

# Los Angeles County Aggregate Communities

## FEMA National Flood Insurance Program NFIP Overview

November 1, 2023





## **Mark Pestrella, P.E.**

Director of Public Works,  
Los Angeles County Department of Public Works

# Objectives

## Los Angeles County NFIP Overview Webinar

- To protect lives and property through the National Flood Insurance Program within the **Cities and County of Los Angeles County**,
- To build floodplain management relationships within the **Cities and County of Los Angeles County**, and also with FEMA and CA DWR.
- To provide an overview of the NFIP within the **Cities and County of Los Angeles County**:
  - Los Angeles County Special Flood Hazard Areas (SFHAs) and Flood Risks
  - Rules and Regulations
  - Flood Insurance Premiums and Claims
  - Duties of the Local Floodplain Administrator,



# Agenda

- Introduction Remarks
  - Mark Pestrella, P.E., LACDWP
  - Adam D. Lizarrage, ANFI, CFM (CTR), FEMA Region IX
  - Anntonette Duncan, P.E., CA DWR
- LA County's Aggregate SFHA and Flooding Sources
- **BREAK (5 minutes)**
- LA County's Aggregate Insurance Overview
- What is Floodplain Management
- 9 Duties of the Local Floodplain Administrator
- Flood Insurance Availability
- Concluding Remarks
  - Questions & Answers (if time permits)



# Ground Rules

- Webinar is ***not*** being recorded
- Participants may ask questions during in the webinar Q & A Function
- PDF of Presentation and Q & A Sheet will be posted at:
  - <https://pw.lacounty.gov/wmd/nfip/>
- If there is no time left in the Q & A webinar portion, please email your questions to Patricia Wood and Garret Tam Sing and the Q & A will be on the LACDPW website.





**FEMA**

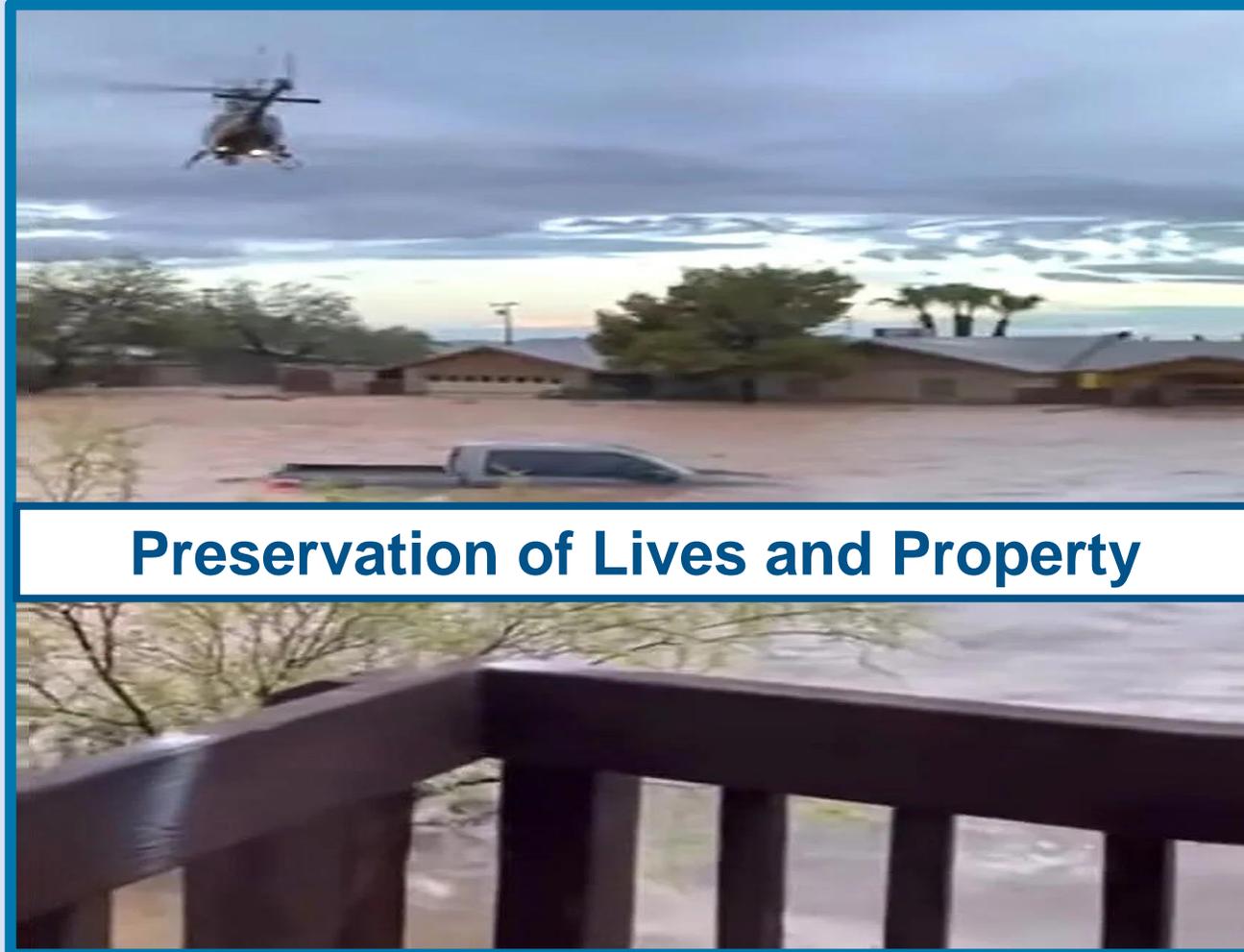
# **Adam D. Lizarraga, ANFI, CFM (CTR)**

NFIP Regional Support Liaison, FEMA Region IX

Optimal Solutions and Technologies (OST), Contractor

- [Adam.Lizarraga@associates.fema.dhs.gov](mailto:Adam.Lizarraga@associates.fema.dhs.gov)
- (916)375-0927

# NFIP's Primary Goal

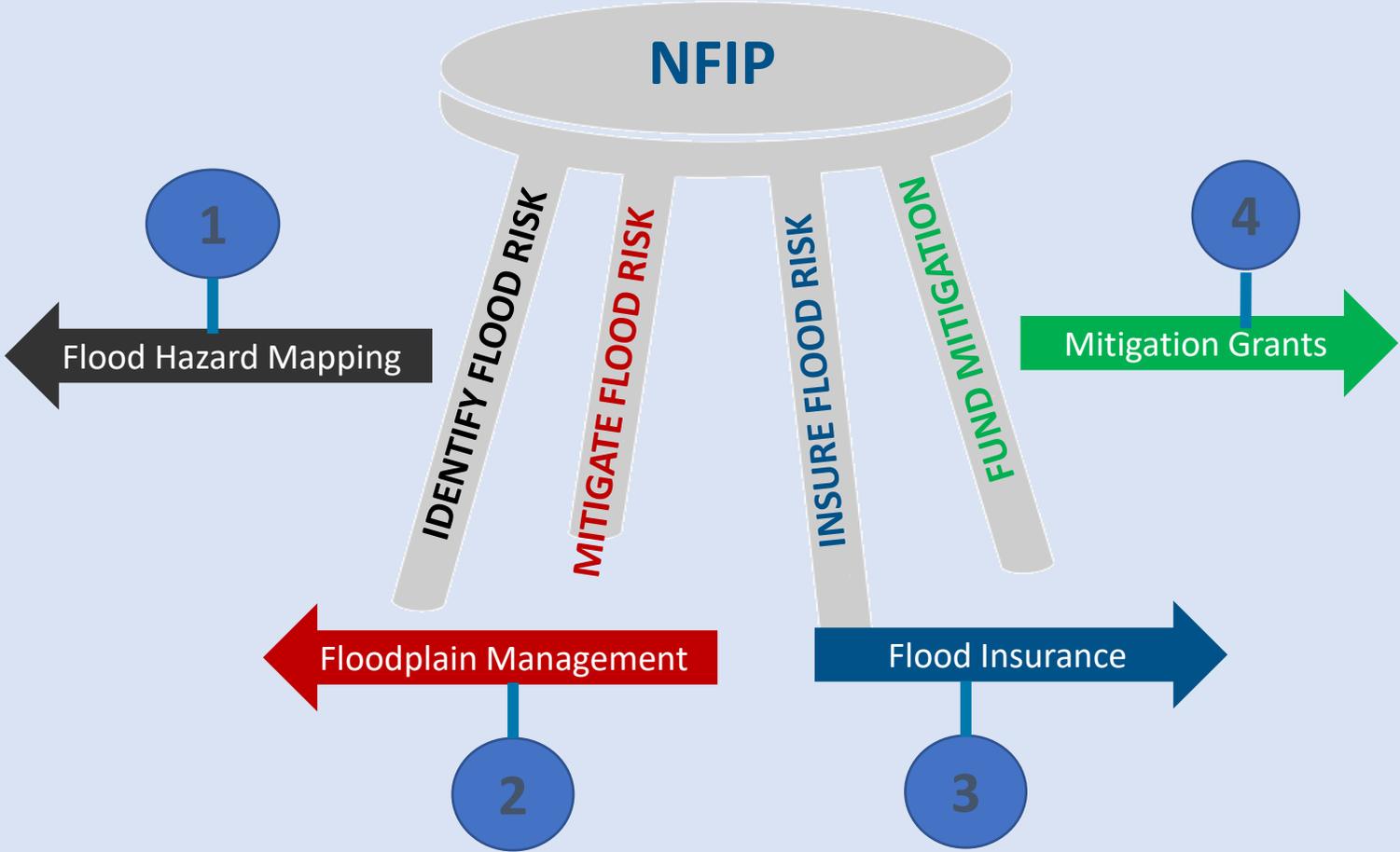


**Preservation of Lives and Property**

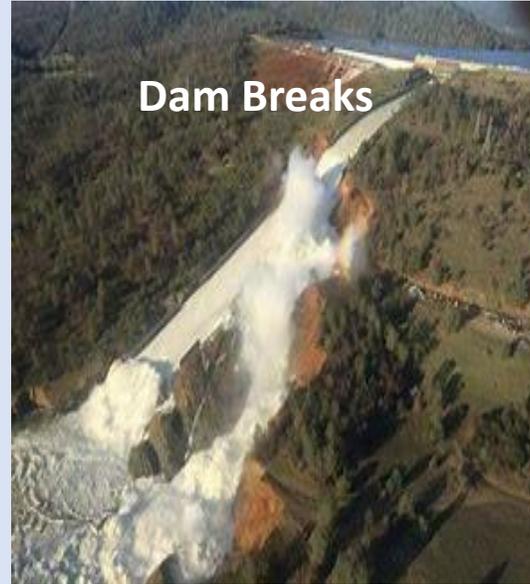


**FEMA**

# How Does the NFIP Work?



# What Flooding Events are Covered?



# NFIP Flood Insurance

A Mitigation Strategy to Protect the Life You Have Built



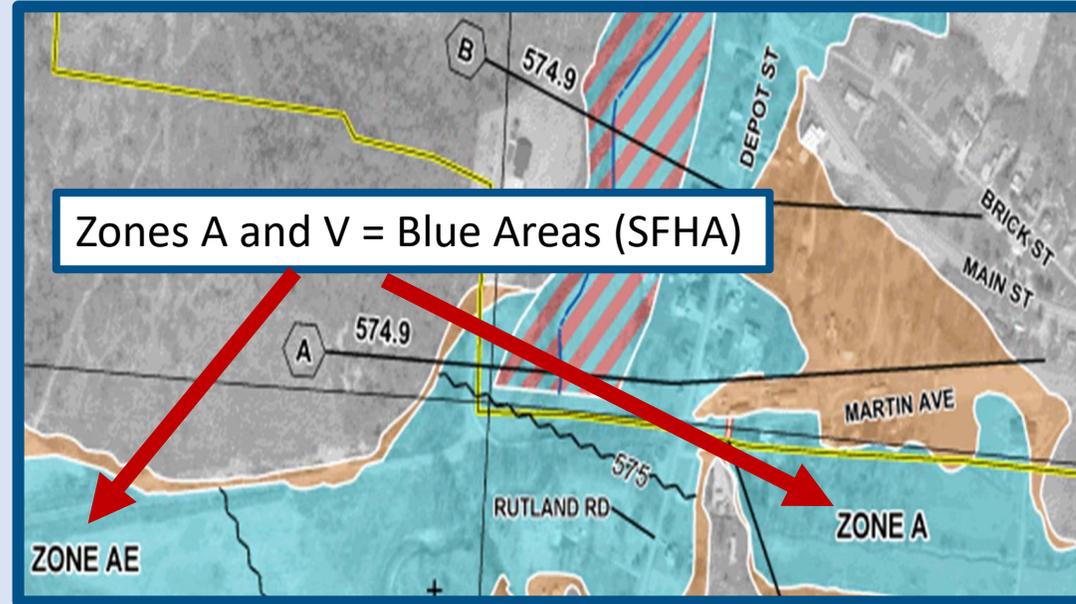
Phoenix Aug. 3, 2016



# When Is Flood Insurance Mandatory?

Buildings in “A” and “V” Flood Zones

Special  
Flood  
Hazard  
Area

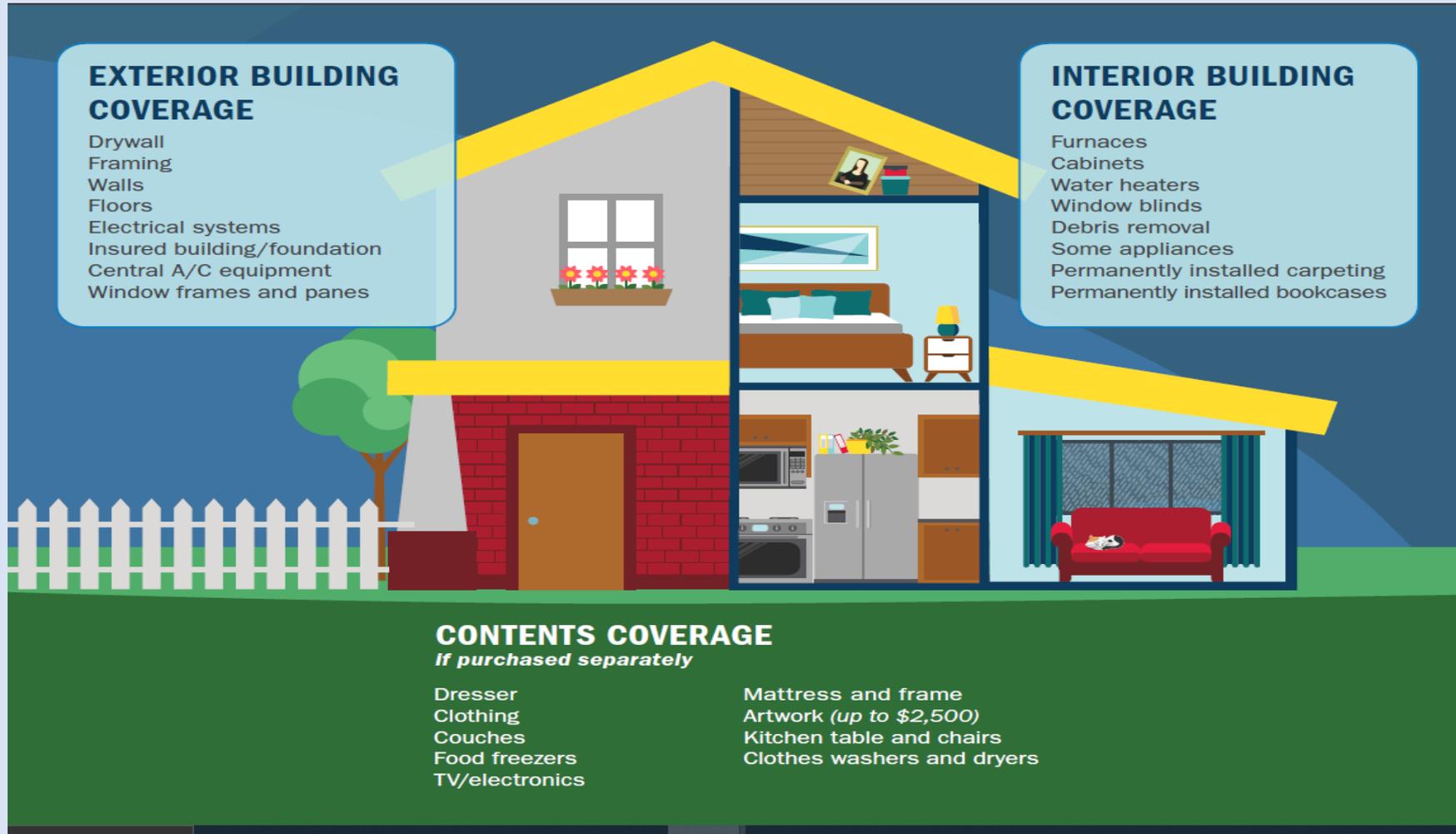


Federally  
Backed  
Loan

FEMA Flood Insurance Rate Maps = <https://msc.fema.gov>  
1-877-336-2627



# What Items are Covered?



# NFIP Flood Insurance Limits

<b>Occupancy Type:</b>	<b>Building</b>	<b>Contents</b>
<b>Residential</b>	<b>250,000</b>	<b>100,000</b>
<b>Commercial</b>	<b>500,000</b>	<b>500,000</b>



# Where Can I Buy Flood Insurance?

Contact Your Local Insurance Agent  
[www.floodsmart.gov](http://www.floodsmart.gov) | 1-877-336-2627



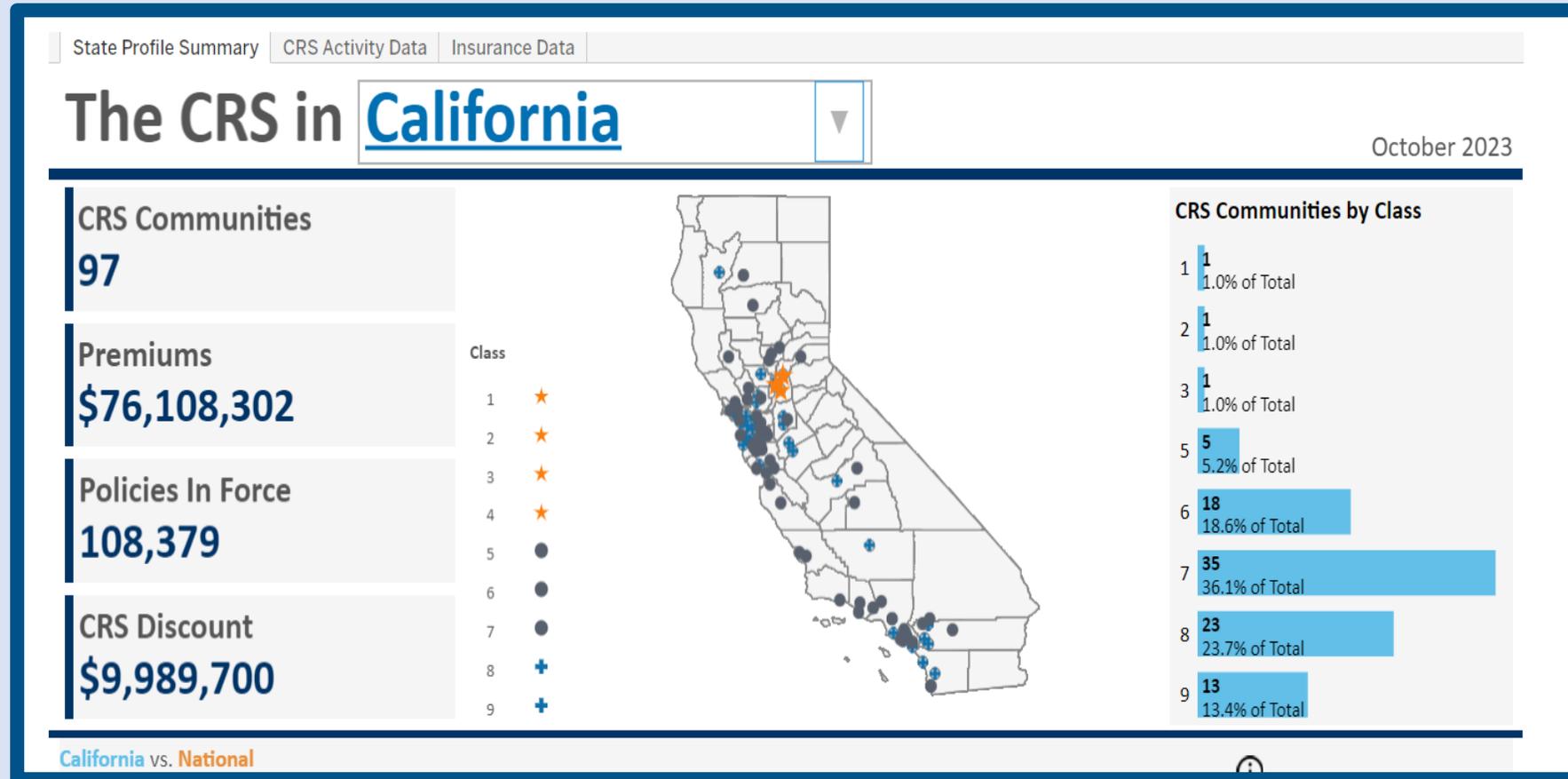
# Community Rating System (CRS)



Class	Premium Discount
10	0%
9	5%
8	10%
7	15%
6	20%
5	25%
4	30%
3	35%
2	40%
1	45%



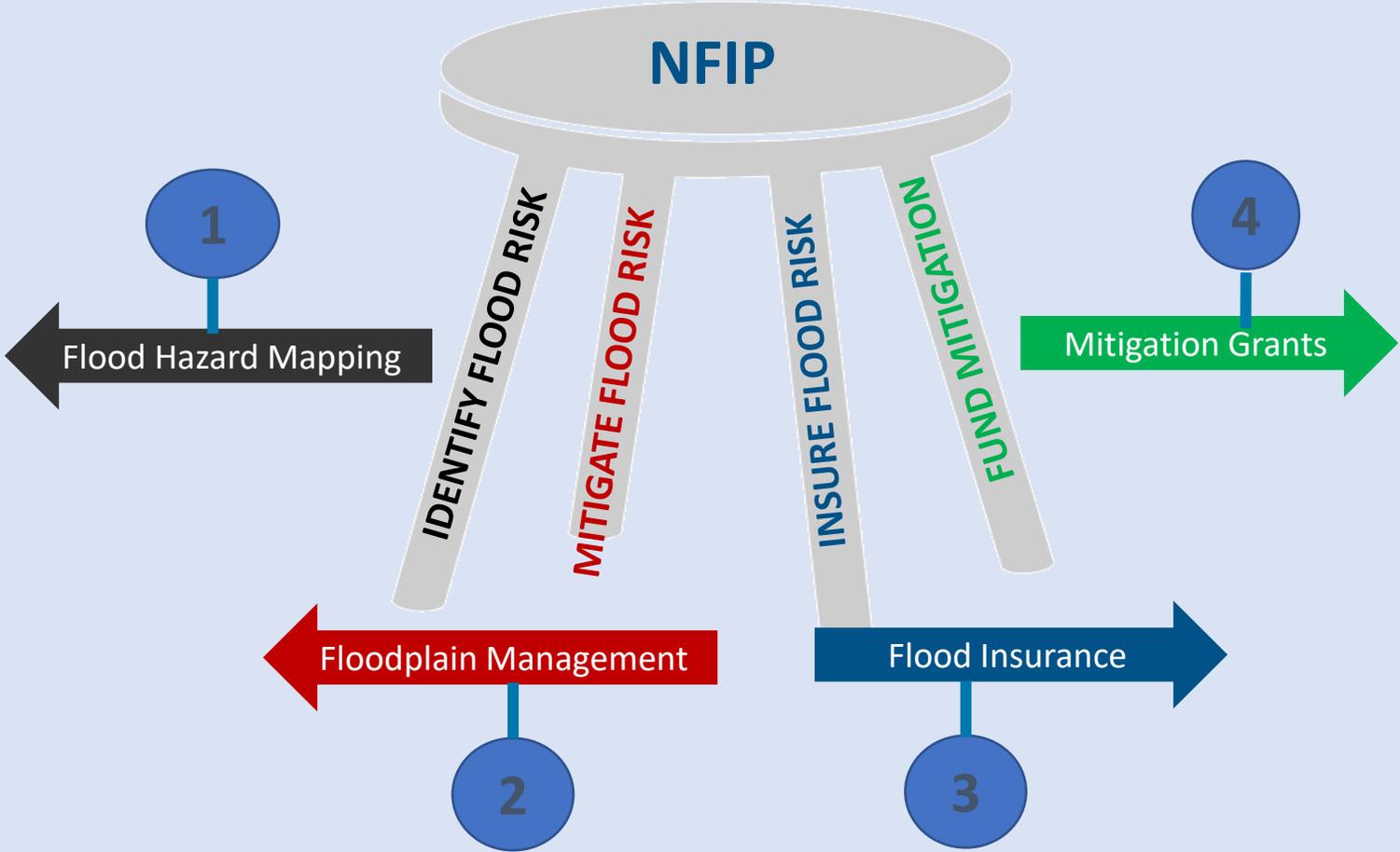
# Community Rating System (CRS)



[CRS State Profiles](#) | [CRS Data Visualizations \(crsviz.com\)](#)



# How Does the NFIP Work?

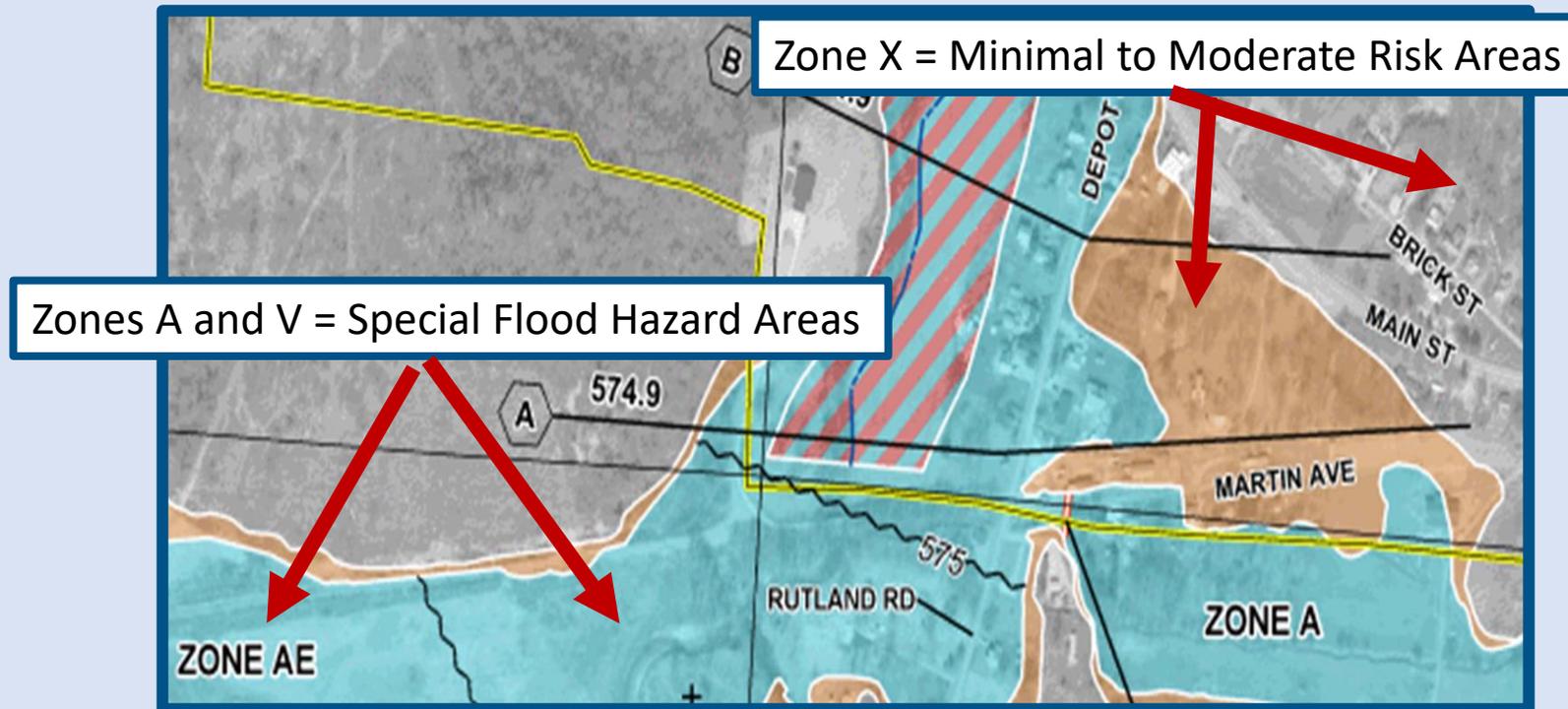


# FEMA Flood Hazard Mapping

FEMA Map Service Center

<https://msc.fema.gov>

1-877-336-2627



# Floodplain Management

Protection of Lives and Property through Building Compliance & Regulations



**FEMA**

# Hazard Mitigation Assistance

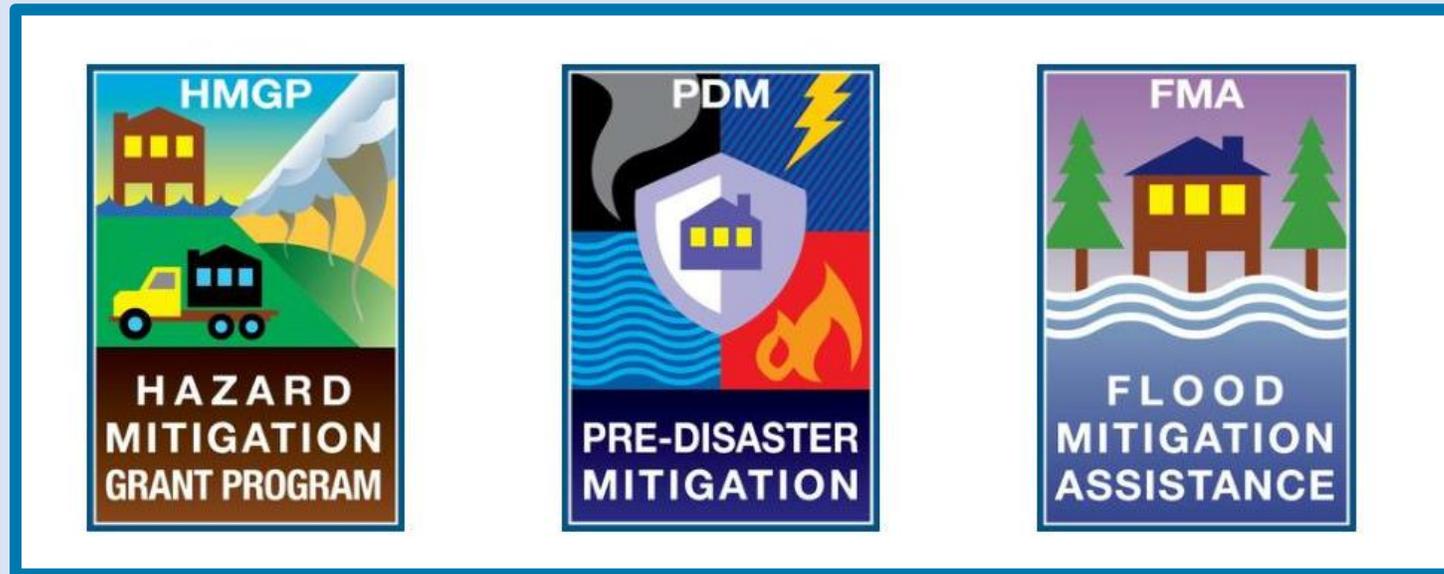
Mitigation Funding to Support More Resilient Communities



# Hazard Mitigation Assistance

Mitigation Funding to Support More Resilient Communities

<https://www.fema.gov/grants/mitigation>



# Where Can I Get More Information?

**FEMA Region 9 Risk Analysis:** Michael Bishop

[Michael.bishop@fema.dhs.gov](mailto:Michael.bishop@fema.dhs.gov)

**FEMA Region 9 Floodplain Management:** Michael Nakagaki

[Michael.nakagaki@fema.dhs.gov](mailto:Michael.nakagaki@fema.dhs.gov)

**FEMA Region 9 Hazard Mitigation Assistance:** Robert McCord

[Robert.mccord@fema.dhs.gov](mailto:Robert.mccord@fema.dhs.gov)

**FEMA Region 9 NFIP Flood Insurance:** Edie Lohmann

[Edith.lohmann@fema.dhs.gov](mailto:Edith.lohmann@fema.dhs.gov)

**NFIP Regional Support Contact:** Adam Lizarraga

[Adam.Lizarraga@associates.fema.dhs.gov](mailto:Adam.Lizarraga@associates.fema.dhs.gov)



# Where Can I Get More Information?

**NFIP Flood Insurance Data and Analytics:** [| Flood Insurance Data and Analytics \(floodsmart.gov\)](https://www.floodsmart.gov/floodsmart/data-and-analytics)

**NFIP's Pricing Approach:** [NFIP's Pricing Approach | FEMA.gov](https://www.fema.gov/nfip/pricing-approach)

**NFIP Outreach Materials (State & Local Officials, Agents):** [| The National Flood Insurance Program for Agents \(floodsmart.gov\)](https://www.floodsmart.gov/nfip-outreach-materials)

**FloodSmart for Consumers:** [| The National Flood Insurance Program \(floodsmart.gov\)](https://www.floodsmart.gov/the-national-flood-insurance-program)

**NFIP Help Center:** 1-877-336-2627

**NFIP Flood Insurance Manuals and Handbooks:** [Flood Insurance Manuals and Handbooks | FEMA.gov](https://www.fema.gov/nfip-manuals-and-handbooks)

If you would like to receive NFIP email updates, please visit: [Signup for FEMA Email Updates \(govdelivery.com\)](https://www.govdelivery.com/signups/fema-email-updates)



THANK YOU!



FEMA



FEMA



# Anntonette Duncan, P.E.

Division of Flood Management

State of California, Department of Water Resources

- [Anntonette.Duncan@water.ca.gov](mailto:Anntonette.Duncan@water.ca.gov)
- (916)699-8398

# DWR NFIP Mission

To sustainably manage the water resources of California and encourage community participation in the National Flood Insurance Program (NFIP). In cooperation with FEMA and other agencies, promote continued community participation, encourage and educate communities located within flood prone areas on the financial benefits of NFIP participation and purchasing flood insurance.



# DWR's Role in the NFIP

- Work collaboratively with FEMA Region 9
- Provide Technical Assistance to Local Communities
- Help ensure that Local Communities are meeting the min. NFIP requirements (CAVs/CACs)
- Review Floodplain Management Ordinances
- Provide NFIP related trainings



# DWR Floodplain Specialist Map



# DWR NFIP Website

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## National Flood Insurance Program

The U.S. Congress established the National Flood Insurance Act of 1968. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which provides participating communities to purchase insurance as protection against future flood damage. Floodplain management regulations that reduce future flood damage are a key component of the NFIP.

In California, approximately 99 percent of California communities participate in the NFIP, and approximately 18 percent participate in the Community Rating System (CRS), which provides additional benefits above and beyond minimum NFIP requirements.

DWR, on behalf of FEMA, conducts Community Assistance Visits (CAVs) to provide individual technical assistance to NFIP communities to provide individual technical assistance to interpret and explain the NFIP regulations and to give management.

- + [California Quick Guide](#)
- + [Community Assistance Visits](#)
- + [Technical Assistance](#)

### Building Code Resources

The flood provisions of the California Building Standards Code (CBC) for buildings and structures. California communities can rely on the building regulations to fulfill the requirements for participation in the NFIP.

### Building Code Resources

The flood provisions of the California Building Standards Code, CCR Title 24, meet or exceed the minimum NFIP requirements for buildings and structures. California communities can rely on the building regulations to fulfill the requirements for participation in the NFIP.

#### 2019 California Building Standards Code (CCR Title 24)

- Excerpts of the flood provisions (A copy of this publication may be downloaded to: [DWR\\_NFIP@water.ca.gov](mailto:DWR_NFIP@water.ca.gov).)
- Highlights of ASCE 24 Flood Resistant Design and Construction (FRD)

- + [Higher Standards](#)

### Certified Floodplain Managers

The Certified Floodplain Manager (CFM) program was established in 1996 (ASFPM). The CFM program was established to provide a national base of qualified professionals to assist communities in developing and implementing floodplain management regulations to fulfill the requirements for participation in the NFIP. CFMs make a difference! They help reduce community liability, while also providing a knowledge to reduce flood damage to their communities' structures and property. CFMs also receive professional and public recognition while also maintaining professional certification process.

### Model Ordinances

DWR developed the model ordinances available on this page to help communities work with the flood provisions of the California Building Standards Code (CCR Title 24) for buildings and structures in special flood hazard areas. Excerpts of the flood provisions are available by sending an email to: [DWR\\_NFIP@water.ca.gov](mailto:DWR_NFIP@water.ca.gov).

Please review the Frequently Asked Questions About the California Building Standards Code Model Ordinances.

- + [General](#)
- + [Floodplain Management Ordinance with Appendix G for All Zones](#)
- + [Zone A](#)
- + [Zones A and V](#)
- + [Floodplain Management Model Ordinance and Community Development Code](#)

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Michael Gill  
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### Model Ordinances

DWR developed the model ordinances available on this page to help communities adopt local regulations that are written to work with the flood provisions of the California Building Standards Code (CCR Title 24) for buildings and structures in special flood hazard areas. Excerpts of the flood provisions are available by sending an email to: [DWR\\_NFIP@water.ca.gov](mailto:DWR_NFIP@water.ca.gov).

Please review the Frequently Asked Questions About the California Building Standards Code Model Ordinances.

Two sets of model ordinances are available below:

- Companion Ordinance. Communities may adopt regulations based on the flood provisions of CCR Title 24, includes everything necessary to fulfill the requirements for participation in the National Flood Insurance Program.
- Title 24 Appendix G. Alternatively, communities may decide to locally adopt the flood provisions of the California Building Standards Code (CCR Title 24) for buildings and structures in special flood hazard areas. Please note that the California Building Standards Commission adopts a new edition of the California Building Standards Code (CBC) every two years.

Note: Electronic copies of the model ordinances will be linked to this page in the future. Please contact [DWR\\_NFIP@water.ca.gov](mailto:DWR_NFIP@water.ca.gov) if you are unable to find the model ordinance you need.

- + [General](#)
- + [Floodplain Management Ordinance with Appendix G for All Zones](#)
- + [Zone A](#)
- + [Zones A and V](#)
- + [Floodplain Management Model Ordinance and Community Development Code](#)

### Workshops and Training

DWR and FEMA conduct workshops for floodplain management agencies, including State and local officials. The workshops allow floodplain management officials to have a greater understanding of FEMA's minimum regulation requirements and how to meet them. DWR is working on scheduling online training for 2021. [Visit our registration page for a list of upcoming classes.](#)

- + [FEMA Elevation Certificate](#)
- + [Floodplain Management and Duties of the Local Administrator \(Basic Course\)](#)
- + [Floodplain Management Review Course](#)
- + [Obtaining and Developing Base Flood Elevations in Zone A Areas \(Advanced Course\)](#)
- + [Substantial Improvement/Substantial Damage Workshop](#)

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### Resources

- > [Association of State of Floodplain Managers](#)
- > [Federal Emergency Management Agency](#)
- > [FEMA Map Service Center](#)
- > [FEMA Flood Map Service Center FAQs](#)
- > [Flood Hazard Mapping: Frequently Asked Questions](#)



# CA Floodplain Management Ordinance Dashboard

CA Floodplain Management Model Ordinance and Community Rating System Dashboard

with ArcGIS Web AppBuilder

FM Ordinance Adoption Counts

- NFIP City Points: 6
  - Adopted: 1
  - In Process: 2
  - Meets Regulations: 3
- NFIP County Pts: 8

Layer List

- NFIP City boundaries
- NFIP County boundaries
- CRS Communities Rating
- CRS Counties Rating
- NFIP City Points
- NFIP County Pts

Map control widgets

BC Adoption Counts

NFIP Communities/BC Adoption Status Charts

CRS Rates Graphs

Open attribute tables for active layers

NFIP City boundaries | NFIP County boundaries

Options | Filter by map extent | Zoom to | Clear selection | Refresh

FID	CommunityN	County	Ord_Status	OrdAdoptYr	OrdAdoptYr	CRSClass	LastCRS_Yr	Website_1
1	Clearlake, City Of	Lake County	Adopted	8/18/2021	2021	10	2008	https://clearlake.mur
2	Dinuba, City Of	Tulare County	In Process		0	0	0	https://www.dinuba.d
3	Los Altos, City Of	Santa Clara County	In Process		0	8	1996	https://www.losaltos





**Patricia Wood, P.E.**  
Senior Civil Engineer,  
Los Angeles County Department of Public Works

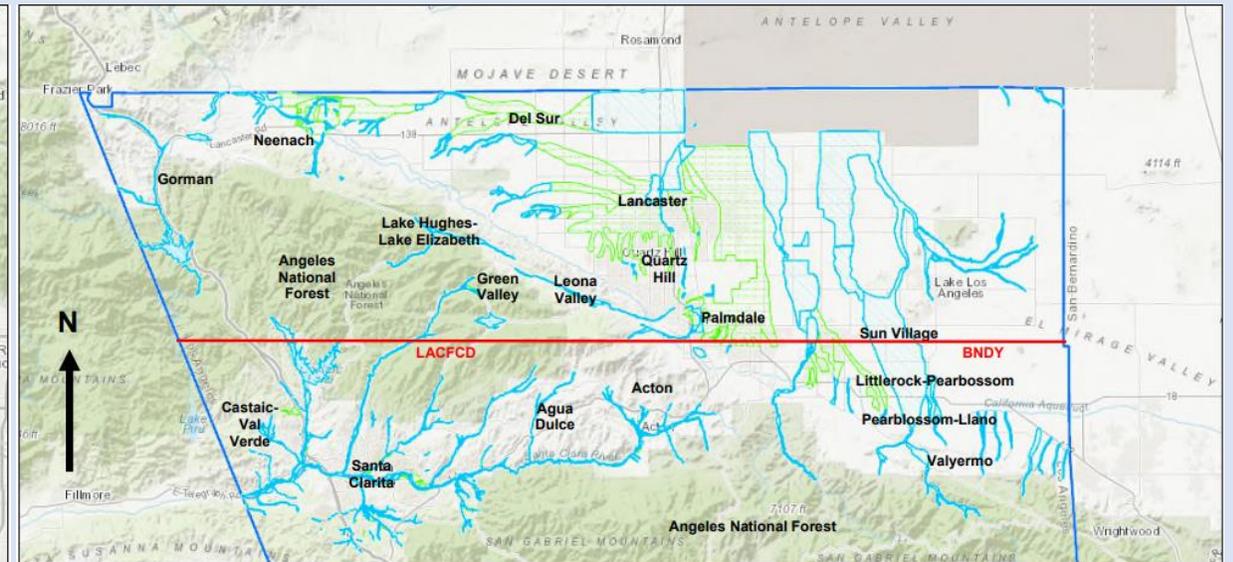
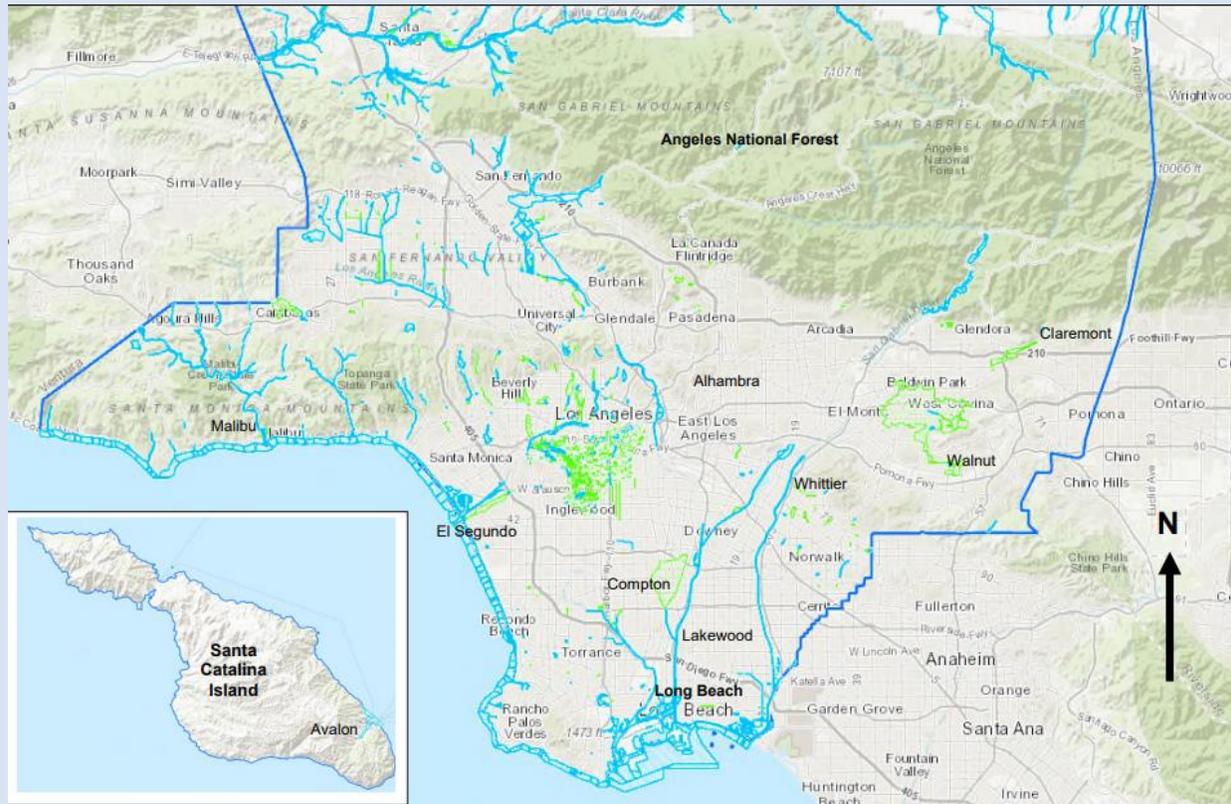
- [pwood@pw.lacounty.gov](mailto:pwood@pw.lacounty.gov)
- (626)458-6131

# Los Angeles County Map

## Special Flood Hazard Areas

Los Angeles County - South

Los Angeles County - North



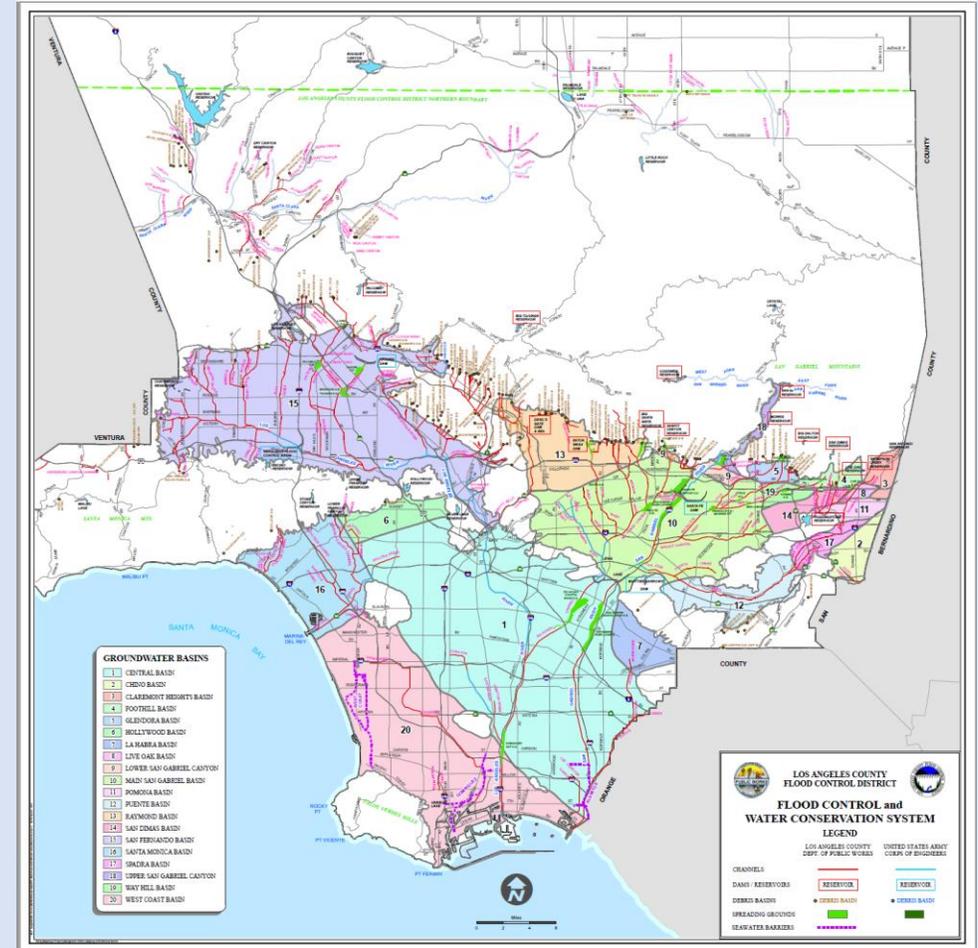
# Emerging Flood Risks in Los Angeles County from Climate Change

- Rising sea levels
- More intense rainfall events  
→ Larger stormflows
- Larger, more severe wildfires  
→ Debris flows



# Los Angeles County's Comprehensive Urban Flood Control and Water Conservation System

- Dams and Reservoirs
- Debris Basins
- Stream Stabilizers (Crib Structures)
- Channels
- Storm Drains
- Pump Stations
- Spreading Grounds

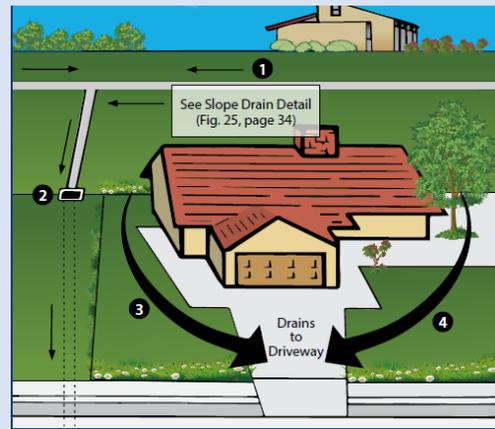
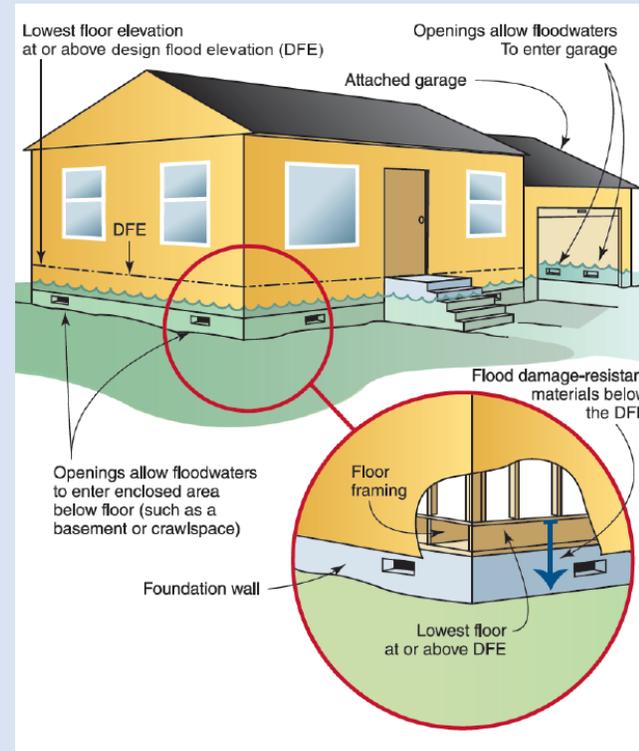


# What Owners/Residents Can Do

- Learn about your flood risk
- Consider buying flood insurance
- Look at doing drainage measures on your property
- Consider implementing flood resiliency measures on your structures
- Support flood infrastructure maintenance and improvements



<https://waterforla.lacounty.gov/flood-preparation/>



# 5 Minute BREAK



# Floodplain Management and Flood Insurance “Quid Pro Quo”

- Flood Insurance is an incentive for communities to adopt and enforce better floodplain regulations.
- Structures located in a Special Flood Hazard Area and that are financed by a federally regulated loan must have flood insurance coverage.



# NFIP Insurance Policy and Premium Overview

Eighty-Six (86) Los Angeles County Aggregate Communities

Communities	Policies in Force	Total Premiums	Insurance in Force Losses	No. of Paid	Total Losses Paid
Agoura Hills	71	47,062	23,425,000	65	580,043.29
Altamira	5	2,547	1,750,000	8	17,362.66
Arcadia	12	7,787	4,041,000	8	5,884.52
Artesia	1	596	350,000	1	0.00
Avalon	30	46,763	9,462,000	5	56,470.55
Azusa	3	1,651	1,050,000	1	750.00
Baldwin Park	5	2,705	1,750,000	2	47,602.07
Bell	0	0	0	0	0.00
Bell Gardens	0	0	0	0	0.00
Bellflower	22	14,771	7,783,000	9	27,384.75
Beverly Hills	129	80,337	46,068,000	233	1,584,279.69
Bradbury	1	1,277	742,000	8	20,720.84
Burbank	104	87,484	33,795,000	35	139,603.03
Calabasas	85	43,162	27,640,000	26	185,358.80
Canon Hills	43	43,810	15,133,000	47	72,021.20
Cerritos	45	25,733	15,482,000	4	3,886.45
Claremont	28	13,620	8,544,000	5	6,484.88
Commerce	2	2,023	1,050,000	1	5,443.60
Compton	27	16,866	8,868,000	16	139,855.06
Covina	3	1,719	1,050,000	5	729.20
Cudahy	0	0	0	1	0.00
Culver City	64	60,754	22,864,000	27	95,815.71
Diamond Bar	7	3,822	2,310,000	3	6,806.22
Downey	75	45,901	25,543,000	36	136,649.33
Duarte	16	7,462	5,106,000	3	1,725.51
El Monte	0	0	0	0	0.00
El Segundo	8	4,084	2,261,000	3	3,772.09
Gardena	10	4,827	2,524,000	5	4,416.96
Glendale	85	53,860	29,155,000	73	392,259.26
Glendora	27	14,218	8,777,000	9	239,266.61
Hawaiian Gardens	6	5,734	1,791,000	3	11,271.12
Hawthorne	7	3,228	1,741,000	2	0.00
Hermosa Beach	57	34,428	20,063,000	12	10,545.76
Hidden Hills	35	25,241	11,583,000	40	465,382.41
Huntington Park	0	0	0	0	0.00
Industry	3	9,225	2,100,000	1	500.00
Inglewood	17	11,071	5,740,000	23	10,851.14
Irwindale	1	600	350,000	0	0.00
La Canada Flintridge	63	35,594	21,077,000	49	1,614,819.54
La Habra Heights	4	2,011	1,400,000	3	3,462.82
La Mirada	14	10,143	4,700,000	8	69,823.36
La Puente	1	630	521,000	5	7,942.46
La Verne	9	4,194	2,688,000	6	21,907.55
Lakewood	66	35,426	22,549,000	12	26,320.61
Lancaster	48	30,970	16,872,000	12	95,519.84
Lawndale	3	1,512	1,050,000	1	5,430.56
Lomita	6	3,979	1,785,000	4	13,289.45
Long Beach	1,753	1,912,020	508,964,000	347	2,032,709.78
Long Beach (City)	6,412	4,521,373	2,114,450,000	3,844	21,991,597.34
Los Angeles (County)	797	740,000	233,460,000	3,037	25,819,063.76
Lynwood	58	60,062	15,310,000	19	179,026.33
Malibu	710	1,182,760	235,447,000	218	4,434,372.88
Manhattan Beach	95	50,960	32,177,000	15	124,619.02
Maywood	0	0	0	0	0.00
Monrovia	14	11,987	5,448,000	13	35,204.90
Monterey	5	5,686	3,700,000	2	3,933.12
Monterey Park	14	8,423	4,829,000	28	22,535.67
Norwalk	21	10,364	6,799,000	3	8,167.44
Palmdale	61	62,469	29,999,000	20	397,917.12
Palms Verde Estates	38	25,602	13,161,000	15	39,749.73
Paramount	12	11,140	4,397,000	14	30,223.88
Pasadena	108	66,100	36,062,000	67	232,029.31
Pico Rivera	57	42,071	18,776,000	14	18,972.28
Pomona	8	17,683	5,815,000	7	42,848.28
Rancho Palms Verdes	44	21,429	13,571,000	8	261,095.28
Redondo Beach	60	45,849	20,777,000	31	1,216,135.72
Rolling Hills	10	5,176	3,500,000	1	0.00
Rolling Hills Estates	10	4,912	3,360,000	9	123,444.04
Rosemead	3	1,790	1,050,000	2	382.23
San Dimas	4	3,174	1,400,000	9	9,920.78
San Fernando	1	320	350,000	16	96,069.08
San Gabriel	1	713	400,000	2	5,699.32
San Marino	13	7,509	4,550,000	2	0.00
Santa Clarita	275	329,916	80,669,000	85	366,179.10
Santa Fe Springs	20	24,347	9,667,000	0	0.00
Santa Monica	192	136,543	71,007,000	42	125,840.91
Santa Madra	24	15,010	7,246,000	24	73,720.30
Signal Hill	5	2,291	1,428,000	6	45,609.60
South El Monte	2	5,163	934,000	1	0.00
South Gate	7	3,527	1,721,000	5	4,668.54
South Pasadena	18	8,061	6,300,000	15	122,828.44
Temple City	0	0	0	0	0.00
Torrance	52	29,964	15,623,000	12	10,068.59
Vernon	0	0	0	0	0.00
Walnut	3	1,136	800,000	6	1,371.13
West Covina	18	10,094	4,899,000	2	16,866.04
West Hollywood	33	25,370	12,826,000	28	239,976.55
Westlake Village	18	45,810	18,937,000	4	566.83
Whittier	32	29,309	11,994,000	15	17,980.40
Total	12,336	10,339,028	3,986,052,000	8,788	64,554,612.34

Communities	Policies in Force	Total Premiums	Insurance in Force	No. of Paid Losses	Total Losses Paid
Total	12,336	\$ 10,339,028	\$ 3,986,052,000	8,788	\$ 64,554,612

1. Average Premium/Policy =  
 $\$10,339,028 / 12,336 = \$838/\text{policy}$

2. Average \$ Loss/Claim =

• Total Losses Paid/No. of Paid Losses =  
 $\$64,554,612 / 8,788 \text{ claim} = \$7,346/\text{claim}$



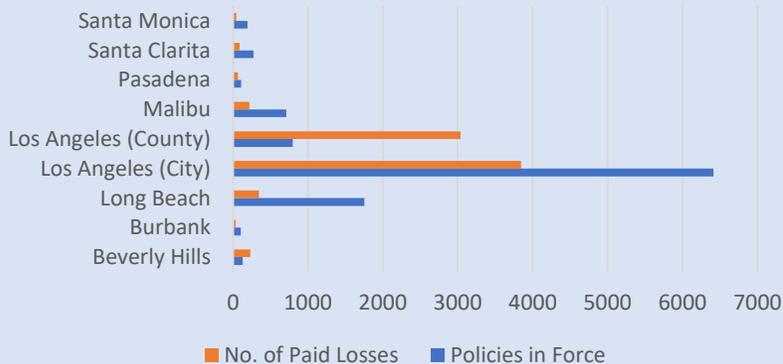
# NFIP Insurance Policy and Premium Overview

Nine (9) Communities > 100 Policies

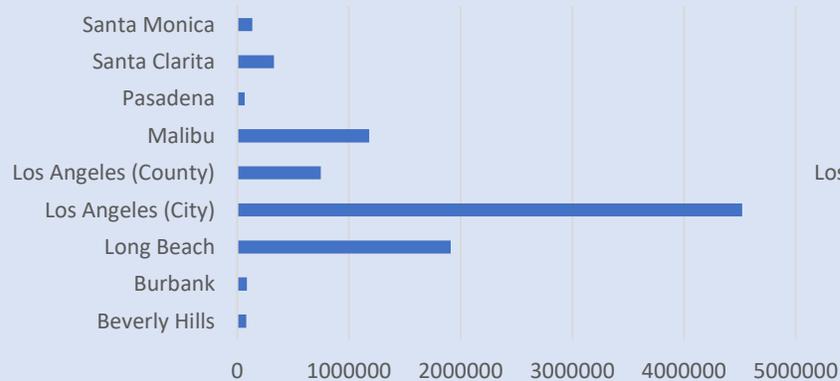


Communities	Policies in Force	Total Premiums	Insurance in Force	No. of Paid Losses	Total Losses Paid
Beverly Hills	129	\$ 80,337	\$ 46,068,000	233	\$ 1,584,280
Burbank	104	\$ 87,484	\$ 33,785,000	35	\$ 139,603
Long Beach	1,753	\$ 1,912,020	\$ 508,984,000	347	\$ 2,620,710
Los Angeles (City)	6,412	\$ 4,521,373	\$ 2,116,450,000	3,844	\$ 21,991,597
Los Angeles (County)	797	\$ 749,000	\$ 233,467,000	3,037	\$ 25,819,064
Malibu	710	\$ 1,182,760	\$ 235,447,000	218	\$ 4,434,373
Pasadena	108	\$ 66,100	\$ 36,062,000	67	\$ 232,029
Santa Clarita	275	\$ 329,916	\$ 80,669,000	85	\$ 366,179
Santa Monica	192	\$ 136,543	\$ 71,007,000	42	\$ 125,841
<b>Total</b>	<b>12,336</b>	<b>\$ 10,339,028</b>	<b>\$ 3,986,052,000</b>	<b>8,788</b>	<b>\$ 64,554,612</b>

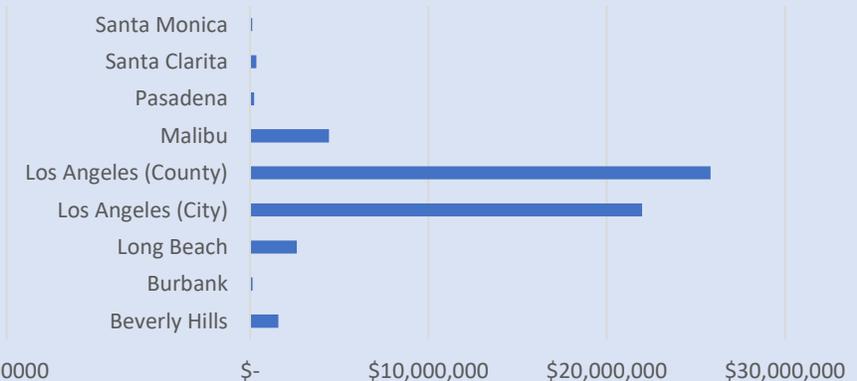
Policies in Force vs No. of Paid Losses



Total Premiums



Total Losses Paid



# What is Floodplain Management?

A decision-making process that aims to achieve wise use of floodplains.

Communities in Los Angeles County entering the National Flood Insurance Program agreed to undertake floodplain management in their projects and regulation of developments in floodplains.



# Development

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.



# Floodplain

*Floodplain or flood-prone area* means any land area susceptible to being inundated by water from any source.



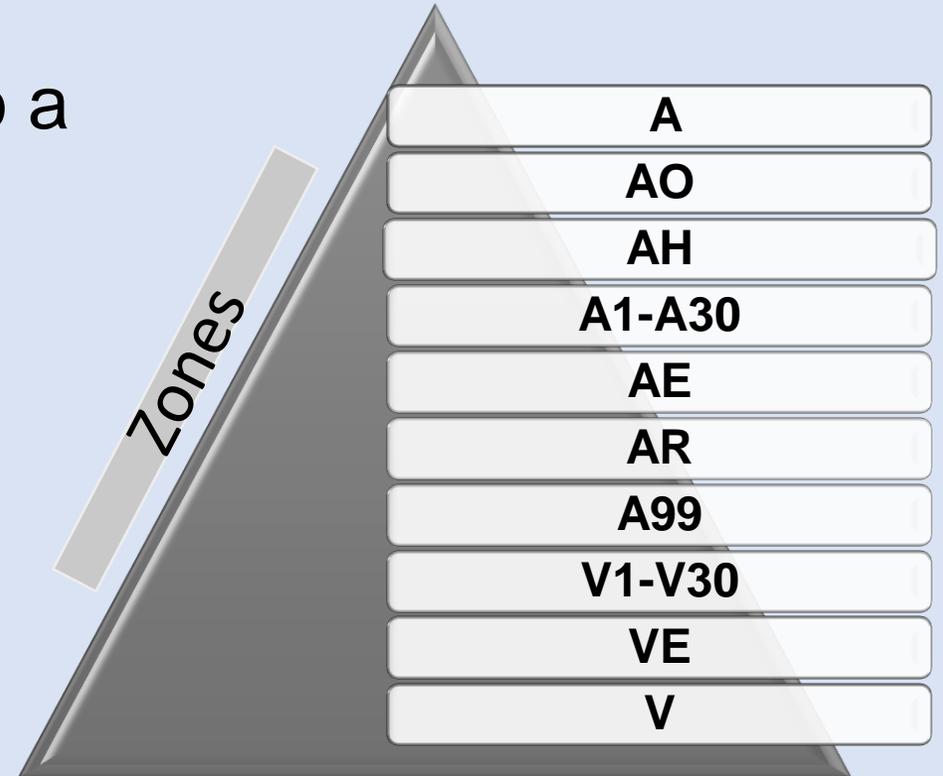
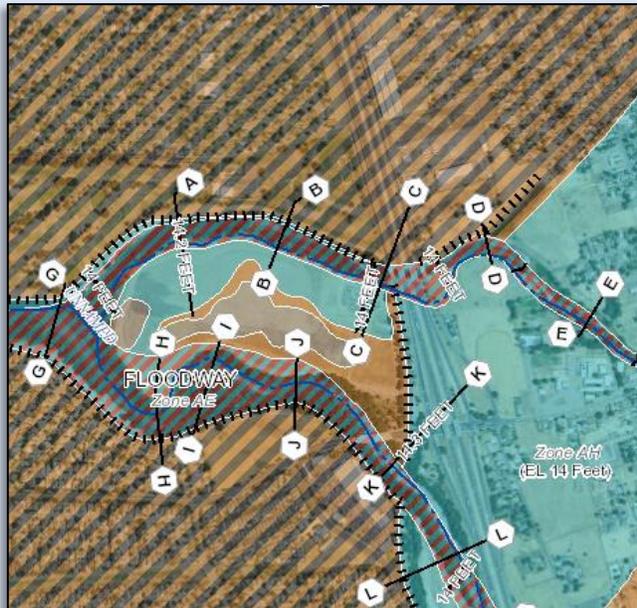
# Base Flood Elevation (BFE)

The water surface level of a watercourse or waterbody, referenced to an established datum, that corresponds to a flood event that has a one percent chance of being equaled or exceeded in any given year.



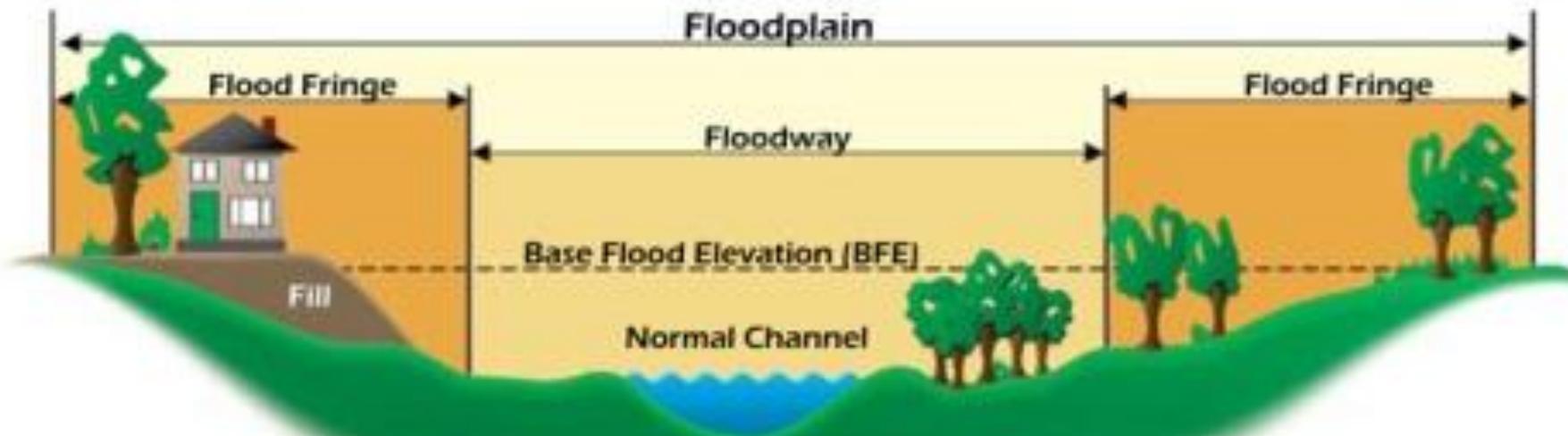
# Special Flood Hazard Area (SFHA)

An area in the floodplain subject to a one percent or greater chance of flooding in any given year.



# Floodway

“...means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.”



Source: NFIP Guidebook, FEMA

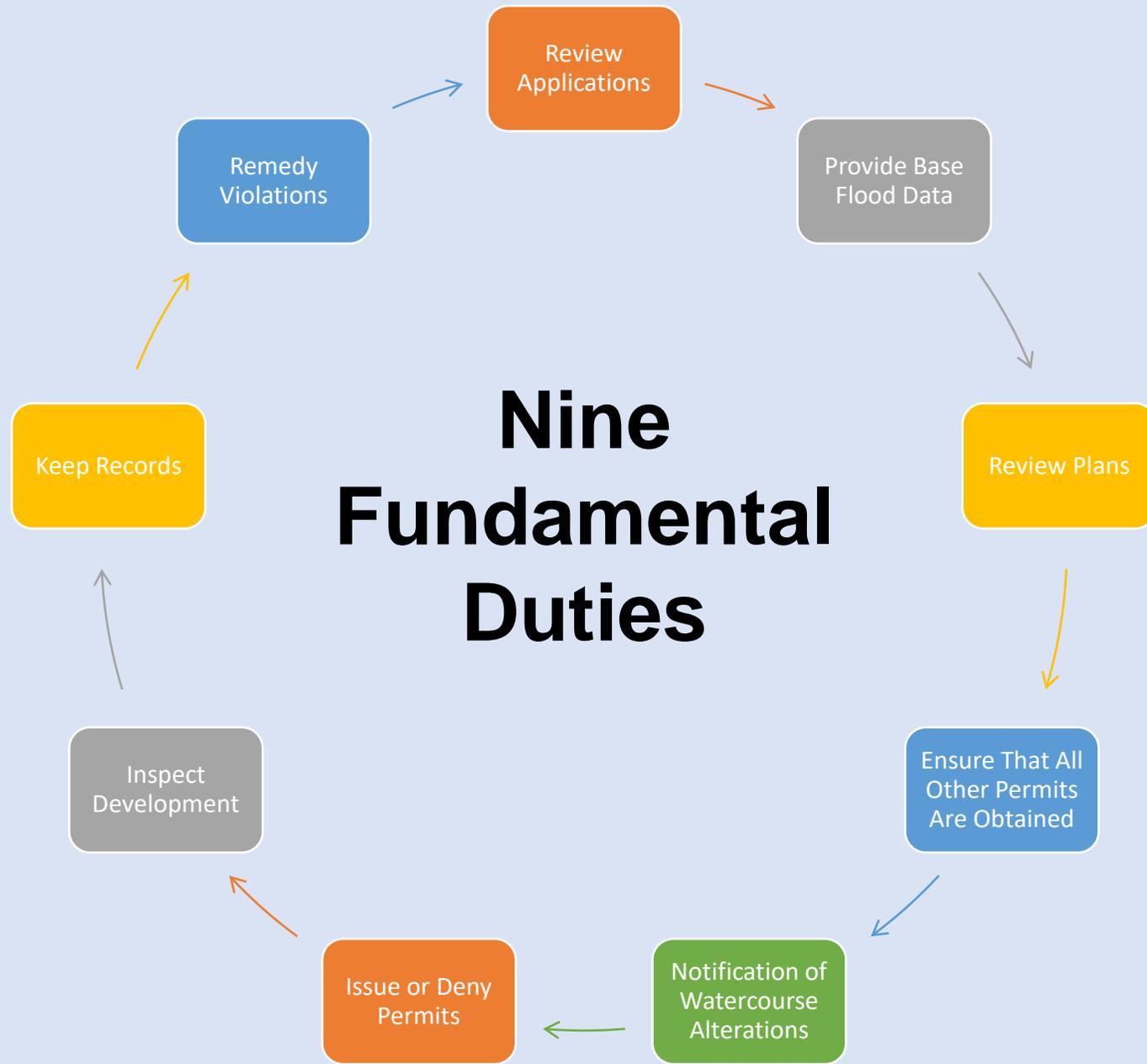




# Salomon Miranda, P.E., MS

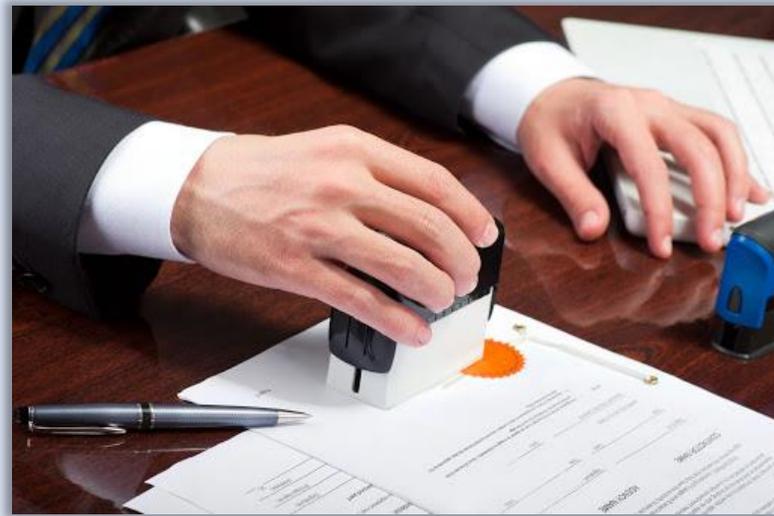
Division of Regional Assistance, Southern Region Office  
State of California, Department of Water Resources

- [salomon.miranda@water.ca.gov](mailto:salomon.miranda@water.ca.gov)
- (818)254-4814 Office
- (818)621-9310 Cell



# Duty #1 Review Applications

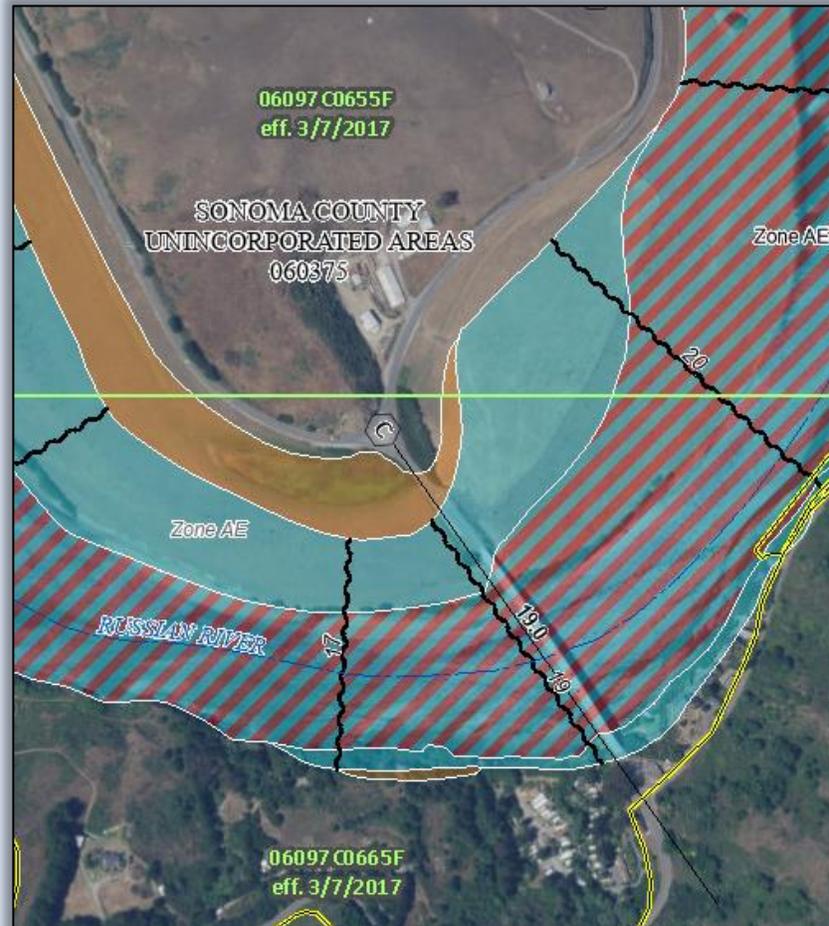
- Review and evaluate development permit applications and determine, whether or not, the development will take place in the Special Flood Hazard Area.
- Is the development located within the floodway?



# REMINDER

## Approving Development in Floodways

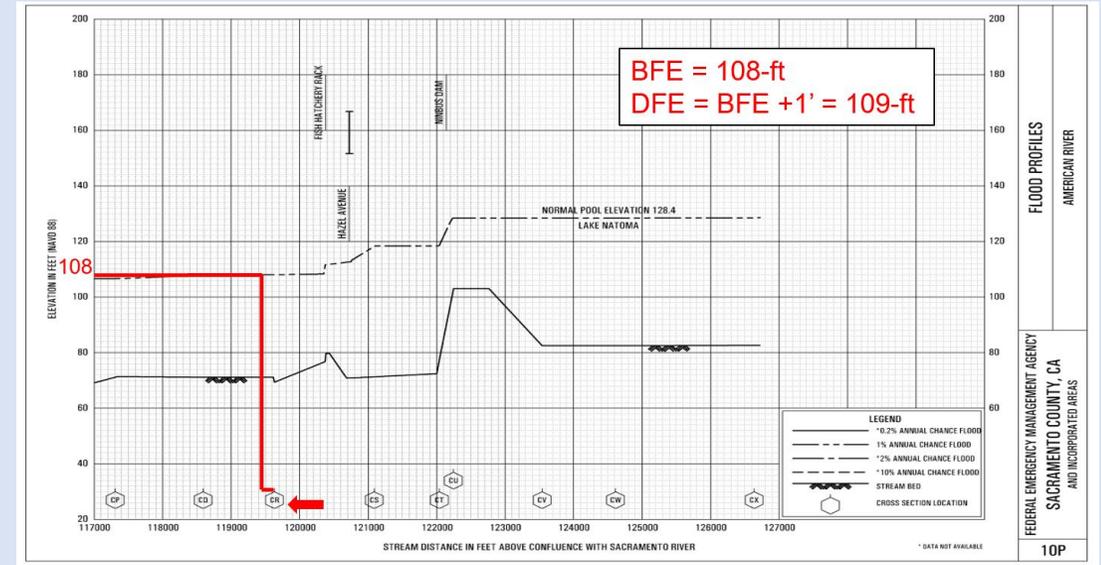
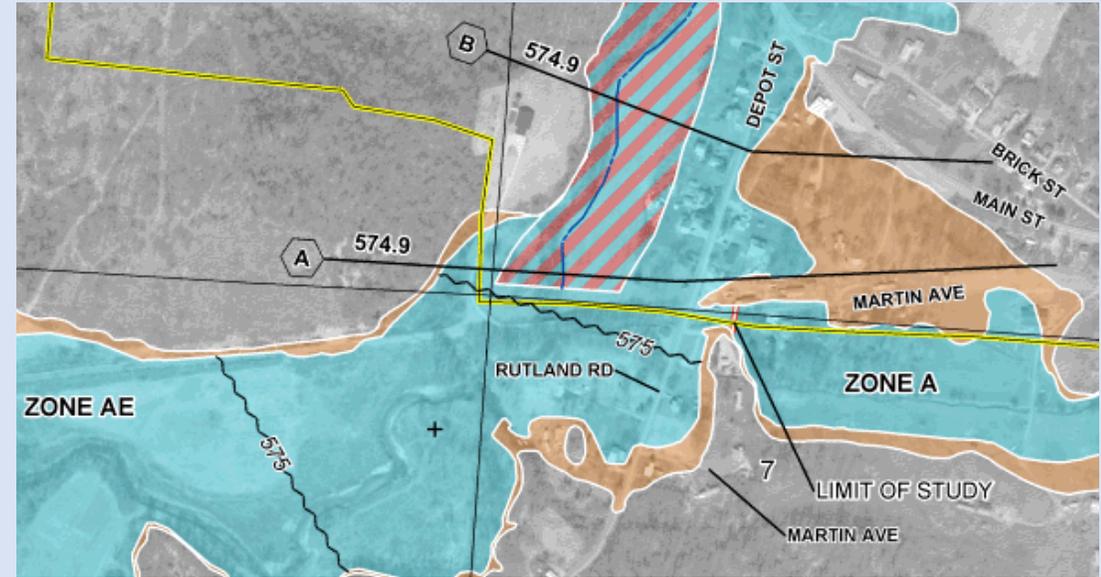
Development within the floodway is prohibited, unless an engineering analysis is provided that demonstrates that there is **ABSOLUTELY** no rise in Base Flood Elevations!



# Duty # 2

## Provide Base Flood Data

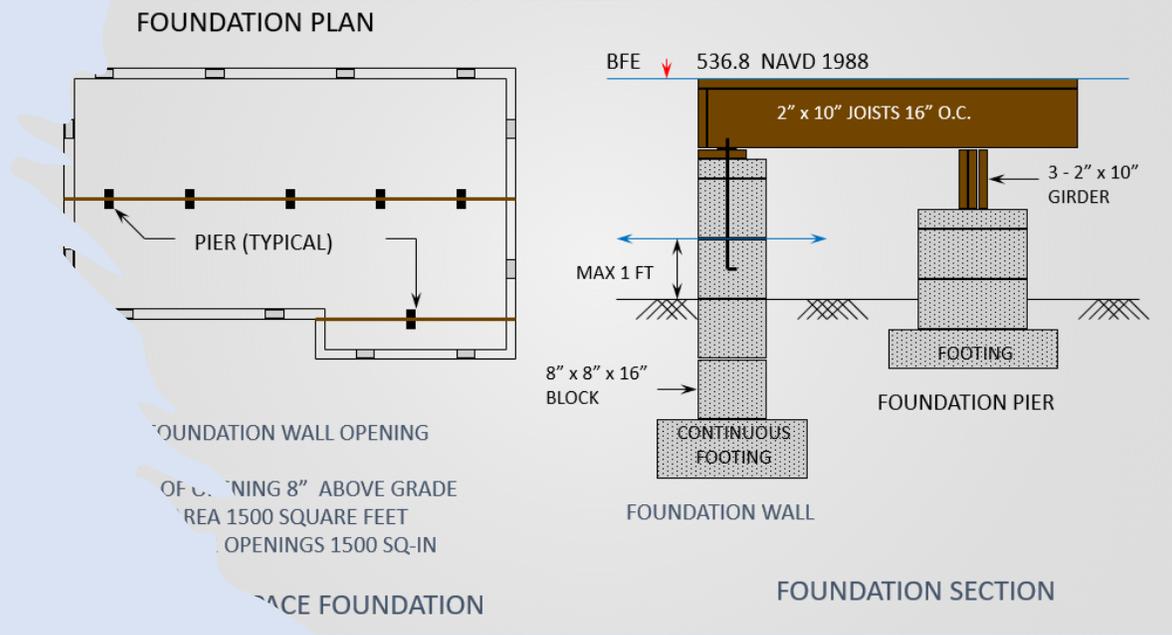
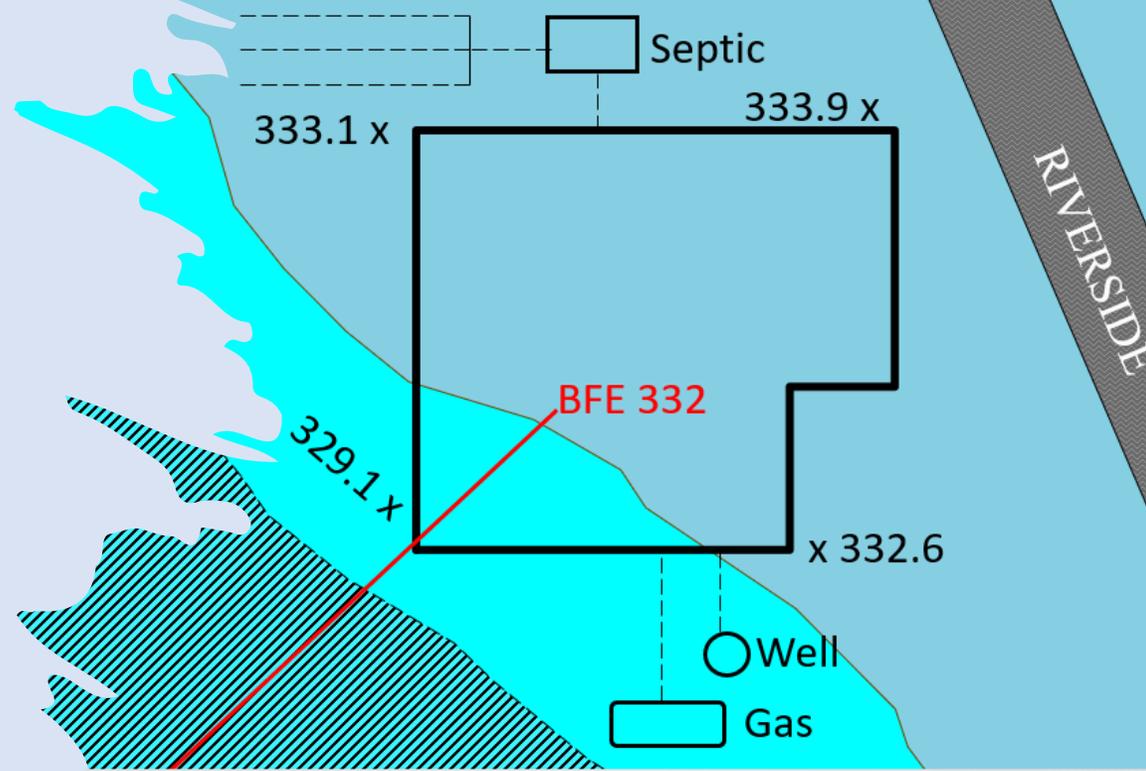
- Interpret floodplain boundaries and provide base flood elevation data when available.
- In Zone As:  
5 acres or 50 lot subdivision –  
BFE must be obtained.



# Duty # 3 Review Plans and Specs

Review plans and specifications for conformance with NFIP floodplain management criteria.

- Site plan
- Foundation design details
- Flood resistant materials
- Utilities
- Lowest floor and BFE's
- Substantial Improvement or Damage



# Duty #4 Other Permits

Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State Law, e.g.

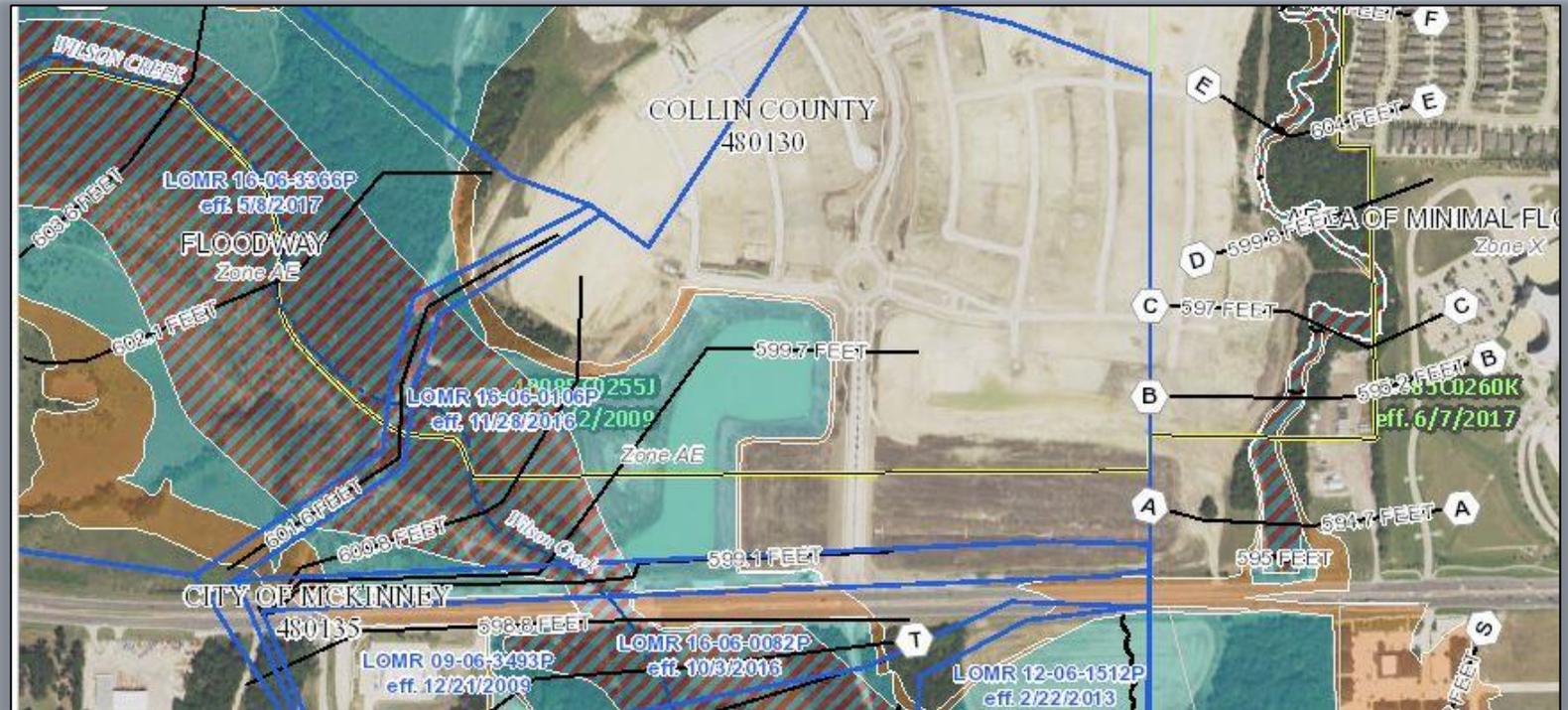
- Federal (USACE 404)
- State (DFW 1602, RWQCB 401)
- Building Codes
- Underlying Property Owners



# Duty #5 Watercourse Alterations

Notifications of changes to existing watercourses must be submitted to:

- FEMA –  
(i.e. Letter of Map Revisions)
- DWR
- Adjacent Communities



# Duty #6 Permits

- Issues or denies permits
- Conditionally approves permit



# Duty #7 Inspections



**Inspect development to verify that construction proceeds in conformance with approved plans...**

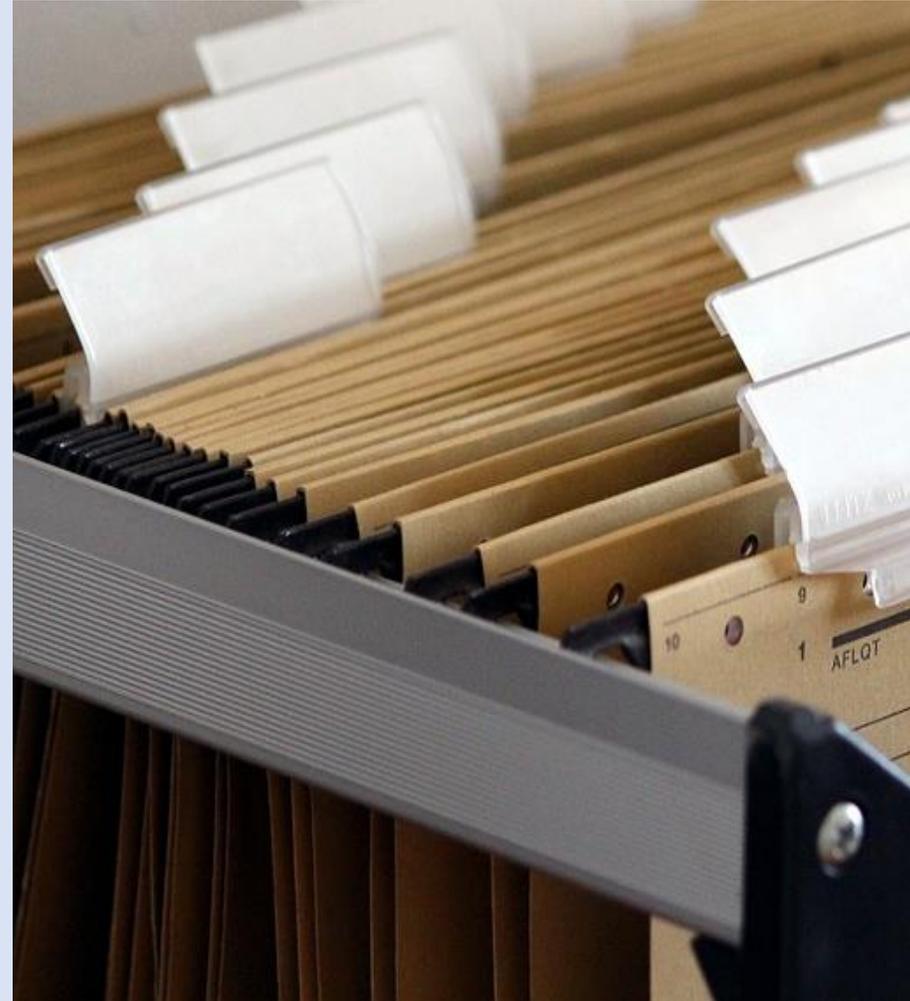
- **Setback from floodway**
- **Foundation construction**
- **Lowest Floor Elevation**
- **Flood resistant materials requirements**
- **Wet floodproofing requirements (flood openings)**
- **Utilities and other building systems**



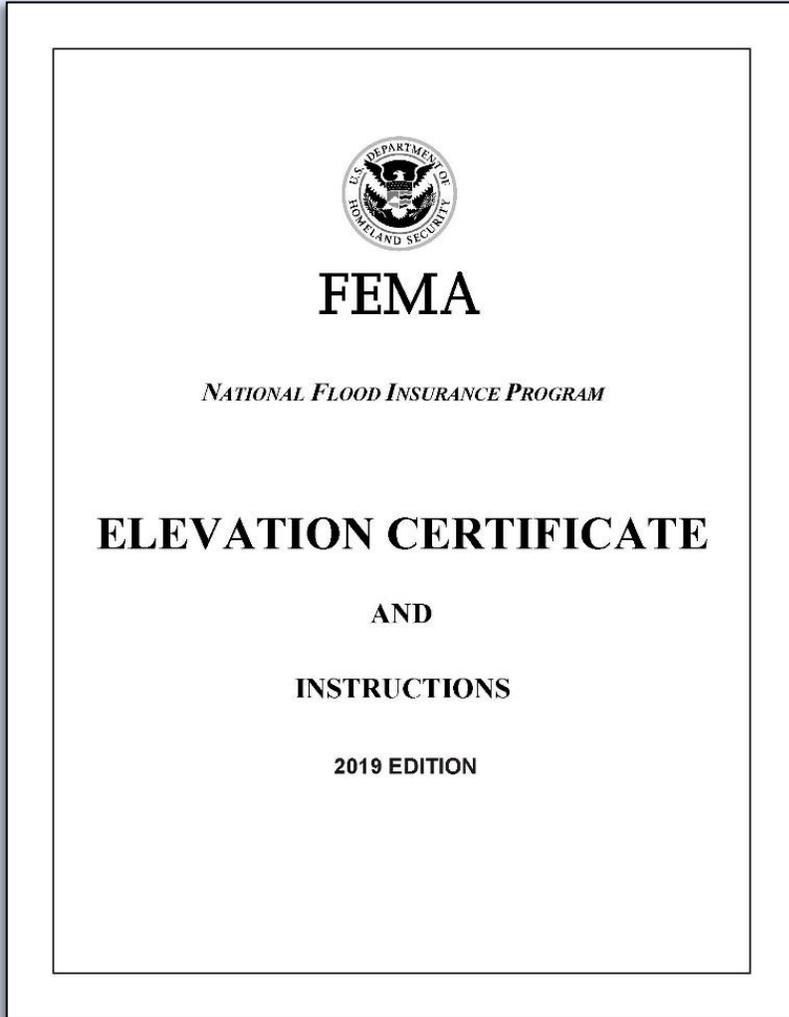
# Duty #8 Record Keeping

Maintains records for floodplain compliance:

- Permit Records
- Certified As-Constructed Lowest Floor Elevations (i.e., FEMA EC, V Zone Cert, pad elevation)
- “Dry” Floodproofing Certification
- Substantial Improvement/Damage Evaluation
- Letters of Map Change (LOMA/LOMR)
- Variance Actions



# Elevation Certificate Roles



## NFIP administrative tool for:

1. **Community compliance**
2. **Building's elevation certification**
3. **Flood insurance policy rating**
4. **Map revision/amendment support**
5. **Community Rating System**

FEMA Form 086-0-33 (12/19)

<https://www.fema.gov/elevation-certificate>



# Duty #9 Remedy Violations...

Investigates violations and takes appropriate action:

- Bring structure or other development into compliance
- Implement enforcement provisions
- Protect structure or other development from flood damages, i.e., retrofit
- Deter future similar violations by modifying procedures, and attending training



# NFIP Compliance

- The community's floodplain management program and permit records are re-viewed periodically by the FEMA's Regional Offices or state NFIP coordinating agencies (e.g., DWR).
- Either agency may inspect records as part of a Community Assistance Visit (CAV) or Community Assistance Contact (CAC).
- Communities which allow violations of floodplain management regulations or have program deficiencies may be subject to enforcement action by FEMA.



# Consequences of Non-Compliance

## CRS Minimum Standards

- Reduction or loss of flood insurance discounts for residents

## NFIP Minimum Standards

- Probation: Surcharge on all residents' flood insurance premiums
- Suspension/Elimination from NFIP
  - All residents lose access to NFIP flood insurance
  - Residents in 100-yr flood areas rendered **ineligible** for:
    - Federal grants or loans (e.g., SBA, HUD, EPA)
    - Federal flood disaster assistance
    - Federal mortgage insurance or loan guarantees (e.g., VA, FHA)



# Cutting the Cost of Flood Insurance Premiums

- Elevate lowest floors of structures above the BFE.
- Add freeboard of one foot or more to reduce insurance premiums.
- Add proper flood openings.
- Limiting enclosures below BFE to <300 sq-ft.
- Having a BFE can mean lower insurance premiums (Zone A).
- Floodproof non-residential structures a minimum of 1-foot above the BFE.
- Join the **Community Rating System (CRS) Program**



# Contact Information

- Contacts

- Edie Lohman, FEMA Region IX: [edith.Lohmann@fema.dhs.gov](mailto:edith.Lohmann@fema.dhs.gov)
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- Salomon Miranda, P.E., MS, CA DWR: [salomon.miranda@water.ca.gov](mailto:salomon.miranda@water.ca.gov)



# Questions & Answers