

Date: February 27, 2014

AGENDA ITEM NO. IE

COUNCIL MEETING: 02/27/14

APPROVED BY


DEPARTMENT DIRECTOR

CITY MANAGER



FROM: JENNIFER K. CLARK, Director
Development and Resource Management

BY: BRIAN T. LEONG, Building and Safety Services Manager *BTL*
Building and Safety Services Division

SUBJECT: Adopt Ordinance Bill to repeal Sections 11-601 and 11-607 of the Fresno Municipal Code and add Sections 11-601 and 11-607, and amend Sections 11-625 and 11-632 relating to Flood Plain Building Regulations.

RECOMMENDATIONS

It is recommended that the Council:

1. Adopt the environmental document, a categorical exemption, prepared for this project.
2. Adopt Ordinance Bill to repeal Sections 11-601 and 11-607 of the Fresno Municipal Code and add Sections 11-601 and 11-607 relating to Flood Plain Building Regulations.
3. Adopt Ordinance Bill to amend Sections 11-625 and 11-632 of the Fresno Municipal Code.

EXECUTIVE SUMMARY

In an effort to ensure lower insurance rates and safe placement of structures, the City of Fresno has participated in the National Flood Insurance Program (NFIP) since December 1, 1982. The Federal Emergency Management Agency (FEMA) makes flood insurance available to participating communities provided that the community adopts and enforces flood plain management regulations that meet current minimum NFIP requirements. To remain compliant with current NFIP and FEMA requirements, staff is introducing the attached revisions to the current Flood Plain Ordinance to be considered for adoption which repeals current sections 11-601 and 11-607 of the Fresno Municipal Code Flood Plain Management Ordinance and adds new sections 11-601 and 11-607, and amends sections 11-625 and 11-632.

BACKGROUND

On September 26, 2013 a Community Assistance Visit (CAV) was conducted by a representative from the California Department of Water Resources (DWR) to review the City of Fresno's Flood Plain Ordinance for compliance to NFIP and FEMA requirements. Staff from the Building and Safety Services and Planning Divisions of the Development and Resource Management Department, and Fresno Metropolitan Flood Control District met with the representative from DWR to evaluate flood plain management practices and to update staff on NFIP and FEMA requirements. Upon completion

**CITY OF FRESNO
ENVIRONMENTAL FINDING OF NO POSSIBILITY OF SIGNIFICANT EFFECT
ENVIRONMENTAL ASSESSMENT NO. EA-14-06**

THE PROJECT DESCRIBED HEREIN IS DETERMINED TO HAVE NO SIGNIFICANT EFFECT
ON THE ENVIRONMENT, PURSUANT TO ARTICLE 5 OF THE
STATE OF CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES

APPLICANT: City of Fresno Planning and Development Department,
Building and Safety Division
2600 Fresno Street Room 3043
Fresno, California 93721

PROJECT LOCATION: Areas within the jurisdiction of the City of Fresno, generally located within the corporate boundaries

PROJECT DESCRIPTION: Updating Sections 11-601 and 11-607 and amending Sections 11-625 and 11-632 of the Fresno Flood Plain Ordinance (Fresno Municipal Code Sections 11-601 *et seq.*) to bring these section into better compliance with requirements of the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP).

This project is exempt under Section 15061(b)(3) of the California Environmental Quality Act (CEQA) Guidelines.

EXPLANATION: CEQA applies only to projects which have the potential to cause some effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have an adverse effect on the environment, the activity is not subject to CEQA.

The proposed update of Sections 11-601 and 11-607 and amendment of Sections 11-625 and 11-632 of the Fresno Flood Plain Ordinance clarifies the review process required for any proposal to modify watercourses (including floodplains, floodways, and base flood elevations). The updated Sections 11-601 and 11-607 and amended Sections 11-625 and 11-632 requires notification of other water resource and flood control agencies when the City receives proposals of this type, and sets criteria for evaluating such proposed modifications prior to issuance of building permits. It also requires that the City notify FEMA when there are changes to the City's corporate boundaries, to facilitate delineation of responsibility for administering FEMA regulations related to the NFIP.

This Ordinance amendment does not itself cause, facilitate or allow any new alterations of watercourses. Any specific proposals to modify floodplains, floodways, and base flood elevations are subject to individual site- and project-specific environmental analyses as well as to administrative processing requirements such as those set forth in the proposed Ordinance amendment.

Environmental Assessment No. EA-14-06

Finding of No Possibility of Adverse Environmental Effect

Proposed Amendment to FMC 11-601 and 11-607, sections of the Floodplain Ordinance

February 7, 2014

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In conjunction with the other provisions of the Fresno Flood Plain Ordinance, this update to Fresno Municipal Code Sections 11-601 and 11-607 and amendment of Sections 11-625 and 11-632 will protect human life, safety and health; will minimize flood damage to private and public property, utilities and watercourses; will prevent damaging increases in flood heights and velocities; will prevent erosion from flooding; will restrict or prohibit improper barriers, diversions, and other negative alteration of flood plains and floodways; will prevent alterations in some portions of floodplains that would increase flood hazards in other areas; and will minimize costs for emergency response, flood mitigation, and flood repairs.

Therefore, there are no potential adverse environmental effects that could result from the proposed amendment of Fresno Municipal Code Sections 11-601 and 11-607 and amendment of Sections 11-625 and 11-632.

Date: February 7, 2014

Prepared By: Lauren A. Filice, Planner

Submitted by:



Mike Sanchez, Planning Manager
City of Fresno Planning & Development Department
2600 Fresno Street, third Floor
Fresno, California 93721-3604
(559) 621-8040

BILL NO. _____

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF FRESNO, CALIFORNIA, REPEALING SECTIONS 11-601, 11-607, 11-625, AND 11-632 OF ARTICLE 6, CHAPTER 11 OF THE FRESNO MUNICIPAL CODE, AND ADDING SECTIONS 11-601, 11-607, 11-625, AND 11-632 OF ARTICLE 6, CHAPTER 11 OF THE FRESNO MUNICIPAL CODE RELATING TO FLOODPLAIN REGULATIONS.

THE COUNCIL OF THE CITY OF FRESNO DOES ORDAIN AS FOLLOWS:

SECTION 1. Sections 11-601, 11-607, 11-625, and 11-632 of Article 6, Chapter 11 of the Fresno Municipal Code are repealed.

SECTION 2. Sections 11-601, 11-607, 11-625, and 11-632 of Article 6, Chapter 11 are added to the Fresno Municipal Code to read:

SECTION 11-601. STATUTORY AUTHORIZATION. The Legislature of the State of California has in Government Code Sections 65302, 65560, and 65800 conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Council of the City of Fresno does hereby adopt the following floodplain management regulations.

SECTION 11-607. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD. The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) for Fresno County, California and incorporated areas dated February 18,

Date Adopted:
Date Approved
Effective Date:

City Attorney Approval: MRD

Ordinance No. _____

2009, with accompanying Flood Insurance Rate Maps (FIRM's) and Floodway Boundary and Floodway Maps (FBFM's) dated February 18, 2009, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared part of this ordinance. The FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the Council by the Floodplain Administrator. The study, FIRM's and FBFM's are on file in the Development and Resource Management Department.

SECTION 11-625. CONSTRUCTION MATERIALS AND METHODS. All new construction and substantial improvements of structures, including manufactured homes, shall be constructed:

(a) With flood resistant materials, and utility equipment resistant to flood damage for areas below the base flood elevation.

(b) Using methods and practices that minimize flood damage.

(c) With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(d) Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from structures.

(e) All fill placed in the area of the building pads shall be compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test method issued by the American Society for Testing and Materials (ASTM Standard D-698).

SECTION 11-632. STANDARDS FOR SUBDIVISIONS AND OTHER PROPOSED DEVELOPMENT.

(a) All new subdivision proposals and other proposed development greater than 50 lots or 5 acres, whichever is the lesser, shall:

(1) Identify the area of Special Flood Hazard Areas (SFHA) and the Base Flood Elevations (BFE).

(2) Identify the elevations of the lowest floors of all proposed structures and pads on the final plans.

(3) If the site is filled above the base flood elevation, the lowest floor and pad elevations and the lowest adjacent grades shall be certified by a registered professional engineer or surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator.

(b) All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.

(c) All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

(d) All subdivision proposals and other proposed development shall provide adequate drainage to reduce exposure to flood hazards.

SECTION 3. This ordinance shall become effective and in full force and effect at 12:01 a.m. on the thirty-first day after its final passage.

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DEPARTMENT OF WATER RESOURCES

SOUTH CENTRAL REGION OFFICE
3374 EAST SHIELDS AVENUE, ROOM 3
FRESNO, CA 93726-6913



October 29, 2013

RECEIVED

NOV 19 2013

**CITY OF FRESNO
BUILDING & SAFETY SERVICES**

Honorable Ashley Swearengin
Mayor of the City of Fresno
2600 Fresno Street
Fresno, California 93721

Dear Mayor Swearengin:

Thank you for the cooperation and courtesy that Brian T. Leong, Richard L. Madrigal, and Michael Sanchez of your staff extended to Amanda Peisch-Derby of my staff during the Community Assistance Visit (CAV) on September 26, 2013. The Department of Water Resources, on behalf of the Federal Emergency Management Agency, conducted the visit to evaluate how the city is administering its floodplain management program under the National Flood Insurance Program (NFIP). A copy of the CAV report is enclosed.

Based on the CAV, it was determined that the city's floodplain management regulations located under Ordinance No. 2013-15, Chapter 11, Article 6 of the *Fresno City Code* does not meet the minimum NFIP regulations as specified in Title 44, *Code of Federal Regulations*, Section 60.3. An updated draft has been requested and is to be provided **within 30 days of receipt of this report**. Adoption of the revised ordinance is pertinent to the city's administration and implementation of its floodplain management program and is necessary to remain compliant with the NFIP. Once the ordinance has been adopted, a copy of the ordinance, certified by the city clerk, is to be forwarded to DWR to update its files.

Continued enforcement of the NFIP regulations will ensure the city's good standing in the NFIP and guarantee availability of flood insurance coverage. If you have any questions, please contact Amanda Peisch-Derby of my staff at (559) 230-3307.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Faulkenberry".

Kevin Faulkenberry, Chief
South Central Region Office

Enclosure

Mayor Ashley Swearengin
October 29, 2013
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cc: Ms. Jane Hopkins
Federal Emergency Management Agency
Region IX
1111 Broadway Street, Suite 1200
Oakland, California 94607-4052

Mr. Brian T. Leong
Building Official
City of Fresno
2600 Fresno Street
Fresno, California 93721-3604

Mr. Richard L. Madrigal
Engineer II
2600 Fresno Street
Fresno, California 93721-3604

Ricky Hara
Fresno Metropolitan Flood Control District
5469 East Olive Avenue
Fresno, California 93727

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

COMMUNITY ASSISTANCE VISIT REPORT

SECTION I

NAME OF COMMUNITY: City of Fresno	STATE: California	I.D. #: 060048	COUNTY: Fresno
VISIT CONDUCTED BY: Amanda Peisch-Derby	AGENCY: Department of Water Resources		DATE OF VISIT: September 26, 2013

SECTION II

NAME OF LOCAL OFFICIAL: Brian T. Leong	TELEPHONE #: (559) 621-8094
TITLE: Building Official	ADDRESS: 2600 Fresno Street Fresno, CA 93721

SECTION III

PART A - Findings (Check appropriate column.)		SERIOUS	MINOR	NONE
1.	Are there any problems with the community's floodplain management regulations?		X	
2.	Are there problems with the community's administrative and enforcement procedures?		X	
3.	Are there engineering or other problems with the maps or flood insurance study?			X
4.	Are there any other problems in the community's floodplain management program?			X
5.	Are there any problems with the Biennial Report data?			X
6.	Are there any programmatic issues or problems identified?			X

7. Have structures been identified as being in violation? (Check appropriate category below.)

No violations have been identified.

A potential violation or violations have been identified.

Actions are being taken on the part of the community to remedy the violation(s) identified during the visit.

This report describes the findings of the September 26, 2013, Community Assistance Visit (CAV) and recommends corrective actions where deficiencies were identified. The recommendations, when implemented, will enable the city to comply with the National Flood Insurance Program (NFIP) requirements as specified in Title 44 Section 60.3, *Code of Federal Regulations* (44 CFR 60.3). A CAV is a scheduled visit to an NFIP community to evaluate the effectiveness of its local floodplain management practices and to offer assistance if needed. A previous CAV with the city was conducted by the Department of Water Resources' (DWR's) staff on October 7, 2008.

1. Background:

The city of Fresno is located in the center of the San Joaquin Valley and is the fifth largest city in California. Fresno is approximately 190 miles south of San Francisco and 200 miles north of Los Angeles. Based on estimates provided by the U.S. Census Bureau, the population of the city was 505,882 residents in 2012 and spans about 112 square miles. The city of Fresno entered the regular phase of the NFIP on December 1, 1982. Single-family residential development is the most significant development within the existing city limits. Fresno is classified as a semidesert with an average annual precipitation around 11.5 inches.

The major watercourses that are within the city are Dry Creek and the San Joaquin River; the San Joaquin River runs adjacent to the city boundary between Fresno County and Madera County. The channels and flood control projects are constructed and maintained by the Fresno Metropolitan Flood Control District (FMFCD).

There is an isolated A Zone located within an industrial area, south of the city limits, near the community of Calwa, which is detailed on the Flood Insurance Rate Map (FIRM) panel 06019C2110H. The city is not planning any future development within the A Zone at this time, and the area is mostly developed. The existing structures' date of construction is likely pre-FIRM (constructed prior to the city's participation in the NFIP), and with the recent federal NFIP extension, Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12), this area may experience some issues with current insurance policies and future improvements. This area was the focus of the floodplain inspection conducted prior to the CAV, and no potential violations were observed.

According to the Insurance Summary Report, dated July 31, 2013, the city has 323 flood insurance policies that have been issued for a total insurance of \$81,606,298. The total insurance premiums within city limits amount to \$232,298 that estimates an average premium of \$719 per policy. Actual rates vary depending on zone and actual flood risk. Of the 323 policies, 264 are single-family residential policies, 46 are policies for non-residential structures, and the remaining 13 policies are all other residential structure policies. There are 198 pre-FIRM structures of which 115 are in preferred-rated B, C, and X Zones. There is a high potential that BW-12 will affect several homeowners and businesses within the city of Fresno. During the meeting with the city, information was provided that detailed the impact of BW-12 on current flood insurance policies. This information will be important as city staff may be the first point of contact when homeowners receive notification of future flood insurance rate increases.

The NFIP's Community Rating System (CRS) rewards the communities that exceed the minimum NFIP standards with lower flood insurance premiums. In October of 2007, the city received a CRS Class 8 rating. A benefit of the Class 8 rating is that property owners located in flood-prone areas receive a 10-percent reduction in their annual flood insurance premiums. Maintaining the Class 8 CRS rating will help to reduce the impact of future rate increases from BW-12.

2. Reference Part A, Questions 1-6:

[1] Floodplain Management Regulations:

The city's floodplain management regulations located online under Ordinance No. 2013-15, Chapter 11, Article 6, of the *Fresno City Code*¹ was reviewed by DWR to check conformance with the minimum NFIP regulations as specified in 44 CFR 60.3. Based on our review, we requested that city staff revise the ordinance so that it reflects the changes that have taken place within the current California Model Floodplain Management Ordinance (California Model Ordinance), dated December 2006. Mr. Brian T. Leong, Building Official, was provided with the following excerpts to the California Model Ordinance.

The required sections of the California Model Ordinance that must be added to Chapter 11:

- CA Model 1.1 – Citation of Statutory Authorization

Additional recommendations were given to consider updating the following sections:

- 11-607 – Revising the dates to reflect the current Flood Insurance Study (FIS) and FIRMs (CA Model 3.2)
- 11-625(a) – Adding the flood-resistant materials language (CA Model 5.1.B.1)
- 11-632 (c), (d), and (e) – Include other development language (CA Model 5.3.B, C and D)
- 11-632 – Either revise the definition of subdivisions to include any development greater than 50 lots or 5 acres, or update the section to include the information (CA Model 5.3.A)

During the CAV, we requested Mr. Leong to submit an updated draft ordinance, which incorporates the changes, to DWR for review **within 30 days from receipt of this report**. Once the comments from DWR are incorporated, the ordinance will need to be adopted by the City Council. After the ordinance adoption is finalized, a copy of the adopted ordinance, certified by the City Clerk, is to be forwarded to DWR to update its files.

As of January 1, 2011, it is mandatory for communities to adopt the California Building Code (Code) Section 1612 (includes ASCE 24-05). The Code if adopted with Appendix G, which is optional, may be equivalent to the minimum requirements of the 44 CFR 60.3 for the NFIP. DWR and the Federal Emergency Management Agency (FEMA) are studying the Code to determine if the Code with Appendix G meets the requirements of the NFIP 44 CFR Sections 59-78. Eligibility for the NFIP is covered in 44 CFR 59. Typically, local statutes and ordinances authorize the regulations so a copy of the NFIP regulations that the community adopted to meet Sections 60.3, 60.4, and/or 60.5 is required. DWR is working on a Fact Sheet and potentially

¹ <http://library.municode.com/index.aspx?clientId=14478>

may amend the California Model Ordinance to reflect language in the Code. We plan to keep all communities apprised of any new developments regarding this matter.

[2] Administration and Enforcement Procedures:

In Section 11-614 of the ordinance, the Building Official is appointed as the city's floodplain administrator. Currently, Mr. Leong is acting as the city's floodplain administrator.

The Building and Safety Services Division is responsible for issuing building permits. When an applicant requests a permit for a new development, the applicant is requested to provide a site plan and/ or grading plan. City staff will use the city's database to determine if the location of the proposed project lies within a Special Flood Hazard Area (SFHA). During this process, staff requires that the project comply with the city's floodplain management regulations prior to approval. Part of the city approval process is to notify other agencies, and one of those is the FMFCD. The FMFCD works with the city to identify development within the SFHA and provide recommendations for NFIP compliance in a memo that is provided to the city within 30 days of the notification. The city requires a proposed and preliminary Elevation Certificate (EC) prior to the final EC for any development. With this process, the city is able to verify the building elevations for NFIP compliance and would be able to correct any problems prior to construction.

When city staff was asked about permitting substantial improvements within the existing SFHA's; city staff did not have a clear process to identify these permits since the current focus is on new development. Most of the SFHA's within the city have existing development and are typically pre-FIRM. There is a chance that a structure could have substantial improvement or damage, get permitted for the improvement, and may not comply with the city flood ordinance and NFIP regulations. This could result in a potential NFIP violation for the city that would result in a risk of losing the current CRS status that includes the reduction in premiums for the city's constituents that purchase flood insurance. It was recommended that the city determine a process to identify structures within a SFHA when pulling building permits for all proposed work. City staff was provided a link to the Substantial Improvement/ Substantial Damage FEMA document (FEMA P-758) that can be found online at <http://www.fema.gov/media-library/assets/documents/18562?id=4160>. This document can provide guidance and help implement a process for identifying and permitting this type of development. It is requested that the city provide DWR with a draft of the updated process within 30 days of this report.

[3] Engineering Flood Maps and Study:

FEMA has recently adopted new countywide Digital FIRMs for Fresno County and its incorporated communities under its Map Modernization Program. The maps include a change from the National Geodetic Vertical Datum of 1929 to the North American Vertical Datum of 1988. This process has shifted the NFIP to the digital platform and away from paper maps. City staff has been using the FEMA National Flood Hazard digital GIS layers provided by FEMA since the maps were adopted in February 2009. DWR informed the city of a new tool to help identify SFHAs online through the FEMA GeoPlatform and the Map Service Center. Unlike the digital GIS layers provided by FEMA, these online tools are periodically updated so they include the most updated information. Additional tools include the use of Google Earth and ESRI ArcGIS links to FEMA's National Flood Hazard Layers within the software to provide the same data as the online tools. However, the best tools for the general public may be the FEMA GeoPlatform and the Map Service Center.

[4] Floodplain Management Program:

- 1) In 2007, as part of a package of six bills addressing flood risk management and flood protection in California, Assembly Bill 162 (AB 162) was passed. This bill specifically requires additional consideration of flood risk in local land use planning throughout California and named DWR as a source for floodplain information and technical data that local governments will need in order to comply with AB 162. DWR drafted a document titled *Implementing California Flood Legislation into Local Land Use Planning: A Handbook for Local Communities* (Handbook). The Handbook can be accessed online at http://www.water.ca.gov/floodsafe/docs/Implementing_CA_Flod_Leg-A_Handbook.pdf. Please refer to the Handbook for assistance in meeting the requirements of AB 162.
- 2) A statewide map set was developed by DWR based on the best available information for flood hazard mapping. This map set may be updated periodically. The maps can be accessed at <http://gis.bam.water.ca.gov/bam/>. The city's ordinance requires that Fresno use the best available data from the State, so periodic checking of the data is recommended for compliance with the NFIP.
- 3) DWR recommends that all Floodplain Managers and their supporting staff attend training for implementation of the NFIP regulations. The workshops allow floodplain management officials to have a greater understanding of FEMA's minimum regulation requirements and how to meet them. It is highly recommended that city staff attend the free DWR training for the Substantial Improvement/ Substantial Damage and EC workshops to aid in the development review within the SFHA. For more information about the training and workshops schedule, visit <http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fas/nfip/workshop/>.
- 4) The Flood Insurance Reform Act of 2012, otherwise known as BW-12, made a number of changes to the way the NFIP is run. Some of those changes have already occurred, and others will be implemented in the coming months. Key provisions of the law require the NFIP to raise flood insurance rates to reflect the true flood risk. The changes will mean flood insurance premium rate increases for some, but not all, policyholders over time. Since there are 198 pre-FIRM policies, there is a high probability that several policyholders within the city of Fresno will be affected. Background of BW-12 was provided during the meeting and was discussed with city staff.

[5] Programmatic Issues: N/A

3. Section 404, Stafford Act – Hazard Mitigation Grant Program: N/A
4. E.O. 11988, Floodplain Management: N/A
5. Other Findings: N/A

6. Follow-up:

- (1) Review the updated ordinance for compliance.
- (2) Review the Substantial Damage/ Substantial Improvement permitting process

7. Community Action Required:

- (1) Submit a final draft amended Floodplain Management Ordinance to DWR for review prior to adoption. **Deadline – December 15, 2013**
- (2) Submit a draft of the proposed Substantial Damage/ Substantial Improvement permitting process to DWR for review. **Deadline – December 15, 2013**

Meeting Participants:

Brian T. Leong	Building Official City of Fresno
Richard L. Madrigal	City Engineer City of Fresno
Michael Sanchez	Planning Manager City of Fresno
Ricky Hara	Engineering Services Manager Fresno Metropolitan Flood Control District
Amanda Peisch-Derby	Engineer, Water Resources South Central Region Office Department of Water Resources

CALIFORNIA
MODEL
FLOODPLAIN MANAGEMENT
ORDINANCE
FOR
NONCOASTAL COMMUNITIES

December 2006

This California Model Floodplain Management Ordinance has been developed as a tool to help communities meet the minimum requirements of the National Flood Insurance Program (NFIP). Communities choosing not to use this model ordinance must ensure their ordinance meets the minimum requirements of the NFIP.

Department of Water Resources
The Resources Agency, State of California

(44 CFR Parts 59-78)

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**SECTION 1.0
STATUTORY AUTHORIZATION,
FINDINGS OF FACT,
PURPOSE AND METHODS**

1.1 STATUTORY AUTHORIZATION.

The Legislature of the State of California has in Government Code Sections 65302, 65560, and 65800 conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the {community governing body} of {name of county or municipality} does hereby adopt the following floodplain management regulations.

1.2 FINDINGS OF FACT.

- A. The flood hazard areas of {name of county or municipality} are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- B. These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contributes to flood losses.

1.3 STATEMENT OF PURPOSE.

It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by legally enforceable regulations applied uniformly throughout the community to all publicly and privately owned land within flood prone, mudslide [i.e. mudflow] or flood related erosion areas. These regulations are designed to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;
- F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;
- G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

**SECTION 3.0
GENERAL PROVISIONS**

3.1 LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of {name of county or municipality}.

3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD.

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the "Flood Insurance Study (FIS) for {name of county or municipality (exact title of study)}" dated {date}, with accompanying Flood Insurance Rate Maps (FIRM's) and Flood Boundary and Floodway Maps (FBFM's), dated {date}, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this ordinance. This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the {community governing body} by the Floodplain Administrator. The study, FIRM's and FBFM's are on file at {department, address}.

3.3 COMPLIANCE.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the requirements (including violations of conditions and safeguards) shall constitute a misdemeanor. Nothing herein shall prevent the {community governing body} from taking such lawful action as is necessary to prevent or remedy any violation.

3.4 ABROGATION AND GREATER RESTRICTIONS.

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3.5 INTERPRETATION.

In the interpretation and application of this ordinance, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

3.6 WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of {community governing body}, any officer or employee thereof, the State of California, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

3.7 SEVERABILITY.

This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

**SECTION 5.0
PROVISIONS FOR FLOOD HAZARD REDUCTION**

5.1 STANDARDS OF CONSTRUCTION.

In all areas of special flood hazards the following standards are required:

A. Anchoring.

All new construction and substantial improvements of structures, including manufactured homes, shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

B. Construction Materials and Methods.

All new construction and substantial improvements of structures, including manufactured homes, shall be constructed:

1. With flood resistant materials, and utility equipment resistant to flood damage for areas below the base flood elevation;
2. Using methods and practices that minimize flood damage;
3. With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and
4. Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

C. Elevation and Floodproofing.

1. **Residential construction.**

All new construction or substantial improvements of residential structures shall have the lowest floor, including basement:

- a. In AE, AH, A1-30 Zones, elevated to or above the base flood elevation.
- b. In an AO zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least 2 feet above the highest adjacent grade if no depth number is specified.
- c. In an A zone, without BFE's specified on the FIRM [unnumbered A zone], elevated to or above the base flood elevation; as determined under **Section 4.2.C.**

Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered civil engineer or licensed land surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

5.3 STANDARDS FOR SUBDIVISIONS AND OTHER PROPOSED DEVELOPMENT.

- A. All new subdivisions proposals and other proposed development, including proposals for manufactured home parks and subdivisions, greater than 50 lots or 5 acres, whichever is the lesser, shall:
 - 1. Identify the Special Flood Hazard Areas (SFHA) and Base Flood Elevations (BFE).
 - 2. Identify the elevations of lowest floors of all proposed structures and pads on the final plans.
 - 3. If the site is filled above the base flood elevation, the following as-built information for each structure shall be certified by a registered civil engineer or licensed land surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator:
 - a. Lowest floor elevation.
 - b. Pad elevation.
 - c. Lowest adjacent grade.
- B. All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.
- C. All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- D. All subdivisions and other proposed development shall provide adequate drainage to reduce exposure to flood hazards.

5.4 STANDARDS FOR MANUFACTURED HOMES.

- A. All manufactured homes that are placed or substantially improved, on sites located: (1) outside of a manufactured home park or subdivision; (2) in a new manufactured home park or subdivision; (3) in an expansion to an existing manufactured home park or subdivision; or (4) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall:
 - 1. Within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- B. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map that are not subject to the provisions of Section 5.4.A will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either the:
 - 1. Lowest floor of the manufactured home is at or above the base flood elevation; or
 - 2. Manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.