

5. HEALTH AND SAFETY ELEMENT

5.1 Health and Safety Introduction

The Health and Safety Element addresses the following issues:

1. Public Health
2. Public Safety and Police Protection
3. Fire Protection
4. Geology and Seismic Hazards
5. Flood Hazards
6. Airport-Related Hazards
7. Hazardous Materials
8. Public Protection and Emergency Planning
9. Water System
10. Wastewater Collection and Treatment.

A Safety Element is a required element of the General Plan. It establishes a framework of objectives, policies and implementation programs that will be the basis for proficient land use planning to reduce unreasonable risks and to protect public health and welfare.

California Government Code Section 65302(g) requires that a Safety element be included in a General Plan, and more specifically mandates that the element address the following:

...the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, tsunamis, seiches, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards identified pursuant to Chapter 7.8(commencing with Section 2690) of the Public

Resources Code, and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards...

The City of Anderson has expanded the intent of the safety Element to address public health issues as a component of public safety. The result is a combined “Health and Safety Element.”

5.2 Objectives, Policies, and Implementation Program

Health and Safety Objective: To provide all City residents with adequate public services for a safe and healthy living environment.

5.2.1 Public Health

From the beginning, town planning involved issues of public health. Urban planning and public health professions both came out of a desire to prevent urban outbreaks of infectious disease. Recently, health professionals have taken a new look at urban design and have become advocates for designing and building healthy places, especially those designs which will promote increased physical activity. Land use policies and programs that support active living include the following:

- Mixed Use development
- Transit-oriented development
- Urban infill
- Parks
- Recreation
- Trails

These policies are said to ameliorate many medical conditions including respiratory and cardiovascular diseases (heart disease and stroke), cancer, obesity, diabetes, depression and

anxiety. According to the Surgeon General, as little as 30 minutes of moderate exercise each day, including brisk walking, can bring significant health benefits.

Mixed Use development allows planning and zoning to site residential, retail, office and educational facilities within close proximity to each other to encourage walking and biking as a routine part of everyday life.

Transit-oriented development includes bus and paratransit options and gives residents and commuters more opportunities to combine biking and walking with other means of getting to work, school or shopping centers. Public transit does not replace walking or biking, but integrates them into the transportation mix.

Urban infill is often associated with Mixed Use development which results in compact communities that can encourage walking and biking opportunities to jobs, schools and shopping centers.

Parks can provide opportunities for family recreation, play areas and sports fields. Parks located close to residential areas and/or schools can increase opportunities for biking and walking.

Recreation can either be active or passive. Active recreation is activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts and various forms of children's play equipment. Passive recreation is activity that does not require the use of organized play areas such as nature observation.

Trails for biking and/or walking can promote increased activity with smaller amounts of land than large parks and can often use "left-over" or unwanted land. Promotion of trails is necessary to gain the full public health benefits of increased use.

All sections of the General Plan include provisions to promote the health of Anderson residents. The implementation of bicycle and pedestrian trails has been demonstrated to promote a healthy life-style. The Housing Element promotes adequate shelter for all.

Recreation programs promote a sense of community and good health. Open-space and preservation of scenic vistas all contribute to good health. The sense of security is important to good health.

A. Public Health Policies (PHP)

PHP-1 Mixed Use development benefits public health by promoting walking and social interaction.

PHP-2 Transit-oriented development will be encouraged in all land-use designations.(Circulation Element)

PHP-3 Urban infill will be encouraged.

PHP-4 Parkland and developed parks will be increased.

PHP-5 Recreation programs will be expanded for all age groups.

PHP-6 Trails will be an integral part of both the recreation and circulation plans.

B. Public Health Implementation Program (PHI)

PHI-1 Mixed Use development will be given priority for application processing.

PHI-2 Transit-oriented development will be encouraged by specific development requirements.

PHI-3 Urban infill will take advantage of existing infrastructure.

PHI-4 Recreation programs will be developed with new sources of revenue.

PHI-5 Trails will be required to be included in new development plans.

5.2.2 Public Safety and Police Protection

Under the leadership of the Chief of Police, the Police Department is organized into two divisions as follows:

- 1) Field Services, and
- 2) Support and Administrative Services.

Each of these divisions plays an integral part in the operation of the Police Department to provide the community of Anderson with the highest quality of service possible. The Police Station is located at 2220 North Street, at the intersection of Martha Street.

The department is focused on following community oriented policing principles:

- sharing the Department with the community by having special programs, such as the "Citizens on Patrol" volunteers;
- sponsoring an active Neighborhood Watch Program;
- providing a School Resource Officer, and
- participating in a Neighborhood Improvement Task Force Program to identify and resolve community problems.

The department is truly a "Full Service", community-oriented police agency that balances its service standards with its enforcement standards.

The members of the Department pride themselves on providing friendly and humanistic treatment to the community members and the thousands of visitors who share our community. They serve diligently to be sensitive and responsive to the needs of the community through the delivery of professional police services, for the purpose of enhancing the quality of life within the City of Anderson.

The following policies and implementation programs are designed to support public safety and police protection and to ensure that the City of Anderson will get sufficient revenue from new development to continue the present level of police protection provided to residents of the City.

A. Public Safety and Police Protection Policies (PPP)

PPP-1 Maintain public confidence in the ability of the Police Department to provide quality police services by ensuring a customer-based approach to providing services to the community.

PPP-2 Consider the fiscal impacts of development in order to ensure that the City has adequate financial resources to fund community projects and programs.

PPP-3 Assure that all development in the City pays for its fair share of the cost of necessary public service and facilities.

PPP-4 Maintain a service ratio of 1.7 sworn officers per 1,000 persons.

B. Public Safety and Police Protection Implementation (PPI)

PPI-1 Require a financial impact analysis during the review of development projects so the financial impacts to the City of providing required public facilities and services will be explained and require that each project properly compensate for the full cost of providing those facilities and services through fee and other programs.

PPI-2 Annually review and amend fee and other programs that assure that the need of residents for public safety and police protection services and facilities will be adequately served.

PPI-3 Principal building addresses and entries shall be clearly articulated.

5.2.3 Fire Protection

Anderson Fire Protection District was formed in 1889 when most of the town was lost to a fire. The Anderson Fire Protection District is a separate special district with a defined governing board. Two members of the Anderson City Council are members of the Anderson Fire Protection District Board of Directors.

The District was originally a volunteer department. Now the Anderson Fire Protection District has 5 paid positions and one seasonal firefighter, along with 17 volunteers. The District maintains a fire station at the corner of Howard and Douglas Streets which is manned 24 hours per day by paid and volunteer personnel. There is an older fire station on East Center Street which houses two antique fire trucks used for parades only. New fire stations will be developed as needed.

A. Fire Protection Policies (FP)

- FP-1 Minimize the potential for loss of life, injury, and property damage resulting from urban and wildland fires.
- FP-2 Maintain the present level of fire protection in developed areas and extend the same or greater level of service to new developments. (Land Use Element)
- FP-3 Ensure that fire safety is considered when capital improvements (such as water line extensions) and development proposals are planned.

FP-4 Coordinate annexations into the City of Anderson to annex these lands to the Anderson Fire Protection District at the same time. No areas of the City should be served by any other fire protection district.

FP-5 New public safety facilities such as fire stations shall be located in or near commercial areas or adjacent to public parks.

B. Fire Protection Implementation (FI)

FI-1 Continued review of all new development projects by the Anderson Fire Protection District.

FI-2 Cooperate with the Anderson Fire Protection District in sizing new water lines and locating hydrants.

FI-3 Improve water system capabilities as they affect fire protection.

FI-4 Use the Uniform Fire and Building Codes in the City of Anderson.

FI-5 Periodically review the City's capital improvement plan to ensure that water supply and fire protection facilities and issues have been identified and included.

FI-6 Develop landscape guidelines and a vegetation management and weed abatement program for open-space areas to reduce the risk of wildland fire.

FI-7 Require a financial impact analysis during the review of development projects so the financial impacts to the Anderson Fire Protection District of providing required public facilities and services will be explained and require that each project properly

compensate for the full cost of providing those facilities and services through fee and other programs.

FI-8 Annually review and amend fee and other programs that assure that the need of residents for fire protection services and facilities will be adequately served.

FI-9 The Spheres of Influence for the Anderson Fire Protection District and the City should be the same.

5.2.4 Geology and Seismic Hazards

Seismic Hazards include the following:

1. Surface rupture or ground rupture
2. Ground shaking
3. Tsunami
4. Seiches
5. Dam failure
6. Mudslides
7. Landslides
8. Subsidence
9. Liquefaction

Shasta County has a low level of historic seismic activity. In the past 120 years there has been no significant property damage or loss of life due to earthquakes occurring within or near the County according to the Shasta County General Plan. Shasta County is entirely within Seismic Zone 3 of the Uniform Building Code.

Therefore, the City of Anderson is at low risk of experiencing an earthquake. However, the City has adopted the Uniform Building Code and will require all buildings to meet the standards of this Code.

A Seiche is an earthquake-generated wave in an enclosed body of water such as a lake, reservoir, or bay. Since Anderson is at a low risk for earthquakes as noted above, the City is also at a low risk of damage from a Seiche.

However, the City is aware of the risks posed by Shasta Dam or Whiskeytown Dam failure and has an emergency plan to cope with this type of emergency. According to 1994 modeling studies conducted by the United States Bureau of Reclamation, significant failure of Shasta Dam would

have a catastrophic effect on low-lying areas within the Planning Area. Significant failure of Whiskeytown Dam would also be extremely damaging to low-lying areas within the Planning Area.

A. Seismic Safety Policies (SSP)

SSP-1 Minimize risk to life and property from seismic activity.

SSP-2 Include seismic safety considerations in public utility systems improvements and expansions.

SSP-3 Continue implementation of Uniform Building Code in construction.

SSP-4 Plan for appropriate densities and types of land use on sloped lands that minimize exposure to soil erosion and landslides.

SSP-5 Minimize the potential for catastrophic impacts as a result of regional dam failures.

B. Seismic Safety Implementation (SSI)

SSI-1 Continued updating of the emergency plan.

SSI-2 Encourage programs designed to give citizens training in first aid and knowledge of proper action in emergency situations. (Air Quality Element)

SSI-3 Continued improvement of the water and sewer systems.

SSI-4 Retain application of the Hillside Slope Combining District or Planned Development Combining District on the foothill areas in town.

SSI-5 Ensure that the City's Disaster Response plan includes procedures to address potential flooding created by uncontrolled releases from Shasta and Whiskeytown Dams and procedures for the efficient and orderly notification and evacuation of potential dam inundation areas.

5.2.5 Flood Hazards and Drainage System

The purpose of the Flood Hazard policies and implementation measures is to protect public safety and to minimize the risk to life and property from flooding. The City of Anderson participates in the Federal Emergency Management Agency's (FEMA's) flood damage prevention program. The City's flood-prone areas are shown on Flood Insurance Rate Maps as modified by Letters of Map Revision.

The storm drain system will prevent localized flood problems. The City of Anderson policy is to require storm water detention for 100-year storm events. Detention of 10-year and 50 year events may not be required if existing downstream drainage structures are of sufficient size to allow passage of these lesser flow events without damage to the structures themselves or to adjacent properties.

A. Flood Hazard and Drainage System Policies (FHP)

FHP-1 Prevent damage from flooding. (Housing Element)

FHP-2 Encourage open space uses for F-1 primary floodplains. (Open Space and Conservation Element) (Recreation Element)

FHP-3 Prevent drainage problems in future developments.

FHP-4 Encourage basin-wide or regional drainage planning for the City. (Open Space and Conservation Element)

FHP-5 Detention facilities will meet the criteria established in the City of Anderson Standards and will be designed to minimize erosion. Capacities and design will be based on the storm water runoff defined in the Anderson Drainage Study.

B. Flood Hazard Implementation (FHI)

FHI-1 Continue use of flood damage prevention ordinance and other regulations related to flood prevention.

FHI-2 Possible joint uses for detention basins may include vineyards, trails, and tree planting.

FHI-3 Prohibit development in the floodway; discourage development in the 100 year flood plain.

FHI-4 Periodically review dam failure inundation maps for safety consideration.

FHI-5 Continue to participate in the FEMA Flood Insurance Program and cooperate with FEMA in keeping flood hazard maps up to date.

FHI-6 Require measures which eliminate or mitigate to acceptable levels (no net increase) runoff from future projects.

FHI-7 Work with State and Regional groups on a Flood Hazard Mitigation Plan.

5.2.6 Airport-Related Hazards

The Redding Municipal Airport is located southeast of Redding, just north of Anderson. Safety issues associated with airports are primarily concerned with hazards related to flight and hazards related to those on the ground within the vicinity of flight operations.

Flight hazards may be physical (tall structures that could obstruct airspace), visual (glare caused by lights or other bright objects) or electronic (uses that interfere with aircraft instruments or communications systems). Increased flight hazards can be reduced by planning methods, including height restrictions, density restrictions, and the avoidance of incompatible land uses.

A. Airport Hazard Policy (AHP)

AHP-1 Minimize the potential for and damage resulting from aircraft accidents.

B. Airport Hazard Implementation (AHI)

AHI-1 Prevent development that could endanger the safety of air travelers and persons residing or working in the Airport environs by adhering to the land use policies contained in the Comprehensive Land Use Plan and applicable Shasta County Airport Land Use Commission (ALUC) resolutions.

5.2.7 Hazardous Materials

The purpose of the Hazardous Materials policies and implementation programs is to provide guidance for protection from hazards associated with the use, transport, treatment, and disposal of hazardous substances. Hazardous materials include liquids, solids, and gases which, by themselves or when placed in contact with other materials, can result in a threat to life, the environment and/or property.

A. Hazardous Materials Policies (HMP)

HMP-1 Hazardous waste releases from both private companies and public agencies shall be identified and eliminated.

HMP-2 Storage of hazardous materials and wastes shall strictly follow State regulations.

HMP-3 Secondary containment and periodic examination shall be required for all storage of toxic materials. (Air Quality Element)

HMP-4 Industrial facilities shall be constructed and operated in accordance with current safety and environmental protection standards.

HMP-5 Industries which store and process hazardous materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The buffer zone shall be determined by the Planning Department. (Open Space and Conservation Element) (Noise Element)

B. Hazardous Materials Implementation Program (HMI)

HMI-1 Coordinate with the Shasta County Health Department, the State Department of Health Services and the California Highway Patrol to review permits for radioactive or hazardous materials on a regular basis and to promulgate and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.

HMI-2 Request that State and federal agencies with responsibilities for regulating the transportation of hazardous material review regulations and procedures, in cooperation with the City, to determine means of mitigating the public safety hazard in urbanized areas.

5.2.8 Public Protection and Emergency Planning

Emphasis on public protection and emergency planning will support a high level of public protection services and coordination of services in an emergency.

A. Emergency Planning Policy (EP)

EP-1 Develop a City-wide emergency evacuation plan. (Circulation Element)

EP-2 Provide safe evacuation routes in event of emergency.

EP-3 In order to ensure prompt public protection services, address numbers shall be required to be easily seen from the street or road.

EP-4 Provide adequate access for medical emergency equipment in new developments.

EP-5 Design and construct all buildings to provide a safe environment and a plan for evacuation. (Housing Element) (Noise Element)

B. Emergency Planning Implementation (EI)

EI-1 In cooperation with adjacent cities and public protection agencies, delineate evacuation routes, emergency vehicle routes for emergency response and, where possible, alternative routes where congestion or road failure could occur.

EI-2 Require major developments to provide access and funding for fire-fighting services adequate for the proposed development.

EI-3 Adopt a City of Anderson Emergency Response Plan that identifies specific response procedures and responsibilities for responding to emergency situations and that includes regular testing of the Plan at appropriate intervals.

5.2.9 Water System and Water Supply

The City of Anderson's water system consists of three separate systems containing a total of nine wells, a booster pump, and two reservoirs. The water system is maintained by the Water Department, which is part of Public Works. Five wells, a booster pump and two reservoirs serve the Main City System.

According to the "Redding Basin Water Resources Management Plan Phase 2C Report prepared for the Redding Area Water Council in August 2004, the City of Anderson gets its water from the Redding Groundwater Basin. The City was estimated to use 2,900 acre feet of water in 2005 and to need 5,400 acre feet of water in 2030.

The total amount of groundwater pumped from the Redding Groundwater Basin is about 40,000 acre feet per year compared to 800,000 acre feet of annual recharge to the basin through precipitation, seepage from streams and the ACID canal, and deep percolation of applied water and septic tank flow. The report states that "The estimated basin-wide water needs in 2030 are well below the ...available groundwater pumping capacity." Thus, the City of Anderson will have an adequate supply of water in the foreseeable future.

A. Water System Policies (WSP)

WSP-1 Provide adequate quantity and quality of water to existing and future customers.

WSP-2 The water system shall be designed to provide 1,000 gallons per minute (GPM) for four hours plus maximum day demand in low-density residential areas and 2,500 GPM for four hours plus maximum day demand for schools and commercial areas.

WSP-3 Water system facilities shall be designed to minimize visual impacts on adjoining land uses by maintaining a low profile and using screening and landscaping.

B. Water System Implementation (WSI)

WSI-1 Provide a system for future customers to reimburse developers for financing extensions of water lines.

WSI-2 Well shall be constructed to meet the State Department of water Resources and City of Anderson well standards.

WSI-3 Vertical turbine pumps with premium high-efficiency motors shall be required for all City well facilities.

WSI-4 Standby power generators shall be natural gas-driven and capable of operating the well facility during power outages.

WSI-5 Pumping facilities shall be contained within a fenced enclosure and shall be monitored with intrusion alarms for security.

WSI-6 All wells shall have chemical injection equipment.

WSI-7 Update the Water System Master Plan every five years.

5.2.10 Waste Water Collection and Treatment

The City of Anderson Waste Water Treatment Plant is located on Rupert Road near the Sacramento River. The Plant discharges an average dry weather flow of 1.4 million gallons per day (mgd) of treated domestic waste (advanced secondary treatment) into the Sacramento River. The Design Average Dry Weather Flow is 2.0 mgd.

The treatment system consists of influent pump station, bar screens, complete mix activated sludge with secondary clarification, followed by dual media pressure filtration, followed by disinfection using chlorine, and dechlorination using Sulfur Dioxide.

A. Waste Water Collection and Treatment Policies (WWP)

WWP-1 Operate the City's waste water treatment plant in accordance with State Regional Water Quality Control Board Waste Discharge Requirements.

WWP-2 Expand the waste water treatment plant as necessary. (Housing Element)

WWP-3 Developers shall fund expansion of the waste water treatment plant necessary to serve the proposed development.

B. Waste Water Collection and Treatment Implementation (WWI)

WWI-1 Coordinate provision of sewer service with other urban services.

WWI-2 Monitor capacity of the waste water collection and treatment system on an on-going basis and expand capacity as necessary.

WWI-3 Update the Waste Water Master Plan every five years.



