

**REQUEST FOR PROPOSAL
PREPARATION OF AN UPDATE TO THE LASSEN COUNTY
SAFETY ELEMENT**

LASSEN COUNTY, CALIFORNIA

Request For Proposal Issue Date: December 31, 2019

Proposal Deadline: February 20, 2020

PURPOSE

The County of Lassen ("County") is requesting proposals from qualified consulting firms or individuals to assist in the comprehensive update of its Safety Element of the General Plan, including the required environmental clearance. The selected Consultant will review the County's existing Safety Element and update the document to reflect current conditions and County policies to meet the Safety Element requirements found at Government Code Section 65302(g), and any other requirements, within legally mandated timeframes.

The current Safety Element (1974) of the Lassen County General Plan is included with this RFP for reference. It is expected that the current Hazard Mitigation Plan, approved by the Federal Emergency Management Agency, will be officially incorporated into the Safety Element when a contract is awarded to perform the work detailed in this RFP (said process is currently underway).

BACKGROUND

Lassen County is located in Northeast California with a total population of approximately 31,163. The County has a land area totaling over three million acres with only one incorporated city with a population of approximately 15,555 (although approximately 8,000 are inmates at the two state prisons within the city's boundaries). In addition to the two state prisons in the city, there is also one federal prison located within the unincorporated area of the County that houses approximately 1,000 inmates. This rural county has a few commercial and industrial developments and contains rail, highway, and airport access. The predominant sector of employment in Lassen County is Federal, State, and Local Government, which comprises approximately 50 percent of the jobs in the County. Due to the relatively mild climate and natural beauty, Lassen County appeals to locals and visitors alike for year-round recreational activities.

SCOPE OF SERVICES

The following deliverables are expected by the County:

Task 1 - Assessment

1.1. Evaluation of the Safety Element. Consultant will be required to review and evaluate the current Safety Element and its programs, including:

- A discussion of the effectiveness of its safety implementation programs;
- An evaluation of the existing Safety Element relative to Government Code Section 65302(g) and the Governor's Office of Planning and Research's Safety Element Guidelines (Appendix D of the *General Plan Guidelines: 2017 Update*) which can be viewed on the

1.2. Document Review. Consultant will review County documents to aid in understanding local conditions. Documents include, but are not limited to, the County's General Plan last updated in the year 2000, the zoning ordinance (Title 18 of Lassen County Code), the Hazard Mitigation Plan, the Regional Transpiration Plan, the Lassen County Fire Safety Ordinance 502 (Chapter 9.16 of Lassen County Code), and other pertinent documents.

1.3. Work plan preparation. Consultant will provide a detailed work plan which shall include the following:

- Public Outreach
- Consultation with Pertinent Agencies
- Outreach Summary
- Executive Summary
- Analysis of Key Facts
- Issues
- Opportunities and Challenges

Task 2 - Safety Element Preparation

2.1. Safety Goals, Policies, and Quantified Objectives. The Consultant shall update the existing Safety Element pursuant to Government Code Section 65302(g). The Safety Element must be consistent and comply with the other General Plan elements, community goals, and all State of California Assembly and Senate bills, as well as substantially conform to the Governor's Office of Planning and Research's Safety Element Guidelines.

Task 3 - Prepare and Finalize Safety Element

3.1. Administrative Draft Safety Element. The Consultant will be required to prepare and submit three reproducible copies and one electronic copy in Microsoft Word format of the administrative draft Safety Element for County staff to review and comment. The administrative draft shall reflect a high-quality work product and represent the Consultant's best professional work. The Consultant will have 90 days from the date of the kick-off meeting to complete the administrative draft. Once staff has reviewed and commented on the draft, the Consultant will modify the administrative draft as directed.

3.2. Draft Safety Element. The Consultant will then prepare and submit three reproducible copies and one electronic copy in Microsoft Word format, and one electronic copy in Adobe Portable Document Format of the draft Safety Element for distribution to the Board of Supervisors, the Planning Commission, and the general public for review and comment. The County intends to make the draft Safety Element accessible both in hard copy format and on the County's website.

3.3. Agency Review. The consultant shall identify all agencies who are required by law or regulation to review, comment, and/or approve the proposed Safety Element. This task includes assisting with the submittal of the Draft Safety Element to said agencies. The

consultant shall make any required edits to the Draft Safety Element that are identified. In addition, if there are required changes made from said agencies, the consultant will also assist in resubmitting the second Draft Safety Element back for review for the preparation of the Final Safety Element to be adopted and or approved.

- 3.4. *Community, Planning Commission, and Board of Supervisors Meetings.* The Consultant must organize and attend three (3) community meetings to present the draft Safety Element and respond to questions from the public. The Consultant must also attend all Planning Commission and Board of Supervisors' meetings pertinent to the Safety Element.
- 3.5. *Final Safety Element.* The Consultant will prepare a final version of the Safety Element and submit fifteen (15) bound copies and one electronic copy in Adobe Portable Document Format, in response to comments received from County staff, the Planning Commission, the Board of Supervisors, and the general public.

Task 4 - Safety Ordinance

- 4.1 *Preparation of a Safety Ordinance.* The Consultant will prepare a draft safety ordinance that will help to resolve safety complaints as well as establish safety thresholds that can be used for environmental review of future projects and that is compatible with the existing Lassen County Fire Safety Ordinance 502. (Chapter 9.16 et seq. of the Lassen County Code).
- 4.2 *Staff Review and Comment.* The Consultant will submit said draft safety ordinance to the Department of Planning and Building Services, the Lassen County Planning Commission, and the Lassen County Board of Supervisors, for review and comment. The Consultant will incorporate said comments into its draft safety ordinance.

Task 5 - Environmental Review

- 5.1. *California Environmental Quality Act (CEQA) Completion and Submittal of all Required Documents.* The consultant must prepare and process all applicable environmental documents or exemptions pursuant to CEQA. The consultant shall submit a draft of all required CEQA documents to the Department and provide an updated copy, responding to all edits and comments made by the County. Said documents (draft and final) shall be submitted in a Microsoft Word and Adobe Portable Document Format. An "Initial Study" must be completed for the project. If the initial study prepared pursuant to this section results in a determination that an environmental impact report (EIR) is required, said EIR would be prepared pursuant to a separate agreement.

PROPOSAL AND QUALIFICATIONS

Proposal responses must adhere to the requirements set forth in this section. Failure to adhere to these requirements or the inclusion of conditions, limitations, or misrepresentations may be cause for rejection of the submittal. Use 8 ½ x 11 sheets (foldouts are acceptable for charts, etc.) and font size large enough to be easily legible, but no smaller than 11 point.

Proposals, at a minimum, must include:

1. Cover letter signed by an individual authorized to bind the proposing entity.

2. General information about the Consultant (i.e. company size, location of office(s), length of time in business, organizational structure, number of professional personnel, and other pertinent information. Include name, address, telephone number, facsimile number, and e-mail address of the consulting firm.
3. The names, telephone numbers, and email addresses of the Consultant's project team, including the name of the project manager, and the sub-consultants to be retained by the Consultant, if any. Submit the resumes of all personnel (including sub-consultants) to be involved with the project and their specific experiences relative to the preparation of safety elements and environmental documents.
4. Consultant must provide a minimum of three (3) client references for whom the Consultant has prepared a Safety Element update. The references shall identify the client, a contact name, telephone number, description of the service provided, and length of business.
5. One hard copy of a Safety Element completed by the Consultant.
6. Consultant's knowledge of Government Code Section 65302(g).
7. A detailed outline of the proposed approach to the project, including a breakdown of tasks and timing to complete the project and a detailed description of the methods of information gathering and analysis to be used in preparing the Safety Element to meet the County's objectives. Also, indicate which members of the project team will be responsible for the various task(s) and attendance at meetings. The submittal should also provide a detailed description of any requested material needed from the County.
8. Consultant's estimated fee for the project, with a not-to-exceed amount. The cost estimates shall reflect detailed project man-hours per the Scope of Services to be provided, including clerical and expected subcontractor rates, the cost for attendance at meetings, mileage, and projected reproduction costs. Cost estimates shall also include contingencies.
9. Provide insurance evidence as specified in the Section - Insurance Requirements.

PROPOSAL EVALUATION

The County of Lassen is using the competitive proposal process, wherein the experience of each submitted proposal is evaluated as it relates to the Scope of Services. All proposals will be reviewed and discussed, each consulting firm will be rated using the following criteria and rating schedule:

- | | |
|---|--------------------|
| 1. Understanding and capacity to perform the Scope of Services. | 50 Points, Maximum |
| 2. Clarity of work plan. | 20 Points, Maximum |
| 3. Successful experience in similar efforts. | 13 Points. Maximum |
| 4. Schedule. | 7 Points, Maximum |
| 5. Budget. | 10 Points, Maximum |
| | 100 Points, Total |

The County of Lassen reserves the right to negotiate aspects of the project with the successful consulting firm. An evaluation committee will be assembled to review all proposals and will report its recommendation to the County of Lassen's Board of Supervisors.

The County of Lassen's Board of Supervisors, whom retains the right to reject any and all proposals, will award the contract. The County reserves the right to award a contract to the Consultant that presents the proposal, which in the sole judgment of the County best serves the County's interest. The County reserves the right to reject any or all of proposals, to waive minor irregularities in said proposals, and/or to negotiate minor deviations with the successful consulting firm.

INSURANCE REQUIREMENTS

The successful Consultant shall furnish County with certificates and original endorsements affecting the required insurance coverage prior to execution of a Contract by County. The successful Consultant shall provide a Certificate of Insurance naming County of Lassen as additional insured for the following:

1. Comprehensive general liability insurance including comprehensive public liability insurance with minimum coverage of One Million Dollars (\$1,000,000) per occurrence and with not less than One Million Dollars (\$1,000,000) aggregate; Consultant shall insure both County and Consultant against any liability arising under or related to this Agreement.
2. Comprehensive automobile liability insurance with minimum coverage of Five Hundred Thousand Dollars (\$500,000) per occurrence and with not less than Five Hundred Thousand Dollars (\$500,000) on reserve in the aggregate, with combined single limit including owned, non-owned, and hired vehicles.
3. Workers' Compensation Insurance coverage for all of Consultant's employees and other persons for whom Consultant is responsible to provide such insurance coverage, as provided by Division 4 and 4.5 of the California Labor Code.
4. The policy shall not be cancelable without twenty-days advance written notice to the County, and shall be in a form and by a surety approved by the County.
5. In the event the policy is canceled prior to the completion of the project and the Consultant does not furnish a new Certificate of Insurance prior to cancellation, the County may obtain the required insurance and deduct the premium(s) from contract monies due to the Consultant.
6. If the policy is a claim made policy, the policy shall contain language providing coverage up to six months following the completion of the contract in order to provide insurance coverage for the hold harmless provisions herein.
7. As used above, the term "Consultant" includes the Consultant, and its officers, agents or employees.

NON-DISCRIMINATION

The County is an equal opportunity employer. Proponents shall not discriminate in their employment with regard to race, color, religion, sex, or national origin. Qualified Consultants including small

businesses and businesses owned by women, minorities, and disabled persons are encouraged to submit proposals.

PROPOSAL SUBMITTALS

All proposals must be received by the County of Lassen by 4:00 p.m. (Pacific Daylight Time) February 20, 2020. Proposals received after 4:00 p.m. (Pacific Daylight Time) February 20, 2020, or proposals sent by facsimile machine will be considered late and disqualified by the proposal evaluation committee. Please submit three (3) copies of the proposal in a sealed envelope and clearly marked "Proposal for Safety Element Update."

Proposals are to be delivered to:

County of Lassen Department of Planning and Building Services
Proposal for Safety Element Update
Attn: Gaylon Norwood
707 Nevada Street, Suite 5
Susanville, CA 96130

All proposals whether selected or rejected, shall become the property of the County of Lassen. The County is not responsible for any cost incurred in the preparation of the proposal or proposals delivered to a person/location other than specified above.

Any questions concerning the request for proposal should be directed to Assistant Director, Gaylon Norwood, in writing by mail at 707 Nevada Street, Suite 5, Susanville, CA 96130; by fax at (530) 251-8373; or by email at gnorwood@co.lassen.ca.us. Questions and responses may be made available to all potential proponents.



LASSEN COUNTY GENERAL PLAN

**SAFETY AND
SEISMIC SAFETY ELEMENT**

**Resolution No. 2552, Exhibit B
September 3, 1974**

**(Note: The Noise Element, referred to as Exhibit A,
has been updated and is a separate document. 2-04)**



RESOLUTION NO. 2552

RESOLUTION ADOPTING NOISE, SAFETY AND SEISMIC SAFETY ELEMENTS AS PART OF ITS GENERAL PLAN

BE IT RESOLVED by the Board of Supervisors of the County of Lassen as follows:

WHEREAS, Government Code Section 65302(g) requires that County general plans include a Noise Element, in qualitative numerical terms, showing contours of present and projected noise levels associated with all existing and proposed major transportation elements; and

WHEREAS, Government Code Section 65302(f) requires that the County General Plan include a Seismic Safety Element; and

WHEREAS, Government Code Section 65302.1 requires a Safety Element to such general plan for the protection of the community against fires and geologic hazards; and

WHEREAS, the Lassen County Planning Commission after holding two public hearings on July 3, and August 7, 1974, in accordance with the Planning and Zoning Laws of the State of California, unanimously adopted a Noise Element and a Safety and Seismic Safety Element and recommended their adoption by the Board of Supervisors; and

WHEREAS, the Board of Supervisors, after consideration and careful study, held a public hearing there upon September 3, 1974, in accordance with the Planning and Zoning Laws of the State of California; and

WHEREAS, the Board of Supervisors find that said Noise, Safety and Seismic Safety Elements consist of suitable, logical and timely plans for the future development of the County of Lassen, and are in the best interests of said County and its citizens.

NOW, THEREFORE, BE IT RESOLVED that the Noise Element and the Safety and Seismic Safety Elements annexed hereto as Exhibits "A" and "B" respectively are hereby adopted as the Noise, Safety and Seismic Safety Elements of the General Plan for the County of Lassen in accordance with Article 6 of Chapter 3 of the Planning and Zoning Law.

The foregoing resolution was passed and adopted at a regular meeting of the Board of Supervisors of the County of Lassen, State of California, held on the 3rd day of September, 1974, by the following vote:

AYES: Supervisors Couso, Farris, Theodore, Packwood

NOES: _____

ABSENT: Supervisor Bingham

ATTEST:

Jacquelyn Fountain
Jacquelyn Fountain, Clerk

Donald G. Packwood
Chairman of the Board of Supervisors,
County of Lassen, State of California

EXHIBIT "B"

GENERAL PLAN ELEMENTS - SAFETY AND SEISMIC SAFETY

1. INTRODUCTION

A. Authority

State law requires that General Plans include both Safety and Seismic Safety Elements which are described in the law as follows:

1. Seismic Safety Element (Government Code Section 65302(f)).

"A Seismic Safety Element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically induced waves such as tsunamis and seiches."

"The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismically induced waves."

2. Safety Element (Government Code Section 65302.1.)

"A Safety Element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazard."

B. Combination of Elements

Because of the similarity, and partial duplication of the purposes and field of coverage as set forth in the codes, the Safety and Seismic Safety Elements are treated together.

The Safety Element is expanded to include or recognize general disaster plans as appropriate.

C. Relation of Elements to Planning Area

Both elements relate to natural physical hazards and to the careless or accidental hazards introduced by man. Population and physical improvements in Lassen County are concentrated in small unincorporated towns and scattered suburban, ranch and recreational areas. Extensive

public ownership under the United States Forest Service, Bureau of Land Management and other large land ownerships are substantially unpopulated and undeveloped.

Because of the broad extent and range of natural topography, a broad range of natural hazards exists. Man induced hazards, except for fires are minor to moderate in nature in Lassen County due to the sparse disbursement of population and settlement.

II. SCOPE AND NATURE OF THE ELEMENTS

A. Objective

The objective of the preparation and adoption of the Safety and Seismic Safety Elements is to add safety considerations to the active planning process in order to reduce loss of life, injuries, damage to property, socio-economic dislocation from fire, seismic hazards, and other possible disasters.

B. Plan Policy Statements

1. Recognition of Hazards

It is recognized that safety hazards exist within Lassen County, and that such hazards vary greatly with respect to particular geographical locations.

Hazards given consideration and recognized as requiring attention include:

- (a) Seismic (earth shaking, surface rupture and seiches).
- (b) Unstable slopes and soil, mudslides, landslides, subsidence.
- (c) Volcanism, molton material from inner core.
- (d) Wildfires, range fires, urban fires, explosions, etc.
- (e) Floods and overflow inundation.
- (f) Indirect hazards or losses resulting from erosion, failure to protect natural resources.

III. SEISMIC SAFETY

A. Seismic Hazards

1. Earthshaking

The most destructive seismic hazard is that of earthshaking. Earthshaking is most intense at the epicenter and severity reduces as distance increases. Also earth shaking takes place over a wider area than any other seismic hazard. Damage occurs when buildings affected are unable to withstand increased acceleration and are literally shaken to pieces. Liquefaction is another result of earthshaking, wherein previously solid ground turns into something akin to quicksand losing its ability to support even the lightest of structures.

2. Fault Line Displacement

The earth relieves internal pressure by finding weak spots on the crust, consequently, movement occurs along these weak points as visible evidence of such pressure relief. Faultline displacement occupies minimal land area, however, if improvements are located on the fault itself major destruction can occur. Most displacement usually amounts to only a few inches, however, displacement of up to 18 feet have been recorded. Damage usually takes place on transportation routes and underground utilities.

3. Landsliding

A common accompaniment of seismic activity is that of landsliding. Local conditions such as slope, soil, composition and degree of saturation will usually determine the area, and amount of sliding. Landslides often take place on their own volition but seismic activity acts as a major agitator.

4. Volcanism

Discharge of molten material from the earth's inner core is a relatively infrequent occurrence. However, volcanism is being discussed in this element because of the recent (1915) activity of Mt. Lassen and the volcanic flow geomorphology over much of Lassen County. Volcanic eruptions or flows lead to total destruction of all that comes in their path. Loss of property and sterilization of the lands would be anticipated in such an event.

5. Seiche

A seiche is a seismically induced wave on a lake or reservoir, which can inundate development along a shoreline.

B. History of Earthquakes Affecting Lassen County

<u>DATE</u>	<u>INTENSITY*</u>	<u>LOCATION</u>
January 30, 1885	VII	Near Janesville and on Susan River, 12 miles from Susanville where chimneys fell.
April 28, 1885	VII	Nevada City, felt from San Francisco northeastward into Nevada.
June 19, 1889 1915	VII	Lassen County, was felt to Chico and Sacramento and into Nevada
March 20, 1950	V	Lassen Peak intensity V at 8 places also felt at Reno, magnitude 5.5.
May 9, 1952	VI	California-Nevada border, over an area of 3,000 square miles of northern California to western Nevada, magnitude 5.4.
September 25, 1953	VI	Nevada-California border over an area of 12,000 square miles of western Nevada and northeastern California.
February 21, 1915	VII	Near Lassen Peak, localized shock in mountains near Whitmore, northwest of Lassen Peak. Considerable dislocation of ground.

December 26, 1969

California-Nevada, three shocks at Marysville, felt at Stockton, Sacramento, Grass Valley, Mokelumne Hill and Chico in California and Virginia City in Nevada.

December 27, 1969

V-VII

California-Nevada, considerable damage at Virginia City, Genoa, Carson City in Nevada and at Downieville and Oroville in California.

* Intensity is based upon the Modified Mercalli Intensity Scale of 1931.

The listing of the major earthquakes affecting Lassen County, emphasize that during the past hundred years the planning area has been subjected to minor quakes and secondary impact, which did and could today cause damage and injuries with a breakdown of vital facilities and services.

The California Division of Mines and Geology Epicenter Map of 1972 indicates Lassen County earthquakes occurring between 1934 and June 1971 of from magnitude 4.0 to 5.9 as follows:

- (1) One earthquake near Susanville of magnitude 4.0 to 4.9.
- (2) Two quakes in Honey Lake area of magnitude 5.0 to 5.9.
- (3) Three separate locations between Doyle and Herlong of magnitude 5.0 to 5.9.

The basic assumption underlying the above list, is that where earthquakes have occurred, they are more likely to occur in the future. Most earth scientists agree with this assumption in its most general terms, but there is no agreed way to predict when, where or how powerful the next earthquake will be.

C. Designated Hazard Areas

1. California Division of Mines and Geology Fault Map 72-1 indicates Lassen County hazard areas as follows:

(a) Between Doyle and Herlong, along the west edge of Fort Sage Mountains, historically active fault with surface rupture with documented reports dated 1950.

(b) Quaternary displacement in western and central Lassen County, without historic record. Recognized by displaced alluvium, terraces, or other quaternary units; offset streams; alignment of sag ponds, trenches or saddles. Includes concealed fault-controlled ground water well data.

(c) There are lesser scattered faults throughout the county, without recognized quaternary movement.

2. Weather and Landslides

In terms of energy, frequency of activity, and area of influence, weather is a principal consideration in landslides. Cloud cover, temperature, humidity and fog, among others, regulate the plant cover and influence ground moisture. However, the principal expression of weather is precipitation and it has a direct influence on landsliding. Precipitation can be related to landslide activity and greater rainfall proportionally increases landslide activity.

3. Volcanic Action

Lassen Peak, still considered an active volcano, is situated just west of Lassen County and is the southern most volcano of the Cascade chain. Cinder cones run the length of Lassen County's western boundary. Lassen Peak has recorded the most violent volcanic action on the mainland. Some volcanologists consider Lassen to be a volcanic "time bomb" that could erupt at any time. They point out Arenal Volcano, Costa Rica erupted in 1969 after being dormant for more than 500 years.

4. Lakes and Reservoirs

The number of lakes in Lassen County is high and therefore correlation of known faults and their relationships to lakes and reservoirs should be noted. The potential for a seiche occurring on Eagle Lake is a definite possibility, which depending upon the intensity of seismic event could result in damage of varying severity at vulnerable locations.

The calculation of the effect of seiche on specific bodies of water is very technical and should be analyzed.

IV. PUBLIC SAFETY ELEMENT

A. Fire, Geologic, and Health Hazards

1. Fire Hazard

The entire county is prone to fire, either man-made or natural.

Location, accessibility, local climatic conditions, topography and vegetation type are among the factors associated with the intensity of a fire. Among the factors which can induce fire hazard potential to human safety and the environment is the degree to which fire hazard reduction measures are practiced in an area and, should a fire occur, the response time and effectiveness of the fire suppression activities.

Considerable loss to the economy, environment, and public safety may result in an area where a fire occurs. The losses resulting from natural or man-made fire can be minimized considerably if fire hazard reduction measures of maintaining clearance around structures are practiced as spelled out in the Public Resource Code 4291.

Developments in fire hazard areas should take all necessary precautions in preventing fire and reducing fire hazards. Establishing fuel brakes by thinning the more highly combustible vegetation in such areas of high vulnerability as along roadsides, recreation and residential areas should be practiced.

Adequate multiple ingress and egress options for evacuation and fire suppression access routes should be provided in all areas used by the public. The General Plan and the county land division ordinance regulations provide an excellent framework for new development access, however, all access routes in the county should be maintained and improved periodically in the event an emergency warrants their use for public evacuation and/or fire suppression activities response.

The vulnerability of populated areas to fire is obvious, consequently, water availability is important. The small communities in Lassen County do not have central water systems, however, most communities do have prime sources of supply. In 1974, out of sixteen populated centers, thirteen have prime sources for water supply; six have storage that could meet fire standards; seven have water systems, one being of half inch lines, and one has no storage; ten have organized fire protection, of these, six do not have water systems or storage.

All of the populated areas of Lassen County are in high fire hazard areas of either/or timber, brush, and/or grasslands, and all of these areas are especially vulnerable during peak dry seasons.

2. Geologic Hazard

Maps depicting real and potential existing geologic hazards should be prepared by an agency having special expertise or jurisdiction showing the location of fault zones, unstable soils, flood zones, and other geologic related conditions which could potentially cause public danger and/or possible environmental damage and recommend mitigation measures in these areas of concern as described in the General Plan Elements.

3. Health Hazards

Certain areas of the county are subject to existing or potential

dangers to public health through water quality problems which usually result from the use of individual waste disposal and leaching systems that are affected by one or more unfavorable physical factors. These factors may include such things as: density of development; high groundwater; nearby surface water of high quality; unsuitable local topography; poor soil conditions as in areas of Eocene Nonmarine soils and granitic areas where there is insufficient soil over bedrock; and important recharge areas for groundwater in which leachates put into the soil receive almost no filtering action and become a part of the groundwater and also, obviously, a part of the public health problem.

Potential risks are assumed in these problem areas. As these polluted conditions go unchecked, obvious hazards to public health become eminent unless remedial action is taken. Lassen County should adopt guidelines for waste disposal from land development.

V. POLICY PROGRAMS

A. Implementation Measures

1. Implement a study to locate and identify areas of existing and potential fire, geologic, and health hazards.
2. Require all structures and developments to strictly adhere to Public Resource Code 4291.
3. Subdivision and minor land division ordinances should require that roads constructed be of sufficient width and that there be multiple ingress and egress options for evacuation routes.
4. Population ^(centers) contours should be encouraged to improve or install water systems with adequate storage capacities.
5. Communities should be protected by fuel brakes together with fire suppression equipment backed up with an adequate water supply.

6. For the purpose of faster response time of fire suppression equipment, all major and minor roads should have signs identifying their names.

7. Require that all public and private structures strictly adhere to the Uniform Building Code regarding earthquake safe standards for Seismic Zone 2.

8. Implement a study to identify, map, and calculate the potential of occurrence and effects that a seiche would have on shoreline development along with possible mitigation recommendations.

9. Adoption of an ordinance for hillside developments.

10. Adoption of guidelines for waste disposal from land development and that the guidelines set by Lahontan Regional Water Quality Control and Control Valley Regional Water Quality Control Boards are strictly adhered to.