

# Flood Risk Notification Program

Floodplain Management Association  
September 8, 2011

Maria Lorenzo-Lee, P.E., CFM, CA Department of Water Resources  
Program Manager: Ricardo Pineda, Project Manager: Christina Kuo  
Questions: 1-877-769-7475 or [myfloodrisk@water.ca.gov](mailto:myfloodrisk@water.ca.gov)

## *How Do You Communicate Flood Risk?*

- Flyers
- Website
- Videos
- Billboards
- Reports
- Media



*People prefer hearing about their flood risk on the news (31%) and through letters (29%).  
Source: FEMA (2010)*

# Flood Risk Notification Program

# Flood Risk Notification Program

## Flood Risk Notice 2010

**DEAR PROPERTY OWNER:**

Your property is located behind a State-Federal project levee. According to our records, your property located at \_\_\_\_\_ may be exposed to potential flood risk from the \_\_\_\_\_. Your property may also be at risk for flooding from other sources not identified in this notice, such as creeks and clogged storm drains.

Be aware of your flood risk and be prepared. Read this notice for important information about purchasing flood insurance, emergency planning, and protecting your property.

**FACT:** Local, State and Federal agencies are continuing to improve the State-Federal project levee system. But, there will always be some flood risk.

**FACT:** Under State law, the California Department of Water Resources will notify you each year that your property is at risk for flooding.

**FACT:** Levees may reduce, but do not eliminate, flooding.


**FACT:** When levees break or overtop, the flooding can be catastrophic.

**FACT:** One foot of flooding could cause more than \$54,000 in damages to a \$150,000 single family home and its contents; three feet of flooding could cause more than \$93,000 in damages.

**FACT:** Flood damage is not covered by most standard home and business owners insurance policies.

Visit [www.water.ca.gov/myfloodrisk](http://www.water.ca.gov/myfloodrisk) and enter your property address to find the areas subject to flooding if State-Federal project levees should fail, and to get information on the condition of local levees. **This is not a FEMA map.**

This notification contains important information. Please share it with your tenants, or have it translated if necessary.  
Esta notificación contiene información importante. Por favor compártela con sus inquilinos, o tradúzcala esta notificación si es necesario.  
Para preguntas: 1.877.749.7475



Flood Risk Notification Program  
California Department of Water Resources  
P.O. Box 942836  
Sacramento, California 94236-0001


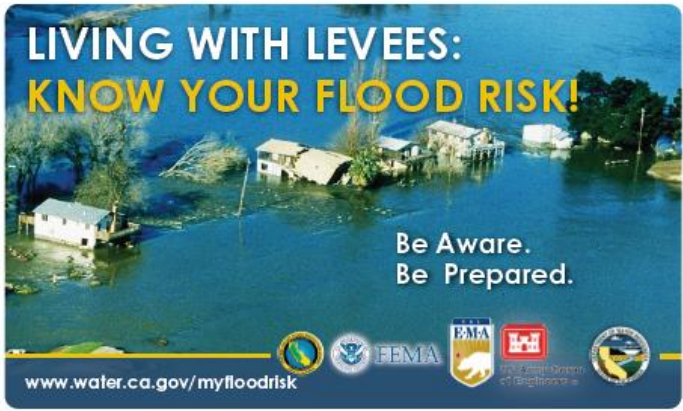
Type address here or use Mail Merge (under Tools) to automatically address this publication to multiple recipients.

### FLOOD RISK NOTICE 2010

**LIVING WITH LEVEES:  
KNOW YOUR FLOOD RISK!**

**Be Aware.  
Be Prepared.**

[www.water.ca.gov/myfloodrisk](http://www.water.ca.gov/myfloodrisk)

# Flood Risk Notification Program

*Purpose:*

*Raise flood risk awareness and encourage actions on an individual basis to reduce flood losses*



# Flood Risk Notification Program

## *Legislation:*

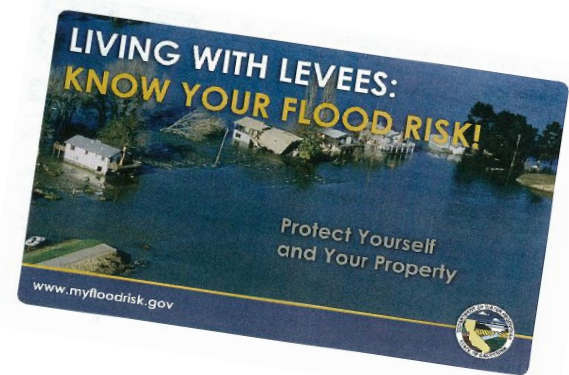
- 2007 Assembly Bill 156 (Laird)
- California Water Code §9121:  
Annual Written Notice
  
- California Water Code §9130;  
Levee Flood Protection Zones



# Flood Risk Notification Program

## *Flood Risk Notice*

- Meets water code and legislative requirements
- Provides multiple benefits to property owners
- Developed based on studies and programs across the U.S.







# Flood Risk Notification Program

## 2010 Flood Risk Notice

Mailed over 277,000 notices for over 350,000 parcels

### YOUR PROPERTY IS AT RISK FOR FLOODING: TAKE ACTION NOW

Be Prepared	Buy Flood Insurance	Prevent Problems	Protect Your Property
<p>Prepare an emergency kit that includes a flashlight, battery-operated radio, extra batteries, candles, matches, first-aid kit, medication, blankets, water, and food.</p> <ul style="list-style-type: none"> <li>Keep important documents and priceless possessions on an upper level, or as high as possible.</li> <li>Ask your local officials if they have a flood warning system, evacuation routes, and designated shelters. Local agency links are available at <a href="http://www.water.ca.gov/myfloodrisk">www.water.ca.gov/myfloodrisk</a>.</li> </ul> <ul style="list-style-type: none"> <li>Make a list of items to take with you and have a plan for your pets.</li> <li>Know how to shut off your gas and electricity if instructed to do so. Contact your local utility company for detailed instructions.</li> <li>When you evacuate, be sure to take your emergency kit and copies of your important documents with you.</li> <li>Always listen to authorities for emergency instructions.</li> <li>Pick a safe place on high ground where your family can meet and have a telephone call-in number in case you are separated.</li> <li>Never try to escape rising floodwater by going into the attic unless you have roof access.</li> <li>Never walk or drive through flooded areas; more people die in their vehicles during a flood than anywhere else.</li> <li>Stay away from power and electrical lines; electrocution is the second most frequent cause of death during flooding.</li> </ul>	<p>Contact your insurance agent or call the National Flood Insurance Program at 1-888-435-6637; you can also visit <a href="http://www.water.ca.gov/myfloodrisk">www.water.ca.gov/myfloodrisk</a></p> <ul style="list-style-type: none"> <li>Flood damage is not covered by most standard home and business owners insurance policies.</li> <li>Flood insurance is a wise investment. Low-cost flood insurance may be available for your building and contents through the National Flood Insurance Program.</li> <li>Renters can purchase coverage for contents only.</li> <li>Ask your insurance agent if you qualify for additional Community Rating System (CRS) discounts.</li> <li>Don't wait! There is usually a 30-day waiting period before flood insurance becomes effective.</li> </ul> <div style="text-align: center;">  <p>Levee break in Central Valley</p> </div>	<p>Never fill, excavate, landscape, plant, irrigate, modify or place any improvement on any levee or flood control easement without permits from the appropriate local, state and federal agencies.</p> <ul style="list-style-type: none"> <li>Always check with your local building, zoning, or permit department to see if a permit is required before you build on, fill, alter or re-grade your property.</li> <li>Keep trash, branches and grass clippings away from levees, channels, basins, ditches, gutters and storm drain inlets. A blockage can back up water onto your property.</li> <li>Contact your local officials if you see unauthorized dumping, filling, construction or debris in your ditches or basins.</li> </ul> <div style="text-align: center;">  <p>This Yuba County home was flooded after a levee break in January 1997. Source: DWR</p> </div>	<p>Order FEMA's Free Homeowner Guide to Retrofitting: Six Ways to Protect your House from Flooding (FEMA P-312) by calling 1-800-480-2520 or visiting <a href="http://www.water.ca.gov/myfloodrisk">www.water.ca.gov/myfloodrisk</a>.</p> <ul style="list-style-type: none"> <li>If your building is on a crawlspace or piers, elevate the building so the first floor is above potential flood levels.</li> <li>If your existing building is on a slab foundation and subject to less than three feet of flooding, investigate a low floodwall, berm or "dry flood proofing" (make the walls water tight and close all openings when a flood comes).</li> <li>For a garage or crawlspace, look into "wet floodproofing" (move all items subject to damage out of harm's way so water can flow in without causing damage).</li> <li>If you cannot protect the building, protect valuable contents. Relocate your furnace, water heater, and electric panel above the potential flood level.</li> <li>Financial assistance may be available for retrofitting. To get more information on sources of financial assistance for which you may be eligible go to <a href="http://www.water.ca.gov/myfloodrisk">www.water.ca.gov/myfloodrisk</a>.</li> </ul> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Flooded Homes</p> </div> <div style="text-align: center;">  <p>Elevated Building</p> </div> </div>
<h4 style="background-color: #0056b3; color: white; padding: 5px;">CALIFORNIA FLOOD RISK</h4> <ul style="list-style-type: none"> <li>Even if a levee is designed for the FEMA standard of a 1% annual chance flood, there is a 1-in-4 chance of a larger flood occurring within any 30-year period (the life of a typical home mortgage).</li> <li>Since 1983, Central Valley State-Federal project levees have been breached or overtopped more than 50 times.</li> <li>In 1986, flooding left thirteen people dead and caused about \$720 million in property damage with about 65 percent of losses occurring within the Central Valley.</li> <li>In 1997, flooding caused eight deaths and almost \$2.4 billion in flood damage, including 25,000 homes and businesses, with about 40 percent of damaged buildings located within the Central Valley.</li> <li>Since 1950, flood disasters have been declared in every California county at least nine times, with some having as many as 28 state and federal disaster declarations.</li> </ul> <p style="font-size: small;">Office of Emergency Services/OES, Origins and Development - A Chronology 1917 - 1999 and OES After Action Reports FEWA: California Disaster History, State of California Multi-Hazard Mitigation Plan, October 2007 CA Department of Water Resources (DWR), Building Code White Paper - California's Susceptibility to Flooding</p> <p style="font-size: x-small;">Cover photo: Reclamation District 2075, San Joaquin, 1997.</p>			
<p><b>For More Information/Questions:</b>  <a href="http://www.water.ca.gov/myfloodrisk">www.water.ca.gov/myfloodrisk</a>  <a href="mailto:myfloodrisk@water.ca.gov">myfloodrisk@water.ca.gov</a>            1-877-7MY-RISK (1-877-769-7475)            TTY: 711 (Contact 1-877-769-7475)</p>			

# Flood Risk Notification Program

## *Risk Notification Outreach*

- Federal and State partners
- Local governments and agencies
- Future outreach (Fairs, Radio)
- Will translate Notice into other languages



# Flood Risk Notification Program

## *List of 17 Counties who received Flood Risk Notice*

- Butte
- Colusa
- Fresno
- Glenn
- Lake
- Madera
- Merced
- Placer
- Plumas
- Sacramento
- San Joaquin
- Solano
- Stanislaus
- Sutter
- Tehama
- Yolo
- Yuba

# Flood Risk Notification Program

FRN Website: [www.water.ca.gov/myfloodrisk](http://www.water.ca.gov/myfloodrisk)

The screenshot shows a web browser window displaying the Department of Water Resources website. The page title is "Levee Repairs & Floodplain Management > Floodplain Management > Floodplain A - Windows Internet Explorer pro". The address bar shows "www.water.ca.gov/floodmgmt/trafmo/fmb/fas/risknotification/". The page features a navigation menu with categories like "Flood & Safety", "Planning", "State Water Project", "Funding", "Environment", "Supply & Use", and "Data". The main content area is titled "LIVING WITH LEVEES: KNOW YOUR FLOOD RISK! Be Aware. Be Prepared." and includes a sidebar with a "Click Here To Enter Your Property Address" button and a "View Your Levee Flood Protection Zone Map" link. The main text area contains the heading "DO YOU KNOW YOUR FLOOD RISK?" and a paragraph explaining the risk of flooding in the Central Valley. Below the text is a video player showing a landscape.



## Flood Risk Notification Program

### *Statistics from 2010 National Survey on Flood Risk*

- Local officials believe they are at risk of flooding, but their citizens do not (68% vs. 31%).
- While local officials know that flood insurance is available, the public does not (78% vs. 33%).
- People who hear about flood risk (several times a year) believe their community is at risk (42% vs. 31%)
- People who review their flood map take action (50% vs. 32%)

## Flood Risk Notification Program

### *Is the Flood Risk Notice Working?*

- How much has the notice raised your awareness of flood risk? “A Lot” and “Somewhat” = 82%
- Has the notice encouraged you to do any [or all] of the following?
  - Visit the Flood Risk Notification website = 22%
  - Buy flood insurance = 25%
  - Create an emergency evacuation plan = 25%
  - Secure important documents/belongings = 43%
  - Review local emergency services information = 23%

# Flood Risk Notification Program

## *Future Actions*

- Evaluate effectiveness of flood risk notification program
- Update Levee Flood Protection Zone maps when appropriate
- Pursue partnerships with local agencies

# Flood Risk Notification Program

## *Future Actions*

- Provide risk notification statewide
- Expand flood risk communication via multi-media
- Develop a second video on non-structural/  
floodplain management
- Manage the spectrum of responses

# Flood Risk Notification Program

## *Key Points*

- 2007 Flood Legislation linked flood risk and local land use planning, but the Flood Risk Notice extends that risk outreach to (connects) the property owner.
- The public should hear about flood risk to encourage them to take action.
- The Flood Risk Notice goes beyond the requirements of the Legislation.
- Communicating flood risk effectively to the public involves partnerships at all levels.

# Comments & Questions?





## Stakeholder Outreach Meeting Handout for Explaining Levee Flood Protection Zones



# LFPZ Defined



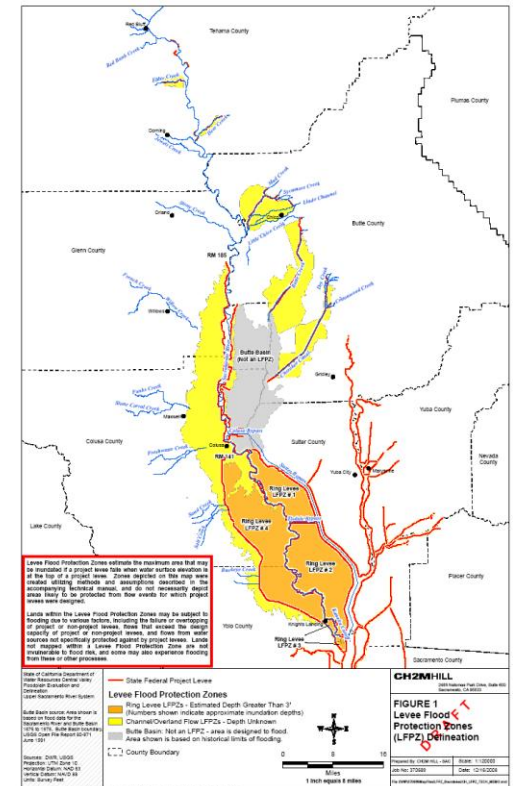
- “Levee Flood Protection Zone” means the area, as determined by the board or the department, that is protected by a project levee (WC Section 9110(b))
- **Approach Taken** – Estimated area that could be inundated if a project levee were to fail with flows at maximum capacity that may reasonably be conveyed

# New Type of Flood Map

- LFPZ Maps different than floodplain maps (such as FEMA FIRMs)
  - Not based on frequency of occurrence
  - Do not show all areas at risk of flooding
  - Only indicate areas subject to inundation due to potential project levee failure (regardless of levee certification status)

# Levee Flood Protection Zone (LFPZ)

- Joint Effort Between DWR and its Consultants
- Used Available Information and Basic Assumptions
- Draft LFPZ Map and Technical Memorandum available for your review



# General Approach and Basic Assumptions

- Channel flow at the top of the levee
- Best available existing models or model results; new models and model runs used in some cases
- The potential for upstream levee failure causing sequential downstream levee failure not evaluated
- Professional engineering judgment used in delineating LFPZ boundaries

# A Sample LFPZ Map (Lower Sac Basin)

