



The City of Biggs is a safe community, supported by appropriate development standards and a clear understanding of potential man-made and natural hazards. Public safety has been enhanced by improvements to local circulation systems, including the roadways, well-lit bike and pedestrian trails, and railroad crossings. Children are able to safely walk or bike to school. Public safety is maintained by efficient and effective emergency response services, and citizens are knowledgeable and informed about potential hazards and appropriate responses.

## I. INTRODUCTION

The Public Health and Safety Element, a legally required element, is included in this General Plan to address the services provided by the City of Biggs and the City's public safety providers related to public safety. Such service providers include fire protection, crime prevention, public works, and building safety services.

The City actively plans for its approach to hazards such as flooding, earthquakes, and other potentially dangerous situations. It proactively seeks to provide education in disaster preparedness and response through public information outreach to enable residents to help themselves during a disaster. The Public Health and Safety Element addresses safety concerns of the community and sets forth the goals and policies essential in addressing these concerns.

### Overview

The Public Health and Safety Element is a mandatory element of the General Plan (safety element) pursuant to Section 65302(g) of the Government Code. The Public Health and Safety Element identifies and appraises potential safety issues in and around the city and establishes goals, policies and actions addressing the subjects discussed. The element is used as a guide to assist in understanding potential safety risks and how to minimize the exposure of city residents to natural and man-made hazards. It also establishes policies and implementing actions that seek to minimize risks associated with seismic, geologic, flood, fire, and environmental hazards. By identifying these hazards and the appropriate abatement measures, the Public Health and Safety Element works to reduce the potential for events to occur that would threaten lives, damage property, and disrupt the local economy.

The Public Health and Safety Element is organized into sections addressing the following seven topics:

- Emergency Preparedness
- Flood and Dam Inundation



## PUBLIC HEALTH & SAFETY ELEMENT

- Fire Protection
- Crime Prevention Through Environmental Design
- Seismic and Geologic Hazards
- Hazardous Materials and Waste Management
- Transportation Hazards

### II. ISSUES AND OPPORTUNITIES

#### Emergency Preparedness

Guidance for emergency preparedness within Butte County as a whole, including the City of Biggs, is provided within the Butte County Emergency Response Plan (ERP). The Emergency Response Plan establishes procedures for responding to various emergency situations, including regional flooding, hazardous materials incident, defense emergency, dam failure, wildland fire, and seismic activity.

Butte County released a Multi-Jurisdictional All Hazard Pre-Disaster Mitigation Plan (MHMP) in March 2007. The MHMP was approved by the Federal Emergency Management Agency (FEMA) and has been adopted by all local jurisdictions in Butte County. It was adopted by the City of Biggs on April 16, 2007. The plan represents a cooperative effort between the County and the incorporated cities, including Biggs, to document and plan for mitigation of natural and man-made hazards. According to the document, the overall intent of the Mitigation Plan is to “reduce or prevent injury and damage from hazards in the County. It identifies past and present mitigation activities, current policies and programs, and mitigation strategies for the future. The Mitigation Plan also guides hazard mitigation activities by establishing hazard mitigation goals and objectives.”

The Butte County MHMP is available at: <http://buttecounty.net/Documents.aspx>.

#### Flood and Dam Inundation

According to the Butte County MHMP, the probability and potential severity of flooding within the City of Biggs is considered to be high. Two primary types of regional flooding have the potential to threaten the Biggs. These are the failure of a dam located upstream from the city and the failure or overtopping of Feather River levees. Several dams located above Biggs are also located above Oroville Dam and, in the event of failure of these dams, floodwater would be contained in Lake Oroville. Four dams are located such that failure might create flooding in the city. These are Oroville Dam itself and the three structures that create the Thermalito complex: the Thermalito Diversion Dam, the Thermalito Forebay Dam, and the Thermalito Afterbay Dam.

An area of local flooding is located on the north end of Third Street and Second Street. This area of flooding encompasses some ten residential lots. The high water level reaches an elevation of



about 8 to 10 inches above the street curb. Protection against local flooding is addressed specifically in the Public Facilities Element under the topic of Storm Drainage Facilities.

Overtopping of the Sacramento River levees is not considered to be a significant local concern due to the general topography of the region. Levee failure or overtopping of the Sacramento River in areas above Biggs would generally be directed to the lower elevation Butte Sink area and would not directly affect the city. However, when the Sacramento River floods, localized flooding is possible because water backs up into the drainage channels and cannot be evacuated and removed from the city.

Another potential flooding threat to the City of Biggs is the Hazelbrush Levee, which is the western levee of the Feather River below the Thermalito Afterbay spillway. This levee is located where the Feather River turns from the southwest to the south; immediately downstream from this area, the Feather River channel is constrained by rock piles from Gold Rush days. The combinations of the channel turn and channel blockage, along with the location above Biggs, represents a significant threat to the city, according to the Butte County MHMP. A proposal that has been discussed within the City is the reopening of passages beneath the Union Pacific Railroad tracks to allow water to flow to the west in the event of a levee failure above Biggs. Originally built on trestles, the base of the railroad has been filled and now serves as a levee. Unfortunately, in the event of a levee breach northeast of Biggs, floodwater would flow in a generally southwest direction and upon meeting the rail tracks would be forced toward Biggs.

**Figure S-1** shows the flood hazard areas associated with the potential dam failures.



## PUBLIC HEALTH & SAFETY ELEMENT





## Flood Control

Flood control in the Biggs area is provided by a combination of federal, state, and local agencies. The general purpose of these agencies is to identify potential flood hazard areas and devise preventive programs, policies, and structures to avoid or minimize flood damage. FEMA produces Flood Insurance Rate Maps, which identify areas of potential flood hazards, and designates 100-year floodplain zones. A 100-year floodplain is the area that has a 1 percent chance of being flooded in any one year. FEMA also manages the National Flood Insurance Program, which provides insurance to the public based on the predicted 100-year flood event.

FEMA and the California Department of Water Resources are in the process of evaluating whether flood control infrastructure in the area meets 100-year and 200-year flood protection standards. These agencies have taken the position that various levees and flood control structures, for which adequate data is unavailable, cannot be certified or accredited as adequate to provide the required 100-year or 200-year level of flood protection.



As of the publication of this General Plan, the City was identified as located outside of the 100-year floodplain and was not classified as being within a flood hazard area. However, FEMA is currently undergoing a process to decertify several levees in California and, based on preliminary information, it appears as though the City of Biggs could be reclassified as being within the 200-year flood hazard designation. The city is part of the Sutter Butte Flood Control Agency (SBFCA), which was formed to evaluate and construct improvements to the levee system to

allow it to comply with the requirements of FEMA for flood protection. SBFCA is currently in the process of preparing for construction efforts to increase the stability and protection of Feather River levees.

The role of Reclamation District 833 (RD 833) is of special significance to flood control in and around Biggs. RD 833 channels surround the city and serve the dual purposes of providing and conveying agricultural irrigation water as well as removing storm runoff from the city. Increases in development within the region, coupled with the nearly flat terrain, result in the potential for flooding miles "downstream" from Biggs to the southwest, which is known as the Butte Sink. Avoiding increases in stormwater runoff entering the RD 833 channels has become an important concern due to the potential for increase in downstream flooding.

This General Plan contains policies addressing the City's interaction with RD 833 and how the City plans to address stormwater within its jurisdictional area. Protection against local flooding is addressed specifically in the Public Facilities Element under the topic of Storm Drainage Facilities.



## PUBLIC HEALTH & SAFETY ELEMENT

### Flood Legislation

In 2006 and 2007, the state legislature produced several pieces of legislation governing various aspects of flood planning. The following is a list of legislation included as part of that package, which affects the City and the General Plan:

- **SB 5 – Flood Management.** Establishes higher standards of flood protection (generally 200-year protection) for urban and urbanizing areas exceeding 10,000 residents.
- **AB 70 – Flood Liability.** Requires a city or county to contribute its fair share cost of property damage caused by a flood event where the jurisdiction's actions contributed to or increased the state's exposure to liability.
- **AB 162 – Flood Planning in General Plans.** Establishes enhanced requirements for cities and counties to address flood-related matters in their general plans.

In addition, consistent with the requirements of Proposition 1E approved by voters in 2006 and as part of the State's overall effort to reevaluate flood hazards in the Central Valley, the State of California is preparing the State Plan of Flood Control (SPFC) and the Central Valley Flood Protection Plan (CVFPP), which will serve as comprehensive flood control documents and will help to define the reevaluated 100- and 200-year flood areas. The City of Biggs Planning Area and various flood control structures are within the area covered by the SPFC and CVFPP documents.

The drainage facilities that provide local flood control are discussed in detail in the Public Facilities Element of the General Plan. The Public Health and Safety Element addresses flood and dam inundation hazards through policies that require compliance with flood protection building standards and actions to work with federal, state, and local agencies to identify areas susceptible to flooding and accredit the flood control levees in the city.

### Fire Protection

The City of Biggs is potentially vulnerable to a variety of fire types. Reducing the potential for fire-related injuries and property losses involves both the prevention of fires through community education and enforcement of building and safety codes, and the ability to respond to fire-related emergencies once they occur.

The highest probability fire threats in Biggs are structural fires within residences or businesses. Additionally, other types of fires have the potential for resulting in major losses in and around the city. These include fire or explosion at one of the local agricultural processing plants, major operational failure of the rail service that passes through Biggs, and urban conflagration (multiple simultaneous structural fires). Wildland





and vegetation fires on the perimeter of the city are also possible, though the Butte County MHMP has determined the probability and severity of these risks to be low.

The Biggs Fire Station is located at 454 B Street. Fire protection services within the city have been provided through a cooperative agreement with Butte County Fire/CalFire since 1989. This agreement is renewed on a three-year basis and is funded on an annual basis by the Biggs City Council and the Butte County Board of Supervisors. Agreements for mutual assistance have been established between Butte County Fire/CalFire and various fire protection agencies. In the event of a major fire in Biggs, all county fire departments, Butte County Fire/CalFire, and, if necessary, Sutter County and Live Oak fire departments could respond.

Existing equipment consists of one primary engine, one reserve engine, and one water tender. The station is currently staffed by two firefighters 24 hours a day year-round, assisted by seasonal and volunteer firefighters during response. The County Fire Chief leads the department, beneath whom are one Deputy Chief and five Assistant Chiefs. Butte County Fire/CalFire is a combination fire department; the delivery of fire department services is accomplished using both career professional and citizen volunteer firefighters. According to the Biggs Municipal Services Review (MSR), the Biggs Fire Station is currently meeting departmental minimums for staffing as a regional provider

In 2009–2010, the City upgraded its potable water system, which will allow for increased water pressure within the city. These improvements included replacement of a significant percentage of the city's water extraction and delivery infrastructure. A new pressure system and ground tank was installed at Family Park, which will increase water pressures in the system. Prior to these improvements, water pressure within the system was below 40 pounds per square inch (PSI). Improvements to this system have allowed an increase in water pressure to approximately 55 PSI. The increased pressure will significantly assist fire safety services throughout the city.

## Crime Prevention Through Environmental Design

Crime Prevention Through Environmental Design (CPTED) is based on the idea that design and effective use of community design can lead to a reduction in the potential for crime and incidence of crime and an overall improvement in quality of life. CPTED strategies rely on the ability to influence offender decisions that precede criminal acts by affecting the built, social, and administrative environments.

Because Biggs does not have a full-time police department within its city limits, a CPTED strategy would allow a reduction in crime by designing future neighborhoods and buildings in a manner that would provide security and safety for people and property.



## PUBLIC HEALTH & SAFETY ELEMENT

### Seismic and Geologic Hazards

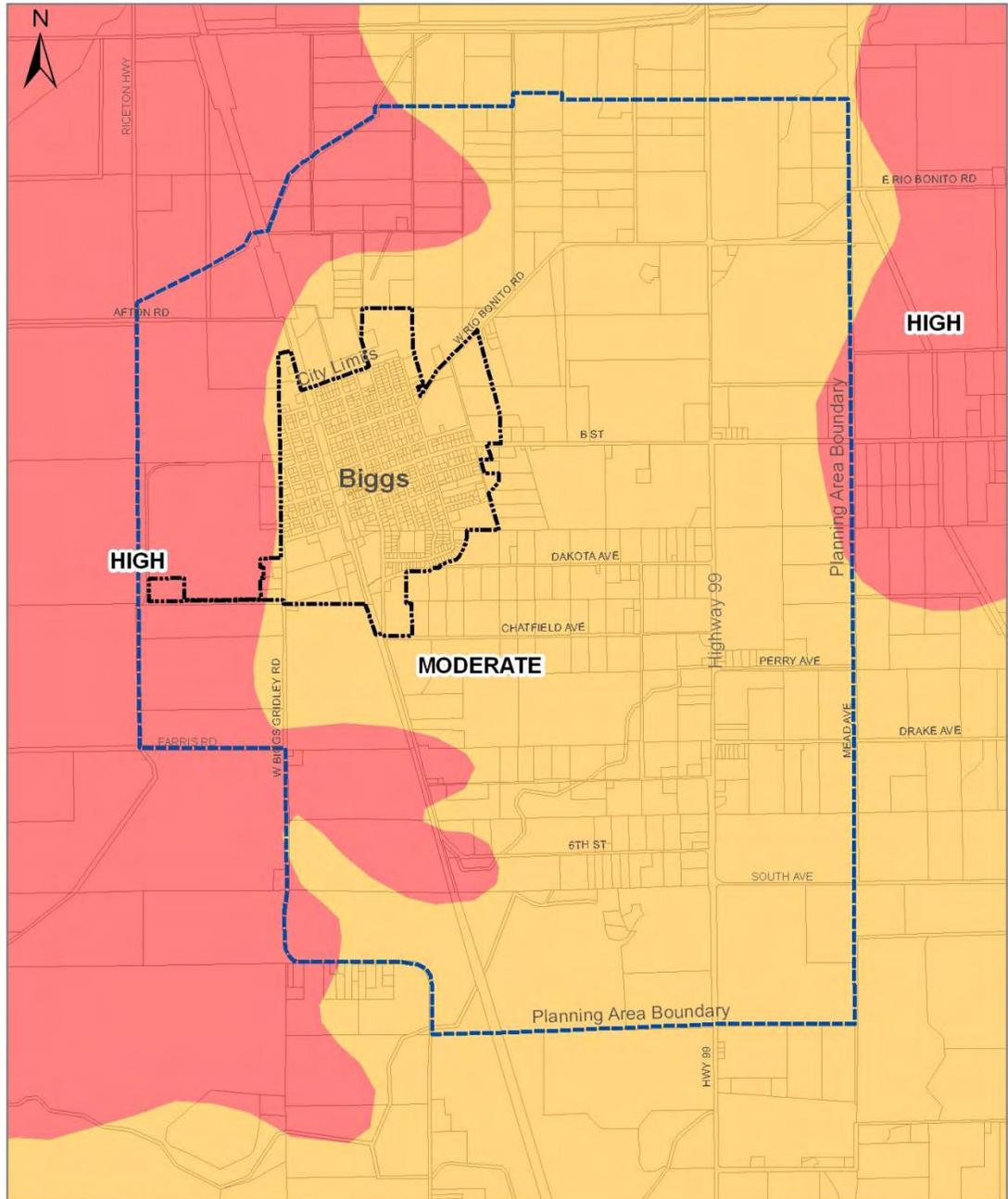
According to the Butte County MHMP, the probability and potential severity of geologic hazards in the City of Biggs are considered low. Biggs and the surrounding area are relatively free from significant seismic and geologic hazards. There are no known or inferred active faults within the city. The only known active fault in Butte County is the Cleveland Hills fault, the site of the August 1975 Oroville earthquake. This earthquake had a Richter magnitude of 5.7.

The City enforces the state building code, which mandates construction techniques that minimize seismic hazards. In addition to seismically induced ground shaking, ground movement can also be triggered by heavy rains or by grading. Landslide potential is influenced by a number of factors, including geology, water influences, and topography. Because Biggs is located on the valley floor, there is no potential for landslides, seiche, or tsunamis within the city or Planning Area. Further, there is no indication of subsidence ever occurring within the city.

Some locations in the Biggs area are known to have expansive soils that swell when they absorb water and shrink when drying (see **Figure S-2**). Expansive soils can cause structural damage to foundations and roads if the necessary construction techniques and materials are not used.

The policies of this element support the continued use of the state building code to address structural requirements related to safety from seismic and geologic hazards.

# PUBLIC HEALTH & SAFETY ELEMENT



Source: Butte County GIS, 2011



- High Potential for Soil Expansion
- Moderate Potential for Soil Expansion

**Figure S-2**  
Potential for Soil Expansion





## PUBLIC HEALTH & SAFETY ELEMENT

### Hazardous Materials and Waste Management

Hazardous materials include a wide variety of substances commonly used in households and businesses. Used motor oil, paint, solvents, lawn care and gardening products, household cleaners, gasoline, and refrigerants are among the diverse range of substances classified as hazardous materials. Nearly all businesses and residences generate some amount of hazardous waste; certain businesses and industries generate larger amounts of each substance, including gas stations, automotive service and repair shops, printers, dry cleaners, and photo processors.

In addition to these sources, material that is toxic or hazardous is transported on nearby State Route 99 and on the Union Pacific Railroad, which passes through the city, and could be subject to accidental release.

Several herbicides and insecticides that are classified by the California Department of Food and Agriculture as potentially harmful to humans are used in Butte County. Although injuries from agricultural chemicals are experienced predominantly in occupational situations, some hazards may occur on neighboring lands during application. For example, if crop spraying adjacent to urban uses occurs on a windy day, drift could create a hazard. The hazards that farming operations present for urban uses can be minimized by using organic farming practices, switching to crops with natural pest resistance, or maintaining buffer zones between urban and agricultural uses. Policy LU-XX in the Land Use Element specifies the agricultural buffering requirements at the community's edge.

### Hazardous Waste Regulation

Use, storage, and transportation of hazardous wastes are heavily regulated by federal, state, and local agencies, including the California Department of Toxic Substances Control, which is authorized to implement the regulations of the U.S. Environmental Protection Agency (EPA).

In Butte County, a unified team serves as first responders to hazardous materials incidents or emergencies. The team was first organized by the Butte County Fire Chiefs Association beginning in 1989 through the use of a Joint Powers Agreement. Team members are from the fire departments of Chico, Oroville, Paradise, Biggs, Gridley, and Butte County, as well as from CalFire. The team staffs two units and comprises specialists and technicians. Haz Mat 64 is stationed at the Kelly Ridge Fire/Butte County Station, and Haz Mat 1 is stationed at Chico Station 1.

The City and this General Plan will encourage and promote practices and technologies that will:

- Reduce the use of hazardous substances and the generation of hazardous wastes at their source.
- Recover and recycle the remaining wastes for reuse.



- Treat those wastes not amendable to source reduction or recycling so that the environment and community health are not harmed by their ultimate release or disposal.

## Transportation Hazards

The Union Pacific Railroad line passes through the City of Biggs between Seventh and Eighth streets. Hazardous materials are regularly shipped via the rail line and, while unlikely, an incident involving a rail accident within the city could have devastating effects.

The City has little control over the types of materials that are shipped via the rail line. With regard to government activities, the content of shipments may be confidential for reasons of security and/or is generally unknown to the City. While the City has little influence over the types of material transported via the rail line, the potential for rail incidents can be reduced by ensuring that at-grade crossings within the city are operating in a safe and effective manner.



One of the primary concerns is the safety of pedestrians along the tracks and vehicles utilizing at-grade crossings on B Street, E Street, and F Street. The second primary concern, while unlikely, is an incident involving derailment of a train in the vicinity of Biggs and the hazards that could result from spillage of the cargo which the train is transporting.

The design and operation of at-grade crossings is the aspect of rail-related hazards that is most under the control of the City. Each of the city's crossing sites is controlled by automated gates.



Grade-separated crossings (overcrossings) improve safety within the community by reducing collision potential and ensuring that emergency vehicles can always cross the tracks. However, such crossings are cost-prohibitive and could significantly impact existing development adjacent to the existing crossing sites. The Circulation Element of this General Plan identifies potential future locations for grade-separated crossings. Additionally, the City has engaged in

dialogue with the Union Pacific Railroad, the City of Gridley, and Butte County to explore options for regional crossings, which may assist in addressing cost concerns.



## PUBLIC HEALTH & SAFETY ELEMENT

Given the land use and financial impacts of grade-separated crossings, it is highly unlikely that the at-grade crossings within Biggs will be eliminated during the life of this General Plan. Therefore, ensuring proper gate operation at the crossings is the most effective strategy the City can employ to avoid accidents and minimize safety risks.

Proper gate functioning includes ensuring that gates are not in the lowered position unnecessarily. Lowering of gates for excessive time durations or when trains are not present can encourage drivers to maneuver around gates. Over time, such practices can increase the potential for a train/vehicle collision.

### III. GOALS, POLICIES, AND ACTIONS

**Goal S-1: Minimize the loss of life and property resulting from natural and human-caused hazards.**

**Goal S-2: Minimize the threat to life and property from flooding and inundation.**

**Goal S-3: Protect lives and property from seismic and geologic hazards.**

**Goal S-4: Continue to provide effective and efficient fire protection and prevention services to Biggs area residents.**

**Goal S-5: Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property.**

**Goal S-6: Enhance the safety of railroad crossings.**

**Goal S-7: Reduce the potential for public exposure to hazardous materials or the accidental releases of toxic or hazardous substances.**

**GOAL S-1: MINIMIZE THE LOSS OF LIFE AND PROPERTY RESULTING FROM NATURAL AND HUMAN-CAUSED HAZARDS.**

**Policy S-1.1 (Emergency Preparedness) – Promote public safety from hazards that may cause death, injury, or property damage through emergency preparedness and awareness.**

**Action S-1.1.1 (Emergency Plan Maintenance) –** Maintain, and update as needed, the City's Emergency Plan to guide emergency management in the city.

**Action S-1.1.2 (Emergency Response Awareness) –** Promote community awareness of emergency evacuation routes, notification methods, and planning in the Biggs area.



**Action S-1.1.3 (Regional Hazard Agency Participation)** – Actively participate and partner with Butte County and other regional agencies for comprehensive hazard and emergency planning.

**Action S-1.1.4 (Incident Training)** – Participate in the Federal Emergency Management Agency’s National Incident Management System program, which provides a standardized approach to emergency incidents.

## **GOAL S-2: MINIMIZE THE THREAT TO LIFE AND PROPERTY FROM FLOODING AND INUNDATION.**

**Policy S-2.1 (Potential Flood Hazards)** – When considering areas for development, analyze and consider potential impacts of flooding.

**Action S-2.1.1 (Consider Potential Flood Impacts)** – The City shall not approve new development projects that will result in new or increased flooding impacts on adjoining parcels or upstream and downstream areas, unless it can be shown that corresponding improvements to drainage facilities are sufficient to mitigate any potential impacts. Projects shall mitigate for increases in flooding potential through project-related improvements (either on- or off-site), as approved by the City Engineer.

**Action S-2.1.2 (Flood Hazard Management)** – Continue efforts to work with FEMA and state and local agencies to evaluate the potential for flooding, identify areas susceptible to flooding, accredit the flood control levees in the city, and require appropriate measures to mitigate flood-related hazards.

**Action S-2.1.3 (Floodplain Development)** – Preclude development within the 100-year floodplain, as determined by the most recent floodplain mapping available from FEMA or other acceptable source, unless otherwise approved by the City floodplain administrator based on site-specific mitigation.

**Action S-2.1.4 (Flood Hazard Analysis)** – As part of project review, analyze potential impacts from flooding and require compliance with appropriate building standards and codes for structures subject to 200-year flood hazards.

**Action S-2.1.5 (200-Year Flood Protection)** – Cooperate and partner with local, regional, state, and federal agencies to seek funding for the provision of 200-year flood protection.

**Action S-2.1.6 (Flood Hazard Analysis)** – Develop flood control strategies and improvement plans for the City of Biggs in coordination with regional flood control and reclamation districts.



## PUBLIC HEALTH & SAFETY ELEMENT

**Action S-2.1.7 (Floodplain Hazard Materials)** – Provide materials to the community regarding FEMA and California Department of Water Resources flood mapping.

**Action S-2.1.8 (SBFCA Participation)** – Continue active participation in the Sutter Buttes Flood Control Agency.

**Action S-2.1.9 (NFIP Participation)** – Participate in the National Flood Insurance Program by updating the Local Floodplain Management Ordinance as necessary to help reduce future flood damage. As part of the update, consider adopting more stringent standards than included in model ordinances as a way of improving flood safety and reducing insurance premiums for property owners.

**Policy S-2.2 (Drainage)** – Ensure that adequate drainage exists for both existing and new development.

**Action S-2.2.1 (Runoff Control Measures)** – Require all new urban development projects to either incorporate runoff control measures to minimize peak flows of runoff or otherwise implement comprehensive drainage plans.

**Action S-2.2.2 (Drainage Maintenance)** – Work with area Reclamation Districts to maintain drainage facilities in order to ensure their proper operation during storms.

**Action S-2.2.3 (Regional Stormwater Facility)** – Evaluate the potential for a regional stormwater detention/retention facility within or downtown of Biggs.

**Action S-2.2.4 (Master Drainage Plans)** – Require master drainage plans as a condition of approval for large development projects.

**Action S-2.2.5 (New Residential Construction)** – Require new residential construction to have its lowest habitable floor elevated above the base flood level elevation, as determined by FEMA standards.

### **GOAL S-3: PROTECT LIVES AND PROPERTY FROM SEISMIC AND GEOLOGIC HAZARDS.**

**Policy S-3.1 (Potential Damage to New Structures)** – Prevent damage to new structures caused by seismic, geologic, or soil conditions.

**Action S-3.1.1 (Soils Report)** – A soils report, prepared by a licensed soils engineer, shall be required for all new residential subdivisions and nonresidential development projects. Soils reports shall evaluate shrink/swell and liquefaction potentials of sites and recommend measures to minimize unstable soil hazards.

**Action S-3.1.2 (Potential Soil Hazards)** – In areas identified as having highly expansive soils, require appropriate studies and structural precautions through project review.



**Action S-3.1.3 (Reducing Subsidence)** – Applications for projects that extract groundwater, oil, or gas shall include a report evaluating the potential for resulting subsidence. Reports shall discuss appropriate mitigation measures to reduce the potential for subsidence.

**Policy S-3.2 (Potential Damage to Existing Structures) – Encourage owners of buildings which are subject to seismic hazards to pursue structural improvements to remedy seismic-related hazards.**

**Action S-3.2.1 (Identification of Hazards)** – Consider establishing a program to identify buildings that present seismic safety concerns and explore opportunities to assist owners of such structures with accomplishing necessary improvements.

**Action S-3.2.2 (Funding Options)** – Identify, and pursue as appropriate, funding options to assist property owners with costs related to seismic safety structural improvements.

**Action S-3.2.3 (Groundwater Monitoring)** – Monitor the elevations of groundwater at city wells. Fluctuations in groundwater levels shall be recorded to determine long-term trends in groundwater elevation.

**Action S-3.2.4 (Groundwater Sales)** – Oppose groundwater transfers and sales that would substantially impact city water supplies or regional groundwater supplies.

**Action S-3.2.5 (Regional Water Discussions)** – Participate in regional groundwater monitoring activities and ongoing regional water discussions.

**GOAL S-4: CONTINUE TO PROVIDE EFFECTIVE AND EFFICIENT FIRE PROTECTION AND PREVENTION SERVICES TO BIGGS AREA RESIDENTS.**

**Policy S-4.1 (Fire Safety Staffing)** – At a minimum, maintain current levels of service for fire protection by continuing to require development to provide and/or fund fire protection facilities, personnel, and operations and maintenance.

**Policy S-4.2 (Fire Hydrants)** – Ensure all fire hydrants within the city are maintained and can sufficiently provide fire suppression services.

**Action S-4.2.1 (Hydrant Spacing)** – Require all new development to design public facility improvements to ensure that water volume and hydrant spacing are adequate to support efficient and effective fire suppression.

**Action S-4.2.2 (Hydrant Maintenance)** – Work with Butte County Fire/CalFire to properly test and maintain fire hydrants.



## PUBLIC HEALTH & SAFETY ELEMENT

**Policy S-4.3 (ISO Rating) – Biggs shall strive to maintain, at a minimum, the city’s current Insurance Service Office (ISO) rating of Protection Class 3.**

**Policy S-4.4 (Vegetation Management) – Support vegetation management and weed abatement programs that reduce fire hazards.**

**Action S-4.4.1 (Hazard Reduction) –** Continue to enforce the requirements of Public Resources Code Sections 4290 and 4291 and Biggs Municipal Code Section 6.25 in all new development projects and within the existing developed areas of the City. This includes, but is not limited to, the following:

- Maintain roofs of structures free of vegetative growth and debris.
- Remove any portion of trees growing within ten (10) feet of chimney/stovepipe outlets.
- Maintain screens over chimney/stovepipe outlets or other devices that burn any solid or liquid fuel.

**Policy S-4.5 (Interagency Coordination) – Continue to maintain interagency relationships to maximize fire protection services and support programs that reduce fire hazards.**

**Action S-4.5.1 (Interagency Programs) –** Continue to work with CalFire and the Butte County Fire Department on programs that will enhance fire protection and firefighting capabilities in the Planning Area, including maintaining aid agreements.

**Policy S-4.6 (Fire Safety Standards and Programs) – Support the development and implementation of standards and programs to reduce fire hazards and review development and building applications for opportunities to ensure compliance with relevant codes.**

**Action S-4.6.1 (Standards to Protect Structures) –** Maintain, and update as needed, the standards manual for protecting structures in wildland fire areas.

**Action S-4.6.2 (Structural Standards) –** Incorporate building construction standards for the Local Resource Area (areas that are provided City fire suppression services) that are consistent with the requirements for the State Responsibility Areas (areas that are provided state and county fire suppression services) designated as Very High, High, and Moderate Fire Hazard Severity Zones.

**Action S-4.6.3 (Project Design) –** As part of the project review process in wildland fire areas, require consideration of emergency evacuation routes and defensible buffer areas.



**Action S-4.6.4 (Development Standards)** – Encourage and work with the County to require development in unincorporated areas within the City’s Sphere of Influence to conform to the City’s development standards.

**Action S-4.6.5 (Fire Sprinklers, New Structures)** – Conform to all California Building Code requirements requiring fire sprinklers for new construction.

**Action S-4.6.6 (Mutual Response Agreements)** – Continue participation in regional mutual response agreements to address issues of fire safety within and around the city and to provide options for fire protection services on the west side of the railroad tracks in the event of track blockage.

**Action S-4.6.7 (Equipment Modernization Funding)** – Continue to fund equipment modernization efforts and participate in grant funding to enhance firefighting resources.

**GOAL S-5: DESIGN NEIGHBORHOODS AND BUILDINGS IN A MANNER THAT PREVENTS CRIME AND PROVIDES SECURITY AND SAFETY FOR PEOPLE AND PROPERTY.**

**Policy S-5.1 (CPTED) – Utilize Crime Prevention Through Environmental Design (CPTED) principles in the design of projects and buildings.**

**Action S-5.1.1 (CPTED Guidelines)** – Adopt, and update as necessary, development standards and design provisions consistent with current Crime Prevention Through Environmental Design (CPTED) guidelines. Specifically, incorporate provisions to address the following:

**Action S-5.1.2 (Natural Surveillance)** - Intended to keep intruders easily observable, natural surveillance provisions maximize visibility of people, parking area, and building entrances (e.g., doors and windows that look out on to streets and parking areas, pedestrian-friendly sidewalks and streets, front porches, adequate nighttime lighting).

**Action S-5.1.3 (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. This design concept is implemented by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and fences.

**Action S-5.1.4 (Natural Access Control)** - A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating a perception of risk for offenders. This design concept is achieved by designing streets, sidewalks, building entrances, and neighborhood gateways to clearly indicate public routes and also by discouraging access to private area with structural elements.



## PUBLIC HEALTH & SAFETY ELEMENT

**Action S-5.1.5 (Target Hardening)** - This is accomplished by adding features that prohibit entry or access, including window locks, deadbolts for doors, and interior door hinges.

### GOAL S-6: ENHANCE THE SAFETY OF RAILROAD CROSSINGS.

#### Policy S-6.1 (Railroad Crossings) – Enhance the safety of railroad crossings in the city.

**Action S-6.1.1 (Coordinate with UPRR)** – Request Union Pacific Railroad to verify that relevant safety measures for at-grade crossings are implemented and maintained, and assess the feasibility of improving safety features, including enhanced crossing gate practices and warning devices.

**Action S-6.1.2 (Education on Railroad Crossings)** – Consider potential rail-related hazards prior to approval of new development projects and roadway improvements in the immediate vicinity of the Union Pacific Railroad tracks.

**Action S-6.1.3 (Grade-Separated Crossings)** – For improved emergency response and traffic circulation, support interagency studies to identify the best possible locations and feasibility for funding and developing grade-separated (vehicle and pedestrian/bicycle) railroad crossings within the city.

**Action S-6.1.4 (Monitor At-Grade Crossings)** – Monitor the operation of at-grade crossings within the city limits and immediately report any problems with gate function to the rail line operator.

**Action S-6.1.5 (Pedestrian/Bicycle Railroad Crossing)** – In cooperation with UPRR, work to ensure pedestrian and bicycle crossing safety as appropriate.

**Action S-6.1.6 (Minimize Railroad Noise)** – Work with UPRR to evaluate options for enhanced warning devices that would increase safety and minimize the use of horns around residential areas.

**Action S-6.1.7 (Railroad Crossing Blockage)** – Work with the UPRR to minimize the stoppage of trains that block all of the railroad crossings in the city at the same time.

### GOAL S-7: REDUCE THE POTENTIAL FOR PUBLIC EXPOSURE TO HAZARDOUS MATERIALS OR THE ACCIDENTAL RELEASES OF TOXIC OR HAZARDOUS SUBSTANCES.

#### Policy S-7.1 (Hazardous Materials Safety Coordination) – Support efforts to reduce the potential for accidental releases of toxic and hazardous substances.

**Action S-7.1.1 (Butte County EOP)** – Continue to coordinate hazardous waste management programs with the Butte County Hazardous Waste Management Plan and the Butte County Emergency Operations Plan.



**Action S-7.1.2 (Planning for Hazardous Materials Safety)** – Consult with the State Office of Emergency Services, the State Department of Toxic Substances Control, the California Highway Patrol, Butte County, and other relevant agencies regarding hazardous materials routing and incident response programs.

**Action S-7.1.3 (Transporting Hazardous Materials)** – Strive to ensure that hazardous materials are used, transported, and disposed in the city in a safe manner and in compliance with local, state, and federal safety standards.

**Action S-7.1.4 (Hazardous Waste Facility Siting)** – Ensure that new hazardous waste facilities and those commercial and industrial land uses that use or produce hazardous waste are sited in an appropriate manner.

**Action S-7.1.5 (Contamination Prevention)** – Protect soils, surface water, and groundwater from contamination.

**Action S-7.1.6 (Increase Public Awareness)** – Work to educate the public as to the types of household hazardous waste and the proper method of disposal.

**Action S-7.1.7 (Household Hazardous Waste)** – Encourage household hazardous waste to be disposed of properly and continue to support local household hazardous waste disposal events.

**Action S-7.1.8 (Designated Routes for Hazardous Materials)** – Designate hazardous materials routes and require that hazardous materials transported within the city be restricted to routes that have been designated for such transport.

**Policy S-7.2 (Reduce Toxic Materials Use)** – Strive to reduce the use of hazardous and toxic materials in City operations.