



FLOOD HAZARDS IN FRESNO COUNTY

September 14, 2012

Dear Fresno County Resident:

This pamphlet is for informational purposes, because significant portions of Fresno County are subject to the possibility of flooding. The County is working on ways to improve and increase its circulation of and accessibility to information that pertains to floodplain areas, in an effort to better educate and assist its citizens living in the floodplain. Please take the time to read the information below, and if you have further questions, or would like additional information, please use the contact information supplied in this document.

Overview

Fresno County features two main rivers and several smaller tributaries, streams, canals, and sloughs that are susceptible to annual flooding events that can pose threats to life and safety and cause significant property damage. Large rivers include the San Joaquin and Kings Rivers. Major streams include Big Dry Creek, Fancher Creek, Fresno Slough, Redbank Creek, and Little Panoche Creek. There are several flood control facilities that have been constructed throughout the County to address the need for flood prevention plans. Such facilities include Redbank Reservoir, Big Dry Creek Reservoir, Millerton Reservoir, Pine Flat Reservoir, Mendota Pool, Friant-Kern Canal, Fresno Slough, and James Bypass. A considerable number of levee systems can be found within the County. Most of these systems are privately owned, maintained, and operated. Because of the ownership of the levee systems and lack of enforcement for maintenance, most of these systems do not meet the current standards for flood protection and are mapped as such.

Recorded Flooding Events

Records indicate that there were nine significant flood events in Fresno County up to the year 1900. According to the Fresno County Multi-Hazard Mitigation Plan, several flood events have occurred in Fresno County during the 20th Century. In 1995 a series of strong storms caused flooding mainly in the western portion of the County at an estimated \$5 million in public facilities losses and \$9 million in economic and other damage to businesses. In 2005, the City of Parlier experienced severe weather that left 25 homes and businesses with flood damage estimated at almost \$1 million.

Causes of Flooding in Fresno County

Floods are among the most frequent and costly natural disasters as it concerns human hardship and economic losses. Fresno County is primarily susceptible to three types of flooding: localized, riverine, and dam failure flooding. Localized flooding is mainly caused by flash flooding, severe weather, or higher than average rainfall. Riverine flooding refers to rainfall events resulting in rivers or riverines exceeding their maximum capacity. Dam failure refers to flooding caused by upstream dam failure that can easily overwhelm response time and capabilities of downstream communities. Larger floods typically result from heavy rains that continue over the course of several days, augmented by snowmelt at a time when the soil is near saturation from previous rains.

Flood Insurance

Fresno County participates in the National Flood Insurance Program (NFIP) that makes available federally backed flood insurance for all structures, whether or not they are located within the floodplain. More than 25 percent of NFIP claims are filed by properties located outside the 100-year floodplain, also known as the Special Flood Hazard Area (SFHA.). Following the purchase of flood insurance, NFIP imposes a 30-day waiting period, so residents should purchase insurance before the onset of the rainy season to ensure coverage during the flooding season.

Membership within NFIP—and the availability to County residents of flood insurance – requires the County to manage its floodplain in ways that meet or exceed standards set by FEMA. NFIP insures buildings with two types of coverage: structural and contents. Structural coverage includes walls, floors, insulation, furnaces and other items permanently attached to the structure. Contents coverage may be purchased separately to cover the contents of an insurable building. Flood insurance also pays a portion of the costs of actions taken to prevent flood damage.

Since July 1, 1997, all NFIP policies include Increased Cost of Compliance coverage that assists with bringing structures into compliance with current building standards, such as elevating structures 1 foot or more above the height of the 100-year flood. The limit of this coverage is \$30,000.

Federal financial assistance requires the purchase of flood insurance for buildings located within the SFHA – a requirement that affects nearly all mortgages financed through commercial lending institutions. This mandatory requirement stipulates that structural coverage be purchased in an amount equal to the amount of the loan (or other financial assistance), or for the maximum amount available, which is currently \$250,000 for a single family residence.

While the mandatory flood insurance purchase requirement has been in effect for many years, not all lending institutions required flood insurance in the past. Today, however, most institutions are now requiring the flood insurance purchase, and some are reviewing all mortgage loans to determine whether flood insurance is required and should have been required in the past. Upon refinancing a loan, nearly all lending institutions will enforce the flood insurance requirement. It is the lender’s responsibility to check the Flood Insurance Rate Map (**FIRM**) to determine whether a structure is within the SFHA.

The mandatory flood insurance purchase requirement does not apply to loans or financial assistance for items that are not eligible for flood insurance coverage, such as vehicles, business expenses, landscaping and vacant lots. The requirement also does not apply to loans for structures not located in a SFHA, even though a portion of the lot may be within a SFHA. Persons located within SFHAs who received disaster assistance after Sept. 23, 1994 for flood losses to real or personal property must purchase and maintain flood insurance coverage, otherwise future disaster assistance will be denied.

Floodplain Understanding and Regulation

Maintaining the flow capacity in streams that cross County properties requires cooperation and assistance to prevent flooding and bank erosion. Following are some suggestions and information for understanding the ways that floodplains function, and how the County regulates the floodplain in order to protect property and lives, while affording County citizens the ability to obtain floodplain insurance at discounted rates.

Do not dump or throw anything into ditches or streams: A plugged channel cannot carry water, and when it rains, the excess water must go somewhere. Trash and vegetation dumped into a stream degrades water quality of both the stream itself and its receiving waters, and every piece of trash can contribute to flooding. **All surface water management agencies serving the County have adopted and enforce regulations that prohibit the dumping of material into any natural or manmade component of the drainage system. Additionally, the County as a whole has adopted and enforces regulations that prohibit the illegal dumping of material, including material dumped into ditches, streams or other drainage ways.** Please report any observations of the dumping of debris or other objects into streams, drainage ways, or rivers to the **Fresno County Development Engineering Section at (559) 600-4022.**

Remove debris, trash, loose branches and vegetation: Keep banks clear of brush and debris to help maintain an unobstructed flow of water in stream channels. Do not stack burn piles on or near levees. Levee strength is seriously compromised by burrowing animals that live under burn piles, and also by the “baking” effect of the heat generated during burning. Vegetation that is actively growing on a stream bank should not be removed without permission. Streamside vegetation is tightly regulated by local, state and federal regulations. Before undertaking any removal of streamside vegetation or to report any observations of the clearing of vegetation or trees on stream banks, contact the **Fresno County Development Engineering Section at (559) 600-4022.**

Obtain a floodplain development permit and/or building permit, if required: To minimize damage to structures during flood events, the County requires all new construction in the floodplain to be anchored against movement by

floodwaters, resistant to flood forces, constructed with flood-resistant materials and flood-proofed or elevated so that the first floor of living space, as well as all mechanical and other services, are at least one foot above the elevation of the 100-year flood. These standards apply to new structures and to substantial improvements of existing structures. The County defines a Substantial Improvement as any reconstruction, rehabilitation, or addition to an existing structure, the cost of which exceeds 50 percent of the structure's appraised or market value (whichever the builder chooses to use). Additionally, most other types of construction within the floodplain also require a floodplain alteration permit, such as grading, cut and fill, installation of docks, steps, riprap or other bank stabilization techniques. County staff is available to undertake site visits, if requested, to review flood, drainage, and stormwater issues.

For further information, and prior to undertaking any activity within the floodplain, or if you see non-permitted building or filling in the floodplain, contact the Fresno County Development Engineering Section at (559) 600-4022.

Recognize the natural and beneficial functions of floodplains to help reduce flooding: Floodplains are a natural component of the Fresno County environment. Understanding and protecting the natural functions of floodplains helps reduce flood damage and protect resources. When flooding spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the streambank and channel, deposition of sediments higher in the watershed and improved groundwater recharge. Floodplains are scenic, valued wildlife habitat, and suitable for farming. Poorly planned development in floodplains can lead to streambank erosion, loss of valuable property, increased risk of flooding to downstream properties, and degradation of water quality.

Reduce risk of damage to homes: Practical and cost-effective methods for reducing or eliminating the risk of flooding are available to property owners whose homes have experienced damage from flooding in the past, or may experience damage in the future.

Such techniques include elevation of the home, relocating the home to higher ground, constructing floodwalls or berms, and flood-proofing and protecting utilities. For further information, contact the **Fresno County Development Engineering Section at (559) 600-4022**, or the **Federal Emergency Management Agency, Region IX at (800) 621-FEMA**. During times of flooding, homes that have not been retrofitted can be protected during emergencies by the installation of sandbags and plastic sheeting. For further information about sandbags and the locations of sites where sandbags are available during flooding, contact the **Fresno County Office of Emergency Services at (559) 600-3357**. **In case of an emergency, call 911.**

County Floodplain Information Services: The County can determine the relationship of a particular property to the floodplain, including: 1) whether the property is located within the Special Flood Hazard Area; 2) Flood Insurance Rate Map (FIRM) Zone for the property; 3) Base Flood Elevation for the property, if available; and 4) whether the property is located within a floodway. The County also maintains previously filed elevation certificates for review.

FIRMs can be viewed online at FEMA's website: www.msc.fema.gov. Simply type in the address of the property in question and the corresponding FIRM panel will load.

You can also contact the Fresno County Development Engineering Section at (559) 600-4022 for further information. Our website also has additional helpful links to FEMA information.

Flood Safety Tips

The Fresno County Office of Emergency Services has flood warning information available that can be accessed by calling them at **(559) 600-3357**, or through their Web site at: <http://www.co.fresno.ca.us/DepartmentPage.aspx?id=1568>. The Web site includes information about sandbag locations during flood events, and ways to contact and listen to the National Weather Service. It also has an informational brochure that explains how people can prepare for an emergency. Additionally, **CALTRANS** has a hotline that features road conditions, road closures, and road hazards. Call **1-800-427-7623**.

Other helpful hints for emergency safety include having a **portable battery operated radio**, an evacuation kit, and a plan for family pets and animals. Having a portable battery operated radio is essential because emergency officials will

use the radio to relay important information regarding any emergency conditions in your area. The Emergency Alert System (EAS) utilizes all major television and radio stations to provide information when severe weather is forecasted. Fresno County has emergency radio transmitters used to broadcast to threatened neighborhoods and all necessary public agencies.

Having an **evacuation kit** is another essential item for emergency preparedness. This kit consists of copies of family prescriptions, insurance papers in ziplocked plastic bags, an emergency contact list that includes names and contact numbers of family, employers, and friends that officials can use to help you. Other important items are **a first aid kit and water**. These items can be conveniently stored in a small wheeled suitcase or portable bag.

A final helpful tip is to plan ahead for any family **pets or animals**. It is important to have an animal carrier and practice using it. It is also recommended that pets have a license and collar. Include a photo with the name, height, and weight of your pet to be included in the zip-locked plastic bag.

These are just a few helpful hints to help you get started to prepare in the event of an emergency.

We acknowledge the following sources for information contained in this document:

- Federal Emergency Management Agency 12-16-05 Flood Insurance Study #060299V001A
- FEMA National Flood Insurance Program Community Rating System
- Insurance Services Office, Inc.
- Fresno County Office of Emergency Services