#### **RESOLUTION NO. 2016-143**

# A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE AMENDING THE ELK GROVE GENERAL PLAN FOR THE FLOODPLAIN MANAGEMENT UPDATE PROJECT

**WHEREAS**, the State of California (State) has adopted Government Code Section 65300, et seq., which requires that every city shall adopt a comprehensive, long-term general plan for the physical development of the city, and any land outside its boundaries which in the city's judgement bears relation to its planning; and

WHEREAS, in November 2003, the City of Elk Grove adopted its General Plan; and

WHEREAS, in 2007, the State adopted Senate Bill 5 (Machado) (and follow-on legislation in SB 1278), which requires the City to amend its General Plan and Zoning regulations to address flooding that has a 1-in-200 chance of occurring in any given year (i.e., a 200-year storm); and

WHEREAS, in 2007, the State adopted Assembly Bill 162, which requires that the City amend its General Plan to address and show the locations of levee flood protection zones and dam inundation areas mapped by the California Governor's Office of Emergency Services (Cal OES), Department of Water Resources (DWR), and flood hazard locations mapped by local flood agencies or flood districts; and

WHEREAS, pursuant to SB 1278, the General Plan amendments were to be adopted by July 2015 and the Zoning changes are to be adopted by July 2016; and

**WHEREAS**, City staff has prepared a hydraulic flood model of the City in keeping with the guidance provided DWR (the State Criteria); and

**WHEREAS**, based upon the results of this modeling, staff has identified specific changes necessary to the City's General Plan in order to implement SB 5, SB 1278, and AB 162; and

WHEREAS, as part of these proposed changes, amendments to the City's Municipal Code are necessary in order to implement the policies of the amended General Plan; and

WHEREAS, together, the proposed General Plan and Municipal Code amendments constitute the Floodplain Management Update Project (the Project); and

WHEREAS, State CEQA Guidelines section 15162 identifies that when an EIR has been certified for an adopted project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, that one or more of three stated criteria exists; and

WHEREAS, the Planning Commission held a duly noticed public hearing on July 7, 2016 as required by law to consider all of the information presented by staff, information presented by the Applicant, and public testimony presented in writing and at the meeting and voted 4-0 to recommend approval of the Project to the City Council; and

WHEREAS, the City Council held a duly noticed public hearing on July 27, 2016 as required by law to consider all of the information presented by staff, information presented by the Applicant, and public testimony presented in writing and at the meeting.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby finds the Floodplain Management Update Project exempt from the California Environmental Quality Act based upon the following finding:

# California Environmental Quality Act (CEQA)

<u>Finding:</u> No further environmental review is required under the California Environmental Quality Act pursuant to State CEQA Guidelines section 15162.

<u>Evidence</u>: The proposed Project includes changes to the Safety Element of the Elk Grove General Plan and the Elk Grove Zoning Code (Title 23 of the Municipal Code) in response to new flood safety requirements in the Central Valley Flood Protection Plan. The proposed changes are intended to achieve compliance with Senate Bill (SB) 5 flood risk legislation, which requires each city and county in the Central Valley to amend its zoning ordinance to be consistent with the Central Valley Flood Protection Plan by July 1, 2016.

The proposed amendments to the Safety Element include new discussion of flood risk, new maps showing the 100-year and 200-year floodplains, and five new policies. These changes require corresponding changes to Zoning Code Section 23.42.020, Flood Combining District. The Project would amend Section 23.42.020 to include a new requirement that findings be made in relation to the Urban Level of Flood Protection prior to issuance of any new permit or plan approval within the F200 layer of the Flood Combining District. The Zoning Map would also be updated to include three layers in the Flood Combining District: F100 (100-year floodplain), F200 (200-year floodplain), and F100/F200 (for areas in both the 100-year floodplain and the 200-year floodplain). The project would add a new subsection to Section 23.42.020 indicating that new essential government service facilities and essential health care facilities would only be allowed in the Flood Combining District in cases where locating a facility there is essential to enable the facility to function.

State CEQA Guidelines Section 15162 (Subsequent EIRs and Negative Declarations) requires that when an EIR has been certified for an adopted project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, that one or more of the following exists:

 Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with exercise of reasonable diligence at the time of the previous EIR was certified as complete shows any of the following:
  - a. The project will have one or more significant impacts not discussed in the previous EIR;
  - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measures or alternative.

The General Plan provides policy direction to guide land use development within the City in a manner to gain the maximum social and economic benefit to the citizens. The General Plan includes the General Plan Land Use Policy Map, which is a detailed land use plan for the City. The General Plan Policy Document is divided into ten elements, which consist of Land Use, Circulation, Housing, Economic Development, Public Facilities and Finance, Historic Resources, Parks, Trails, and Open Space, Safety, Noise, and Conservation and Air Quality. The Safety Element identifies the policies and programs the City will implement to ensure that the City's residents and businesses are safe from known and reasonably foreseeable hazards, including flooding. The Elk Grove General Plan EIR (SCH No. 2002062082), certified in 2003, evaluated the environmental effects of buildout of the General Plan as established by the Land Use Policy Map and policies in each of the General Plan Elements.

The proposed Project includes updates to the Safety Element of the General Plan and Zoning Code that are intended to comply with new flood risk legislation. While compliance with policies contained in the proposed Safety Element and new sections in the Zoning Code could result in changes in the type or intensity of use in areas affected by floodplains, no changes would be made to the General Plan Land Use Policy Map or Zoning, such that different or more intense uses would be allowed to be developed. In fact, unless certain findings can be

made regarding the safety of a potential future development site, the changes could result in less development in areas subject to flood hazards compared to that envisioned in the General Plan. Therefore, the Project would not result in substantial changes to the General Plan that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

There have been changes to State law that impose new flood safety requirements. However, the new flood safety requirements would not increase the intensity of development in the City or result in any other physical changes in the environment that would require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

There are no other components of the Project that could result in physical changes in the environment that would be different than those identified for General Plan implementation in the General Plan EIR. The Project would not result in any new significant impacts, nor would any previously identified impact increase in severity from what was originally documented in the Elk Grove General Plan EIR. No mitigation identified in the EIR was found to be infeasible that has now been determined feasible, and future projects will be required to implement all applicable mitigation measures adopted within the General Plan EIR. Therefore, the City of Elk Grove has determined that no modifications to the General Plan EIR would be necessary for it to adequately address the impacts of the proposed Project. Therefore, no further CEQA review is required.

AND, BE IT FURTHER RESOLVED that the City Council of the City of Elk Grove hereby amends the Safety Element of the Elk Grove General Plan as provided in Exhibit A, incorporated herein by this reference based upon the following finding:

<u>Finding</u>: The proposed General Plan amendment is of substantial benefit to the City and the amendment is internally consistent with the General Plan.

Evidence: The proposed amendment to the Safety Element of the General Plan incorporates the latest flood inundation modeling information for the City and identifies area of potential inundation in a 100-year and 200-year storm event. Further, the amendment adds policies and action items relative to ensuring public safety from the potential flood inundation described in the modeling. These changes are a substantial benefit to the City as they provide tools for the City to continue ensuring the overall safety of the public. These amendments are internally consistent with the balance of the General Plan as they do not change the land use designations or increase the development potential of any property, nor do they change the character or quality of the community from that described in the vision or goals of the General Plan. These changes specifically implement Guiding Goal 1 (A high quality of life for all residents) and Focused Goal 1-1 (A safe community, free from man-made and natural hazards).

PASSED AND A	OOPTED by	the City	Council	of the	City	of Elk	Grove	this	27 <sup>th</sup>
day of July 2016.									

GARY DAVIS, MAYOR of the CITY OF ELK GROVE

ATTEST:

APPROVED AS TO FORM:

IASON LINDGREN, CITY CLERK

JÉNNIFER'A' ALVES,

**ASSISTANT CITY ATTORNEY** 

# Safety Element <u>Amendments</u>

nsuring that Elk Grove is a safe community is an majerimportant goal of the City of Elk Grove.— This Safety Element identifies the policies and programs the City will implement to make sure that city's residents and businesses are safe from known and reasonably foreseeable hazards. The Planning Area includes land within the City limits and certain areas outside the City limits as defined in the Introduction of the General Plan.

#### POTENTIAL SAFETY HAZARDS

Several major sources of potential safety hazards exist in Elk Grove and are addressed in this Safety Element:

- Potential release of toxic or hazardous substances as the result of accidents on truck routes and/or railroad lines which pass through Elk Grove.
- The release of foxic or hazardous substances which are used by commercial and industrial businesses in Elk Grove.
- Flooding.
- Regional seismic activity and other geologic hazards.
- Traffic accidents at at-grade railroad crossings.

This Safety Element provides the City's policies for ensuring that the risk associated with these hazards can be reduced to an acceptable level; the City acknowledges that actions or policy statements on the behalf of the City cannot eliminate all risks.

This Element also provides policies related to police and fire protection and steps the City can take to assist in the prevention of fire hazards and crime.

Many Safety Element goals, policies, and programs correspond to priorities established in the 2011 Sacramento County Local Hazard Mitigation Plan, a multi-jurisdictional plan that includes Sacramento County (County) and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Isleton, Rancho Cordova, and Sacramento, as well as 69 special districts within the county. Annex Chapters of the Sacramento County Local Hazard Mitigation Plan provide specific analysis for each of the partner cities. Annex B of the document is specific to Elk Grove. This plan forms the foundation for the City's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. The 2004 Sacramento County Multi-Hazard Mitigation Plan fulfills the requirements of Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5165, as amended by the Disaster Mitigation Act of 2000. The Elk Grove Community Element of the Multi-Hazard Mitigation Plan is incorporated into this Safety Element by reference and should be consulted when addressing known hazards to ensure the general health, safety, and public welfare of life and property within the planning area. Safety Element goals, policy objectives, and implementation actions support and are consistent with the Local Hazard Mitigation Plan.

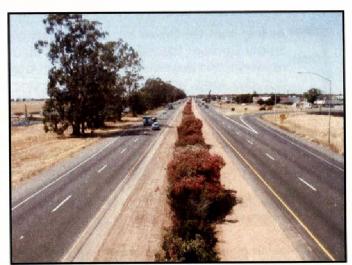
# POTENTIAL RELEASE OF HAZARDOUS SUBSTANCES

A number of <u>uses\_entities\_throughout Elk Grove—from</u> dry cleaners to filling stations to industrial users—maintain stocks of hazardous substances on—site, and therefore raise the potential for the accidental release of these substances.

In addition, two freeways, several major surface routes, and two active rail lines traverse the Planning Area. Vehicles and rail cars carrying hazardous materials substances use all of these routes, and therefore bring the risk of an accident involving hazardous substances to large areas of Elk Grove.

#### **FLOODING**

Flooding affects a large part of the Planning Area, primarily in. The areas most susceptible to flooding are the eastern portion of Elk Grove where major drainage facilities have not been built and stormwater flows either in natural channels or small ditches whose capacity is frequently exceeded. In the "Sheldon" area of Elk Grove, local flooding is widespread but generally



Both of the freeways in the planning area Planning Area carry heavy truck traffic, including trucks carrying hazardous and toxic materials.

minor; the flat land causes floodwaters to spread out, reducing threats to life.



Land inundated by the Cosumnes River near Michigan Bar in 1997, a year that saw historic flooding levels.

Along the eastern and southern edges of the Planning Area, the Cosumnes River represents a major flood hazard. The Cosumnes River is the last river in California, which that remains undammed along its entire length, so flooding caused by this river can be extensive.

For more information on flooding in the Planning Area, please refer to the General Plan Background Report.

A 100-year floodplain zone estimates inundation areas based on a flood that has a 1 percent chance of occurring in any given year. These floodplain zones are defined by the Federal Emergency Management Agency (FEMA). In Elk Grove, 100-year flood zones include areas along Laguna Creek in the northwest and north central portion of the City, and along the Cosumnes River to the southeast, primarily outside of the City limits, but within the Planning Area. Flood risk is

intensified in the lower stream reaches by the likelihood of coincident high tides and strong offshore winds during heavy rainfall.

Pursuant to Government Code Sections 65007, 65300.2, 65302.9, 65302, 65303.4, 65584.04, 65584.06, 65865.5, 65962, and 66474.6, as well as portions of Chapter 4 of the Water Code relating to flood management, as amended by Assembly Bill (AB) 162 (2007) and Senate Bill (SB) 5, the California Department of Water Resources (DWR) and the Central Valley Flood Protection Board (formerly the State Reclamation Board) adopted a Central Valley Flood Protection Plan (CVFPP) in 2012. The amendments also established flood

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protection requirements for local land use decision-making to be aligned with the CVFPP. These laws set a higher standard for flood protection for the Sacramento-San Joaquin Valley area, which covers the entire Delta region and includes the Elk Grove Planning Area. These laws established a requirement for jurisdictions to attain an urban level of flood protection necessary to withstand a flood with a 1 in 200 chance of occurring in any given year (200-year flood) for areas developed or planned to have a population of at least 10,000 people. They do not apply to areas of shallow flooding or areas of flooding from local drainage equivalent to less than 3 feet in depth.

Figure SA-1 shows areas within the 100-year floodplain zones. The map uses Flood Insurance Rate Map (FIRM) 100-year floodplain data produced by FEMA. The FIRM is the only official mapping for the purposes of National Flood Insurance Program (NFIP) regulations and coverage areas. Additional flood risk data, including 200-year flood data shown in Figure SA-2, described below, is not approved by FEMA for use in relation to the NFIP.

Figure SA-2 shows areas within the 200-year floodplain which are potentially subject to urban level of flood protection requirements when flood depths of 3 feet or greater could occur. This map identifies areas where higher standards of development and flood protection may be required before issuance of building permits. Figure SA-2 was developed using data provided by DWR, supplemented by floodplain studies commissioned by the City, covering local creek systems that have watershed areas of at least 10 square miles. This includes the Laguna Creek and Deer Creek/Cosumnes River watersheds, as well as the Sacramento River watershed, which affects local creek systems.

The City commissioned hydrologic modeling to supplement DWR 200-year floodplain mapping of Laguna Creek in order to account for levee improvements completed or in process that were not included in DWR mapping. The Sacramento Area Flood Control Agency (SAFCA) is in the process of implementing a levee improvement project to provide 200-year flood protection for the Sacramento River, and the U.S. Army Corps of Engineers is completing improvements to the Folsom Dam spillway on the American River. These projects were not accounted for within the DWR mapping. Because of these improvements, the City's supplemental 200-year floodplain calculations use a scenario in which the levees and dams along the Sacramento and American Rivers do not fail.

The City's supplemental mapping also differs from DWR 200-year floodplain mapping by adding 200-year water surface elevations along Deer Creek. Deer Creek was not assessed by DWR since no state flood improvement projects are located in this watershed. Levees in this area have not been certified to provide 100-year protection and have failed in the past during large storm events. Therefore, modeling for this area considers the possibility of extensive levee failure, especially along the north bank of the Cosumnes River.

The area potentially affected by a 200-year flood event in Elk Grove is focused in the southeast portion of the Planning Area, along Deer Creek and the Cosumnes River. Much of this land is preserved for agricultural use and would be at limited risk of damage from flood hazard zones. However, a 200-year flood event caused by levee breaks along the Sacramento River could result in flooding in small portions of Laguna West, an existing residential neighborhood on the western side of the City. If, in the future, the City were to consider expanding beyond its existing planning area north or south along Interstate 5 (I-5), such development in these areas would also be at risk in a 200-year flood event.

The City recognizes that flood risk conditions can change over time through natural processes or project improvements on the local or regional scale. Therefore, the 200-year flood map is considered the base case for establishing potential flood risk. The City will keep updated data on the 200-year floodplain through an annual review, accounting for the results of new technical studies and changes in flood protection infrastructure. This updated information is available and shall be referenced during the development review process for areas within the base case 200-year flood map, as shown in Figure SA-2.

As required by the flood management requirements in the Government Code, the City of Elk Grove has incorporated CVFPP measures into this Element of the General Plan through the inclusion of Urban Level Flood

<u>Protection mapping, as well as through more extensive flood risk analysis. The City will incorporate related measures into Title 23 of the Municipal Code. The City will then apply more stringent development standards in identified areas when considering approval of future projects and developments.</u>

#### Agencies Responsible for Flood Protection

#### Federal Emergency Management Agency

FEMA is a federal agency whose mission is to reduce the loss of life and property from natural and human-made disasters through a comprehensive, risk-based emergency management system. One of the agency's responsibilities is to maintain flood zone maps.

# California Department of Water Resources

<u>DWR implements the California Water Code, including the Cobey-Alquist Flood Plain Management Act. DWR regulates activities in California's floodways, encourages preventive flood control maintenance, and operates some flood control projects.</u>

# Central Valley Flood Protection Board and Plan

The Central Valley Flood Protection Board developed and adopted the CVFPP in 2012 and continues to oversee the plan's implementation. The CVFPP provides conceptual guidance to reduce the risk of flooding for about one million people in California and \$70 billion in infrastructure, homes, and businesses with a goal of providing 200-year flood protection to urban areas.

## Sacramento Area Flood Control Agency

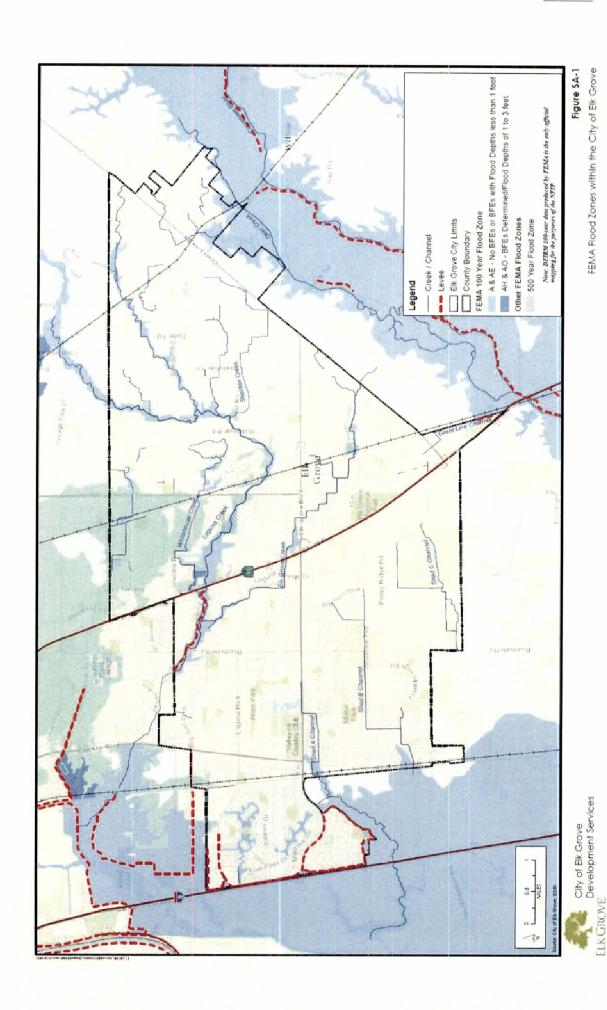
The Sacramento Area Flood Control Agency is charged with providing the Sacramento region with increased flood protection along the American and Sacramento Rivers. The Agency was formed through a Joint Powers Agreement between the City of Sacramento, the County of Sacramento, the County of Sutter, the American River Flood Control District, and Reclamation District No. 1000, and conducts flood control improvement projects including levee enforcement, and dam improvements.

#### Sacramento County Department of Water Resources

The Sacramento County Department of Water Resources is the county-level agency that manages floodplain information, flood insurance, and the ALERT System and provides up-to-date information to the community and public agencies on potential flooding in Sacramento County.

# Elk Grove Police, Fire, and Elk Grove Public Works, and Cosumnes CSD Fire Department Departments

These City and CCSD departments play an active role in disaster planning, preparedness, and first response within the City.



Elk Grove General Plan

Safety Element

City of Elk Grove Development Services

ELKGROVE

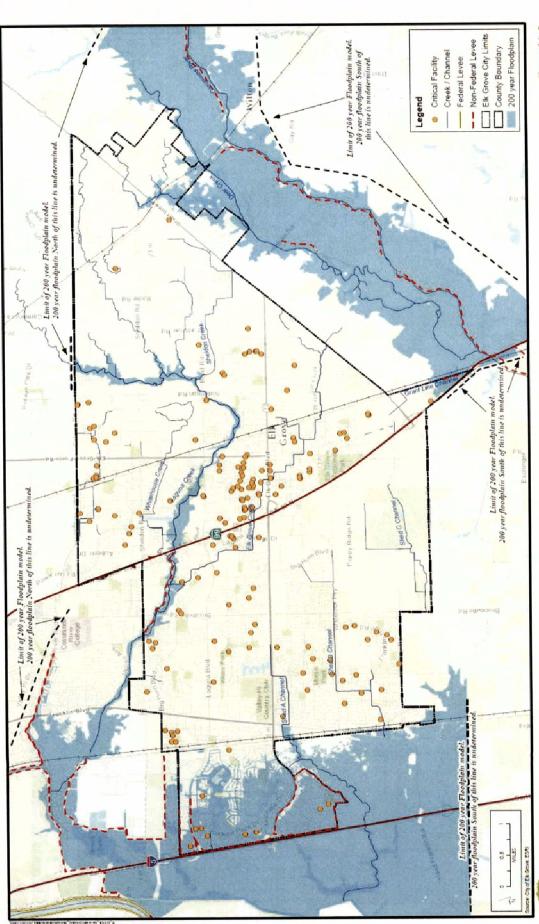


Figure SA-2

200 year Flood Zones and Critical Facilities within the City of Elk Grove

Adopted 11/19/03  $\mid$  Reflects Amendments through July 22, 2009 and proposed 2016 revisions

#### **Dam Inundation**

Dam inundation occurs when a dam is not structurally sound or is unable to withstand damages resulting from seismic activity. The degree and rapidity of dam failure depends on the dam's structural characteristics. Figure SA-3 shows inundation areas from potential dam failures, based on maps prepared by the California Office of Emergency Services (Calema Oes provides model estimates of the degree and extent of flooding that would occur in the case of a dam failure.

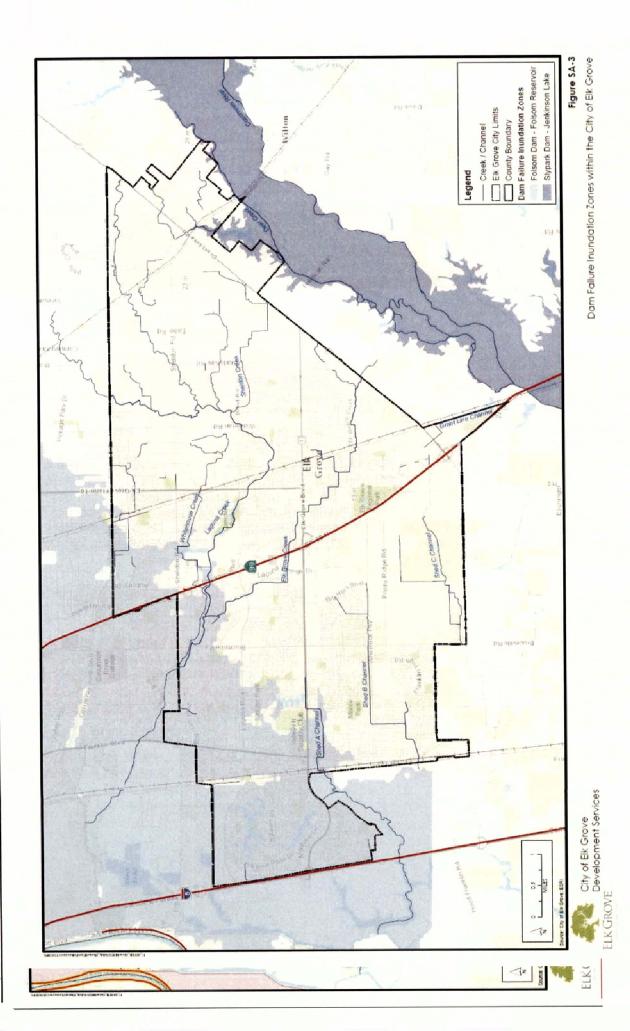
Regulation dams at Folsom and Sly Park on the Sacramento River and Cosumnes River respectively have the potential to cause human injury or loss of life in Elk Grove. Since neither of the dams impacting Elk Grove is located within the Planning Area, in order to reduce the likelihood of dam inundation, policies and programs focus on partnerships with regional agencies, including Sacramento County, to track inundation profiles (flood depth) and prepare accordingly and by including requirements for project features that may reduce dam failure hazards.

#### Canal or Levee Failure

Generally, levees fail due to overtopping or collapse. A catastrophic levee failure resulting from collapse would occur quickly with little warning. Levees may fail because of earthquake-induced slumping, landslides, and liquefaction. The existing levee system in areas surrounding Elk Grove was initially constructed by hand labor, and later by dredging to hold back river floods and tidal influences, to obtain additional lands for grazing and crop growing. Constant maintenance is necessary to hold these levees against the river floods that threaten surrounding areas. Because levees are vulnerable to peat oxidation as well as sand, silt, and peat erosion, new material is continually added to maintain them. Subsiding farmlands adjacent to levees may increase water pressure against levees, adding to the potential for levee failure. In addition, many levees, known as non-project levees, are not maintained to any specified standard, which can increase the likelihood of failure and inundation. Levee failures can be difficult to predict, since even inspected project levees are prone to failure under certain conditions. DWR has, using the best available information, identified areas where flood levels would be more than 3 feet deep if a project levee were to fail; these areas are known as Levee Flood Protection Zones (LFPZs).

The Elk Grove Planning Area is protected by a number of project levees that are part of federally authorized flood projects and are considered part of the State Plan of Flood Control. There are no project levees located in Elk Grove, but several project levees located outside of the Planning Area affect flooding in the Planning Area along the Sacramento River. A number of non-project levees also provide flood protection to the community. These non-project levees were generally constructed prior to project levees, and without federal or state assistance. They are not part of the State Plan of Flood Control. Non-project levees are located along the eastern side of Interstate 5 and along Morrison Creek, Laguna Creek, and the Cosumnes River. Figure SA-4 identifies the locations of project levees, non-project levees, and locations of DWR Levee Flood Protection Zones that affect the Elk Grove Planning Area.

<u>The City conducts levee operation and maintenance activities which provide maintenance recommendations and requirements for specific levee inspections and maintenance operations.</u>



Adapted 11/19/03 | Reflects Amendments through July 22, 2009 and proposed 2016 revisions

#### **Climate Change**

The California Climate Change Center, a research arm of the California Energy Commission, has found that climate change will result in new flooding concerns throughout California. Climate change-induced sea level rise is likely to create significant impacts in the San Francisco Bay and Delta. The California Natural Resources Agency in a 2012 report estimates that sea levels along the California coast will rise between 3 and 5 feet by 2100. A combination of increased storm intensity and saltwater intrusion in the Sacramento-San Joaquin Delta resulting from higher sea levels could increase the risk for flood-caused levee failures, increasing flood risk and contaminating freshwater supplies stored and conveyed in the delta. The California Ocean Protection Council (OPC) released sea level rise planning guidance in 2013, which recommends assessing and planning for 5 to 24 inches of sea level rise by mid-century and 17 to 66 inches by the end of the century. The San Francisco Bay Conservation and Development Commission (BCDC) and other state agencies are evaluating expected impacts using these projections. While uncertainty exists regarding the extent of sea level rise, there is consensus that it will increase the frequency, duration, and magnitude of flood events in the San Francisco Bay and Sacramento-San Joaquin Delta (Bay-Delta) area that borders the western edge of Elk Grove.

Given a 1-foot rise in sea level, as predicted in low-end sea level rise projections, the occurrence of a 100-year storm surge-induced flood event would shift to once every 10 years. In other words, the frequency of a 100-year event could increase tenfold. Sea level rise and the associated increases in flood events would place greater strain on existing levee systems and could expand floodplains affecting Elk Grove.

In addition to the pressure resulting from sea level rise, climate change will result in increased severity of winter storms, particularly in El Niño years. Such weather events will result in higher levels of seasonal flooding than those currently experienced. This too will strain levees and increase floodplain areas.

The possible increased flooding risk to Elk Grove as a result of sea level rise may require additional policies or changes to flood mapping. The need for such changes will be considered by the City during the annual review of the General Plan.

#### REGIONAL SEISMIC ACTIVITY/GEOLOGIC HAZARDS

No known earthquake faults pass through the city limits or the Planning Area. -However, faults even far from the Planning Area have the potential to generate <u>earth shaking</u> which could cause damage in Elk Grove. <u>(For more information on seismic and geologic conditions, please refer to the Background Report.)</u>

This Safety Element provides the City's policies related to reducing the risk of property damage and injury to persons as the result of ground shaking.

#### **INDUSTRIAL USES**

A variety of industrial uses are located in Elk Grove and the Planning Area, primarily in the southern portion of Elk Grove and in the Laguna West area west of the <u>City</u>. Many of these industrial facilities use and/or store chemicals and other materials that could result in damage both on- and off-site in the event of an accident.



Storage tanks are visible in this aerial photograph of industrial facilities on Waterman Road in Elk Grove.

This Safety Element sets forth the City's policies associated with the placement of land uses near facilities of all kinds that pose a threat of injury in the event of accidental or deliberate incidents.

#### AT-GRADE RAILROAD CROSSINGS

Most of the roadway/railroad crossings in Elk Grove are "at-grade"—the roadway crosses the rails, with crossing gates provided to halt vehicle traffic while the train passes through. –Two major crossings—on Elk Grove Boulevard and Laguna Boulevard in the western area of Elk Grove—are provided with a bridge crossing to carry the roadway over the rails.



This accident in February 2001 at Elk Grove Boulevard led to calls for increased safety at railroad crossings.

While at-grade crossings are <u>generally</u> safe, a <u>history of accidents</u> <u>particularly at the Elk Grove Boulevard crossing in Old Town—have demonstrated</u> the potential for accidents <u>involving trains</u> is <u>present.</u>

# FIRE HAZARDS

Fire hazards within the Planning Area are limited. There are no Moderate, High, or Very High Fire Hazard Severity Zones identified by the California Department of Forestry and injuries at these locations Fire Protection [Cal Fire). The Planning Area is located within a Local Responsibility Area, and contains no State Responsibility Areas as shown in Figure SA-5.

The City faces greater danger from urban fires, which have potential to cause property damage, injury, and loss of life. In addition to fire-related hazards from structures in urbanized areas, the main source of wildland fire in the Planning Area occurs where natural resource and habitat areas interface with development (for example, undeveloped grassland areas near residential structures in Sheldon). Additionally, several new and proposed developments in the Planning Area contain natural vegetation, which has potential to ignite and pose safety risks to adjacent and surrounding development.

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Adopted 11/19/03 | Reflects Amendments through July 22, 2009 and proposed October 2015 revisions

# Fire-Safe Planning and Protection

Fire planning and preparation activities in Elk Grove are primarily undertaken by the Cosumnes Community Services District Fire Department (CCSDFD). This section describes a variety of actions that the City can take to assist the CCSD to prevent property damage and loss of life caused by wildfires. The CCSDFD operates a Fire Prevention Bureau that provides community prevention services related to fire, life, occupational hazards, property damage, and environmental safety. Diverse services including fire safety plan reviews and fire investigations are a part of what the bureau does to help keep the community safe.

The City's wildfire planning and prevention strategy focuses on techniques that reduce wildfire and other fire source potential and ensure use of fire-safe building methods. The City provides for coordinated fire protection and emergency medical services and addresses the needs of Elk Grove residents and businesses. Community members have access to information regarding potential risks and fire prevention techniques, and existing and new development will continue to be required to incorporate fire prevention and suppression measures.

#### WATER SUPPLY FOR FIREFIGHTING

The issue of providing sufficient water supply (both water pressure and storage capacity) is addressed in the Public Facilities and Finance Element of this General Plan. Please see the Background Report for information on the water systems and master plans maintained by the agencies that provide water service to Elk Grove.

#### FIRE HAZARDS

There are no known fire hazards in Elk Grove that require the implementation of specific policies in this General Plan. Please see the Background Report for further information on the fire Department Master Plan maintained by the Elk Grove Community Services District.

#### **EVACUATION ROUTES**

#### **Evacuation Routes**

The roadway system in Elk Grove provides numerous evacuation routes—<u>please</u> see the Circulation Element of this General Plan for information and policies related to roadways.

#### **Critical Facilities**

Critical facilities in Elk Grove include essential facilities for emergency response, lifeline infrastructure, public-serving structures of very high value, and natural or cultural assets. There are 343 critical facilities that have been identified in Annex B of the Sacramento County Local Hazard Mitigation Plan. Of these, 69 are essential to government operations and emergency response, in Elk Grove. Certain essential facilities are necessary for effective response in the case of a flood. Essential government facilities include police stations, fire stations, the City Corporate Yard, Emergency Operations Center, vector control facilities, 911-emergency call centers, and sand bag storage locations. Essential health care facilities include: assisted living centers, hospitals, and urgent care centers.

None of these essential services facilities are located within the 100-year floodplain; however, nine essential service facilities are located within the 200-year floodplain, as shown in Figure SA-2 and listed in Table SA-1 below.

Table SA-1 Essential Government Facilities in the 200-Year Floodplain

<u>Facility</u>	Facility Type	Address	
<u>Laguna Town Hall</u>	Essential government	3020 Renwick Ave.	
Sand bag storage location (S-5)	Essential government	10050 E Taron Dr.	
Sand bag storage location (S-s)	Essential government	Klagge Ct.	
Cosumnes CSD Fire Station	Essential government	2300 Maritime Dr.	
W.V Home for the Elderly	Essential health care	2308 Dinwidie Wy.	
Devers Care Home	Essential health care	2812 W Pintail Wy.	
Marine Residential Care Home	Essential health care	9649 Sea Cliff Wy.	
Social Vocation	Essential health care	2204 Kausen Dr.	
Embassy Fountain Inc.	Essential health care	2405 Renwick Ave.	

#### POLICE PROTECTION

Police protection in Elk Grove is provided by the Elk Grove Police Department, which operates from headquarters on Bend ReadLaguna Palms Way. –Detailed information on current staffing levels and service levels provided by the Elk Grove Police Department is included in the General Plan Background Report.



#### FIRE PROTECTION

Fire protection services in Elk Grove are provided by a separate agency, the <u>Elk GroveCosumnes</u> Community Services District (<u>EGCSD</u>). <u>CCSD</u>). The <u>EGCSDCCSD</u> maintains an extensive system of fire stations throughout Elk Grove and <u>in a portion of the Planning Area outside the <u>cityCity</u> limits.</u>



Elk Grove firefighters in action in June 2000.

Because the City of Elk Grove does not provide fire protection services, this General Plan does not contain policies or action items that provide for the construction or operation of fire stations or related facilities; these facilities will be constructed pursuant to the EGCSD's CCSD's Master Plan (summarized in the General Plan Background Report).— This Element, instead, focuses on policies and action items aimed at coordinating the efforts of the City with those of the EGCSDCCSD to ensure that an adequate level of fire protection is available at all times in Elk Grove.

This Safety Element implements the following Goalsgoals of the City of Elk Grove:

Guiding Goal 1: A High Quality of Life for All Residents

**Focused Goal 1-1:** -A safe community, free from manmademan-made and natural hazards

The following are the Safety Policies of the City of Elk Grove:

#### **GENERAL SAFETY POLICIES**

- SA-1 The City will seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.
- SA-2 In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shallwill consider the hazards posed by reasonably foreseeable events. I -Evaluation of such hazards shallwill address the potential for events at facilities to create hazardous physical effects at offsiteoff-site locations that could result in death, significant injury, or significant property damage.— The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a "hazardous physical effect" from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.
- **SA-3** For the purpose of implementing Policy SA\_2, the City considers an event to be "reasonably foreseeable" when the <u>probability</u> of the event occurring is as indicated in the table below.

Land Use	Probability of Occurrence Perper Year
"Agriculture, Light Industrial and Industrial" Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open space, warehouses, manufacturing plants, etc.	Between 100 in one million and 10 in one million (10-4 to $10^{-5}$ )
"Commercial"  Uses involving continuous access but of easy evacuation,  e.g., commercial uses, offices, etc.	Between 10 in one million and 1 in one million (10 <sup>-5</sup> to 10 <sup>-6</sup> )
"Residential"  All other land uses without restriction including institutional uses, residential areas, etc.	1 in one million and less (10-6)

**SA-3-Action 1** As part of the environmental review process for proposed projects, the City shallwill analyze potential safety-related impacts resulting from or affecting new development which could cause or be affected by reasonably foreseeable events. -This analysis shallwill include the potential for

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<sup>&</sup>lt;sup>1</sup> Please see the Glossary for a definition of "event" as used in this policy.

events to occur at the facility, and the potential for hazardous physical effects to result from such events with respect to the hazards listed in Table SA-A.

- **SA-3-Action 2** The City shallwill continue to maintain a database which records, in maps and text, the identified off-site hazards from any reasonably foreseeable events at hazardous facilities in Elk Grove, and shallwill make this information available to the public.
- **SA-4** The Maximum Acceptable Exposure standards shown in Table SA-A shallwill be used in determining the appropriateness of either:
  - (1) Placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or
  - (2) Siting a hazardous facility that could expose other nearby uses to hazardous physical effects.

Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shallwill be considered to result in a significant, adverse impact for the purposes of CEQA analysis.

- SA-5 The City will cooperate with other local, regional, state, and federal agencies, and with rail carriers in an effort to secure the safety of all residents and businesses in Elk Grove.
  - **SA-5-Action 1** Establish an Continue to use the Emergency Operations Center (EOC) to coordinate and direct overall emergency response operations. The establishment of the EOC should be coordinated with the Elk Grove Police Department, appropriate City departments, the Elk Grove CSDCCSD Fire District Department, and the County Sheriff's Department to ensure clear knowledge of roles by all agencies when using the EOC.

Table SA-A:

Maximum Acceptable Exposure Criteria for Agricultural, Residential, and Non-Residential Nonresidential Land

Uses

Land Use	Maximum Acceptable Exposure						
	Over- pressure	Airborne Toxic Substances	Radiant Heat	Shrapnel			
Agriculture	3.4 psig <sup>(1)</sup>	Dose = ERPG-2 <sup>(2)</sup> ppm for 60 min Exposure time = 60 min	Radiant dose = 200 kJ/m <sup>2</sup>				
Residential (all density ranges) (5)	1.0 psig	For example: -chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min	Exposure time = 30 sec  Target radiant energy =  Radiantradiant  dose/Exposureexposure				
Office/ Commercial	1.0 psig	Target concentration =  Dose/Exposuredose/exposure time  Target concentration =  (180 ppm-min) / 60 min  Target concentration = 3 ppm  chlorine	time Target radiant energy = (200 kJ/m²) / 30 sec Target radiant energy = 6.67 kW/m²				
Light industrial	1.25 psig	Dose = ERPG-2 ppm for 60 min Exposure time = 30 min  For example: -chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposuredose/exposure time Target concentration = (180 ppm-min) / 30 min Target concentration = 6 ppm chlorine	Radiant dose = 200 kJ/m² Exposure time = 15 sec Target radiant energy = Radiantradiant dose/Exposureexposure	All uses shallwill be located such that the possibility possibility of injury for an unprotected person due to shrapne released by coreasonably foreseeable event <sup>(4)</sup> is less than 1/10-6 (1/1,000,000)			
Industrial	3.4 psig	Dose = ERPG-2 ppm for 60 min Exposure time = 15 min  For example: ——chlorine ERPG-2 = 3 ppm Dose = 3 ppm x 60 min = 180 ppm-min Target concentration = Dose/Exposuredose/exposure time Target concentration = (180 ppm-min) / 15 min Target concentration = 12 ppm chlorine	time Target radiant energy = (200 kJ/m²) / 15 sec Target radiant energy = 13.34 kW/m²				

- (1) psig: pounds per square inch gauge
- (2) ERPG-2: Emergency Response Planning Guidelines.—The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action; ppm: parts per million
- (3) kJ/m<sup>2</sup>: kiloJoules per square meter (a measure of radiant heat received); kW/m<sup>2</sup>: kilowatts per square meter;  $1.0 \text{ kJ/m}^2 = 1.0 \text{ kW/m}^2 \text{ for } 1 \text{ sec} = 1 \text{ kW/(m}^2 \text{-sec})$

As defined in Policy SA-3.

Elk Grove General Plan Includes schools, parks, libraries, and other similar public gathering places regardless of their location.

- SA-5-Action 2 Establish an emergency response organization consisting of representatives from the Elk Grove Police Department, City <u>departments</u>, the <u>Elk Grove CSDCCSD</u> Fire Department, <u>County County</u> agencies, utility agencies, schools, and the public.
  - **SA-5-Action 3** Participate in State mutual aid agreements with neighboring cities and counties; State and federal emergency relief agencies; and private enterprises such as <a href="the-Red Cross">the Red Cross</a>, the Salvation Army, and local medical institutions to assist in shelter, relief, and first aid operations. Encourage cooperation among adjacent communities to provide backup fire suppression and law enforcement assistance in emergency situations.
  - SA-5-Action 4 Participate in the Standard Emergency Management System.
  - SA-5-Action 5 Comply with the State of California Emergency Services Act.
- **SA-6** Consider developing and adopting a pre-disaster ordinance for post-disaster recovery and reconstruction that includes provisions for debris clearance, damage assessment, demolitions, re-occupancy and building moratorium criteria, fee waivers and deferrals, and expedited permitting procedures for repair and reconstruction.

#### SAFETY POLICIES:- ACCIDENTAL RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES

- **SA-7** The City of Elk Grove will work to identify and eliminate hazardous waste releases from both private companies and public agencies.
- **SA-8** Storage of hazardous materials and waste <u>shallwill</u> be strictly regulated, consistent with state and federal law.
  - **SA-8-Action 1** Regularly review the City's codes to ensure that City regulations reflect the most up-to-date standards for the storage, handling, and use of hazardous and toxic materials.
  - **SA-8-Action 2** Secondary containment and periodic examination shallwill be required for all storage of hazardous and toxic materials, consistent with the requirements of state or federal law.
  - **SA-8-Action 3** As part of the review and approval of development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.
  - **SA-8-\_Action 4** Prior to site improvements for properties that are suspected or known to contain hazardous materials and sites that are listed on or identified on any hazardous material/waste database search **shallwill** require that the site and surrounding area be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.
- **SA-9** The City <u>shallwill</u> seek to ensure that all industrial facilities are constructed and operated in accordance with up-to-date safety and environmental protection standards.
  - **SA-9-Action 1** Support continued enforcement of permitting requirements for radioactive materials, and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.

**SA-10** Industries which store and process hazardous or toxic materials shallwill provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.

**SA-10-Action 1** Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the <u>city. City.</u> To the extent feasible, uses requiring substantial transport of hazardous materials should be located to direct such traffic away from the <u>city's City's</u> residential and commercial areas.

#### SAFETY POLICIES: TRANSPORT OF HAZARDOUS MATERIALS

- SA-11 Support continued coordination with the <a href="StateCalifornia">StateCalifornia</a> Department of Toxic Substances Control, the <a href="StateCalifornia">StateCalifornia</a> Highway Patrol, the Sacramento County Department of Environmental Health Services, the <a href="Elk Grove CSDCCSD">Elk Grove CSDCCSD</a> Fire <a href="DistrictDepartment">DistrictDepartment</a>, the <a href="Sacramento County">Sacramento County</a> Sheriff's Department, and other appropriate agencies in hazardous materials route planning and incident response.
  - **SA-11-Action 1** Assist all appropriate state and federal agencies which regulate the transport of vehicles carrying hazardous materials through the <a href="eityCity">eityCity</a>.
  - -SA-11-Action 2 Request that state and federal agencies with responsibilities for regulating the transportation of hazardous materials review regulations and procedures, in cooperation with the City, to determine means of mitigating the public safety hazard in urbanized areas.

#### SAFETY POLICIES: DRAINAGE AND FLOODING

Note:—The reader should also consult the Conservation and Air Quality Element for additional policies dealing with development within floodplain areas.

- SA-12 The City opposes the construction of flood <u>controlmanagement</u> facilities that would alter or reduce flows in the Cosumnes River and supports retention of the Cosumnes River floodplain in non-urban uses consistent with location in an area subject to flooding.
  - **SA-13** The City shall require that all new projects not result in new or increased flooding impacts on adjoining parcels <u>or</u> on upstream and downstream areas.
  - SA-14 The City shall locate, and encourage other agencies to locate, new essential government service facilities and essential health care facilities outside of 100-year and 200-year flood hazard zones, except in cases where such locations would compromise facility functioning.
  - **SA-15** The City shall re-locate or harden existing essential government service facilities and essential health care facilities that are currently located inside of 100-year and 200-year flood hazard zones.
    - <u>SA-15 Action 1</u>. The City shall identify construction methods or other hardening methods to minimize damage for facilities that remain in flood hazard zones.
  - <u>SA-16</u> The City shall give priority to the designation of appropriate land uses in areas subject to flooding to reduce risks to life and property. -Construction of new flood <u>control management</u> projects shall have a lower priority, unless land use controls (such as limiting new development in flood-prone areas) <u>isare</u> not sufficient to reduce hazards to life and property to acceptable levels.
  - SA-1517 Development shall not be permitted on land subject to flooding during a 100-year event, based on the most recent floodplain mapping prepared by the Federal Emergency Management

Adopted 11/19/03 | Reflects Amendments through July 22, 2009 194 and proposed 2016 revisions Agency (FEMA) or updated mapping acceptable to the City of Elk Grove. Potential development in areas subject to flooding may be clustered onto portions of a site which are not subject to flooding, consistent with other policies of this General Plan.

- **SA-16SA-17-Action 1** The City will keep updated data on the 200-year floodplain through an annual review. This updated information will be made available and referenced during the development review process for areas within the base case 200-year flood map, as shown in Figure SA-2.
- SA-18 A buildable area outside the 100-year floodplain must be present on every residential lot sufficient to accommodate a residence and associated structures. –Fill may be placed to create a buildable area only if approved by the City and in accordance with all other applicable policies and regulations.

The use of fill in the 100-year floodplain to create buildable area is strongly discouraged, and shall be subject to review to determine potential impacts on wildlife, habitat, and flooding on other parcels.

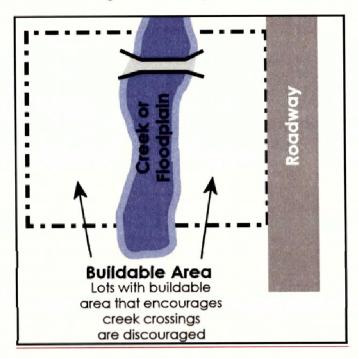
- **SA-17SA-19** The City will not enter into a development agreement, approve a building permit or entitlement, or approve a tentative or parcel map for a project located within an urban level of flood protection area unless it meets one or more established flood protection findings.
  - **SA-19-Action 1** By no later than July of 2016, update the Zoning Code to require flood protection findings in areas within the 200-year floodplain. Findings shall all be consistent with current Central Valley Flood Protection Plan (CVFPP) standards for an urban level of flood protection. The amendments shall incorporate, at a minimum, the following parameters:

The four potential findings for a development project within the 200-year floodplain, as shown on Figure SA-1, are: 1) The project has an Urban Level of Flood Protection from flood management facilities that is not reflected in the most recent map of the two hundred (200) year floodplain; 2) Conditions imposed on the project will provide for an Urban Level of Flood Protection; 3) Adequate progress has been made toward construction of a flood protection system to provide an Urban Level of Flood Protection for the project, as indicated by the Central Valley Flood Protection Board; or 4) the project is a site improvement that would not result in the development of any new habitable structure, and would not increase risk of damage to neighboring development or alter the conveyance area of a watercourse in the case of a flood.

- Findings shall be based on substantial evidence.
- Substantial evidence necessary to determine findings shall be consistent with criteria developed by DWR.
- **SA-20** Ensure common understanding and consistent application of urban level of flood protection criteria and conditions.
  - <u>SA-20-Action 1</u> Develop a method, such as a checklist provided during development review, to aid potential project applicants in determine flood risk and flood protection findings.
- <u>SA-21</u> Work with regional, county, and state agencies to develop mechanisms to finance the design and construction of flood management and drainage facilities to achieve an urban level of flood protection in affected areas.
- <u>SA-22</u> Vehicular access to the buildable area of all parcels must be at or above the 10-year flood elevation.
- **SA-1823** Creation of lots whose access will be inundated by flows resulting from a 10-year or greater storm shall not be allowed. -Bridges or similar structures may be used to provide access over creeks or inundated areas, subject to applicable local, state, and federal regulations.

Discourage the number of crossings of natural creeks in order to reduce potential flooding and access problems.

**SA-1924-Action 1** Lots or parcels which will contain two or more buildable areas on both sides of a creek or floodplain shall be discouraged. See the figure below.



SA-2025 Parcels should not be created on which the presence of easements, floodplain, marsh or riparian habitat, or other features would leave insufficient land to build and operate structures. This policy shall not apply to open space lots specifically created for dedication to the City or another appropriate party for habitat protection, flood controlhazard management, drainage, or wetland maintenance.

**SA-2126** Where necessary due to clear dangers to life or property, the City will support the construction of flood <u>controlhazard management</u> projects.

**SA-2126-Action 1** The City will <u>continue to</u> participate through the Sacramento Area Flood Control Agency in <u>obtaining federal authorization for constructionimplementation</u> of a backbone flood <u>controlhazard management</u> project along the Sacramento River and the immediate connection of local internal streams to this river.

**SA-2126-Action 2** The City will continue local efforts that encourage implementation implementation of the Federal National Flood Insurance Program.

**SA-2126-Action 3** The City will participate with the City of Sacramento, the Army Corps of Engineers, and other Federal, State, and local governments and agencies to develop policies to finance, construct, and plan fleedinfrastructure improvements to eliminate fleedingreduce potential flood hazards in Elk Grove.

SA-2227 New and modified bridge structures shall not cause an increase in water surface elevations of the 100-year floodplain exceeding <a href="mailto:one-new left">one-left</a> foot, unless analysis clearly indicates that the physical and/or economic use of upstream property will not be adversely affected.

- SA-2328 The City shall require all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.
  - **SA-2328-Action 1** As part of the review of development projects, ensure that runoff control measures are planned and provided.
- **SA-2429** Drainage facilities should be properly maintained to ensure their proper operation during storms.

#### SAFETY POLICIES: GEOLOGIC AND SEISMIC HAZARDS

- **SA-2530** The City supports efforts by Federal, State, and other local jurisdictions to investigate local seismic and geological hazards and support those programs that effectively mitigate these hazards.
  - **SA-2530-Action 1** Implement the International/California Uniform Building Code to ensure that structures meet all applicable seismic standards.
- SA-2631 The City shall seek to ensure that new structures are protected from damage caused by geologic and/or soil conditions.
  - **SA-26-31-Action 1** Require that a geotechnical report or other appropriate analysis be conducted to determine the shrink/swell potential and stability of the soil for public and private construction projects and identifies measures necessary to ensure stable soil conditions.

# SAFETY POLICIES: RAILROAD CROSSINGS

- **SA-2732** The City shall initiate as well as cooperate in improvements at existing railroad at-grade railroad crossings to improve public safety. —This may include construction of grade-separated crossings and other appropriate safety features.
- **SA-2833** The City shall take all appropriate measures to ensure that railroad crossings in Elk Grove are made as safe as possible.
  - **SA-2833-Action 1** The City will coordinate with the railroads operating in Elk Grove to ensure that all appropriate safety measures are implemented in their operations in the <u>cityCity</u>.
  - **SA-2833-Action 2** The City will seek to improve the safety at rail crossings by continuing to investigate improvements in crossing gates and warning devices.
  - **SA-2833-Action 3** The City will make available information on railroad crossing safety at City Hall and on the City's website to encourage safe practices by Elk Grove residents and businesses.

#### **SAFETY POLICIES: -EVACUATION ROUTES**

A properly planned and implemented roadway system within the <u>cityCity</u> will facilitate the efficient movement of police and <u>fire fightingfirefighting</u> equipment and the safe evacuation of residents. Please refer to the <u>Circulation Element</u> for policies related to the <u>city'sCity's</u> overall circulation system.

#### SAFETY POLICIES: POLICE PROTECTION

SA-2934 The City shall regularly monitor and review the level of police staffing provided in Elk Grove, and ensure that sufficient staffing and resources are available to serve local needs.

SA-3035 Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible.

# SAFETY POLICIES: DESIGN OF SITES AND BUILDINGS

**SA-3136** Encourage the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of <u>development development</u> projects and buildings.- These basic principles include:

#### **Natural Surveillance**

A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas, and building entrances: doors and windows that look out on to streets and parking areas; pedestrian-friendly sidewalks and streets; front porches; adequate nighttime lighting.

#### **Territorial Reinforcement**

Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and 'CPTED'CPTED fences.

#### **Natural Access Control**

A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, building entrances, and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.

# **Target Hardening**

Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges.

#### SAFETY POLICIES: FIRE PROTECTION

SA-3237 Cooperate with the Elk GroveCosumnes Community Services District (EGCSDCCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.

**SA-3237-Action 1** Review new development for adequate water supply and pressure, fire hydrants, and access to structures by fire fighting firefighting equipment and personnel.

**SA-3237-Action 2** Review projects for <u>compliance</u> with the <u>California</u> Fire Code <u>and the life safety provisions of the California Building Code</u> as part of the building permit process.

**SA-3237-Action 3** Work with the <u>EGCSDCCSD</u> to develop high visibility fire prevention programs, including those which provide voluntary home inspections and awareness of home fire prevention measures.

**SA-3237-Action 4** Require, where appropriate, on-site fire suppression systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.

**SA-3237-Action 5** The City shall continue to maintain, periodically update, and test the effectiveness of its Emergency Response Plan.

**SA-3237-Action 6** The City shall require the iinstallation of earthquake-triggered automatic gas shut-off sensors in high-occupancy facilities and in industrial and commercial structures.

**SA-3237-Action 7** Work with the **EGCSDCCSD** Fire Department to enforce all existing codes and ordinances regarding fire protection, including building inspection and vegetation management.

# SAFETY POLICIES: WATER SUPPLY FOR FIREFIGHTING

Please see the Public Facilities and Finance Element for policies related to water supply.

This page intentionally left blank.[The following definitions should be added to the General Plan Glossary upon adoption of this Element

- "100-year Floodplain" means areas that have a 1-in-100 chance of flooding in any given year using criteria consistent with, or developed by, the Federal Emergency Management Agency (FEMA).
- "200-year Floodplain" means areas that have a 1-in-200 chance of flooding in any given year using criteria consistent with, or developed by, the Department of Water Resources. As used in this chapter, the term shall be ascribed to all areas labeled as such on Figure 2 of the General Plan Safety Element.
- "Ordinary High Water Mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- "Urban Level of Flood Protection" means the level of protection that is necessary to withstand flooding that has a 1-in-200 chance of occurring in any given year using criteria consistent with, or developed by, the Department of Water Resources, "Urban level of flood protection" shall not mean shallow flooding or flooding from local drainage that meets the criteria of the national Federal Emergency Management Agency standard of flood protection.

# CERTIFICATION ELK GROVE CITY COUNCIL RESOLUTION NO. 2016-143

STATE OF CALIFORNIA	)	
COUNTY OF SACRAMENTO	)	SS
CITY OF ELK GROVE	)	

I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on July 27, 2016 by the following vote:

AYES: COUNCILMEMBERS: Davis, Ly, Detrick, Hume, Suen

NOES: COUNCILMEMBERS: None

ABSTAIN: COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None

Jason Lindgren, City Clerk City of Elk Grove, California