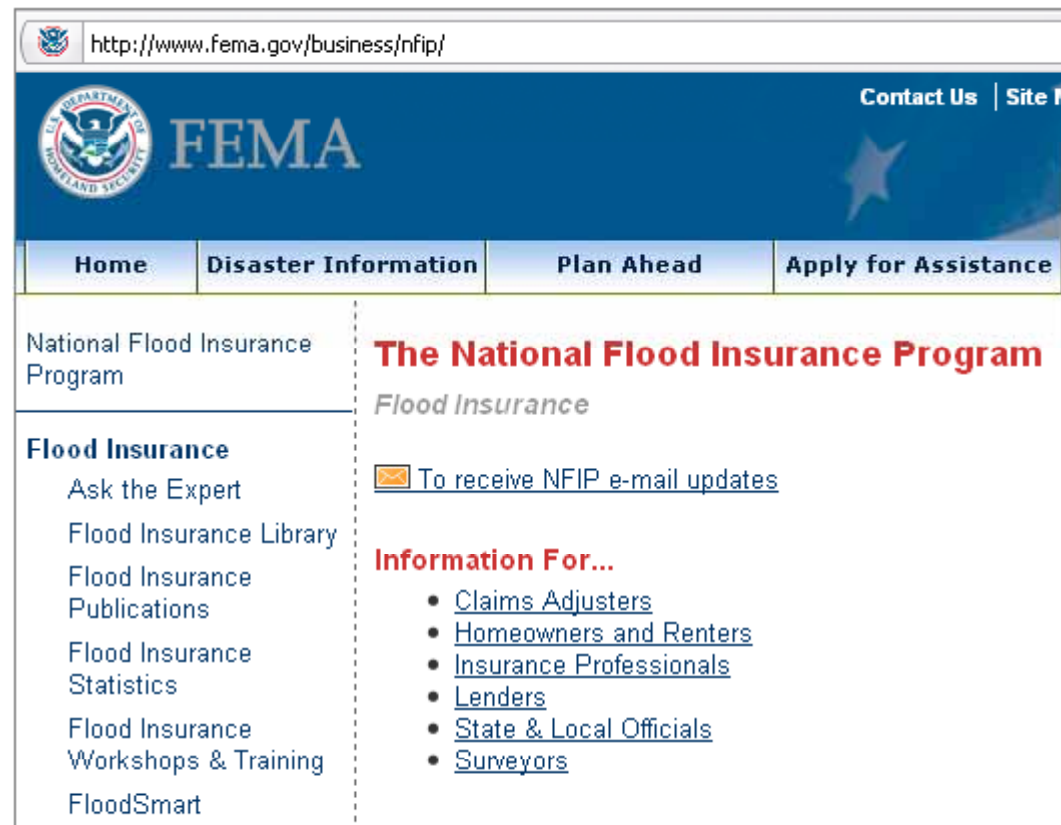
# FLORIDA

## Interfacing agencies

- Coastal Construction Control Line (CCCL)  
DEP
  - State of Florida erosion control; sets standards for construction
- Federal rules, state rules, more agencies such as the U.S. Fish & Wildlife....everyone is concerned about our resources

# The National Flood Insurance Program (NFIP)

- Offers flood insurance
  - Insurance through WYOs as well as NFIP
  - Over 90% of policyholders via WYO
- Reduces the consequences of flooding
  - Community participation is required for NFIP flood insurance



The screenshot shows the FEMA website for the National Flood Insurance Program. The URL is <http://www.fema.gov/business/nfip/>. The page features the FEMA logo and navigation links: Home, Disaster Information, Plan Ahead, and Apply for Assistance. The main content area is titled "The National Flood Insurance Program" and includes a link to "Flood Insurance" and a section for "Information For..." with links for Claims Adjusters, Homeowners and Renters, Insurance Professionals, Lenders, State & Local Officials, and Surveyors.

http://www.fema.gov/business/nfip/

Contact Us | Site Map

Home Disaster Information Plan Ahead Apply for Assistance

National Flood Insurance Program

**The National Flood Insurance Program**  
*Flood Insurance*

✉ To receive NFIP e-mail updates

**Information For...**

- [Claims Adjusters](#)
- [Homeowners and Renters](#)
- [Insurance Professionals](#)
- [Lenders](#)
- [State & Local Officials](#)
- [Surveyors](#)

**Flood Insurance**

- Ask the Expert
- Flood Insurance Library
- Flood Insurance Publications
- Flood Insurance Statistics
- Flood Insurance Workshops & Training
- FloodSmart

# Voluntary Community Participation

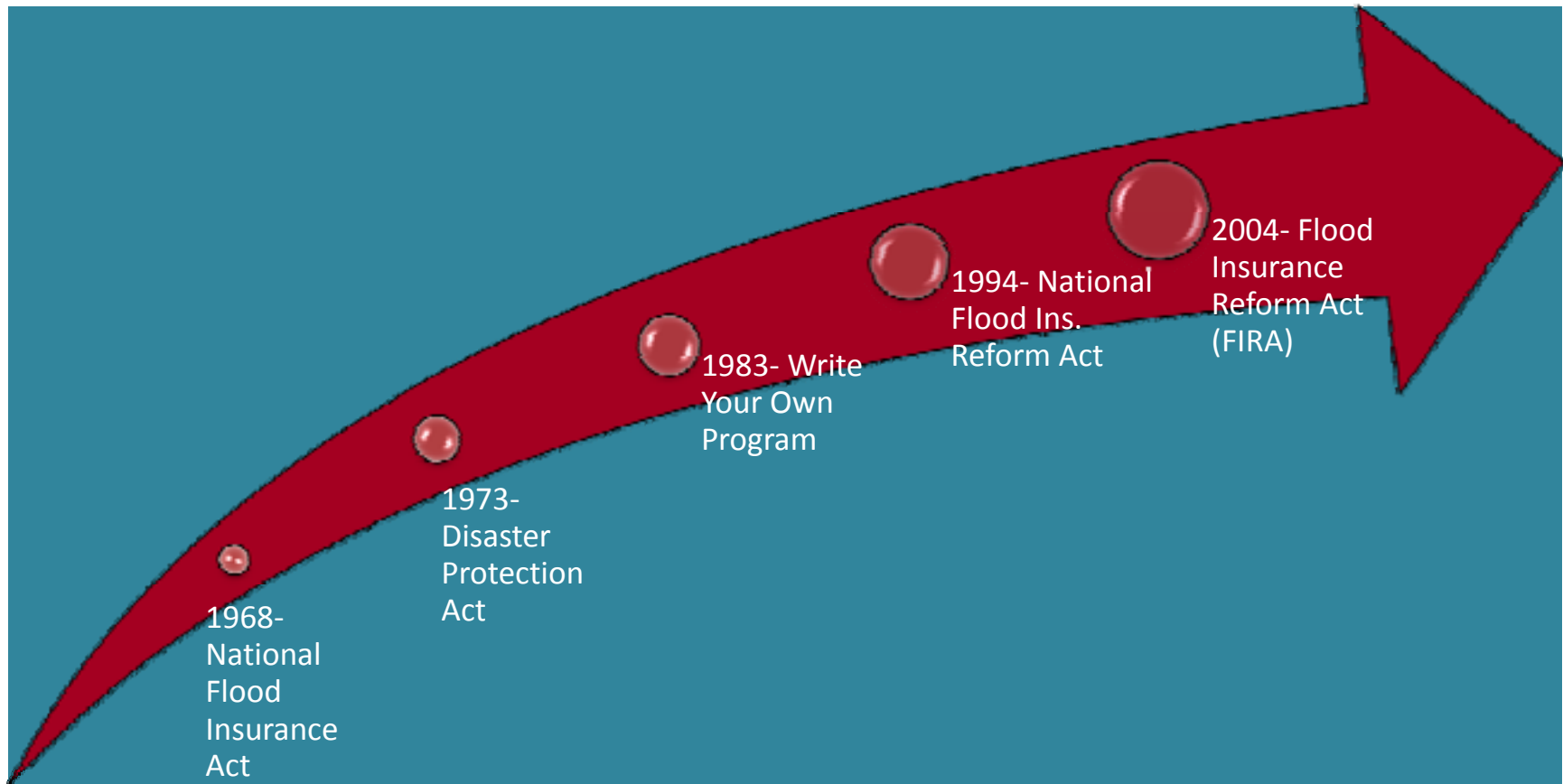


**FEMA** agrees to make flood insurance available within a community.

The **community** agrees to:

- Adopt a floodplain management ordinance.
- Enforce the regulations in that ordinance.

# Congress acted in 1968



# PRINCIPAL ENVIRONMENTAL & HISTORIC PRESERVATION LAWS

- National Environmental Policy Act (NEPA)
- National Historic Preservation Act (NHPA)
- Executive Order on Floodplain Management (EO 11988)
- Other environmental and historic preservation laws



# Executive Order 11988

Issued in May 1977, this Executive Order directs Federal Agencies to:

- assert leadership in reducing flood losses and losses to environmental values served by floodplains;
- avoid actions located in or adversely affecting floodplains unless there is no practicable alternative;
- take action to mitigate losses if avoidance is not practicable; and
- establish a process for flood hazard evaluation based upon the 100-year base flood standard of the NFIP.

Under the Constitution, a Federal agency does not have to obtain local community permits to develop property within the community. However, all Federal agencies are responsible for implementing Executive Order 11988 through their own regulations. The Order states that, at a minimum, Federal agencies must comply with NFIP regulations.

# REGULATIONS



Federal Flood Regulations are adopted and enforced locally.

Flood Risk Areas are identified and risks are calculated through studies and maps.

Communities that impose higher regulations are rewarded with insurance discounts.

The CRS Program

# What is your community status?

- Does your community participate in the NFIP? If so, since when?
- Does your community participate in the CRS? If so, since when? What is your rating?
- Who manages your floodplain under this program?

# Community Status Book

([www.fema.gov/fema/csb.shtm](http://www.fema.gov/fema/csb.shtm))

The flood rating program is similar to the fire rating program.

## Federal Emergency Management Agency Community Status Book Report MICHIGAN

### Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
260006#	HOLLAND, CITY OF	ALLEGAN COUNTY/OTTAWA COUNTY	04/12/74	11/15/78	09/28/90	11/15/78	No
260492#	HOLLAND, TOWNSHIP OF	OTTAWA COUNTY	08/12/77	12/01/83	09/28/90	12/01/83	No
260474#	HOLLY, TOWNSHIP OF	OAKLAND COUNTY	06/24/77	02/01/88	01/16/09(>)	02/01/88	No
260587#	HOLLY, VILLAGE OF	OAKLAND COUNTY	10/03/75	12/04/84	01/16/09(>)	12/04/84	No
260457	HOLMES, TOWNSHIP OF	MENOMINEE COUNTY	04/01/77		01/01/50	07/28/95(E)	No
260654#	HOMER, TOWNSHIP OF	CALHOUN COUNTY	04/01/77	09/28/79	09/28/79(M)	09/28/79	No
260989	HOMER, TOWNSHIP OF	MIDLAND COUNTY			01/01/50	05/14/97(E)	No
260331#	HOMER, VILLAGE OF	CALHOUN COUNTY	04/28/78	05/03/82	05/03/82	05/03/82	No

# Flood Insurance vs. Disaster Assistance



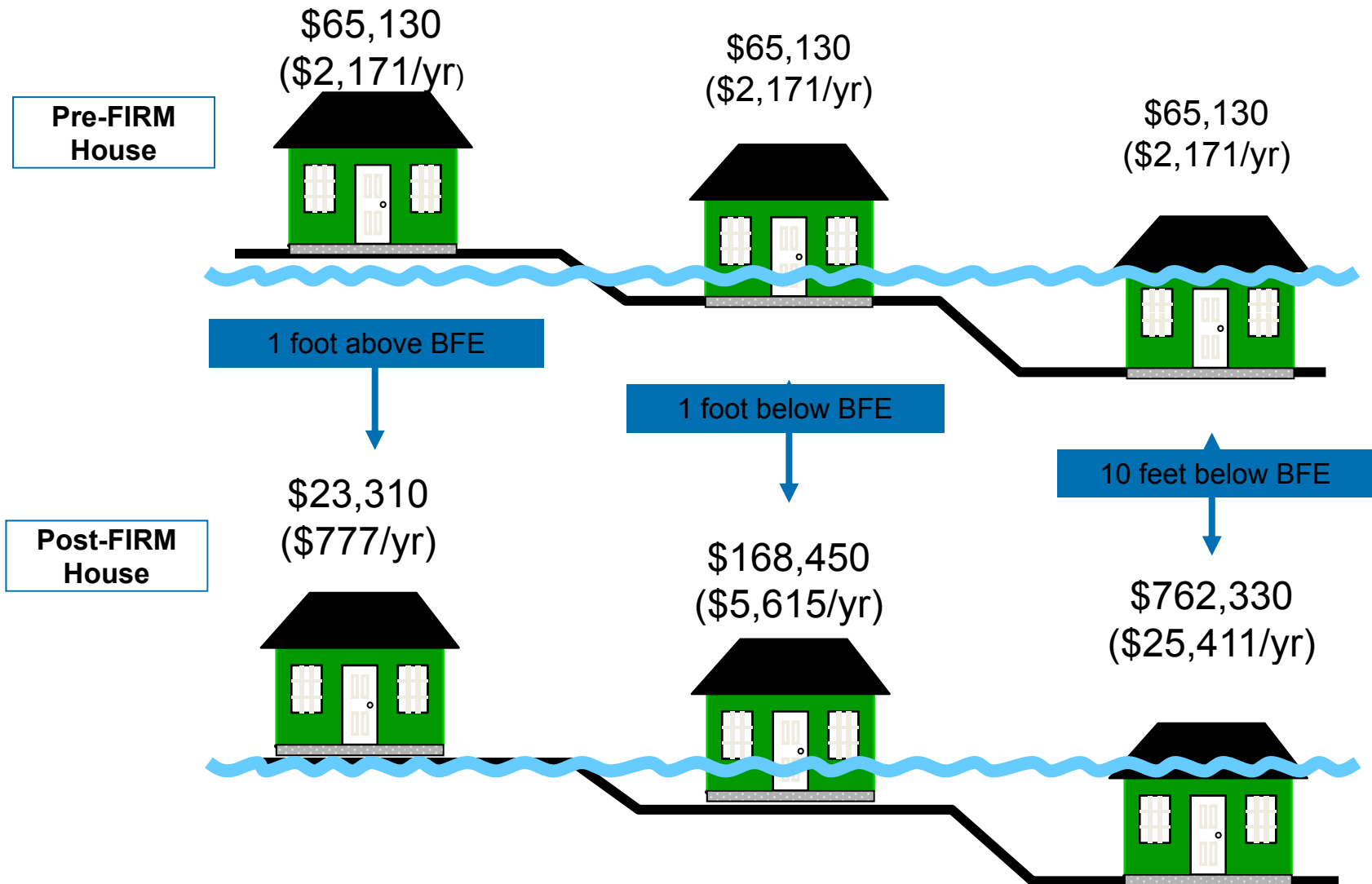
## – Flood Insurance

- Average annual cost for \$100,000 policy: \$400
- Preferred risk policies (low-risk areas) as low as \$119 (*1-4 family residential with building and contents*)

## – Disaster Assistance

- Requires federal disaster declaration
- Most disaster relief comes as a loan, not insurance
- Annual on \$50,000 at 4%: \$2,880  
...and in Special Flood Hazard Areas,  
you must already have flood insurance

# Cost for 30 Years of Flood Insurance



# The Community Rating System (CRS)

- **How are Flood Insurance Premium Discounts Calculated?**
- Very similar to the Fire Rating Program - FEMA encouraged communities to excel in floodplain management...
- The CRS classes for local communities are based on 18 creditable activities, organized under four categories:
  - Public Information
  - Mapping and Regulations
  - Flood Damage Reduction
  - Flood Preparedness

# NFIP Premium Discounts

<b>Class</b>	<b>SFHA*</b>	<b>Non-SFHA**</b>	<b>Credit Points Required</b>
<b>1</b>	<b>45%</b>	<b>10%</b>	<b>4,500 +</b>
<b>2</b>	<b>40%</b>	<b>10%</b>	<b>4,000 – 4,499</b>
<b>3</b>	<b>35%</b>	<b>10%</b>	<b>3,500 – 3,999</b>
<b>4</b>	<b>30%</b>	<b>10%</b>	<b>3,000 – 3,499</b>
<b>5</b>	<b>25%</b>	<b>10%</b>	<b>2,500 – 2,999</b>
<b>6</b>	<b>20%</b>	<b>10%</b>	<b>2,000 – 2,499</b>
<b>7</b>	<b>15%</b>	<b>5%</b>	<b>1,500 – 1,999</b>
<b>8</b>	<b>10%</b>	<b>5%</b>	<b>1,000 – 1,499</b>
<b>9</b>	<b>5%</b>	<b>5%</b>	<b>500 – 999</b>
<b>10</b>	<b>0%</b>	<b>0%</b>	



# FloodSmart.gov

Official site of the National Flood Insurance Program

**FloodSmart.gov**  
NATIONAL FLOOD INSURANCE PROGRAM  
The official site of the NFIP

If you've been affected by the recent flooding and you are insured, find out how to [file your claim now](#).

- HOME
- ABOUT THE NATIONAL FLOOD INSURANCE PROGRAM
- YOUR FLOOD RISK
- FLOOD INSURANCE POLICIES
- PREPARATION & RECOVERY

**ONE-STEP FLOOD RISK PROFILE**  
**How can I get covered?**

- Rate your risk
- Estimate your premiums
- Find an agent

Address:

**Real Flood Stories: RISING WATERS**  
NEARLY RAVAGED HIS INVESTMENT

A little creek. No floods in 40 years. Then suddenly, \$240,000 of flood damage. Without flood insurance, Rich Smith could have been left without a home.

[See His Story](#)      [Transcript](#)

[See all Flood Stories >>](#)

00:00 / 02:27

# NFIP Reduces Risk

- Federal regulations– approved by Congress in 1968
- Available to communities to “REDUCE RISK” who volunteer to participate and abide by the regulations
- Activities development may trigger FEMA, Environmental and Historical regulations
- DHS, FEMA, Mitigation Division, NFIP
- FEMA contracts with insurance companies WYO

## Compare Risks

Your chances of being flooded are much greater than some other risks you face daily.

If on the flood map your property is in a High Risk Flood Zone, there is at least a 26% chance that you will be flooded during your 30-year mortgage.



The chance that a major fire will occur during the same period is only 9%

Venice Ave. and Warfield 7/7/2008



“WHAT DID YOU KNOW?  
WHEN DID YOU KNOW IT?  
AND WHAT DID YOU DO?” \*

- Federal
- State
- Local
- Business Owners
- Individuals

\*David Bellomo, FEMA, during his address  
to the ASFPM Conference in Orlando 2009

# **U.S. Flood Insurance Loss Statistics\***

## *Top Ten Ranking By Total Payments*

1. Louisiana alone)	15.98 billion (\$15m for Katrina
2. Texas	5.36 billion
3. Florida	3.56 billion
4. Mississippi	2.85 billion
5. Alabama	936 million
6. New Jersey	855 million
7. North Carolina	773 million
8. Pennsylvania	751 million
9. New York	601 million
10. Missouri	550 million

\*FEMA Loss Statistic Report: January 1, 1978 – November 30, 2009

Every building is in a flood zone



# Community Liability

- Where do we build?
  - The maps
- How do we build?
  - Base flood elevations and freeboard
- What about development before regulation?
  - 50% substantial improvement or damage repair
  - Bring it up to current code
  - Mitigation

# Where flood insurance is not available

- CBRA areas (Coastal Barrier Resources Act)
- OPA (Otherwise Protected Areas)
- Shown on flood maps with identification date

## In these areas

- No new coverage available if constructed after the identification date

Also, structures built primarily over water are not insurable either (in any zone.)



# Flood Zone Basics



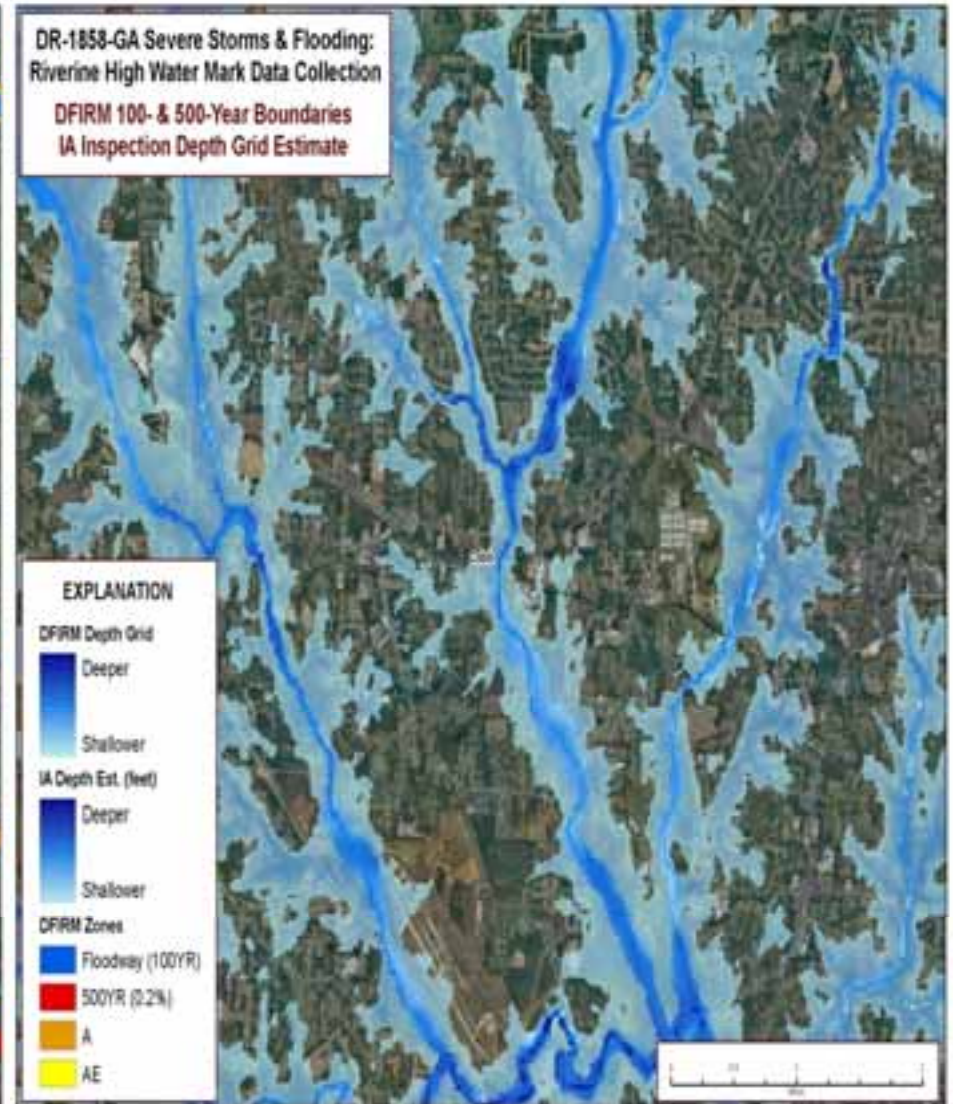
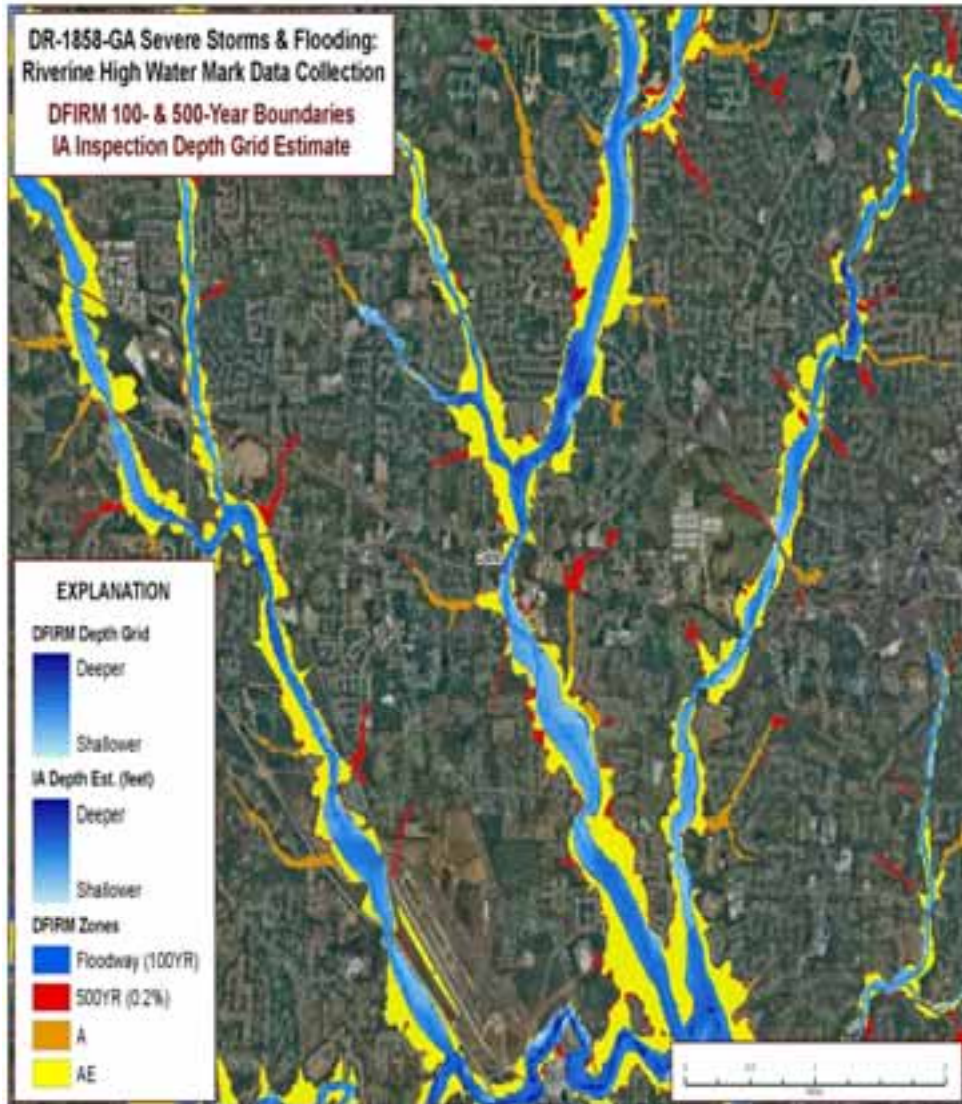
## **Special Flood Hazard Area (SFHA)**

- **“100-year floodplain” – 1% annual chance of flood**
  - **A 26% chance over a 30-year mortgage**
- **High-risk zones**
  - **A zones**
  - **V zones (coastal)**

## **Non-SFHA**


- **Moderate to minimal risk**
- **B and C zones**
- **X zones**

Mother Nature forgets to look at the flood maps.  
More than 25% of the time it floods  
where we didn't anticipate it would.




# FLOOD INSURANCE STUDY


**FLOOD  
INSURANCE  
STUDY**



CITY OF  
SARASOTA,  
FLORIDA  
SARASOTA COUNTY



August 18, 1983



Federal Emergency Management Agency  
COMMUNITY NUMBER - 125150

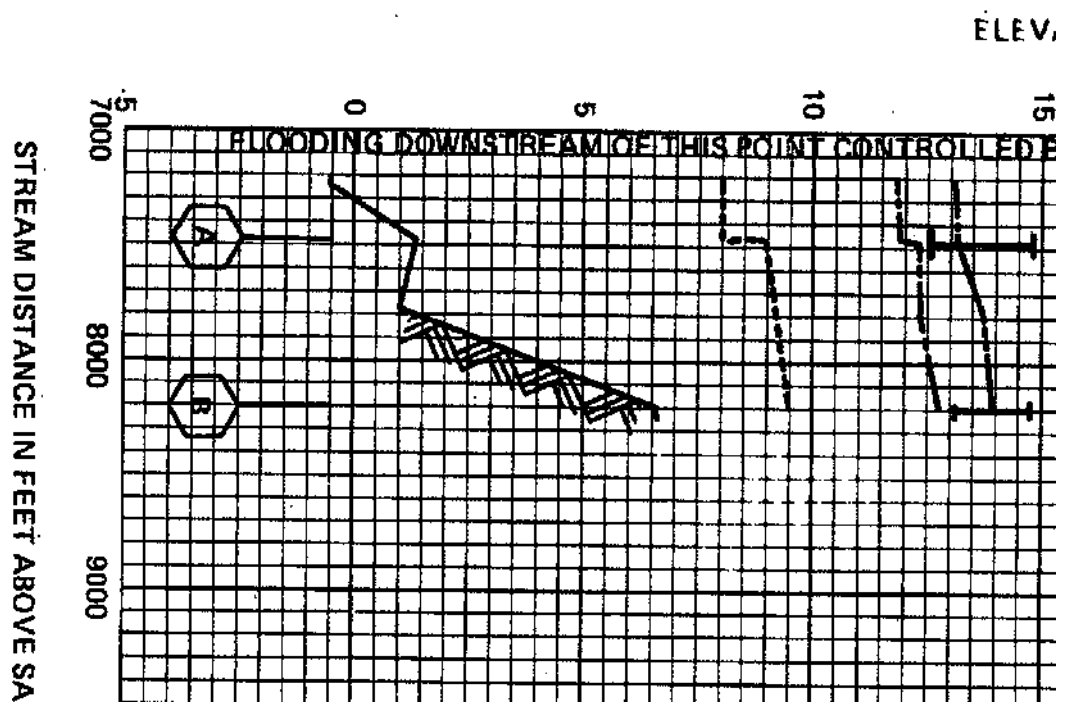
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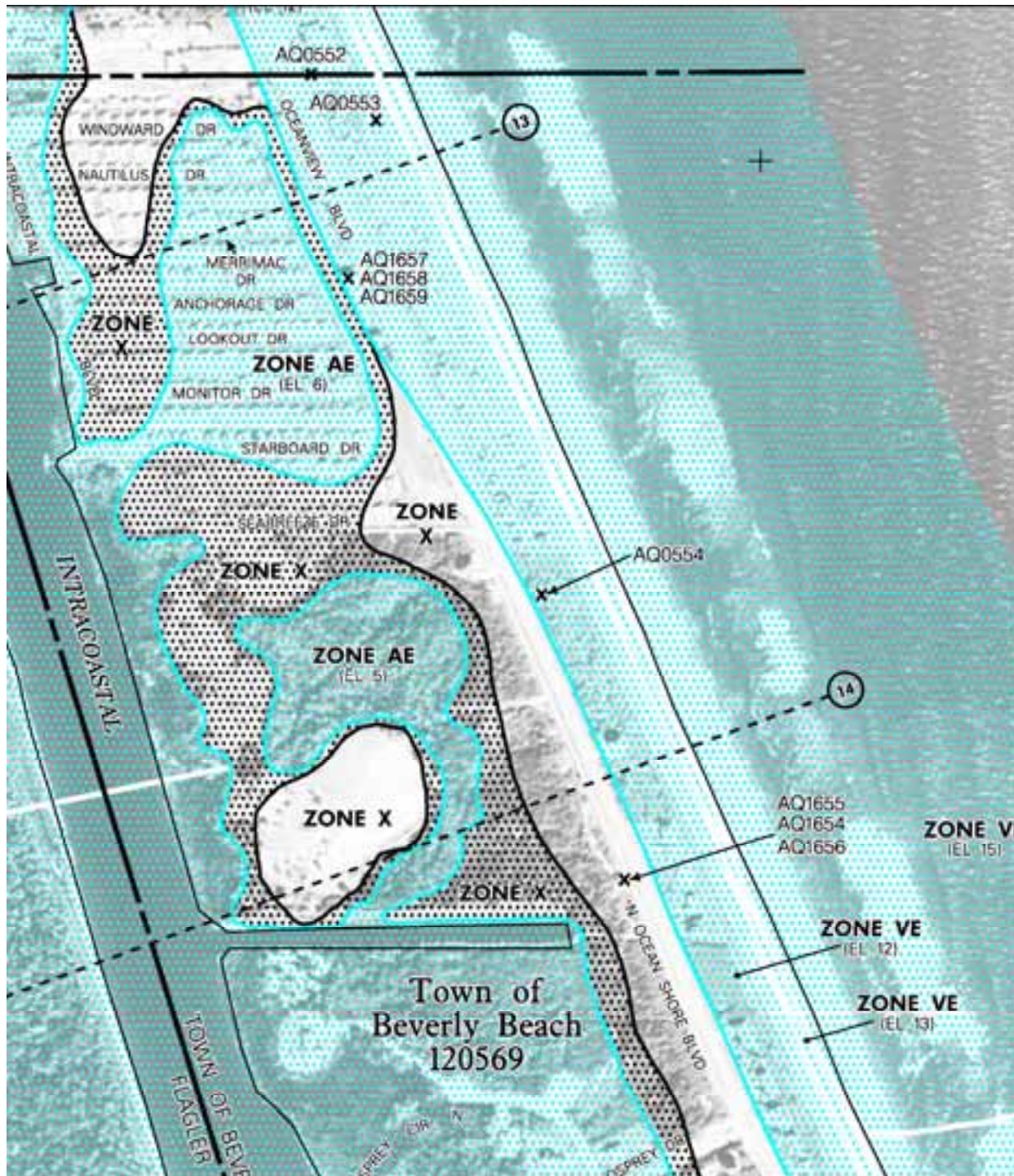
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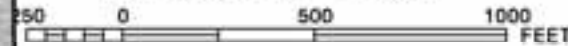




onal Flood Insurance Program at 1-800-638-6620.



MAP SCALE 1" = 500'



NFP

PANEL 0144D

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
 FLAGLER COUNTY,  
 FLORIDA  
 AND INCORPORATED AREAS

PANEL 144 OF 345

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
BEVERLY BEACH TOWN OF	120569	0144	D
FLAGLER BEACH CITY OF	120567	0144	D
FLAGLER COUNTY	120568	0144	D

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  
12035C0144D

EFFECTIVE DATE  
JULY 17, 2006

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

# PAPER FLOOD MAPS vs. DIGITAL FLOOD MAPS

- ACCURACY
  - Tools, technique 70's, 80's –250 ft. margin of error
  - NGVD (1929) vs. NAGD (1988) Vertical Datum
- COST / AVAILABILITY
  - FEMA Stopped printing and reproducing paper maps October 1, 2009
- UPDATES

# Map Modernization FY04-FY09

- Today 92% of the national FIRM's are digitized
- More clearly defined risk = a safer public
- Allow community planners, local officials, engineers, builders and other to make important determinations about WHERE and HOW new structures are built to MAXIMIZE safety



# Flood Map Modernization: Everyone benefits!

- Community planners and local officials
- Builders and developers
- Insurance agents and companies,  
real estate agents and companies, and lending  
institutions
- Homeowners and business owners

# Preliminary Floodplain Map



This information is preliminary and is not to be used for flood insurance determinations.

Roberts Bay Watershed    JOHNSON JERRY C  
Sarasota County        208 OUTER DR  
Date: 01/26/2010      Parcel ID: 0408-10-1088

Southwest Florida  
Water Management District



#### Legend

- Parcel Boundary
- Preliminary Floodplain
- FEMA Flood Hazard Zone



See Disclaimer on back

Scale: 1" = 267'      2009 Aerial

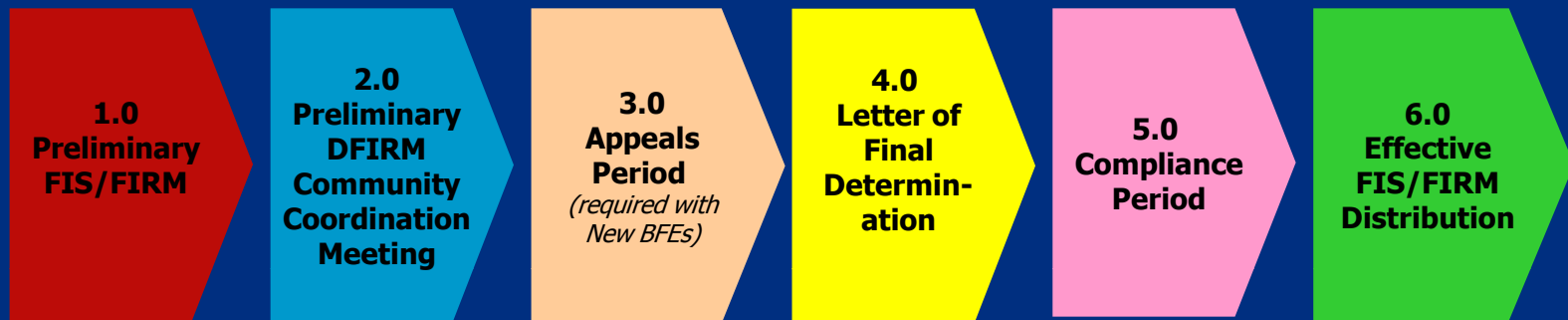
# Effects of Map Changes on Insurance

When new flood maps become effective, property owners may find that they are:

- Mapped *into* a higher risk zone
- Mapped *out of* a higher risk zone
- Their flood map's surrounding Base Flood Elevation has increased
- There is no change

# Post-Preliminary Process

*Time frames may vary from study to study*



1	2	3	4	5	6	7	8	9	10	11	12
OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

X



# Finding a FIRM

Map Service Center: [www.msc.fema.gov](http://www.msc.fema.gov)

The screenshot shows the FEMA website's search interface. At the top is the FEMA logo and navigation links: Product Catalog, Map Search, Quick Order, Digital Post Office, and Help. Below this is a 'Product Search by...' section with two tabs: 'Address' and 'Map Panel ID'. Under the 'Address' tab, there are two main steps: '1) Select a Product:' with a dropdown menu set to 'Public Flood Map', and '2) Enter an Address:' with input fields for Street (1232 Thadery Court), City (Naperville), State (IL), and Zip. A 'Search by Street Address' button is at the bottom of this section. To the right of the search form is a 'New to the FEMA Map!' section with a list of links: Homeowners/Renters, Real Estate/Flood Damage, Insurance Agents, Engineers/Surveyors, and Federal/Exempt Customers. Below that is a 'What are you looking for?' section with links for Flood Maps, FIRMettes, DFIRM Databases, DFIRM Viewer, and Documents, Publications. At the bottom is a 'More Information' section with links for 'How do I find the flood map?' and 'What is a FIRMette?'.

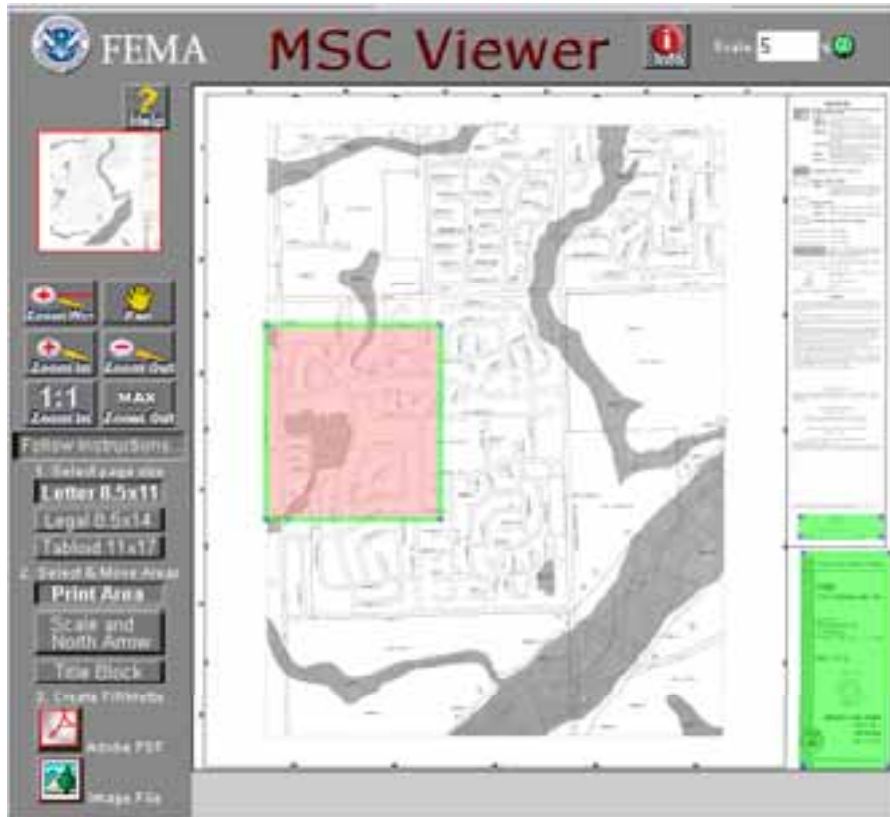
Click to view map

## Map Search Results

FEMA issued Flood Maps

Map Item ID	Description	Effective Date	Show LOMC	View	Buy
1702130021C	NAPERVILLE,CTY/DU PAGE CO	05/18/1992	+		

# FIRMette: a Section of a FIRM



- Use the MSC Viewer
- Move highlight to select a specific area on the FIRM
- Save:
  - Print
  - Save as PDF
  - Save as an image file



# RISK MAP 2010-2014

FEMA is initiating Risk Mapping, Assessment and Planning (Risk MAP) and has developed a multi year plan spanning FY10-FY14.



- VISION - deliver quality data that increases public awareness and leads to action that reduces risk to life and property.
- The plan was approved on March 16, 2009 and provides details on how Risk MAP is building on the successes of Map Mod.

# The Road to Achievement

Alignment and program integration of flood mapping, risk assessment tools, and mitigation planning will be leveraged to achieve the Risk MAP Program goals.



FEMA



# Risk MAP Goals

Building on the success of Map Mod, FEMA will collaborate with federal, state and local stakeholders to achieve goals under RISK MAP

1. Flood Hazard Data Gaps
2. Public Awareness/Outreach
3. Hazard Mitigation Planning
4. Enhanced Digital Platform
5. Alignment and Synergies

# The Risk MAP Team

FEMA headquarters and regional offices will lead a team of contractors and stakeholder entities to deliver its Risk MAP program. The team is comprised of:

## FEMA Headquarters

- responsible for overall program implementation

## FEMA Regions

- manage Regional flood map production and help implement the Risk MAP outreach strategy

## State, local and Tribal entities

- help ensure that updated mapping information is used to make informed decisions regarding risk

**YOU CAN MAKE A DIFFERENCE**

**HOW?**

**QUESTIONS?**

Des Companion  
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(941) 861-0802 or [dcompani@scgov.net](mailto:dcompani@scgov.net)

Joy Duperault  
State Floodplain Manager  
NFIP helpline: (850) 413-9960  
[floods@em.myflorida.com](mailto:floods@em.myflorida.com)