# YAVAPAI COUNTY FLOOD CONTROL DISTRICT STAKEHOLDER WORKSHOP

March 30<sup>th</sup> & 31<sup>st</sup>, 2015

September 1983

#### Northwest Prescott Area:

- Willow Creek
- Bottleneck Wash
- Granite Creek



#### Over 14 Inches of Rain in One Day

ROBERT B. HARDY Assistant City Engineer, Prescott, Arizona

ATE on the evening of September 22, 1983, an especially strong impulse of unstable, moisture-laden air moved northward toward central Arizona. As this air mass encountered the Bradshaw Mountains, which surround Prescott, orographic thunderstorms developed along the mountain ridges and intensified as they progressed. An especially severe line of thunderstorms drifted near the north and northwest portions of the city, and by 1 a.m. on September 23rd, severe thunderstorms began to lash the area with vicious lightning, heavy rains, and hail. In the next six hours, between 4.5 and 7.5 inches of rain and nearly 10 inches of hail had

As this particular storm cell slowly moved northward, a series of additional impulses proceeded across the region, producing more severe thunderstorms. When the storm systems had finally passed through the area on early Saturday, September 24th, as much as 14.52 inches of rain had fallen in the watershed northwest of Prescott. Figure 1 shows the distribution of precipitation for the storm event. It is fortunate for the city that the central core of the thunderstorm was located away from the more urbanized areas. Ironically, the following week, almost to the exact hour,

additional thunderstorms struck the Prescott area. While these precipitation totals were not as great as those of the previous week, they nevertheless hampered repair work of homes and public improvements.

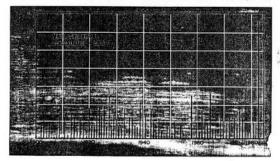
public improvements.

Because of the steep topography and close proximity to the summer "monsoon" moisture flows from Mexico, the Prescott area is subjected to numerous intense thunderstorms from mid-July to mid-September. Indeed, nearly one-half of the annual precipitation of 19.63 inches falls on Prescott during this two-month period. Although September nor-

mally is characterized by a decrease in number and size of thunderstorms, 1983 produced record rains totaling 13.38 inches. Figure 2 shows September precipitation in Prescott since 1900.

This particular storm created very high flows in both Bottleneck Wash and Willow Creek, which resulted in considerable damage. Early in the storm, the main water transmission lines serving the Prescott area from wells located north in Chino Valley were damaged by the flood waters and most residents were suddenly without a domestic water supply.

FIGURE 2. September precipitation in Prescott, Arizona, from 1900 to present.





#### Oak Creek - 1993



WATER RACES over the top of Indian Gardens bridge Friday morning as stranded residents watch from across swollen Oak Creek. The Sedona area was hit with heavy flooding last week as more than two inches of rain fell over a four-day period. The bridge sustained slight damage as boulders, trees and

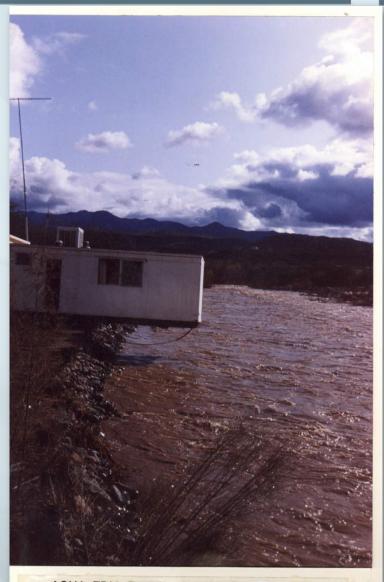
logs were carried downstream by the water's force. The bridge was reopened later that day after floodwaters started to recede. Forecasters expect more rain this week with showers beginning Wednesday and ending Thursday afternoon.

#### Verde River - 1993

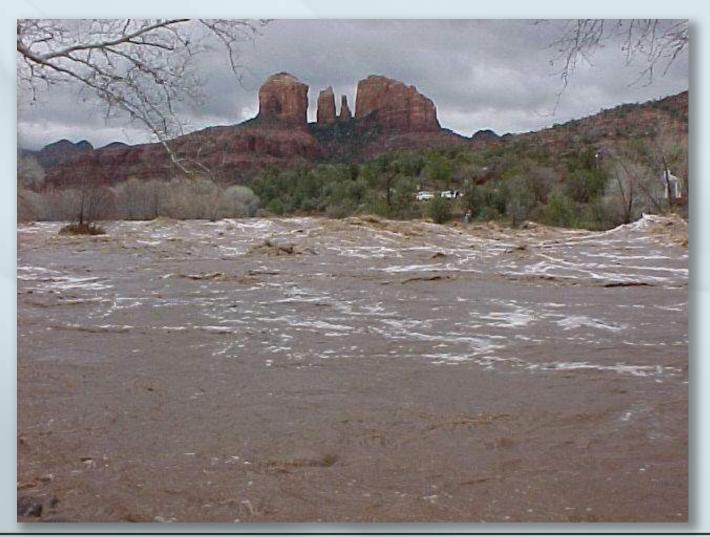


Agua Fria River Black Canyon City 1993

Flooding & Severe Bank Erosion



Oak Creek at Red Rock Crossing, Dec. 2004



#### Verde River - January 2005



#### Clarkdale – Bitter Creek erosion – 2006



Sedona, Oak Creek @ Tlaquepaque Sept. 2009



Black Canyon Creek – August 2014



# Yavapai County Flood Control District

 YCFCD first adopted its Flood Damage Prevention Ordinance in 1981

#### Responsible for:

- Floodplain Management / Development Review under the Nat'l Flood Insurance Program and adopted Ordinance
- Provide information and guidance for activity and development within flood hazard areas
- Keep flood hazard mapping resources modern so they accurately represent areas at high risk
- Providing real-time weather data and pertinent storm water runoff information
- Regulate and review storm water runoff from a quality and quantity standpoint

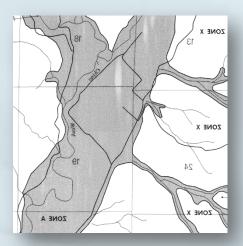
# Yavapai County Flood Control District

- Joined National Flood Insurance Program in 1985
  - Agree to map the flood hazards and manage the floodplain to FEMA's minimum standard
  - In return, citizens have access to federal flood insurance and disaster assistance for floods
- Joined the Community Rating System in 1991; receive credits for going beyond the minimum standards; now a Class 6
  - Benefits:
    - Policyholders in high-risk areas receive 20% discount
    - County's flood risk is reduced and community is more resilient

# YCFCD Mapping Program

#### **FEMA Cooperating Technical Partner**

- First FIRM August 19, 1985
- Updating FEMA's original maps
  - Old data (up to 30 years old)
  - Old technology
  - Lots of development
- New maps
  - Digital; updated flooding and rainfall data; latest mapping-related technology





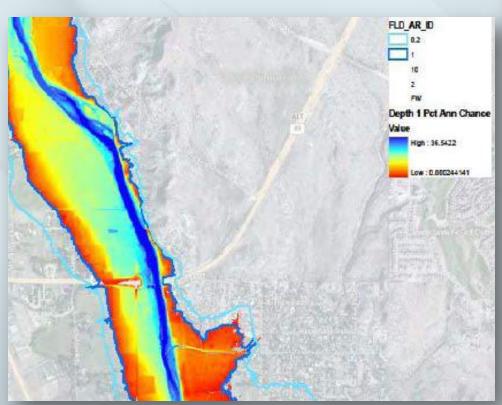
#### Benefits of Improved Mapping

- Knowing the current flood risk....
  - Community officials use updated codes to help ensure safer building and a more resilient community
  - Improve emergency planning and response
  - Realty, Insurance and Lending professionals are better able to inform clients around buying/selling and flood insurance requirements and options
  - Residents and business owners make more informed decisions to protect their assets
- YCFCD is here to provide info and expertise



#### New Tools To Better Communicate Risk

#### **DEPTH GRIDS**





**CHANGES SINCE LAST FIRM** 

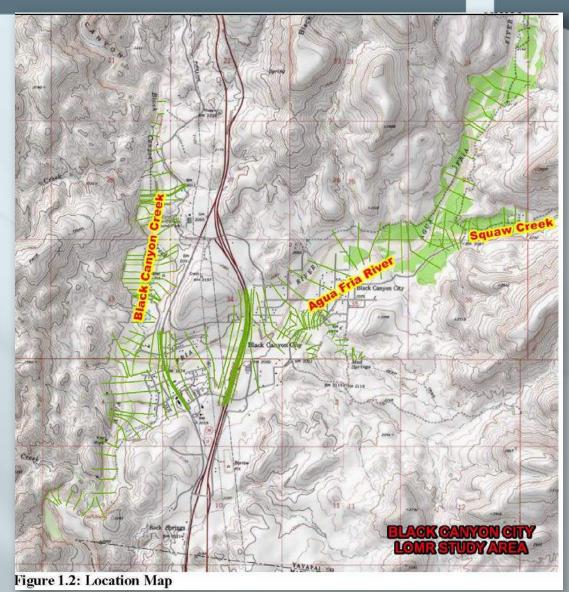


#### Results of new or restudy mapping

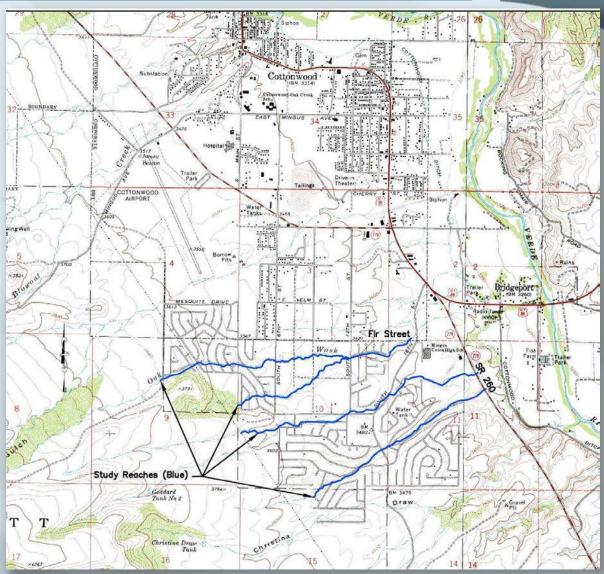
- For properties newly identified to be in a FEMA, high-risk flood hazard area
  - Insurance and building implications
- Changes in Base Flood Elevation may occur
  - Insurance and building implications
- Properties that are newly identified as moderateor low risk (coming OUT of the mapped hazard)
  - Risk is only reduced, not removed
- Properties with no change but time to review your risk!



- Agua Fria River
   / Black Canyon
   Creek / Squaw
   Creek in Black
   Canyon City
- New maps became effective on October 16<sup>th</sup>, 2014



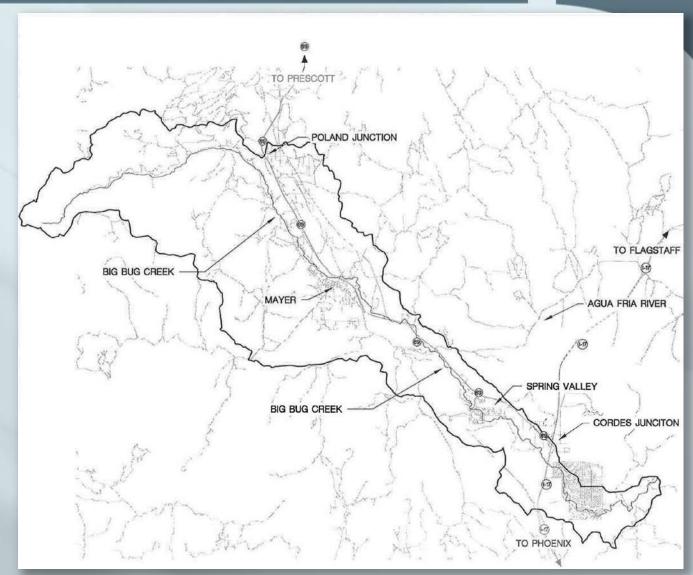
- Verde Village flood hazard area restudy (south of Cottonwood)
- New maps became effective on February 9<sup>th</sup>, 2015

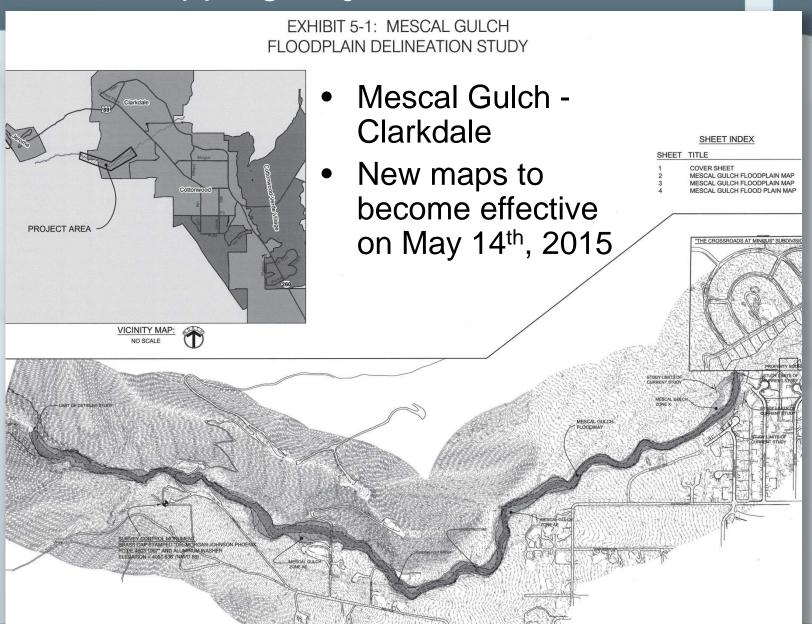


Big Bug Creek

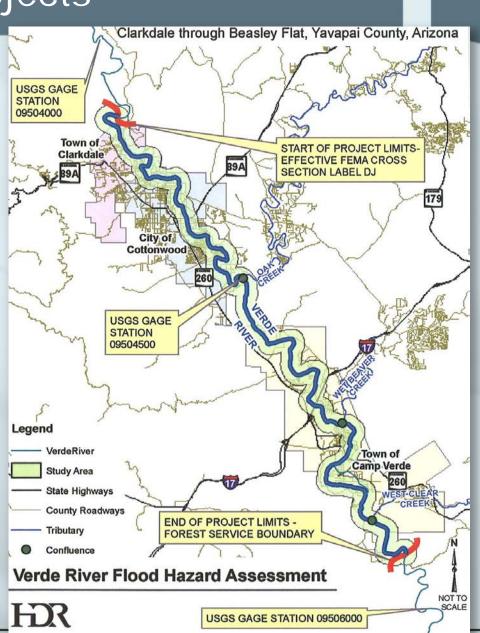
> Poland Junction, Mayer, Spring Valley, Cordes Lakes areas

 New maps became effective on March 2<sup>nd</sup>, 2015



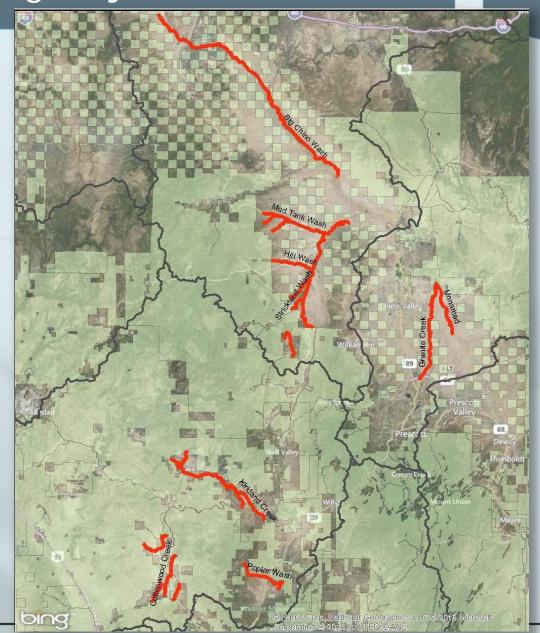


- Verde River Restudy Clarkdale, Cottonwood, Camp Verde areas
- Project has been ongoing for a few years; mapping is complete, but awaiting FEMA publication
- YCFCD has been using as best available information for regulatory purposes since 2014
- **Tentative** publication / effective in Fall 2015



### Upcoming Mapping Projects

- In Process:
   Western Yavapai
   County 'Zone A'
   Restudy
  - Big Chino Wash
  - Kirkland area
  - North Williamson Valley area
  - Granite Creek near Chino Valley
- Submitted to FEMA in Fall 2014



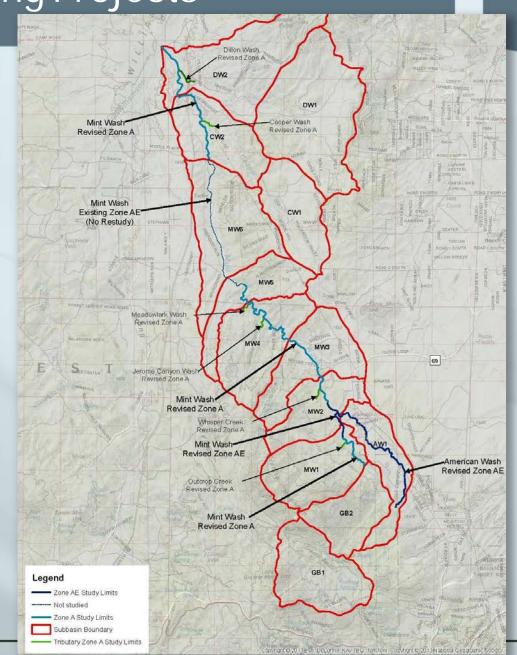
Upcoming Mapping Projects

In Process:

 Post-Doce Fire
 Area Restudy
 (Williamson
 Valley)

- Mint Wash
- American Wash

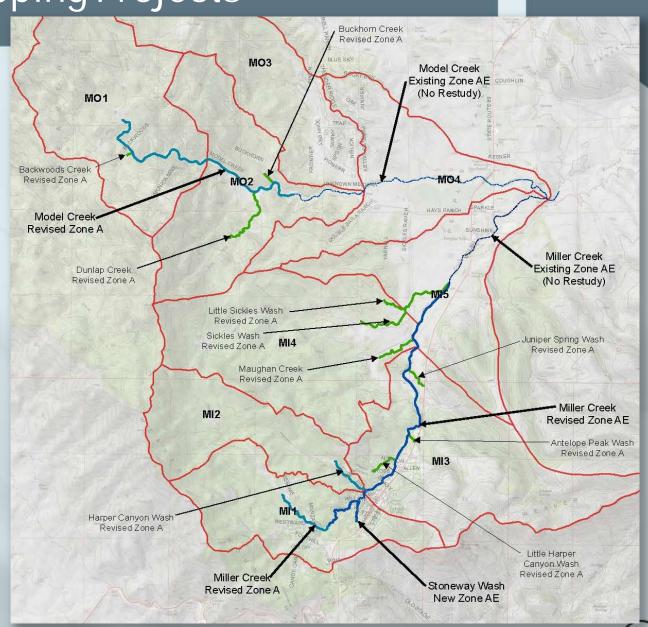
 Submitted to FEMA in Fall 2014



### Upcoming Mapping Projects

- In Process:

   Post-Yarnell
   Hill Fire Area
   Restudy
   (Yarnell & Peeples Valley)
  - Miller Creek
  - Model Creek
  - Tributaries
- Submitted to FEMA in Fall 2014



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#### YCFCD - Reduction of Flood Risk

- Education and Public Outreach
  - Flood Status Reports / Literature / Guidance
  - On-Site meetings
  - Town Hall meetings with elected Supervisors
  - Presentations to schools / classrooms
- Regulatory Practices
  - Elevation of Structures
  - Resilient Construction
- Structural Drainage & Flood Mitigation Projects
  - Bank Stabilization Project in Peeples Valley
  - Scour-prevention floor underneath Beaver Creek Bridge
  - Storm Drains / Roadway Drainage Improvements

# Impacts of Map Changes -Building-

# Effects of Map Changes on Building

- If you are going to build (or substantially improve) on a property where:
  - the BFE has increased, or
  - is newly mapped into a Zone A on the preliminary flood maps, you will have to build to codes based on these new changes.



 YCFCD is currently using preliminary data for Verde River flood hazard area regulation

# Impacts of Map Changes -Flood Insurance-

### Effective Dates - Waiting Periods

- 30-day
- 1-day
- 0 day



#### Flood Zones

- Moderate- and Low-Risk
  - B, C, X, Shaded X
  - Over 35% of Arizona flood claims occur here
- High-Risk
  - AE, A#, A, AO, AH
  - Flood insurance required by most lenders
  - 26% chance of flooding in 30 years
- Undetermined Risk
  - Zone D



#### Preferred Risk vs. Standard Rates

#### Preferred Risk Policy Rates

- Must be in Zone B, C, or X at time of application AND each subsequent renewal\*
- Fixed premiums; fixed limits
- Limited loss history

#### Standard Rates

- Rate Tables provided in Flood Insurance Manual
- Risks not eligible for Preferred Risk Policy
- Flexible limits

#### \*NOTE:

Effective April 1, 2015:
Newly mapped into high-risk get PRP rates for 12 months after a new map becomes effective.

Rates then increase up to 18% annually.

One-time application to all properties newly mapped in since October 2008 – by April 2016.

# Effects of Map Changes on Insurance

- 1. Properties newly *move into a high-risk zone* (A) from a moderate- or low-risk zone (B, C,
- 2. Properties move into a moderate- or low-risk zone (B, C, X) from a high-risk zone (A)
- 3. There is a change in Base Flood Elevation (BFE)
- 4. There is *no change*....but are they fully insured?

### Newly Mapped into High-Risk

High-Risk (Zone A, AO, AE, AH)

#### Moderate- or Low-Risk (Zone B, C, X)

- Federal Mandatory Purchase Requirement
- Increased Risk = Increased Flood Insurance Costs
- FEMA provides cost-saving option:
  - Lower-cost preferred risk rates available for 12 months after effective date.
- DON'T WAIT! Buy PRP now as risk is higher than previously identified

#### Increase in Base Flood Elevation

#### **Higher BFE (Zone AE)**



#### Lower BFE (Zone AE)

- Federal Mandatory Purchase Requirement
- Increased Risk = Increased Flood Insurance Costs
- FEMA provides cost-saving option:
  - Eligible properties can grandfather the lower BFE for future rating

### Mapped Out of High-Risk Area

High-Risk (A, AE, AO, AH)

Moderate (shaded X)- or Low-Risk (X)

- No longer the Federal Mandatory Purchase Requirement
- Risk is reduced, NOT REMOVED
  - Nearly 25% of all flood claims occur in mod-low risk areas
- Convert policy to lower-cost Preferred Risk Policy (PRP)
- KEEP YOUR HOME AND CONTENTS PROTECTED THERE IS STILL A RISK

#### Conversion

#### Procedure:

- Ensure property is eligible for PRP (e.g. losses, zone)
- Chose proper PRP building limit (note: contents are included)
- Rewrite existing SFIP as a PRP, using last renewal date before map change

#### Results:

- No gaps in coverage (no 30-day wait)
- ► A refund to the policyholder ("Stay covered and get money back")
- Strengthened customer loyalty for the agent
- Agent keeps commission on old and new policy

# Effects of Map Changes on Insurance: Change in BFE or Zone

1) Zone stays the same, BFE increases – Grandfather

- 2) Zone stays the same, BFE decreases Rerate policy
- 3) Zone changes from X/B/C to A PRP rates 1st year (Newly Mapped rating option)
- 4) Zone Changes from A to X Conversion

# Effects of Map Changes on Insurance: No Change in BFE or Zone

- Still at risk; know the level of risk
  - If currently has flood insurance:
    - Is it at current replacement cost?
    - Are the contents fully covered?
  - If not currently covered for flood:
    - Do they qualify for a PRP?
    - If they don't want coverage, have them decline in writing to the agent!

# Reform Legislation Impact on Flood Insurance

## Biggert-Waters 2012 (BW-12)

- Enacted July 6, 2012
- Reauthorized the NFIP for five years through September 30, 2017
- Required changes to all major components of the NFIP
- Provided for financial stability
- Ensured rates more accurately reflect the risk

H. R. 4348-512

#### TITLE II-FLOOD INSURANCE

#### Subtitle A—Flood Insurance Reform and Modernization

SEC. 100201. SHORT TITLE.

This subtitle may be cited as the "Biggert-Waters Flood Insurance Reform Act of 2012".

#### SEC. 100202. DEFINITIONS.

(a) IN GENERAL.—In this subtitle, the following definitions shall apply:

(1) 100-YEAR FLOODPLAIN.—The term "100-year floodplain" means that area which is subject to inundation from a flood having a 1-percent chance of being equaled or exceeded in any given year.

(2) 500-YEAR FLOODPLAIN.—The term "500-year floodplain" means that area which is subject to inundation from a flood having a 0.2-percent chance of being equaled or exceeded in any given year.

(3) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Federal Emergency Management Agency. (4) NATIONAL FLOOD INSURANCE PROGRAM.—The term

(4) NATIONAL FLOOD INSURANCE PROGRAM.—The term "National Flood Insurance Program" means the program estabished under the National Flood Insurance Act of 1968 (42 U.S.C. 4011 et seq.).

(5) WRITE YOUR OWN.—The term "Write Your Own" means the cooperative undertaking between the insurance industry and the Federal Insurance Administration which allows participating property and casualty insurance companies to write and service standard flood insurance policies.

(b) COMMON TERMINOLOGY.—Except as otherwise provided in this subtitle, any terms used in this subtitle shall have the meaning given to such terms under section 1370 of the National Flood Insurance Act of 1968 (42 U.S.C. 4121).

#### SEC. 100203. EXTENSION OF NATIONAL FLOOD INSURANCE PROGRAM.

(a) FINANCING.—Section 1309(a) of the National Flood Insurance Act of 1968 (42 U.S.C. 4016(a)) is amended by striking "July 31, 2012" and inserting "September 30, 2017".

(b) PROGRAM EXPIRATION.—Section 1319 of the National Flood Insurance Act of 1968 (42 U.S.C. 4026) is amended by striking "July 31, 2012" and inserting "September 30, 2017".



## HFIAA\*

- Enacted March 21, 2014
- Repealed and modified certain BW-12 provisions
- Focused on affordability
- Continued on a path of financial stability, though slower
- Created new subsidies

113TH CONGRESS 2D SESSION

#### H. R. 3370

#### AN ACT

- To delay the implementation of certain provisions of the Biggert-Waters Flood Insurance Reform Act of 2012, and for other purposes.
- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.
- 2 (a) Short Title.—This Act may be cited as the
- 3 "Homeowner Flood Insurance Affordability Act of 2014".
- 4 (b) Table of Contents.—The table of contents for
- 5 this Act is as follows:
  - Sec. 1. Short title and table of contents.
  - Sec. 2. Definitions.
  - Sec. 3. Repeal of certain rate increases.
  - Sec. 4. Restoration of grandfathered rates.
  - Sec. 5. Requirements regarding annual rate increases.
  - Sec. 6. Clarification of rates for properties newly mapped into areas with special flood hazards.
  - Sec. 7. Premiums and reports.
  - Sec. 8. Annual premium surcharge
  - Sec. 9. Draft affordability framework.
  - Sec. 10. Risk transfer.
  - Sec. 11. Monthly installment payment for premiums.
  - Sec. 12. Optional high-deductible policies for residential properties.
  - See. 13. Exclusion of detached structures from mandatory purchase requirement.
  - Sec. 14. Accounting for flood mitigation activities in estimates of premium rates.
  - Sec. 15. Home improvement fairness.
  - Sec. 16. Affordability study and report.



<sup>\*</sup>Homeowner Flood Insurance Affordability Act of 2014 (HFIAA)

# REFORM LEGISLATIONS IMPACTS ON INSURANCE

## **BW-12 Related Definitions**

#### **Non-primary residence:**

A building that will be lived in for less than 50%\*of the policy year by the policyholder.

#### **Pre-FIRM Building:**

Built before the community's first Flood Insurance Rate Map became effective and not been substantially damaged or improved

#### **Subsidized Rates:**

Rates for pre-FIRM buildings that are in Zone D **or** in Zones A\*\* and V that are not rated with an elevation certificate.\*\*\*

#### **Full-risk Rates (FRR):**

Rates for buildings that are elevation-rated and reflect the true flood risk.

<sup>\*</sup> This changed from 80% to 50% on June 1, 2014

<sup>\*\*</sup>Except certain zones like A99 & AR \*\*Except certain zones like unnumbered V

## Determining Full-Risk Rate

- Obtain an Elevation Certificate (EC)
- Ask their insurance agent to rate using EC
- Estimate when (e.g., 25%) Phase-in = Full-Risk Premium

Example 1\*: LFE-BFE = -3' Full-Risk Premium = \$7,922



Example 2\*: LFE-BFE =0' Full-Risk Premium = \$1,722

RATE USING FULL-RISK RATES!

\*Pre-FIRM Zone AE, Slab, **Secondary Home**, \$200K/\$80K (Building/Contents); Oct 2013; excludes HFIAA Surcharge



# Pre-FIRM Homes in Zone A, D, V

## Primary Residences

- Rates increase up to 18% a year;
- April 1, 2015 average increase is 14%
- Policy & rate can be transferred at sale

# Non-Primary (Secondary) Residences

- Increasing at 25% a year until full-risk rated
- Policy & rate can be transferred at sale



## Pre-FIRM Buildings in Zone A, D, V

## Repetitively Flooded Buildings

Receive 25% annual increase till Full-risk rated

## Businesses

- Non-residential received 25% increase to FRR
- October 1, 2014: reduced to 18%
  - Once Businesses can be separated, they will be on 25% rate path



# Surcharges – Start April 1, 2015

## Annual surcharges to be applied:

- \$25 for primary residences
- \$250 for all other buildings
- Included on ALL policies until ALL pre-FIRM subsidies are eliminated
- Surcharge revenue goes into the NFIP Reserve Fund
- Surcharges are not subject to premium increase caps



# Surcharge Impact

#### **RENEWAL EXAMPLES\***

#### Post-FIRM Secondary Home-Zone AE+1

\$855 – premium

\$ 68 – 8% rate increase (example)

+\$250 – surcharge

1,173 - 37% increase

#### **Pre-FIRM Secondary Home-Zone AE**

\$2,968 - premium

\$ 752 – 25% phase-in

+\$ 250 - surcharge

\$3,960 - 33% increase (~\$1,000)

#### **Secondary Home-Zone X**

\$390 – premium

- \$ 10 - 2.5% rate decrease

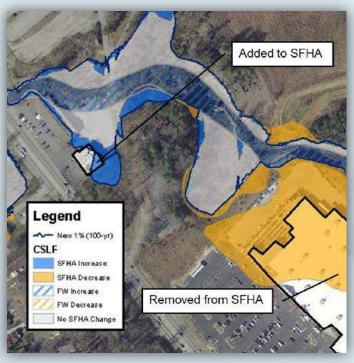
+\$250 – surcharge

\$630 - 62% increase

# Impacts on Map Changes-Starts April 1, 2015

## **HFIAA Section 6: Properties Newly Mapped into SFHA**

- Repealed BW-12 "full-risk rate in 5 years" rate increase
- First 12 months after map change,
   will be eligible for PRP rates\*
- Renewal premiums can't increase more than 18%
- Grandfathering is still in place



\*includes higher Federal Policy Fee (\$45) and Reserve Fund Assessment (15%)

# Other April 2015 Changes

## New \$10K Deductible for Home & Contents

## Reserve Assessments

- Increased from 5% to 15% for most policies, including Newly Mapped Properties getting PRP rates
- PRP reserve assessment increased from 0% to 10%
- Are part of rate cap, so many rates see little increase

## Federal Policy Fee

- PRP stays at \$22
- Newly Mapped Properties get \$45
- All others at \$45



# RESOURCES

## Where To Go For More Information

For General Information:

Yavapai County Flood Control District <u>www.YCFlood.com</u> Prescott – 928-771-3197 Cottonwood – 928-639-8151 Monday – Thursday; 7:00am-5:30pm

- Technical Questions about the Flood Maps
   FEMA Map Information eXchange (FMIX): <a href="http://msc.fema.gov">http://msc.fema.gov</a>
   800-FEMA-MAP (336-2627) <a href="mailto:FEMAMapSpecialist@riskmapcds.com">FEMAMapSpecialist@riskmapcds.com</a>
- FEMA Flood Mapping Program: www.fema.gov/national-flood-insurance-program-flood-hazard-mapping
- Letter of Map Amendment (LOMA) www.fema.gov/letter-map-amendment-letter-map-revision-based-fill-process

Control

- Reform Legislation Implementation www.fema.gov/Flood-Insurance-Reform
- NFIP Bulletins and Insurance Manual <u>www.NFIPiService.com/</u>



## FloodSmart for Consumer& Stakeholders

FloodSmart.gov

Call toll free: 1-888-379-9531 or have us call you

Q Search FloodSmart.gov

FLOODING & FLOOD F

HOME

ABOUT THE NATIONA

RESIDENTIAL COVERA COMMERCIAL COVER

PREPARATION & REC

- RESOURCES > Agent Site
- > Agent Locator
- > Community Resources
- > File Your Claim
- > Frequently Asked Questi
- > Glossary
- > Flood Facts
- > Media Resources
- > Toolkits
- > Email Updates

#### LATEST NEWS

Home and business ow recovering from Sandy, g for important information rebuilding and insuring or business.

Find out more about the Risk Policy Eligibility Ext Learn More ▶

> There is a 30 waiting period new flood insu policies.

FLOODING & FLOOD RISKS

ABOUT THE NATIONAL FLOOD INSURANCE PROGRAM

RESIDENTIAL COVERAGE

FLOOD INSURANCE P COMMERCIAL COVERAGE

PREPARATION & RECOVERY

#### RESOURCES

- > Agent Site
- > Agent Locator
- > Community Resources
- > File Your Claim
- > Frequently Asked Questions
- > Glossary
- > Flood Facts
- > Media Resources > Tookits
- > Email Updates

#### LATEST NEWS

The National Flood Insurance Program has been reauthorized until May 31, 2012. See the latest news on FEMA.gov

Find out more about the Preferred Risk Policy Eligibility Extension.

There is a 30-day waiting period on new flood insurance policies.

### **Community Resources**



#### HELP OTHERS GET FLOODSMART

You can help Americans reduce the devastating effects of flooding. Encourage others to get FloodSmart by knowing their flood risk and how they can help keep their home, businesses, and finances secure.

Being FloodSmart can make the difference in helping Americans rebuild their

#### **GET STARTED**

Here are four easy ways to partner with FloodSmart.

- 1. Encourage others to understand their flood risk and talk with an agent or and one at FloodSmart.gov
- 2. Showcase your FloodSmarts-add FloodSmart tools and resources to your
- 3. Identify ways to make your community aware of flood risks in your area.
- 4. Share your success stories with us at info@femafloodsmart.com.

The FloodSmart campaign, a marketing and education initiative from the National Flood Insurance Program, encourages individuals and business owners to better understand their flood risk and connects them to flood insurance specialists to explore their flood insurance options.



#### **HOW ARE YOU MAKING** YOUR COMMUNITY FLOODSMART?

We are always looking to hear from individuals, communities, and organizations. Tell us what you are doing to prepare your community for flooding so that we can share your story with others.

EMAIL US

- Find an agent
- Learn about risk of flooding and flood insurance
  - Provide tools & resources to stakeholders to explain flood risk and flood insurance

www.FloodSmart.gov/Partners

## FloodSmart for Agents

### Agents.FloodSmart.gov



- Free LeadsProgram
- Interactive Tools to download to help communicate flood risk
- Advertising and marketing templates

# FloodSmart's Cost of Flooding Tool



# **QUESTIONS?**

