



# FLOODWISE

PROTECTING LIVES AND PROPERTY IN OUR COMMUNITY.

FALL 2005

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Regina Rodriguez

### Board of Trustees Meeting

#### When

Second Friday of every month at 11:00 a.m.

#### Where

Our District office:  
165 Commerce Circle  
Suite D, Sacramento  
California 95815

For more information please call Regina at 916-929-4006 or visit us at [www.arfcd.org](http://www.arfcd.org)

## NEW!

Removable Emergency Supply Checklist and Useful Web Links

## Sacramento and New Orleans River Cities = Flood Risk

Over the past several months we all watched as New Orleans survived the wrath of Hurricane Katrina, only to succumb to a series of levee failures. We, along with flood experts in New Orleans, watched helplessly while the City filled with water up to fifteen feet or more over several agonizing days. **This single event has done more to raise the national conscience about flood risks throughout the country than any other previous flood. And nowhere did this story strike home more than Sacramento.**

Flood control experts across the country chided the government for not doing more to prevent the disaster and called for renewed funding to protect other vulnerable areas, specifically naming Sacramento and the American River. After all, New Orleans was fortified with a flood control system thought to provide a 250-year level of protection. Our flood control system in Sacramento, even with all the recent improvements such as slurry walls and erosion protection projects, barely provides a 100-year level of protection – less than half of what New Orleans had.

**A valuable lesson learned from New Orleans is that living behind a levee entails risk!** Though we can do much through capital improvements, a robust operation and maintenance program and a well organized emergency response plan, the risk will never completely go away. Investigations are underway by flood control experts to determine the cause for the levee failures. Did they fail because the storm surge was too great and the levees were overtopped or did they fail for other reasons?

**What we are doing to reduce our flood risk, story inside.**



*American River levees near H Street protect houses in Campus Commons and River Park.*



*New Orleans, 2005*



916-929-4006

A publication of the American River Flood Control District

# Flood Insurance

Each and every property owner living behind a levee can and should carry flood insurance. Though not preventing a flood and associated human suffering it at least provides a means to rebuild should our City suffer the fate of New Orleans.

## COMPARE RISKS

The risk of a major flood in Sacramento is much greater than some other risks you face daily. Even with a high level of flood protection you have a much greater risk of being flooded than having a house fire during a typical 30-year mortgage.

EVENT	% CHANCE OF HAPPENING IN THE NEXT YEAR
Involved in a car accident	3 chances in 100
Victim of burglary	1 chance in 100
100-year flood	1 chance in 100
200-year flood	1 chance in 200
Victim of auto theft	1 chance in 300
Victim of robbery	1 chance in 1,000
Residential fire	1 chance in 2,500

*Source: U.S. Army Corps of Engineers, "Floods and Your Family"*

## DID YOU KNOW?

Flood insurance costs for "Preferred Risk Policies" available to most home owners in our District are less than \$350 per year – about half the cost of normal flood insurance policies.

# Reducing Our Risks

## 5 Positive Steps We Are Taking

*There are positive steps which we are taking here in Sacramento to reduce our vulnerability.*

### Step 1.

Our District continues to implement a first rate maintenance program consistent with a heavily urbanized area of over 500,000 people living behind levees. Our crews are dedicated to levee maintenance, repairs and flood preparation throughout the year – not just in flood season.

### Step 2.

Our District has become proactive in areas such as channel erosion which have traditionally been left to the State and Federal governments. Continuing a high maintenance standard plus tackling new safety concerns will require increased funding levels in the future. We are hopeful property owners recognize the essential service being provided by the District in a professional and cost effective manner.

### Step 3.

Through legislation sponsored by our District, we are developing safer levee standards to be implemented in our District and other urban areas where flooding can have catastrophic consequences. (see story opposite page).

### Step 4.

In learning from the Gulf Coast hurricanes, flood officials across the nation, including our District, are updating their emergency response plans to incorporate the lessons learned.

### Step 5.

We are rallying behind Congresswoman Matsui's efforts to systematically improve flood protection for Sacramento. Projects for Folsom Dam, which have already been approved by Congress and the State, offer the straightest path to reduce our risk in the near term.



*The District performs levee maintenance activities year round.*

# Urban Levee Standards

**W**ith each flood, engineers gain knowledge and valuable experience in how levees perform under duress and what flood fighting techniques prove successful in preventing catastrophic flooding due to a levee failure. The time is ripe to take a fresh look at our standards and current operations and maintenance practices.

## KNOWLEDGE GAINED

Much of the technical knowledge gained during recent floods has already been incorporated into the levee modifications along the American River by the Corps of Engineers. Slurry walls which traditionally had been 30 to 40 feet in depth were placed to a depth of over 70 feet along the American River. We have also learned that levee patrols at increasingly shorter intervals as flood waters rise are essential to reducing the risk of a levee failure. Problems such as seepage, boils, erosion or other signs of levee distress must be quickly identified by trained levee patrol staff. **A timely emergency response with sandbags, rock or other flood fight materials and techniques is essential to avoiding a catastrophic levee failure.**

## NEW LEGISLATION – AB 107

Our District sponsored AB 107 which was signed by the Governor last year. It allows urban areas to adopt safer standards than currently embodied in the State's regulations. Our District intends to develop and implement revised levee standards. These standards will address issues such as new levee encroachments by residents including fences, walls, gardens, vegetation, structures and other problematic intrusions onto the levee and adjacent areas. Current standards for levee crossings and access by public agencies, utility companies and others will also be amended as appropriate to improve levee safety. A series of community meetings will be held as the new standards are drafted. Finally, the District will review its emergency response procedures and make changes as necessary based on our past experiences plus lessons learned from other recent flood events including New Orleans.



*The District crew stockpiles rock for possible use this winter.*

# Flood Maintenance Assessment

## MONTHLY COMPARISON

Standard Cable TV	\$45
High Speed Internet Service	\$20
County Stormwater Utility	\$12
City Stormwater Drainage	\$11
Movie from Video Store	\$4
Gourmet Coffee	\$2

## ARFCD Flood Maintenance

**Assessment** **\$1 – \$2**  
*Typical Single Family Residence*

# Improved Flood Response Capabilities

We have already taken a number of steps in recent years to improve our flood response capabilities.

*These include:*

- Mutual aid agreements with the City and County to supplement our levee patrol staff.
- Agreements with local contractors experienced in flood fighting who are ready to respond 24/7.
- Pre-positioning flood fight materials at strategic locations within the District.
- Establish emergency reserve fund for flood fight activities.
- Upgrade and/or purchase new equipment, including enhanced communication capability.



# Flood Season Preparation

Starting in late summer, our dedicated professional staff busily prepares for the upcoming flood season. Annual activities you may notice while on the levees are filling of rodent holes with grout, repairing damage to the levees and banks from the previous winter's rains and adding material to the levee crowns to insure all weather access.

In addition, as the leaves fall from the trees and shrubs, our crews will be undertaking extensive pruning of the vegetation to improve visibility for levee patrols during high water and access should a flood fight be necessary. All our staff undergoes annual flood fight training conducted by the State Department of Water Resources (DWR) including both classroom and field activities. DWR levee officials also inspect our levees for their readiness and review our inventory of flood fight materials. Vehicles and equipment are inspected and repaired to be ready for the rigors of flood season duty.

Management and administrative staff are also busy updating emergency contact lists, participating in numerous pre-flood season coordination meetings with representatives from the City, County, Police, Fire, Corps of Engineers, Bureau of Reclamation

(Folsom Dam Operators), National Weather Service, California Conservation Corps and others. The General Manager coordinates with the local contractors who will be responding in a flood emergency with heavy equipment, large rock and other flood fight materials.

**We are protecting a major urban area with over 500,000 residents and billions of dollars in property. Nothing should be left to chance – and it never is!**



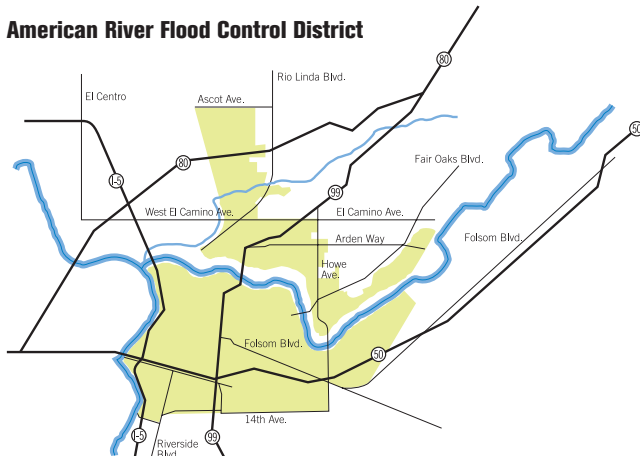
**For the second year in a row, the District Crew members were recognized with Safety Awards from the Association of California Water Agencies for innovations in the workplace.**

▲ Pictured above from left: Roger Unruh, Sean O'Connor, Richard Marck, Eric Maculak, Ronald Sundberg, and Ross Kawamura



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# EMERGENCY SUPPLY CHECKLIST

## Essentials

- ▶ **Water:** 1 gallon per person per day  
*(a week's supply of water is recommended)*
- ▶ **Food:** Ready to eat canned meats, fruits & vegetables, canned juices, milk, soup (if powdered, store extra water)
- ▶ Non-electric can opener
- ▶ Portable radio, flashlight, spare batteries
- ▶ Essential medications
- ▶ Candles, matches
- ▶ Cash and change
- ▶ **Baby supplies:** formula, bottle, pacifier, soap and baby powder, clothing, blankets, baby wipes, disposable diapers, canned food and juices
- ▶ **Important papers:** insurance policies, copies of social security cards, birth certificates in a waterproof container
- ▶ **Pet supplies:** food, carrier, leash

## Cooking

- ▶ Eating utensils
- ▶ Disposable plates and cups
- ▶ Paper towels
- ▶ Heavy duty aluminum foil
- ▶ Camping stove and fuel for outdoor cooking
- ▶ Pots, pans, knife

## Sanitation Supplies

- ▶ Household bleach
- ▶ Toilet paper
- ▶ Bar soap
- ▶ Large garbage bags

## Safety & Comfort

- ▶ Change of clothing
- ▶ Sturdy shoes
- ▶ Blankets, sleeping bags, rain gear

## Tools and Supplies

- ▶ Shovel, axe, broom
- ▶ Tool kit including screwdriver, pliers, hammer
- ▶ Plastic and/or duct tape

# USEFUL WEB LINKS

## **American River Flood Control District (ARFCD)**

[www.arfcd.org](http://www.arfcd.org)  
(916) 929-4006

## **The Sacramento Area Flood Control Agency (SAFCA)**

[www.safca.org](http://www.safca.org)  
(916) 874-7606

## **County of Sacramento**

(916) 875-7246  
(Emergencies, Evenings, Weekends & Holidays)  
[www.saccounty.net](http://www.saccounty.net)

**or**

[www.sacflood.org](http://www.sacflood.org)  
(River, Creek, Stream Levels and Rainfall Amounts)

## **City of Sacramento**

(916) 264-5011  
(Emergencies, Evenings, Weekends & Holidays)  
[www.cityofsacramento.org](http://www.cityofsacramento.org)

**or**

[www.cityofsacramento.org/utilities](http://www.cityofsacramento.org/utilities)

## **California Data Exchange Center (CDEC)**

<http://cdec.water.ca.gov>

## **The Federal Emergency Management Agency (FEMA)**

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

## **National Weather Service-Sacramento**

[www.wrh.noaa.gov/Sacramento](http://www.wrh.noaa.gov/Sacramento)

## **U.S. Army Corps of Engineers**

[www.spk.usace.army.mil](http://www.spk.usace.army.mil)

## **U.S. Bureau of Reclamation**

[www.usbr.gov/mp](http://www.usbr.gov/mp)



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