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CHAPTER 1: INTRODUCTION AND SUMMARY

The Draft Environmental Impact Report (EIR) for the Public Hearing Draft Avenue of the Giants Community Plan has been prepared to comply with the California Environmental Quality Act (CEQA). This is a program EIR, usually prepared for general plans and policy level documents. A program EIR examines the overall effects of a proposed course of action and recommends steps to avoid unnecessary adverse environmental effects. This program EIR evaluates the effects that the goals and policies proposed in the Avenue of the Giants Community Plan might have on the environment. The EIR recommends measures to mitigate these effects. A more detailed description of program EIRs is given below and can be found in the California Code of Regulations, Title 14, Chapter 3.

This chapter contains the following:

- Program EIR guidelines
- Intended uses of the EIR
- Organization of the EIR
- Project setting
- Community plan preparation and format
- Impact and mitigation summary
- Project Alternatives and Probable Environmental Effects

CEQA Program EIR Guidelines

CEQA Section 15168 – Program EIR

a. "General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

   1. Geographically.

   2. As logical parts in the chain of contemplated actions,

   3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct on a continuing program, or

   4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

b. Advantages. Use of a program EIR can provide the following advantages. The program EIR can:

   1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action.
2. Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis.

3. Avoid duplicative reconsideration of basic policy considerations,

4. Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and

5. Allow reduction in paperwork.

c. **Use with Later Activities.** Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

1. If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.

2. If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.

(3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.

(4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

(5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

(d) **Use with Subsequent EIRs and Negative Declarations.** A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:

(1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.
(2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

(3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.

(e) Notice with Later Activities. When a law other than CEQA requires public notice when the agency later proposes to carry out or approve an activity within the program and to rely on the program EIR for CEQA compliance, the notice for the activity shall include a statement that:
   (1) This activity is within the scope of the program approved earlier, and
   (2) The program EIR adequately describes the activity for the purposes of CEQA.


Discussion: The program EIR is a device originally developed by federal agencies under NEPA. Use of this approach was recommended for CEQA in the court decision of County of Inyo v. Yorty cited in the note.

The detailed description of the permissible uses of this document are provided in an effort to encourage its use. The program EIR can be used effectively with a decision to carry out a new governmental program or to adopt a new body of regulations in a regulatory program. The program EIR enables the agency to examine the overall effects of the proposed course of action and to take steps to avoid unnecessary adverse environmental effects.

Use of the program EIR also enables the Lead Agency to characterize the overall program as the project being approved at that time. Following this approach when individual activities within the program are proposed, the agency would be required to examine the individual activities to determine whether their effects were fully analyzed in the program EIR. If the activities would have no effects beyond those analyzed in the program EIR, the agency could assert that the activities are merely part of the program which had been approved earlier, and no further CEQA compliance would be required. This approach offers many possibilities for agencies to reduce their costs of CEQA compliance and still achieve high levels of environmental protection."

**Intended Uses of this EIR**

The Environmental Impact Report has two primary uses. It provides an analysis of environmental effects potentially resulting from the Public Hearing Draft Avenue of the Giants Community Plan for decision-makers and the public, and it serves as a second-tier EIR for subsequent EIR’s on projects implementing the Community Plan. The first-tier EIR was the 1984 Framework General Plan and accompanying background documents.
In addition to the uses above, this document serves as an informational document, as identified in the following CEQA guidelines:

**CEQA Section 15121 – Informational Document**

a. An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.

b. While the information in the EIR does not control the agency’s ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding consideration under Section 15093.

c. The information in an EIR may constitute substantial evidence in the record to support the agency’s action on the project if its decision is later challenged in court.

---

**Organization of the EIR**

The EIR is organized by chapter as shown in the Table of Contents. The chapters include an analysis of impacts by issue, such as land use or flood hazards. Each issue is examined covering the following areas:

**Environmental Setting:** CEQA Section 15125 requires that an EIR include a description of the environment in the vicinity of the project as it exists before the start of the project from both a local and regional perspective. The setting describes existing conditions.

**Impact and Analysis of Impact:** Potentially significant impacts are identified in this section with analysis of the potential effect of implementing the Community Plan in regards to this issue. This analysis includes relevant impacts to the Planning Area, the resources involved, physical changes to ecosystems and changes due to population and use of the land, health and safety problems caused by physical changes and other areas of potential change.

**Significance Standard:** Significance standards are taken from Appendix G (environmental checklist) of the Revised CEQA Guidelines.

**Level of Significance and Mitigation Measure:** The impact is rated according to its level of significance, usually either significant but mitigable or significant and not mitigable. CEQA Section 15370 states that mitigation measures alleviate adverse changes in the environment by:

a. avoiding the impact altogether;
b. minimizing the impact by limiting its magnitude;

c. rectifying the impact through restoration;

d. reducing or eliminating the impact over time or;

e. compensating for the impact by replacing or providing substitute resources or environments.

Impacts Found Not to be Significant: CEQA Section 15128 states that an EIR shall contain a brief statement indicating the reasons that possible significant impacts of the project were determined not to be significant.

Project Setting

The Avenue of the Giants Community Planning Area (AGCPA) is located in southern Humboldt County, California (Figure 1). The AGCPA is made up of 9 towns: Stafford, Holmes, Redcrest, Shively and Pepperwood; Weott; Myers Flat; Miranda and Phillipsville. The area encompasses 16 square miles and is located along the main stem and South Fork of the Eel River. The AGCPA is adjacent to the 35 mile Avenue of the Giants, State Highway 254.

The communities of the Planning Area are located on flats or benches adjacent to the South Fork of the Eel River. Many of the communities were devastated in the 1955 and 1964 floods. Most of the Planning Area is surrounded by State lands or private timberlands. The area offers extensive recreation opportunities along the South Fork Eel River and the State Park lands.

Community Plan preparation and format

The Avenue of the Giants Community Plan is a component of the Humboldt County General Plan. Under state planning law, counties and cities are required to prepare and adopt comprehensive long-range general plans for the physical development within their jurisdictions. The general plan must include discussion of land use, circulation, housing, conservation, open space, noise, and safety issues either in distinct "elements" or combined as deemed appropriate.

The Humboldt County General Plan Program is organized as follows:

Volume I: Goals, policies and standards for county-wide issues; development of the rural areas of the County; Community Planning Area boundaries.

Volume II: Individual plans for specific geographic areas identified in Volume I, including Local Coastal Plans for the Coastal Zone, and Community Plans for the non-coastal areas; and identifying urban/rural boundaries, designating land use categories, and specific policies addressing the special needs of each community or plan area.
Community plans focus in more detail on a specific area. These plans provide a framework for appropriate development and growth through land use and development goals and policies. The Avenue of the Giants Community Plan is organized into five chapters:

1. Introduction
2. Community Development and Land Use
3. Natural Hazards and Resources
4. Public Facilities and Services
   1. Action Plan / Community Action Plans

**Impact and Mitigation Summary**

This EIR analyzes the potential impacts of implementing the Avenue of the Giants Community Plan, as required by CEQA. These impacts are considered potentially significant or less than significant. Impacts that are considered potentially significant require mitigation, where this is feasible. All potentially significant impacts analyzed in this EIR can be reduced to a less than significant level by applying Community Plan policies and other mitigation measures. Table 1-1 summarizes the potentially significant impacts and their mitigation measures.

**TABLE 1.1: POTENTIALLY SIGNIFICANT IMPACTS AND MITIGATION MEASURE SUMMARY**

<table>
<thead>
<tr>
<th>Description of Potential Impact</th>
<th>Mitigation Measure</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter Two</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land use and planning compatibility issues</td>
<td>CP Appendix C, Ordinance No. ___</td>
<td>Reduced to less-than-significant level</td>
</tr>
<tr>
<td></td>
<td>CP Policy 2500.12</td>
<td></td>
</tr>
<tr>
<td>Potential population growth</td>
<td>GP policy 3361.3, CP policy 4500.1</td>
<td>Reduced to less-than-significant level</td>
</tr>
<tr>
<td>Potential loss of productive agricultural lands</td>
<td>CP policies 2520.1-4, 2540.2&amp;3</td>
<td>Reduced to less-than-significant level</td>
</tr>
<tr>
<td>Compatibility of Public Lands and adjacent properties</td>
<td>GP policy 2543.3; CP policies 2540.1 &amp; 2540.4</td>
<td>Reduced to less-than-significant level</td>
</tr>
<tr>
<td><strong>Chapter Three</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geologic hazards</td>
<td>GP policy 2553; CP policies 3200.1, 3200.2, &amp; CP Appendix C, Ordinance No. ___</td>
<td>Reduced to less-than-significant level</td>
</tr>
<tr>
<td>Flood hazards</td>
<td>CP policy 3200.4</td>
<td>Reduced to less-than-significant level</td>
</tr>
</tbody>
</table>
Fire hazards  | CP 3200.3 | Reduced to less-than-significant level
Noise hazards | CP 2500.11 & 2500.13 | Reduced to less-than-significant level
Water resources and water quality | GP goal 3360; CP policies 3300.1, 4500.4 & 4500.5; alternative recommendations | Reduced to less-than-significant level
Impacts to rare, endangered or threatened species or environmentally sensitive habitats | CP policies 3400.1, 3400.2, 3400.3 & 3400.5 | Reduced to less-than-significant level

<table>
<thead>
<tr>
<th>Chapter Four</th>
</tr>
</thead>
</table>
| Circulation and trails | GP zoning regulations; CP policies 4200.3 & 4200.4 | Reduced to less-than-significant level

Water and wastewater facilities | GP policy 4512.3; CP policies 4500.1-5 & alternative recommendations | Reduced to less-than-significant level
Fire services | GP policy 3291.4B; CP policies 4700.1&2; alternative recommendations | Reduced to less-than-significant level

¹GP= Framework General Plan, CP= Avenue of the Giants Community Plan

**Project Alternatives and Probable Environmental Effects**

At present, three alternatives have been identified:

1. The *Proposed Community Plan Alternative* (Preferred Alternative):

   This alternative comprises the draft community plan, with its proposed goals and policies. The primary objective is to provide land use guidelines that meet the needs of the communities. Growth will occur in keeping with community character. Specific objectives include retention of community character, protection of natural resources and promotion of appropriate development and growth. Zoning is recommended for each town, facilitating business development in existing commercial centers. Avenue-wide projects, such as Amador and the Avenue Trail, are supported, as well as smaller, specific community projects.

2. The *Higher Growth Alternative*:

   This alternative is based on maximized development as allowed under the various land use designations. All highway frontage parcels are zoned commercial to allow for maximum business development. There is less protection of agricultural lands and more opportunity for lands to be developed into the highest value use, i.e. tourism related services. Emphasis is placed on employment-creating commercial and industrial development under this option. Consideration of community character is effectively voluntary on the part of developers.
3. The *Low Growth Alternative*:  
In this option, development would be kept to the minimum allowed under the land use designations. No conversions of agricultural lands or other resource lands would be permitted. Commercial and residential zoning would be limited to existing uses and densities. Activities incompatible with the Humboldt Redwoods State Park would be discouraged. Continued expansion of HRSP would be encouraged.

4. The *Retained 1968 Southern Humboldt County General Plan Alternative* ("No Project"):  
Growth under this option would be governed by the existing community plan, last updated in 1968. The present plan does not focus on community development overall, and half of the Avenue communities are not included in the analysis. Land use designations are fairly reflective of current uses, but all zoning is unclassified. Issues that have been highlighted as important to the communities are not covered. The emphasis is on protecting and conserving timber and agricultural resources for long term economic utilization.
CHAPTER 2:  
LAND USE AND DEVELOPMENT

Environmental Setting: Land Use Summary

The Avenue of the Giants’ land use is a mix of residential, commercial, industrial, public lands and agriculture and natural resource uses (Table 2.1). The predominant land use in the towns is residential, with commercial and industrial uses mixed in with housing. In the towns, residential uses make up 11% and commercial and industrial is 2% of the land base. Resource management, which include timber production areas, agricultural lands, flood plain and State Park lands, make up 81% of the land use. The State Park is a dominant feature along the Avenue (27% of land use). Flood plain designations make up 21% of the land use. Park holdings surround each community to some degree. Many of the communities are located in the floodplain, and due to this constraint, future development and build-out is limited.

The North-end Communities of Stafford, Holmes, Redcrest, Shively and Pepperwood make up the northern most area in the AGCPA. Pepperwood is the gateway to the Avenue of the Giants. Redcrest is the largest community, with a commercial center. All of these communities are adjacent to the Eel River, and except for Redcrest, lie in the 100 year flood plain. Stafford, Holmes, Shively and Pepperwood are well known for their excellent soils, each community having a good portion of land classified as prime agricultural land (Storie Index 82-100). Agriculture is the primary land use in this planning area. The proposed zoning of these areas reflects the large portion of agricultural lands, and the limited land available for development.

Weott is a small community surrounded by Humboldt Redwoods State Park. It is the closest community to the Park visitor center and campground facility. It is a residential community with no industrial uses and limited commercial uses. Weott is not located in the 100 year flood plain; however it was severely inundated in both the 1955 and 1964 floods. There is a primary school located in the town and a CDF station. The proposed zoning of Weott reflects the residential nature of the town and the possibilities for more development, recognizing the water and wastewater system constraints (see Chapter 4). The proposed zoning also allows for the potential of increased commercial uses in Weott.

Myers Flat is located on a flat bench in a horseshoe bend of the South Fork Eel River, surrounded by the State Park. The town is entirely within the 100 year flood plain and residential housing is limited to temporary seasonal dwellings only. There is a commercial center along the Avenue of the Giants, with several resident and visitor-serving businesses. A residential neighborhood exists in the flat near the river. There is an industrial area in Myers Flat, the site of an old logging mill. The zoning of Myers Flat reflects its location in the floodplain, with no residential designations.

Miranda is the largest town in the AGCPA and it is not located in the flood plain. There is a commercial center along the Avenue of the Giants with a number of resident and visitor-serving businesses. The South Fork High School is located in Miranda. There are no industrial uses in
town. The proposed zoning for Miranda reflects existing uses and creates a strong commercial area along the Avenue.

**Phillipsville** is the southern-most town along the Avenue of the Giants. The lower part of the town is located in the flood plain and residential uses are limited to temporary, seasonal structures. There is a commercial center located along the Avenue as well as a fire hall. There are no industrial uses in this planning area. The proposed zoning of Phillipsville reflects the current commercial uses, and limits residential uses due to the floodplain.
Table 2.1: Land Use Summary

<table>
<thead>
<tr>
<th>Proposed Land Use Designation</th>
<th>Density Range</th>
<th>Total Acres</th>
<th>Percent of total</th>
<th>Maximum Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber Production (T)</td>
<td>20-160 ac/du</td>
<td>851</td>
<td>9%</td>
<td>30</td>
</tr>
<tr>
<td>Conservation Floodplain (CF)</td>
<td>0</td>
<td>1135</td>
<td>11%</td>
<td>0</td>
</tr>
<tr>
<td>Conservation Floodplain Recreation (CFR)</td>
<td>0</td>
<td>1020</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Agricultural Exclusive (AE)</td>
<td>20 ac/du</td>
<td>1591</td>
<td>16%</td>
<td>79</td>
</tr>
<tr>
<td>Agricultural Lands (AL 40)</td>
<td>40 ac/du</td>
<td>322</td>
<td>3%</td>
<td>8</td>
</tr>
<tr>
<td>Agricultural Lands (AL 20)</td>
<td>20 ac/du</td>
<td>470</td>
<td>5%</td>
<td>24</td>
</tr>
<tr>
<td>Agricultural Rural (AR 5-20)</td>
<td>5-20 ac/du</td>
<td>792</td>
<td>8%</td>
<td>159</td>
</tr>
<tr>
<td>Residential, Low Density (RL)</td>
<td>4 du/ac</td>
<td>184</td>
<td>2%</td>
<td>736</td>
</tr>
<tr>
<td>Residential, Low Density (RL 1-5)</td>
<td>1-5 du/ac</td>
<td>114</td>
<td>1%</td>
<td>114</td>
</tr>
<tr>
<td>Residential, Medium Density (RM)</td>
<td>7-30 du/ac</td>
<td>2</td>
<td>0.02%</td>
<td>60</td>
</tr>
<tr>
<td>Commercial Recreation (CR)</td>
<td>N/A</td>
<td>95</td>
<td>1%</td>
<td>+/- 64</td>
</tr>
<tr>
<td>Commercial Services (CS)</td>
<td>N/A</td>
<td>39</td>
<td>0.4%</td>
<td>+/- 38</td>
</tr>
<tr>
<td>Commercial General (CG)</td>
<td>N/A</td>
<td>3</td>
<td>0.03%</td>
<td>+/- 2</td>
</tr>
<tr>
<td>Industrial General (IG)</td>
<td>N/A</td>
<td>65</td>
<td>0.7%</td>
<td>N/A</td>
</tr>
<tr>
<td>Public Lands (P)</td>
<td>N/A</td>
<td>2627</td>
<td>27%</td>
<td>N/A</td>
</tr>
<tr>
<td>Public Facilities (PF)</td>
<td>N/A</td>
<td>480</td>
<td>5%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9790</td>
<td>100%</td>
<td>1314</td>
</tr>
</tbody>
</table>

In the Planning Area, there are more parcels than facilities to accommodate them. The Plan encourages lot consolidation to the extent possible, and directs development out of the flood
plain and off areas of prime agricultural soils and into the appropriate townsites and surrounding rural areas.

Impacts:

The Community Plan contains a comprehensive update of the zoning and land use designations for the towns along the Avenue of the Giants. The major emphasis of the Plan is to reflect current uses, to retain community character, to encourage commercial development and to recognize constraints to development. Overall, the Avenue towns will experience relatively small land use changes. For the most part, the Community Plan reflects existing uses, and attempts to clarify zoning and land use designations to better serve the communities now and in the future.

Land use in the area will remain generally the same in the future (10-20 years); small towns surrounded by resource management lands. Population growth is directed out of the floodplain, moving the residential concentrations higher into the hill slopes where this is feasible. Agriculture is likely to remain a strong part of the community, along with visitor-serving industries.

Land use and zoning designations are proposed for each town in the Planning Area. The same designations are in effect as in the current General Plan, with some changes. The land use designations Conservation Floodplain (CF) and Conservation Floodplain Recreation (CFR) have been used from the 1968 Southern Humboldt County General Plan and are proposed to be added to the Framework General Plan. The Highway Commercial (CH) zone is used throughout the Avenue, because it allows visitor serving uses. Qualified Combining (Q) and Design Review (D) are used with the CH zone in order to ensure that development is in keeping with the character of the communities. From the Coastal Zone Regulations, Rural Residential Agricultural (RA) and Flood Hazard (F) have been used, and are recommended for addition to the Inland Zoning Code.

A summary of land use for the Planning Area is shown in Table 2-1.

The Community Plan would potentially result in additional commercial businesses and residential housing throughout the towns of the Avenue of the Giants. Maximum potential units allowed under the proposed plan are shown in Table 2-1. If maximum build-out were to occur, there would potentially be an impact regarding water demand (see Chapter 3, page 15 for mitigation measures related to this impact).

Significance Standards:

- Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Mitigation Measures:
The Avenue of the Giants Community Plan is part of the General Plan for Humboldt County, and as such uses the goals and policies as a base. The Community Plan does not conflict with any plans that have been adopted for the purpose of avoiding or mitigating an environmental effect.

The Community Plan contains the following policy to maintain the character of the communities and to limit the impacts of build-out:

- Appendix C: Ordinance No. ___ amends the Highway Commercial (CH) zone to require a Design Review to ensure that development is in keeping with the character of the community.
- 2500.12: Subdivision of parcels designated AL 20 and AR (5-20) shall require a master development plan including road capacity and analysis of build-out impacts as part of initial application.

**Population**

Overview

Table 2.2 shows the population projections for Avenue of the Giants at the county-wide population growth of 9% every ten years. However, population increases do not appear to be a realistic assumption at this time. The communities of Stafford, Pepperwood, Holmes and Myers Flat are not likely to increase in population due to the development constraint of the floodplain. Population growth that does occur along the Avenue will be accommodated in Miranda and to a lesser extent Weott, as well as a small amount in Phillipsville. These towns have some land available for development. Additional growth will likely occur in the rural parcels surrounding the towns, outside of the planning area boundary. This growth may stimulate more development in the towns, in terms of providing services to the population living in the surrounding areas.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>1090</td>
<td>+90</td>
</tr>
<tr>
<td>2010</td>
<td>1188</td>
<td>+188</td>
</tr>
<tr>
<td>2020</td>
<td>1294</td>
<td>+294</td>
</tr>
</tbody>
</table>
Impacts:

The proposed land use and zoning designations in the Community Plan do allow for increased densities in terms of build-out and this could promote increased population levels. However, a number of other constraints exist, such as the floodplain and water and sewage capacity. Thus, it is unlikely that there will be a substantial population growth in the area in the future.

Significance Standard:

- Induce substantial population growth in an area, either directly or indirectly.

Mitigation Measures:

- General Plan policy 3361.3: Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies.

- Community Plan policy 4500.1: Plan density ranges are contingent on adequate service capacities. Current systems should be upgraded to be able to provide consistent, reliable water for domestic and emergency uses. Additional development (second units, caretaker facilities, etc.) or improvements to existing uses will not be approved without proof of adequate service capacities.

See EIR Chapter 3, page 15 for additional policies limiting new development.

Environmental Setting: Agriculture

The Avenue of the Giants has a long tradition of agricultural activity. Many of the towns along the Avenue began as agricultural communities, where deposits of excellent soils are found on terraces along the river. Types of agricultural uses along the Avenue include: field crops (hay, silage, pasture, and range), vegetable crops, livestock and nursery production.

One important natural condition responsible for agriculture's success is the presence of productive soils. The Avenue of the Giants region contains the most highly productive soil group in the County, the Ferndale series. Loleta soils are also found, particularly in Holmes. Maps of prime agricultural soils can be found in Chapter 3 of this document (Geologic Section).

Impacts:

An increased need for land for residential and visitor-serving/commercial development could lead to pressure to convert prime agricultural land to non-agricultural uses. The Community Plan designates most prime agricultural soils as Agriculture Exclusive, giving more accurate zoning to these lands that were unclassified in the 1968 plan. The same increased need for land could result in non-compatible adjacent uses which could potentially impact on the viability of agricultural operations.
One portion of the Lewis property (209-291-22, 17) in Holmes is being converted to a visitor serving use. This is a 40 acre parcel in the flood plain with prime agricultural soils. The conversion will impact approximately 12 acres, and will extend an existing commercial use. Conversion is contingent upon a specific mitigation measure that will be incorporated into the Plan, in the form of an agricultural easement on the balance of the property (approximately 24 acres).

Several parcels in Phillipsville have prime agricultural soils and are planned and zoned CFR and FP. This could be a conversion of prime soils. These parcels (APN's 214-131-10, 214-031-11, 214-081-01, 214-051-01, 214-041-01) currently have a variety of uses, including recreational uses (moto-cross and ballfields), and open fields. The surrounding land use of the southern two parcels is residential, with small parcel sizes. Due to the parcel sizes and the way they are situated, agricultural operations would be constrained. Since prime soils are involved in these parcels, based on recent soil tests, the proposed zoning might be considered a significant impact without mitigation. A mitigation measure is recommended for these parcels.

The largest parcel (214-131-10) was not specifically soil tested, but is presumably similar soil to the nearby parcels that were tested, until such a time as can be shown otherwise. This parcel is the proposed moto-cross site (see discussion and policy, Community Plan 2-35) and a separate EIR is expected to be completed for this project, which would assess the issue of possible agricultural conversion.

Significance Standards:

Would the project:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Mitigation Measures:

Due to the protection of existing agricultural lands in the General Plan and the Community Plan, farmland conversion is not considered to be a potentially significant impact. The following policies provide protection for agricultural lands in the Planning Area:

Community Plan policies 2520.1-4:

- 2520.1 Subdivision shall occur in such a manner to protect prime agricultural soils including lot size modifications and / or the use of Combining Zone B7.
- 2520.2 Lands adjacent to agriculture designated lands shall be planned for uses compatible with agriculture.
2520.3 The County shall maintain the existing agricultural lands through the application of agricultural zoning.

2520.4 The County shall encourage the use of Agricultural Preserve Contracts to maintain agricultural uses in the Planning Area.

Community Plan policy 2540.2: The County should encourage HRSP to designate in their park general plan lands which have prime agricultural soils and do not have significant forest stands for retention in agricultural use as a feature of the unit pursuant to PRC 5069.2.

Community Plan policy 2540.3: The County shall request that the Save-the-Redwoods-League refrain from removing prime agricultural lands from useful production by acquisition.

For the conversion of 12 acres of the Lewis property, the balance of the property, 24 acres, will be planned and zoned AE with an agricultural easement to protect the land for agricultural uses in the future.

Recommended additional mitigation measure:

The Flood plain zone (FP) shall be qualified to ensure that areas with prime agricultural soils are not converted. All uses which might constitute a conversion would be conditionally permitted. Currently included in the list of principally permitted uses in the FP zone are: (1) general agriculture, nurseries and greenhouses, and animal sales and feed yards; (2) temporary recreational vehicle parks; (3) roadside stands; (4) recreational uses, including public stables, docks, boathouses, golf courses, and shooting ranges. Of these uses, temporary recreational vehicle parks, golf courses and shooting ranges could be considered a conversion of prime agricultural soil. Additional recreational uses which would not constitute a conversion and could be principally permitted include: canoe rentals and guiding services.

These mitigation measures reduce the potential impacts to a less-than-significant level.

Environmental Setting: Public Lands

The Avenue of the Giants Community Planning Area is surrounded by the Humboldt Redwoods State Park (HRSP). State Park land is included within several community planning area boundaries. The Park provides a strong visitor base to the area, and offers concessionaire development possibilities to local residents. Given the small population of the area and the small population growth, the Community Plan is not likely to cause an impact to public lands.

There have been issues in the community about land acquisitions by Save the Redwoods League that are subsequently gifted or transferred to HRSP. For this Community Planning Area, a
finding of consistency with the General Plan would be the best approach to ensure that adjacent land owners and community interests are taken into account.

Significance Standards:

Would the project

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Mitigation Measures

- General Plan policy 2543.3: The Planning Commission should encourage applicable public land agencies that prepare management plans to: A. Ensure consistency with the General Plan and B. Promote and protect adjacent private resource production lands

- Community Plan policy 2540.1: The County shall both Save the Redwoods League and the State Department of Parks and Recreation that a finding of consistency with the General Plan and Community Plan be made prior to lands being accepted by the State Park in the Avenue of the Giants Community Planning Area.

- Community Plan policy 2540.4: The County should encourage HRSP to prepare a Park general plan which includes its long-range management objectives so that the public is advised of the Park’s management goals.

- Community Plan policy 2540.5: The County shall request that the impacts of increasing State Park land acquisition be addressed in the Park Management Plan and EIR.
CHAPTER 3: HAZARDS AND RESOURCES

Environmental Setting: Geologic Overview

The Planning Area is located within the Eel River Basin and is part of the Coastal Range province, the dominant geologic province in the County. The Franciscan and Yaeger Formation formations (approximately 145,000,000 years old) can be found on the hillsides adjacent to the Planning Area. The majority of the Planning Area consists of alluvial (riverine terrace) sediment deposits.

The Franciscan complex can be divided into two distinct units. Franciscan sandstone consists mainly of sandstone and siltstone. Although this sandstone unit is frequently sheared, there is little evidence of massive rock deformation. Slopes are fairly stable but subject to debris sliding along steep riverbanks and in steep headwater drainages.

Franciscan melange consists of a rubble of sheared sandstone and siltstone in which occur more competent blocks of volcanic rock, chert, and schist. Melange terrain is generally unstable and characterized by rolling hummocky slopes which are highly susceptible to mass movement.

The Yager formation is predominantly shale and sandstone. Local shearing occurs, but in general the formation is much less deformed and more stable than the Franciscan. However, it is subject to debris slides on steep slopes and river banks.

Again, in the majority of the Planning Area, alluvial sediments dominate. These unconsolidated to partially consolidated sediments have been mildly folded and faulted, but when forested or gently sloped are generally stable.

The Planning Area is composed of gently sloping (0 to 5%) alluvial plains surrounded by steep hills with slopes of 30 to 80%. Elevations range from about 130 above mean sea level at the northern end (Stafford) of the Planning Area to about 250 above mean sea level at the southern end (Phillipsville). The hills immediately surrounding the Planning Area reach elevations of over 2000 feet above mean sea level.

Soils

The Avenue of the Giants region contains the most highly productive soil group in the County, the Ferndale series. Loleta soils are also found, particularly in Holmes. Figure 3.1 a-d show the prime agricultural soils in the project area by Storie Index value.

Ferndale Soils

The Ferndale series consists of medium textured very dark grayish brown soils of recent alluvial origin. The sediments are derived from graywhale, shale, and sandstone of the Franciscan formation in the north Coast Range Mountains. Ferndale soils occur at elevations from near sea
level to about 100 feet. Drainage is generally good. Mixtures of permanent pasture have been produced on the Ferndale soils since the turn of the century. Excellent yields of high quality feed have marked them as the best soils in the County. Mixtures of ladino clover and rye grass, or salina clover, and orchard grass are prominent. Alsike, red and white dutch clovers, and tall fescue have been used effectively. In small local areas where drainage is restricted, reed canary grass has proven worthwhile and highly productive. Some carrots and field corn are raised as supplemental cattle feed. Potatoes are planted occasionally.

Ferndale silt loam, 0 to 3 percent slopes, (Fe2), Grade 1.

This soil is the most extensive agricultural soil in the survey area. Nutrient capacity is high. Moisture holding capacity is favorable and it occupies flood plains.

Ferndale fine sandy loam, 0 to 3 percent slopes, (Fe3), Grade 1.

This soil generally occurs near large stream channels and was deposited by fast moving flood water. It retains from 1 to 1½ inches of available water per foot of soil and dries out more rapidly than the silt loam. Irrigation water should be applied frequently, about every 14 days in mid summer, and for a short duration, or enough time to supply 2½ inches. Chances for alfalfa to survive are better on well drained, well aerated, fine sandy loam types. Small bodies of loamy fine sand adjacent to streams and rivers are included in this mapping unit.

Ferndale silty clay loam, imperfectly drained, 0 to 3 percent slopes (Fe10), Grade 3.

This soil may be found on the broad flood plains some distance from the present stream or river channels, in low lying areas. Because of a high water table, or standing water, crops that are sensitive to poor aeration should not be grown. Artificial drainage might alleviate the situation. Care must be taken as to the time of plowing if compaction is to be avoided. Hydrophytic weeds are difficult to control.

Ferndale mixed fine and coarse soil material, 0 to 3 percent slopes (Fe13) Grade variable.

This soil exists near stream and river channels and is of mixed textural composition. Most of these areas are subject to frequent annual flooding and are consequently undesirable for cropping. They usually contain varying amounts of soil material which ranges from deep to shallow, and normally quite hummocky or channeled. They are separated from riverwash because of their agricultural potential where flooding can be controlled.

Loleta Soils

The Loleta series comprise moderately well to imperfectly drained, medium textured soils developed from sedimentary alluvium. They occur on nearly level to moderately sloping alluvial fans and low terraces. Surface soils are loam, dark grayish brown to very dark brown, medium acid; and subsoils are silt loam in texture and mottled.

Loleta loam, moderately well to imperfectly drained, 0 to 3 percent slopes, (Lo2) Grade 2.
This soil is on a gently sloping alluvial fan between the uplands and the flood plain. The subsoil is unusually mottled. The surface is dark colored.

**Loleta loam, poorly drained, 0 to 3 percent slopes, (Lo3), Grade3.**

This soil occurs in low lying areas or in areas adjacent to the Bayside series. The poorly drained soil types of the Loleta series resemble the Bayside soils in the drainage but have been separated because of surface structure differences and textures.

**Geologic Hazards**

**Slope Stability**

Slope stability hazards are a concern in Humboldt County generally due to steeply sloped terrain and unconsolidated bedrock. This combined with heavy seasonal rainfall, grading or earthquakes can trigger landslides. Most of the communities along the Avenue are located on flat, relatively stable terraces with low instability ratings. Moderate to high instability occurs in the steep areas along creekbeds.

The General Plan mitigates Geologic Hazards associated with unstable terrain by use of a Geologic Hazards Matrix, Figure 3-5 of the Framework Plan. The matrix assigns a relative slope stability rating to the various bedrock types. The Geologic Matrix requires geologic and soil engineering reports based on the slope stability rating, the liquefaction rating and type of development proposed. The majority of the Planning Area, as mapped by the County General Plan Geologic Hazards Map, is identified as Slope Stability Zone 1 (Low Instability). Community Plan Figure 3-2 identifies the Relative Slope Stability Zones of the Planning Area.

**Seismicity**

All of Humboldt County is regarded as an area of moderate to high seismic activity. Several active and potentially active faults or fault zones occur in or near the Planning Area. These include:

- Cascadia Subduction Zone, the interface of the Pacific, Gorda, Juan de Fuca and North American tectonic plates
- Mendocino Fault, a right-lateral fault marking the boundary between the Gorda and Pacific plates
- San Andreas Transform System, extending north-northwest through California, terminating offshore of Cape Mendocino
- Little Salmon Fault, a thrust fault system running northwest to southeast through central Humboldt County

In an "average" year, the coastal and offshore areas of Humboldt County are likely to experience on the order of 100 earthquakes of magnitude 3 or larger, and nearly 20 of magnitude 4 or larger.
The most recent significant earthquake to strike the north coast occurred January 21, 1997. The Punta Gorda sequence was located just off the coast in the Cape Mendocino region, 6 miles southwest of Petrolia. The magnitude value was estimated as between 5.6 and 5.7. This earthquake was felt strongly in southern Humboldt County, and was followed by a number of aftershocks, the largest with a magnitude of 5.2. Another significant earthquake for the Planning Area was the Cape Mendocino earthquake, which struck on April 25, 1992, near Petrolia at a depth of 7 miles. This earthquake was located on or near the CSZ and the main quake as well as the aftershocks had magnitude of 6-7. There was widespread damage in the Eel River Valley.

In 1995, the California Department of Conservation Division of Mines and Geology released a Planning Scenario in Humboldt and Del Norte Counties, California for a Great Earthquake on the Cascadia Subduction Zone. It describes the possible effects of a very large earthquake along the southern section of the Cascadia Subduction Zone.

The projected damage resulting from this modeled earthquake is extensive, including:

- Widespread damage to buildings, especially construction with unreinforced masonry, nonductile concrete frames, pre-1940 wood framed houses, and mobile homes.
- Multiple day outages in public utilities and community services
- Damage to major highways and bridges with multi-day closures, including US Highway 101 and State Highway 254, with potential landslides, structural damage to bridges and earthflows.

Area public schools are noted as good locations for evacuation and aid centers due to their more resilient building construction codes. Also, with the likelihood of multi-day losses of electricity, water, wastewater, natural gas and communication systems, back-up supplies and systems are essential.

**Impacts:**

Allowing residential zoning in Stafford or similar high unstability areas could increase the potential number of people exposed to damages associated with another major landslide. An increase in buildings, both commercial and residential, could expose more people and investments to losses associated with major events, i.e. earthquakes or landslides. In additional, an increase in buildings and infrastructure will result in erosion, loss of permeability, covering of soils in the Planning Area. Entrained soil sediments can contribute adverse effects to water quality and fish and wildlife habitat (see Fishery Resources and Sensitive Habitats sections). The direct and indirect conversion of highly productive soils into non-agricultural uses may result in cumulative loss of agricultural lands, see Chapter 2 Land Use and Development for mitigation measures.

**Significance Standards:**
Exposure of persons or property to potential substantial adverse effects, including risk of loss, injury, or death due to major geologic hazards such as known active faults, areas of strong seismic shaking, unstable areas of seismic-related potential ground failures due to liquefaction, subsidence, lateral spreading, collapse or landsliding, and tsunami and seiche ramp-up areas.

- Substantial soil erosion or loss of topsoil.
- Location of project on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risk to life or property.
- Soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

**Mitigation Measures:**

The following general plan and community plan policies reduce the potential exposure of persons and property to geologic hazards.

**General Plan policy 2553:**

- All development should be designed to minimize erosion and sedimentation.

**Community plan policy 3200.1:**

- Encourage the education of the community regarding the nature and extent of natural and man-made hazards.

**Community Plan policy 3200.2:**

- Support and encourage the formation of Neighborhood Emergency Services Teams (NEST) in Avenue communities.

**Community Plan Appendix C:**

- Ordinance No. ___ requires design review to limit loss of permeability and to retain existing vegetation, especially large trees.

The implementation of these measures will reduce the impacts to less than significant level. In terms of seismicity hazard, the mitigation measures will not reduce the impact to a less than significant level. In the event of a large earthquake, there will be loss of life, injuries, disruption of lifeline services and destruction of property.

**Flood Hazards**

The first official river gauge was installed in January of 1911 by the U.S. Geological Survey. At
present there are over twenty (20) gauges installed along the river. Two of the biggest floods recorded occurred in 1955 and 1964. Both of these floods caused catastrophic damage costing millions of dollars and a number of lives.

The flood of 1955 was the greatest flood event on record until the flood of 1964. Both floods struck just before Christmas of that year. All of the communities in the Planning Area were affected by the 1955 flood. However, many of those who were affected rebuilt.

The 1964 flood was much larger than the 1955 flood and caused devastating effects throughout the watershed. A total of nineteen lives were lost and close to 100,000,000 dollars in damage occurred as a result of the flood. The crest of the 1964 flood was about 15 – 20 feet higher than the 1955 flood. All of the communities along the South Fork were virtually devastated. Below the confluence of the South Fork and the main fork of the Eel River, the communities of Holmes, Pepperwood, Shively and Redcrest were swept away by the raging waters.

During the peak of the flood, it was estimated that at the confluence of the Eel River and the Van Duzen River, flows approached one million cubic feet of water per second. Flows of this magnitude would fill Shasta Reservoir in two days. In Weott, it was reported that the high water mark was about 35 feet above the mainstreet and about 66 feet above the riverbed.

The Federal Emergency Management Agency (FEMA) as part of the National Flood Insurance Program publishes Flood Insurance Rate Maps. These maps identify various flood hazard zones related to rainstorm activity. A 100-year flood event has an average occurrence of once in 100 years. Stafford, Pepperwood, Shively, Holmes, Myers Flat and part of Phillipsville are in the FEMA 100-year flood area (see Community Plan Figure 3.2 a-f, Flood Area Maps).

Impacts:

Development allowed by the proposed Community Plan may expose persons or property to water-related hazards, i.e. flooding from 100-year events.

Significance Standards:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Mitigation Measures:

The proposed Community Plan puts restrictions on development in or near the floodplain to reduce impacts.
Specifically, community plan policy 3200.4 adds Flood Hazard as a combining zone, indicating by zoning where flooding is a likely event. Areas located in the flood plain as identified by FEMA 100 year recurrence interval maps are zoned Flood Plain (FP) to limit new development to temporary or seasonal in nature.

The County also mitigates flood damages by participating in the Federal Flood Insurance Program, which regulates land uses in flood hazard areas in order to minimize loss of life and property and to minimize public flood-related expense.

The implementation of these measures will reduce flooding impacts to a less-than-significant level.

**Fire Hazards**

The Planning Area is considered a rural area in which typically there are two types of fire hazards: wildland fires which are resource related, and structural fires. Three factors play critical roles in the severity of wildland fires: climate, vegetation (fuel loading) and topography. The Avenue of the Giants area is rated with a High Fire Hazard rating for all communities except Pepperwood, Shively, Holmes and Larabee. These communities have a Low Fire Hazard rating.

**Mitigation Measures:**

Community Plan policy 3200.3:

- Support and encourage the formation of a benefit assessment district utilizing the Amador Plan, or similar agreement, to fund year-round fire protection and emergency response from the California Department of Forestry (CDF).

See EIR Chapter 4: Fire Services for additional impacts, significance standards and mitigation measures relating to fire.

**Noise Hazards**

**Impacts:**

There have been issues in the Planning Area regarding noise. There is and has been a conflict between active, public assembly types of recreation (Reggae on the River, Phillipsville motocross) and passive recreation (visiting the State Park). The impacts of large public assembly types of recreation can significantly impact neighbors and visitors.

**Significance Standards:**

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
• Exposure of people to or generation of excessive airbourne vibration or groundbourne noise levels
• A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

Mitigation Measures:

Community Plan policies:

• 2500.11: In the Flood Plain zone, principally permitted recreational uses shall be limited to incidental uses not serving more than 50 people at a time.

• 2500.13: The environmental review and approval process for the moto-cross use should meet all the directives of the court and include an alternative siting study which considers community needs.

These policies, in concert with the General Plan policies and guidelines about noise, will reduce the impact to a less-than-significant level.

Environmental Setting: Water Resources

Eel River Watershed Overview

The Avenue of the Giants Community Plan Area is located in the Eel River Watershed, which has an area of 2 million acres. Elevations range from sea level to about 6000 feet at the headwaters of the Middle Fork of the Eel River. The headwaters of the Eel are in the interior coast range in Mendocino and Trinity counties, and include 3 main forks plus the mainstream Eel. The North-end communities are found on the mainstem Eel, and the rest of the planning area communities are located on the South Fork Eel River. There are also numerous small and large tributaries associated with the Eel and South Fork that relate to the project.

South Fork Watershed Overview

The drainage of the South Fork Eel River is distinct among the tributaries of the Eel, differing in form, climate, vegetation types, and underlying rock. The South Fork has an average slope of 24 feet per mile for its 92-mile length. It flows northwest parallel to the main stem of the Eel through the Redwood forest which covers most of its western drainage. Dominant underlying materials are distinctive to the South Fork and lower Eel drainages. The soils are highly erodible, especially along the steeply sloping western side of the basin; however, the landslide topography found in many areas throughout the Eel River basin is substantially less along the South Fork, with some notable exception such as the Woods Ranch are north of the Planning Area. The South Fork basin is 690 square miles. The water discharge of the South Fork comprises 21% of the total Eel River basin discharge. The sediment discharge is proportionally less, comprising 13% of total basin discharge.

Chadd Creek Watershed Overview
Chadd Creek is tributary to the Eel River, located in Humboldt County, California (Figure 1). Chadd Creek's legal description at the confluence with the Eel River is T1N R2E S32. Its location is 40 25'16" N. latitude and 123 58'32" W. longitude. Chadd Creek is a second order stream and has approximately 5.8 miles of blue line stream, according to the USGS Redcrest 7.5 minute quadrangle. Chadd Creek drains a watershed of approximately 4.9 square miles. Elevations range from about 100 feet at the mouth of the creek to 1,800 feet in the headwater areas. Redwood and Douglas fir dominate the watershed. The lower section of the watershed, and a portion of the upper watershed, is under the jurisdiction of Humboldt Redwoods State Park. The Pacific Lumber Company and other private landowners own the remainder. The basin is managed for recreation and timber production. The town of Redcrest diverts Chadd Creek for its domestic water supply. Vehicle access exists via Highway 101 to Redcrest.

**Larabee Creek Watershed Overview**

Larabee Creek is tributary to the Eel River, located in Humboldt County, California (Figure 1). The legal description at the confluence with the Eel River is T1S R2E S2. Its location is 40 24'33" N. latitude and 123 55'54" W. longitude. Larabee Creek is a fourth order stream and has approximately 24 miles of blue line stream, according to the USGS Redcrest, Myers Flat, Bridgeville, Blocksburg, Larabee Valley, and Dinsmore 7.5 minute quadrangles. Larabee Creek and its tributaries drain a basin of approximately 81.5 square miles, and the system has a total of 75.5 miles of blue line stream. Elevations range from about 100 feet at the mouth of the creek to 1,800 feet in the headwater areas. Redwood and Douglas fir forest dominates the watershed, but there are zones of grassland and oak-woodland in the upper watershed. The watershed is owned by the Pacific Lumber Company and other private parties and is managed for timber production and grazing. Year round vehicle access exists from State Highway 101 via the Shively Road.

**Impacts:**

Stream habitat conditions that might be affected by this project include stream flow, water quality, water temperature, channel complexity, fish passage and sedimentation. The amount of water available to aquatic life at critical times is important for sustaining the health of the ecosystem. In general, low or base level flows that occur during the late summer, August and September, are often the limiting factor for rearing juvenile salmon and trout. Low flows also negatively affect migration and access to habitat and food resources and can disrupt spawning behavior. Low flows happen naturally due to lack of precipitation. However, low flows can be exacerbated by water withdrawals, siltation and stream widening. There is a potentially significant impact on fisheries value due to the increased densities allowed in the Community Plan which would require increased water demand from Eel River tributaries and the South Fork Eel River. Impact is likely to be greatest in the summer months, when water demand is highest due to the tourism and agricultural uses.
Water quality, and in particular water temperature, plays a critical role in the health of anadromous fish. Increases in water temperature are often linked to reduction of shade riparian vegetation along streams. Water temperatures are also affected by stream widening, sedimentation/stream depth, microclimate, groundwater and upstream inputs. This impact can be cumulative if there are elevated temperatures in several tributaries that result in high values downstream. There is a potential impact resulting from the Community Plan in terms of upstream inputs, associated with inadequate waste disposal by recreational users, poorly maintained septic systems, overloaded sewer systems, and livestock or other animals in the riparian zone. Conditions which reduce flow and or increase water temperature have a cumulative impact and will diminish existing aquatic resources and impede recovery of threatened salmonid and other aquatic species of concern. Another impact to water quality is the use of herbicides and pesticides near streams.

Sedimentation of streams is the single most important factor affecting salmonid eggs and alevins (newly hatched fish) in the gravel. Excessive sedimentation decreases the exchange of water between the stream and the gravel. Eggs or alevins die due to lack of intergravel flow supplying them with oxygen. Factors that cause increased fine sediment delivery into streams include, but are not limited to, the location and intensity of erosion and mass-wasting events, and the presence of adequate streamside vegetation to filter fine sediments. Other factors include road construction, timber harvest, grading activities, winter grading activities and the removal of streamside vegetation.

Cumulative impacts: there may be significant effects in terms of water demand and water quality if all South Fork communities are considered cumulatively.

**Significance Standards:**

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or a river, in a manner which would result in substantial erosion or siltation on or off-site or reduction of minimum flow levels required for anadromous fish.
- Create or contribute run-off which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.

**Mitigation measures:**

The following general plan and community plan policies and other mitigation alternatives reduce the potential impacts to a less-than significant level.
General Plan policies on Stream Management Areas will prevent new development associated with the project from causing erosion and increasing sediment loading of streams.

Community Plan policy 3300.1

- Subdivision along streams shall at a minimum be required to maintain flows necessary to protect fishery resources and the timing of cumulative water withdrawals shall not cause stream flows to fall below minimum levels required for anadromous fish habitat.

Project effects can be reduced by either reducing demand or increasing flows during low water periods. The most direct way to reduce water demand is to reduce densities proposed by the project. Community Plan policies 4500.4 and 4500.5 limit subdivision in Residential Low Density (RL) and Residential Low Density (RL 1-5) designations until adequate water and wastewater service capacities exist.

Other mitigation alternatives include:

There will be no increased sedimentation entering into streams as a result of development activities. Specifically, winter grading operations will not be permitted unless in the case of emergency. There will be no over winter storage of exposed soils that could enter a SMA and the storage and disposal of fill grading and development activities will be removed to a site where it cannot enter the stream.

The Plan could also restrict Industrial General designations to uses without heavy water demand.

Another mitigation alternative is to increase flows during low water periods. This would involve construction of a water storage facility (a dam) and is not considered a reasonable mitigation measure.

**Environmental Setting: Biological Resources**

**General Habitat Types**

There are three general habitat types within the Planning Area: the valleys are for the most part cultivated pastures, grasslands and row crops; the surrounding hillsides are covered by coniferous forest; and riparian woodlands are found along the river and creek channels.

**Coniferous Forest.** The coniferous forest has several habitats associated with it: young forest, mid-seral forest, and late seral/old growth forest. The Coastal Coniferous Forest is dominated by redwoods, fir and madrone with an understory of salal, thimbelberry, elderberry, huckleberry and sword fern. This forest area supports big game species including Columbian black-tailed deer and an occasional black bear. This is also habitat for quails, small game animals, fur bearers and predators. Priority species (species with federal or state status or heightened public awareness or concern, generally due to decline in population distribution) such as marbled murrelet, northern spotted owl use these habitats as well as amphibian species.
Young forest habitat consists of conifer saplings that are from 1-11 inches dbh (diameter breast height) and generally 10–29 years old. Approximately 70 wildlife species are associated with young forests in the project area, including priority species such as the mountain quail, ruffed grouse, and sharp-shinned hawk (CDFG, 1998a).

Mid-Seral Forest habitat consists of coniferous trees from 12 to 24 inches dbh that are generally 20 to 50 years old. Approximately 80 wildlife species are associated with this habitat in the project area, using it for foraging and reproduction. The priority species Cooper’s hawk uses this habitat (CDFG, 1998a).

LSH habitat consists of both late-seral forest and old growth forest. Late-seral hawk habitat type is usually managed stands of large trees, averaging over 24 inches dbh and sometimes including a multi-storied canopy section. Typically, managed stands do not provide as many snags, large downed logs and large decadent trees as old growth, but large tree size and high canopy closure is important to many wildlife species including the northern spotted owl. Old growth habitat consists of uncut old growth and residual old growth, with multiple canopy layers dominated by trees over 30 dbh, with a shrub and herb layer and high snag and down log levels. Uncut old growth is typically dominated by redwood and Douglas-fir with approximately 60 wildlife species using the habitat for reproduction and/or foraging. A number of priority species are associated with old growth, including three species of invertebrates, the tailed frog, southern torrent salamander, marbled murrelet, northern spotted owl, northern goshawk, pileated woodpecker, Vaux’s swift, California tree vole, marten and fisher.

Cultivated Pasture/Cropland. Cultivated pasture is most extensive in the northern Planning Area. Most of the plants are introduced species, with clover, blue grass, sweet vernal, brome, rye grass, velvet grass and dandelion being common. Extensive commercial agricultural operations occur in the Shively, Pepperwood and Holmes areas. Cultivated pasture and cropland provides forage areas for rabbits and many fur bearers, predators and bird species.

Riparian Woodland. Riparian woodlands are found along rivers and creeks. This woodland is typified by an overstory of alder, cottonwood and willow, with an understory composed of salmon berry, thimble berry, elderberry, black berry and cow parsnip. In addition to providing a watering and forage area for forest animals, this habitat supports river otter, mink, and beaver. The habitat provides important reproductive, foraging and dispersal corridors for approximately 200 wildlife species, including many priority species. The canopy the woodland provides over streams is also critical for salmonid fish species. Canopy provides cover and lowers stream temperatures.

Environmentally Sensitive Habitat Areas

Due to their high value for providing fish and wildlife value, parts of the Planning Area are environmentally sensitive habitat areas. These include:

- Streams and riparian corridors
- Wetlands
- Forested areas containing habitat and/or nesting sites for rare, threatened, endangered and
special concern species.

Class 1 fish bearing streams in the Community Planning area provide habitat for salmon and steelhead populations. Most of the streams in the Planning Area are within State Park lands and are subject to the Park’s resource protection.

Areas of uncut and residual redwood old-growth within 50 miles of the ocean shoreline provide habitat for marbled murrelets. Potential murrelet habitat occurs along Bull Creek and the Eel River. Northern spotted owl primarily use old-growth and mature conifer trees.

**Fishery Resources**

**Stream Habitat Condition**

The Eel River, the South Fork, Chadd and Larabee Creeks are identified as Class 1 fish-bearing streams. This means they are capable of supporting anadromous fish. There are a number of physical conditions of stream habitat that must be present to support anadromous fish populations. Stream habitat conditions in the project area are affected by a wide range of factors including earthquakes and uplifting; extremes of flow (flooding and low flow); eroding soils, and land use practices (timber harvest, grazing, urban development, road construction and operation; gravel mining). The Eel River watershed on the whole has a number of instream habitat limitations (Table 1). These limitations include high water temperatures, low instream cover levels and low large woody debris (LWD) (PALCO, 1998). The Eel River is listed under Section 303 (d) of the Clean Water Act for sediment and water problems. Listing requires the assessment of watershed impacts, identification of actions needed to attain water quality standards and the development of an implementation and monitoring approach (TMDL process).

<table>
<thead>
<tr>
<th>Stream Habitat Value</th>
<th>Criteria^1</th>
<th>Eel River</th>
</tr>
</thead>
</table>

Table 1: Average values for stream habitat conditions in Eel River Watershed. Value in parentheses represent the rank, 1 = best observed, 5 = worst. Source: Palco, 1998.
<table>
<thead>
<tr>
<th></th>
<th>Criteria</th>
<th>Value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Pool Depth (ft)</td>
<td>&gt;2.0 ft/&lt;1.0 ft</td>
<td>1.19 (4)</td>
<td></td>
</tr>
<tr>
<td>Maximum Pool Depth (ft)</td>
<td>&gt;3.0 ft/&lt;2.0 ft</td>
<td>2.24 (4)</td>
<td></td>
</tr>
<tr>
<td>Residual Pool Volume (ft$^3$)</td>
<td>&gt;600 ft$^3$/&lt;200 ft$^3$</td>
<td>876 (2)</td>
<td></td>
</tr>
<tr>
<td>Embeddedness Score$^3$</td>
<td>&lt;1.75/&gt;3.25</td>
<td>2.71 (4)</td>
<td></td>
</tr>
<tr>
<td>Percent Fines (&lt;4.7 mm)</td>
<td>&lt;20%/&gt;50%</td>
<td>39.7 (4)</td>
<td></td>
</tr>
<tr>
<td>Percent Fines (&lt;0.85 mm)</td>
<td>&lt;20%/&gt;30%</td>
<td>23.8 (3)</td>
<td></td>
</tr>
<tr>
<td>Percent Canopy</td>
<td>70-100%/&lt;45%</td>
<td>54 (3)</td>
<td></td>
</tr>
<tr>
<td>Percent Pools</td>
<td>&gt;40%/&lt;25%</td>
<td>23 (3)</td>
<td></td>
</tr>
<tr>
<td>Percent Cover</td>
<td>&gt;40%/&lt;20%</td>
<td>17 (3)</td>
<td></td>
</tr>
<tr>
<td>Percent Gravel Dominance</td>
<td>&gt;50%/&lt;20%</td>
<td>41 (2)</td>
<td></td>
</tr>
<tr>
<td>Large Woody Debris (LWD)</td>
<td>ND$^2$</td>
<td>1.3 (3)</td>
<td></td>
</tr>
<tr>
<td>Maximum Weekly Average</td>
<td>≤ 18.4°C</td>
<td>17.1 (4)</td>
<td></td>
</tr>
<tr>
<td>Temperatures (MWAT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sediment D$_{50}$ (mm)</td>
<td>ND$^2$</td>
<td>88 (2)</td>
<td></td>
</tr>
</tbody>
</table>

1 These values indicate the criteria for good and poor habitat conditions, respectively.
2 Indicates no data or criteria available for this variable.
3 Measured by State using nonstandard methodology (see Flosi and Reynolds, 1994).

Temperature plays an important role in the biological productivity of streams. Salmonids are very sensitive to water temperatures and are used as...
an indicator species regarding water temperature and water quality. Coldwater species such as salmonids are susceptible to harm when stream temperature is greater than 70°F (Oregon Department of Environmental Quality, 1995). Juvenile salmon and trout are susceptible when stream temperature is above 73 to 77° F. Highest temperatures occur during summer months and are a limiting factor for salmon and steelhead trout both because of high temperature and low flow. MWAT (maximum weekly average temperature) is used to develop a species-specific indicator of thermal stress. For late summer rearing juvenile coho salmon, the MWAT value is 16.8°C. MWAT values have been measured for a number of Avenue streams, with several exceeding the critical temperature for salmon, as detailed below. The high MWAT values are generally associated with stream reaches with less than 30% canopy cover. Stream shading is a critical indicator of stream temperatures (FEIS/FEIR&HCP/SYP, Headwaters Project, 1999).

In the Eel River, water temperatures have warmed substantially and in many reaches the fish communities have become dominated by warm water species such as suckers, roach and Sacramento squawfish (Brown and Moyle, 1990). Where there is substantial canopy and sediment levels are low or moderate, Eel River tributaries are dominated by coho salmon. The upper South Fork provides one of the few cold water areas for salmonids in the whole Eel River watershed. The South Fork warms substantially as it flows downstream, with temperatures reaching a maximum of 28°C, exceeding the lethal limits for salmonids for at least some periods. It maintains this warm temperature at Phillipsville and Miranda (Friedrichsen, 1998). Generally, habitat conditions are poor in the Eel River. Water temperature in particular is too warm to provide habitat for diverse fish assemblages (Fish and Game written comments).

<table>
<thead>
<tr>
<th>Planning Area Location</th>
<th>Stream Name</th>
<th>Start date of 7 day average</th>
<th>MWAT1 (°C)</th>
<th>Canopy Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2: Stream Temperatures in the Eel River Watershed (PALCO, 1998)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Creek</td>
<td>Date</td>
<td>MWAT</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>--------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Stafford</td>
<td>Twin Creek</td>
<td>7/14/95</td>
<td>15.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Twin Creek</td>
<td>7/24/96</td>
<td>16.33</td>
<td></td>
</tr>
<tr>
<td>Pepperwood</td>
<td>Bear Creek</td>
<td>7/15/95</td>
<td>18.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bear Creek</td>
<td>7/25/96</td>
<td>17.45</td>
<td></td>
</tr>
<tr>
<td>Larabee</td>
<td>Larabee Creek</td>
<td>7/24/96</td>
<td>23.33</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Scott Creek</td>
<td>7/25/95</td>
<td>14.38</td>
<td></td>
</tr>
<tr>
<td>Weott</td>
<td>Bull Creek</td>
<td>7/15/95</td>
<td>18.9</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Cow Creek</td>
<td>7/24/96</td>
<td>16.38</td>
<td>97</td>
</tr>
<tr>
<td>Myers Flat</td>
<td>Canoe Creek</td>
<td>8/1/95</td>
<td>16.14</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Canoe Creek</td>
<td>7/24/96</td>
<td>17.96</td>
<td></td>
</tr>
</tbody>
</table>

1MWAT = maximum weekly average temperature

**Status, Life History and Habitat Requirements of Priority Fish Species**

There are a number of priority fish species recorded in the streams and rivers of the Avenue area. These fish include: Coho salmon, chinook salmon, steelhead/rainbow trout and coastal cutthroat trout. Each of these species have Federal and State status, as noted below.

**Table 3: Current Status of Priority Fish Species Recorded in Avenue Streams and Rivers**
<table>
<thead>
<tr>
<th>Fish Species</th>
<th>Federal Status</th>
<th>State Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coho salmon</td>
<td>FT (April 1997)</td>
<td>CCT</td>
</tr>
<tr>
<td>Chinook salmon</td>
<td>PFT</td>
<td>CSSC</td>
</tr>
<tr>
<td>Steelhead/rainbow trout</td>
<td>Rejected for listing, March 14, 1998 (currently holds candidate status)</td>
<td>CSSC</td>
</tr>
<tr>
<td>Coastal cutthroat trout</td>
<td>FSR</td>
<td>CSSC</td>
</tr>
</tbody>
</table>

1FT=Federal threatened species  
PFT=Proposed for Federal listing as threatened  
FSR=Status review of species currently being conducted by NMFS (National Marine Fisheries Service)  
2CCT=California candidate for listing as threatened  
CSSC=CDFG Species of Special Concern

Coho Salmon

California coho salmon exhibit a single dominant life history type of one year in the stream and 2 years in the ocean. Freshwater rearing lasts from 1 to 2 years, and juveniles migrate downstream in the spring (March-April). Coho remain in the ocean for 1 to 2 years, attaining a size of 22-28 inches (55-70 mm). Spawning migration is from October to January (primarily November and December).

Critical freshwater habitat conditions for juvenile coho include the following:

- Year-round cool, high-quality water  
- Abundance of shade  
- Cover in the form of large, stable woody debris and undercut banks  
- Unembedded gravel/rubble substrate  
- Enough pool habitat  
- Adequate food supply  
- Shallow habitat along stream margins for young fish  
- Refuges from high water temperature, low stream flows and natural flooding  
- Side channels and other lateral habitats  
- Low levels of competition and predation

(Feis/Feir&HCP/Syp, 1999; CDFG, 1994; Gregory and Bisson, 1997; Fresh 1997).
This habitat is susceptible to human disturbances including dams or fish passage barriers; gravel mining; agricultural and domestic diversion of stream flows, particularly in summer months; riparian vegetation removal, bank erosion, and sedimentation due to over-grazing; agricultural and urban runoff; road construction and runoff and logging practices (FEIS/FEIR&HCP/SYP, 1999; CDFG, 1994; Gregory and Bisson, 1997).

Historically, coho occurred in 582 California streams (Brown and Moyle, 1991). There are records for 244 of those streams, and by 1987 only 132 had coho runs. Information on these streams demonstrates that the distribution of coho has significantly declined (CDFG, 1997a). A current estimate of Eel River coho in 1991 was only 1,000 fish (Brown and Moyle). As shown in Table 3, coho is a species of particular concern, listed as federally threatened and as a candidate for California threatened listing. Due to concerns about the decline of coho salmon in California, the commercial fishery has been closed, and the sport fishery is limited to isolated areas. As part of federal listing, NMFS will develop a draft recovery plan that addresses critical habitat issues, recommends management options, and identifies criteria to evaluate whether recovery efforts are working.

Chinook Salmon

Aspects of chinook life history are variable. Fall run freshwater rearing is usually limited to less than 1 year. Outmigration is variable, with most juveniles moving downstream in the spring (March-April); however some remain in the streams and estuaries and enter the ocean in the fall. Marine rearing lasts from 2 to 5 years, attaining a size of 30-39 inches (75-100 mm). Spawning migration occurs in late August and early November, depending on adequate stream flows for migration. Spawning occurs from October through January.

Chinook salmon are found in the Eel River drainage and in Eel tributaries. Nehlsen et al (1991) consider the fall chinook to be at a moderate risk of extinction in the lower Eel River. NMFS has concluded that chinook salmon in northern California "are not presently in danger of extinction but are likely to become endangered in the foreseeable future (CFR 30263, June 8, 1995)." Chinook salmon are currently federally proposed as threatened on the southern Oregon and California coast.

Steelhead/Rainbow Trout

Steelhead is the anadromous form of rainbow trout. Steelhead typically spawn from late winter through spring. For summer runs, freshwater rearing is from 1 – 3 years, while winter runs stay for 1-2 years, attaining a size of about a "half-pounder". For both runs, juveniles migrate downstream in the spring (March-June). Marine rearing is for 2-3 years, attaining a size of 19-33 inches (48-84 cm). Upstream migration occurs from April to July and is followed by spawning from December to April.

Because of their extended residence time in freshwater, habitat requirements for juvenile steelhead trout are similar to coho salmon. Both require year-round high water quality, canopy cover, unembedded substrate, and adequate food supplies. There is little information about run sizes of steelhead for the Eel River watershed. Based on available information, Busby et al. (1996) concluded that steelhead trout in the area are not currently in danger of extinction but are likely to become endangered in the near future. Summer-run steelhead abundance is very low. Steelhead was petitioned for federal listing due to apparent population declines and was not listed at this time. It was not listed because the state of California has proposed a habitat recovery plan for the steelhead.

Coastal Cutthroat

Coastal cutthroat have a life history similar to steelhead trout, though some fish will remain residents in freshwater throughout their life. Marine rearing is less than 1 year, attaining a size of 20 inches or less (50 cm). Upstream migration occurs in the winter through the spring. Cutthroat trout prefer small, low-gradient coastal streams and estuarine habitats. There is little information available for the project area on run sizes, but cutthroat is currently a federal candidate species for listing.

The introduction of the non-native Sacramento squawfish (Ptychocheilus grandis) has had an impact on the salmonid population recovery. The
squawfish was illegally introduced in to Lake Pillsbury in 1980. The fish rapidly expanded its range throughout the river system. It is a predator on juvenile salmonids.

Impacts:

Development can result in loss of habitat and this is a potential impact in areas where rare, threatened or endangered species are known to occur. For species that have a limited distribution or have very specific habitat requirements, the loss of small amounts of habitat can lead to critical declines in the population. Construction of buildings, roads and parking lots increases the overall amount of impervious surface that in turn increases the runoff to creeks and streams. This can potentially impact water quality, increasing pollutant levels. Development and recreational use can degrade vegetation along creeks and streams. Loss of riparian vegetation can cause erosion of stream banks, which increases sediment input to creeks, reduces water quality and decreases habitat viability for salmonid species (higher stream temperatures). Agricultural diversions can result in the death of salmonid juveniles. Grading and road building can result in increased erosion, and culverts and dams cause barriers to fish passage.

Significance Standards:

- Substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation Measures:

The Community Plan has several policies that protect sensitive habitats:

Community Plan policy 3400.1:

- The County shall continue to minimize damage to riparian habitat in the Planning Area through application of the Streamside Management Area standards and other sensitive habitat protection guidelines detailed in the Framework General Plan, Section 3432.

Community Plan policy 3400.2:

- Parcels that contain sensitive habitat shall include measures for resource protection in their development plans.

Community Plan policy 3400.5
• The County should encourage PG&E to provide the maximum flow from Potter Valley Dam consistent with natural water flow cycles to improve the characteristics of the Eel River for native fish populations.

The County will work cooperatively with State, Federal and local agencies to identify anadromous fish bearing streams and critical salmonid habitat. Mitigation measures in the Water Resources section also mitigate the impacts highlighted in this section.

The Community Plan policies in concert with the Framework General Plan will mitigate any impacts to a less-than-significant level.
The unsurveyed Potential Arable Lands are lands areas 5 acres or more of land, sloped less than 9%, non-urban, and less than 3000 ft. elevation which were not otherwise included in a soil survey. Source: M. Neilson, NRCS/AmerrCorps 1996.
CHAPTER 4: PUBLIC SERVICES AND FACILITIES

Environmental Setting: Circulation

The Planning Area, with the exception of Stafford, is along the Avenue of the Giants, Highway 254. The Avenue of the Giants or Highway 254 is a State maintained road. The Avenue has narrow or no shoulders throughout its entirety. Traffic levels in the summer months are substantially higher than in the winter months due to the tourist traffic. Caltrans data for Route 254 (Avenue) shows that the annual average daily traffic (AADT) counts are 705 with a peak count in July of 1437. The AADT count for Highway 101 is 6050 with a peak in August of 7835. Figure 4.1 shows the traffic volumes along the Avenue and Highway 101. The number in parenthesis is the 20 year projection of traffic flow. Miranda has the highest traffic volume along the Avenue, nearly twice as high as the other communities.

Caltrans has indicated that there are no major road improvements planned for the Avenue itself. Each of the communities has some County maintained roads within them. However, most of the roads within the communities are private graveled roads.

Impacts:

Given the low population growth of the area in general and the limitations on development, no impacts on circulation are likely to occur as a result of implementing the community plan. Future development could result in inadequate emergency access and inadequate parking capacity. The Community Plan does not conflict with any policies, plans or programs supporting alternative transportation. The Community Plan is in support of the Avenue Trail concept, an alternative transportation project.

Significance Standards:

Would the project:

- Increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Mitigation Measures:

The following general plan and community plan policies address the possible impacts of circulation as a result of the Community Plan.
General Plan Zoning Regulations for off-street parking and parking spaces requires adequate parking facilities for new development.

Community Plan policy 4200.2:

- Requires sidewalks for new developments in accordance with County design standards and encourages pedestrian and bicycle access where appropriate.

Community Plan policy 4200.3:

- New road construction or improvement shall be of sufficient width to accommodate emergency vehicles, and show consistency with County design standards and the County Fire Safe Regulations.

Community Plan policy 4200.5:

- The County shall request that Caltrans comply with Streets and Freeways Code, Section 157, to provide for pedestrian safety, access, and egress, as an integrally funded part of their highway projects.

These mitigation measures reduce the potential circulation impacts to a less-than-significant level.

**Environmental Setting: Water and Wastewater Facilities**

Table 4.1 gives a summary of water system capacities for most of the towns in the Avenue of the Giants Community Planning Area.

**North-end**

In Shively, Pepperwood, Holmes and Stafford, water is supplied from individual wells and private septic tanks handle wastewater. Redcrest has a small community owned water system. There are no wastewater facilities other than private septic tanks.

**Weott**

The Weott Community Services District provides community water and sewer services, fire protection services, street lighting, garbage collection and recreation powers. Recognizing the constraints of the water system the Board of Directors imposed a temporary moratorium effective October 6, 1996. The moratorium excludes parcels with vacant house and those parcels that applied before the adoption date.

Due to failing septic systems in the community, in 1987 the District requested activation of their wastewater treatment powers. The sewage collection and treatment facilities were constructed from 1989-91 under the Clean Water Act program.
The sewage treatment facility consists of a community septic tank, a recirculating pea gravel filter and tank, a chlorine contact basin, a control and generator building, generator, electrical and telemetry equipment, and chlorination and dechlorination equipment. The disposal facilities include a community leachfield and a direct discharge to the Eel River. The treatment facilities have a design capacity of 38,000 gallons average daily flow (gpd), and 209,000 gpd peak wet weather.

Wastewater entering the treatment plant begins with a community septic tank that provides preliminary treatment of the waste. The wastewater flows by gravity from the septic tank to a recirculation tank where it is mixed with water that has already passed through the pea gravel filter. Mixing the septic influent with this treated aerated wastewater raises the oxygen content of the wastewater and helps control possible odor problems. The wastewater is then applied to the pea gravel filter where both physical filtration and biological treatment by microorganisms attached to the pea gravel occurs. Wastewater passes five times between the recirculation tank and the gravel filter.

After filtration, the effluent than passes through the chlorine contact chamber prior to discharge. The final disposal of the effluent is into the leachfield during the summer. From October 1 to May 15 the effluent can be discharged directly into the South Fork Eel River, provided sufficient flow is present in the river. Prior to discharging to the river, the effluent must be chlorinated for disinfection, and then dechlorinated with sulfur dioxide. An ultrasonic flow meter measures wastewater flow and controls the addition of chlorine and sulfur dioxide gas in proportion to wastewater flow.

A 15 foot wide gravel and paved road provides access to the treatment plant. The access road was cut into a slope along a small creek, and included at least two culverts to accommodate cross drainage when constructed. Most of the road is gravel, while a steep portion is paved for about 75 feet.

The Weott Community Services District (District) has applied to the United States Department of Agriculture's Rural Utilities Service for a financial assistance grant and low-interest loan to repair and improve their wastewater system and access road to the water treatment facility, and to refinance existing debt. In addition, there is a community action plan project underway to improve water capacity and the delivery system (permanent transmission pipes under the river).

Myers Flat

The Myers Flat Mutual Water System provides water to Myers Flat. There are no wastewater facilities other than septic tanks.

Miranda

The Miranda Community Services District supplies water to the Miranda area for domestic, irrigation, sanitation, commercial, fire protection and recreational uses. The sewer collection system terminates into community septic tanks, the effluent is treated by recirculation sand
filters, afterwards, the effluent is chlorinated and stored in a settling pond. The treated effluent then leaches from the pond into the gravel layers underlying the river.

Phillipsville

The Phillipsville Mutual Water Association provides water for the town. There is also an inactive Community Services District. There are no wastewater facilities besides private septic tanks in Phillipsville.

Table 4.1: Avenue of the Giants Water System Capacities Summary

<table>
<thead>
<tr>
<th></th>
<th>water connections</th>
<th>Average (winter) Demand</th>
<th>Average (summer) Demand</th>
<th>Storage Capacity (gallons)</th>
<th>Source</th>
<th>Other Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Redcrest</strong></td>
<td>45</td>
<td>12-15,000 gpd¹</td>
<td>50,000 gpd</td>
<td>230,000</td>
<td>Chadd Creek</td>
<td>➢ Limited storage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>➢ Turbidity problems in winter months</td>
</tr>
<tr>
<td><strong>Weott</strong></td>
<td>134</td>
<td>ADD (average daily demand) = 135,000</td>
<td></td>
<td>105,000</td>
<td>Eel River south of Bull Creek</td>
<td>➢ Summer demand exceeds current storage capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>➢ Moratorium in place as of 1996</td>
</tr>
<tr>
<td><strong>Myers Flat</strong></td>
<td>97</td>
<td>100,000 (weekdays)</td>
<td></td>
<td>300,000</td>
<td>Pete Creek</td>
<td>➢ Need new sand filter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130,000 (weekends)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>190,000 (maximum)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on present water use levels, the water systems of most of the communities are limited in their ability to meet the water demands, particularly in the summer months when visitor and agricultural uses are highest.

**Impacts:**

In the Community Plan, a large population growth is not projected. If the County-wide growth rate is applied to the current Avenue population of an estimated 1000 people, in 2020 there will be an additional 294 people living in and around the 10 communities. This growth is not likely to cause an impact to existing water systems, *provided* the systems are in good repair and there is adequate source water. Some creeks, such as Chadd Creek, are at the limit for water withdrawals. Several towns have capacity limitations on their systems in terms of source water or equipment. The municipal water supply systems are typically limited by piping, pumping and storage capacity to fight fires and maintain supplies during emergencies. In general, the communities in the Planning Area need more water storage, especially to be able to supply water for fire protection as well as domestic use. This means that water tanks will need to be located in the hill slope or outlying areas of towns. Over time, this may result in several acres of forest land being converted into a public facility usage.
Significance Standards:

Would the project

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

Mitigation Measures:

Both General Plan and Community Plan policies mitigate the potential water and wastewater impacts in Avenue communities.

General Plan policy 4512.3:

- Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies.

Community Plan polices:

4500.1

- Plan density ranges are contingent on adequate service capacities. Current systems should be upgraded to be able to provide consistent, reliable water for domestic and emergency uses. Additional development (second units, caretaker facilities, etc.) or improvements to existing uses will not be approved without proof of adequate service capacities.

4500.2

- An ability to service letter for both water and wastewater capacity shall be required before acceptance of an application for new development.
New or improved water and wastewater systems shall take into account instream flow requirements for satisfactory salmonid habitat when planning withdrawals or inputs into streams and rivers in the Planning Area.

No new subdivisions which create parcels of less than 2.5 acres shall be approved on lands designated Rural Low Density (RL 1-5) until no service moratoria are in effect and/or until adequate private or publicly maintained water and wastewater disposal systems are available to such lands.

No new subdivisions which create parcels of less than 0.5 acres shall be approved on lands designated Rural Low Density (RL) until no service moratoria are in effect and/or until adequate private or publicly maintained water and wastewater disposal systems are available to such lands.

Another mitigation measure is:

The Planning Division shall recommend a "Status quo" Sphere of Influence for the Weott, Miranda and Phillipsville Community Services Districts until water and wastewater capacities are increased.

These policies mitigate the potential impacts to a less-than-significant level.

**Environmental Setting: Fire Services**

Fire Station Facilities

Many of the fire agencies along the Avenue are volunteer in nature, which limits availability and there are times when the fire agencies do not have enough volunteers to effectively respond to calls for service.

The Stafford area has no fire protection services of its own. At times either Scotia Volunteer Fire Department or Redcrest may respond to calls in the Stafford area, if they are available.

The Redcrest Volunteer Fire Department will respond along the 101 corridor from Stafford to Dyerville, if available. The Department maintains one fire engine, has use of a water truck provided by Eel River Sawmills and has an emergency response vehicle equipped as a first responder. The Department has only four sets of fire gear, therefore any emergency response is
limited to four people. This is an all-volunteer company with no tax base and currently 3 volunteers.

The Weott Volunteer Fire Department provides fire protection for Weott and currently responds outside the district north to Dyerville, east to McCann, west to Cuneo Creek and south about ½ way to Myers Flat. They have 1 400-gallon fire engine and 1 rescue truck (Suburban with jaws of life). There are currently 5-6 volunteer firefighters. The Department is funded by donations and a fee from the Weott Community Services District.

Myers Flat is the only Fire Protection District in the planning area. The Myers Flat Fire Protection District provides fire protection for the Myers Flat area. There are two fire engines and 10 set of fire gear, and currently 2-3 volunteers.

The Miranda Volunteer Fire Department provides fire protection for the Miranda community and also responds to calls north along the Avenue to Cathay Road, south to Fish Creek and west to Salmon Creek. There are two fire engines with 600-800 gallon capacity and one attack vehicle. There are typically 10 volunteer firefighters, with 2+ certified First Responders. There is no fire hall, but the engines are stored in a garage. The community is discussing ideas/plans for a community center/fire hall/CSD office.

The Phillipsville Volunteer Fire Department provides fire protection and emergency response services for the community of Phillipsville. The Department recently completed construction of a new station. The Department is supported entirely by donations. The Department maintains one fire engine, one attack truck and one 2,000-gallon water tender. Currently, the Department is staffed by seven volunteers. One of the volunteers is a certified First Responder.

California Dept. of Forestry and Fire Prevention

All the land within the Planning Area is within the State Responsibility Area (SRA) as mapped by the California Department of Forestry and Fire Protection. CDF has revised the rating scheme to follow administrative boundaries, and there are no areas mapped Extreme Fire Hazard in Humboldt County. The current rating system has been superseded by a new system that has not been implemented by Humboldt County. Lands within SRA’s are subject to the maintenance requirements of Section 4291 of the Public Resources Code (PRC). The County has adopted local regulations as authorized by the Section 4290 of the Public Resources Code known as the "SRA Fire Safe Regulations". These regulations have been prepared and adopted for the purpose of establishing minimum wildfire standards in conjunction with building, construction and development in SRA areas. These requirements include, but are not limited to, emergency access (road grades, widths, vertical clearance, turnouts), signing and building numbering, emergency water supply and defensible space around structures.

It is not the State’s responsibility to provide fire protection services to any building or structure located in SRA’s, unless the Department of Forestry and Fire Protection has entered into a cooperative agreement with a local agency for those purposes. There are no such agreements within the Planning Area. However, if resources permit and the structure fire poses a risk to the wildland, California Department of Forestry and Fire Protection (CDF) will respond. The
Avenue communities have come together to propose year-round fire protection, emergency response and training services from the Weott CDF station. An Amador Plan would extend mutual aid agreements between local volunteer fire departments and CDF. The combined communities have generated an action plan, and are planning on applying for grants to cover the cost of the first 2 years of Amador project operation. Concurrently, the communities will be working to file a County Service Area formation application to LAFCo.

The California Department of Forestry and Fire Protection maintains a fire station in Weott. Most of the Planning area is within the response area of the Weott station, except for Phillipsville which is closer to Garberville CDF station. Generally, there is 24 hour a day availability from June 1 through November 1. During the winter period, CDF will respond if personnel are available in the station. CDF has automatic aid agreements with each volunteer fire department on the Avenue of the Giants (Redcrest, Weott, Myers Flat, and Miranda).

In response to the Notice of Preparation (Appendix A), CDF staff noted a lack of fire protection in the area, with only two districts that comprise less than 10% of the area and several volunteer companies (as listed above). CDF is concerned with setbacks for fuel modifications, greenbelt/park fuel modification maintenance programs, emergency water supplies, signage, and disclosures. CDF would like to see a consistent approach to off-site issues.

**Impacts:**

Development associated with the proposed Community Plan may have adverse effects on the delivery of fire protection services in the State Responsibility Areas of the Planning Area. These effects are due to potential increased population and buildings, and the non-comprehensive manner in which Fire Safe regulations are administered under existing County Ordinance.

**Significance Standards:**

- Exposure of people or structure to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.
- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for fire protection.

**Mitigation Measures:**

The County shall support the formation of an Amador Plan, or similar plan, as described above.

The County shall work with CDF on the concerns outlined in response to the Notice of Preparation (NOP), and correct inconsistencies for off-site situations.

General Plan policy 3291.4.B:
• Use the appropriate sections of the California Department of Forestry "Fire Safe Guides" as guidelines for review of residential development in rural areas, to be applied consistent with other plan policies.

Community Plan policies:

4700.1

• The County shall encourage the maintenance of mutual aid agreements among fire districts.

4700.2

• The County shall require that all new development in the Planning Area be served by an access way that can accommodate emergency vehicles in conformance with SRA standards as outlined in Humboldt County Code.

Another mitigation measure is:

The Planning Division shall recommend a "Status quo" Sphere of Influence for the Myers Flat Fire Protection District until fire protection services are expanded.

These measures will provide for sufficient fire protection and reduce potential impacts to a less-than-significant level.
CHAPTER 5: EVALUATION OF ALTERNATIVES

The development of alternatives to the proposed action provides a range of possible actions that would achieve the objective of developing a long range land use plan for the Avenue of the Giants.

Requirements for Alternatives

CEQA Guidelines state that the EIR must describe and evaluate a reasonable range of alternatives to the project. The CEQA Guidelines for alternatives follow.

CEQA Section 15126 – Alternatives

(d) Alternatives to the Proposed Action. Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

1. Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

As required by the State CEQA Guidelines, a distinction is made between mitigation measures integrated into the project and mitigation measures proposed in the EIR. All of the additional future mitigation measures recommended in the EIR will be considered for incorporation into the final version of the Plan and implementing ordinances. These mitigation measures are also required to be identified in the final EIR for this project. Impacts of the project have been evaluated against both existing conditions and potential development consistent with provisions in existing plans and policies.

Identification and Evaluation of Alternatives

Three alternatives have been selected for evaluation, plus a No Project alternative:

1. The Proposed Community Plan Alternative (Preferred Alternative):

This alternative comprises the draft community plan, with its proposed goals and policies. The primary objective is to provide land use guidelines that meet the needs of the communities. Growth will occur in keeping with community character. Specific objectives include retention of community character, protection of natural resources and promotion of appropriate development and growth. Zoning is recommended for each town, facilitating business development
in existing commercial centers. Avenue-wide projects, such as Amador and the Avenue Trail, are supported, as well as smaller, specific community projects.

2. **The Higher Growth Alternative**: This alternative is based on maximized development as allowed under the various land use designations. Most highway frontage parcels are zoned commercial to allow for maximum business development. There is less protection of agricultural lands and more opportunity for lands to be developed into the highest value use, i.e. tourism related services. Emphasis is placed on employment-creating commercial and industrial development under this option. Consideration of community character is effectively voluntary on the part of developers.

The Higher Growth Alternative would include broader commercial land use designations such as the Commercial Services designation rather than the Commercial Recreation designation. This would be accompanied by less restrictive zoning such as the CH zone in commercial areas without the QD (Qualified, Design Review) combining zones which require new development to be more in keeping with the existing communities and requires more review of more impacting projects.

This alternative would also propose all of the Lewis property (APN 209-351-22 & 209-291-17) in the Holmes Flat area be designated Commercial Recreation, (rather than just the existing developed site with the Immortal Tree, gift shop, and parking area being designated Commercial Recreation, and the balance designated Agricultural Exclusive as in the preferred alternative). This would designate approximately 40 acres of prime agricultural soils for commercial development.

3. **The Low Growth Alternative**: In this option, development would be kept to the minimum allowed under the land use designations. No conversions of agricultural lands or other resource lands would be permitted. Commercial and residential zoning would be primarily limited to existing lots based on service constraints. In filling could take place, but uses requiring new services would require plan amendment and rezone. Activities incompatible with the Humboldt Redwoods State Park would be discouraged. Continued expansion of HRSP would be encouraged.

While this alternative on its face is less impacting than the preferred alternative, it could have unintended adverse consequences. The commercial centers of these communities and the supporting residential areas have suffered from the Highway 101 bypass, and tightly constraining them might lead to further degradation and lowering the quality of life in these towns. These towns for the most part have had flat or negative growth rates over the last thirty years, and revitalization is probably one of the most important land use considerations. Further downturn for the town centers would likely increase land use incompatibility with surrounding parklands and visitor serving land use goals.
4. The *Retained 1968 Southern Humboldt County General Plan Alternative* (*"No Project"*):

Growth under this option would be governed by the existing community plan, last updated in 1968. The present plan does not focus on community development overall, and half of the Avenue communities are not included in the analysis. Land use designations are fairly reflective of current uses, but all zoning is unclassified. Issues that have been highlighted as important to the communities are not covered. The emphasis is on protecting and conserving timber and agricultural resources for long term economic utilization.

This alternative would leave the existing unclassified zoning in place in the town sites. This zoning principally permits single family houses and general agriculture, and makes all other uses conditionally permitted. Leaving this zoning in place would be contrary to state planning law requiring the County to prepare relevant land use plans and consistent zoning. It would be less protective with respect to flood hazards, resource protection, fire safety and community character.

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**Significant Irreversible Effects**

Because the project under consideration is a land use plan and its associated zoning, the project does not inherently result in irreversible significant effects. However, it is reasonable to assume that to some degree build-out will occur under the plan, and this will entail utilization of non-renewable resources in the construction of the uses allowed under the plan. Also in accommodating growth, the project will make long term commitment of land to residential and commercial uses. There will also be a commitment of materials and land to construct housing, businesses, roads, and water, wastewater, and stormwater systems.

The plan does encourage the construction of a permanent bridge across the Eel River to the Shively area. This would be the most significant piece of infrastructure called for in the plan, and if developed, would be a long-term physical improvement across a Wild and Scenic river.

**Growth Inducement and Cumulative Impacts**

The plan is intended to be a long-term guide for orderly development. Certain aspects of the plan such as commercial zoning in the town centers are intended to induce growth in an effort to revitalize the communities. Development pressure is so low in these towns that the growth inducing aspects of the plan are not expected to result in significant impacts on the environment. New business construction is expected to be primarily located at formerly used sites. Development timing policies tie new significant construction to availability of services, and require discretionary review of such projects to allow application of mitigation measures.

Cumulative impacts associated with the plan include potential additional demand on community water and wastewater systems, and road construction associated with rural residential build-out.
These impacts are estimated to be low, considering that the projected 20 year population growth of the planning area is 294, or about 130 additional housing units, which would be primarily accommodated as in-fill in the existing communities.
PERSONS AND ORGANIZATIONS CONTACTED

Avenue of the Giants Communities
Redcrest Water Association: Carl Anderson
Myers Flat Mutual Water System: Mary Whitmore
Weott Community Services District: LB McComick
Miranda Community Services District: Bert Stevens
Phillipsville Mutual Water Association: Ken Eldridge
California State Parks: John Kolb, Roger Goddard, Tim Young, Joann Weiler, John O’Rourke
California Department of Forestry and Fire Protection: Kevin O’Neil, Steve Hubbard
California Department of Fish and Game: Scott Downie
Caltrans: Guy Luther, Paul Dettner
Eel River Watershed Improvement Group: Ruth Goodfield
Save the Redwoods League: Ruskin Hartley
Planwest: George Williamson
Net Gain: Nancy Reichard
Arcata Economic Development Corporation: Jim Kimbrell

RESOURCE DOCUMENTS


CDFG (California Department of Fish and Game), (1994). Petition to the California Board of Forestry to List Coho Salmon as a Sensitive Species. CDFG Report.

CDFG (1997a). California Stream Habitat Database. Electronic data files provided by the Inland Fisheries Division of CDFG.


Humboldt County, (1985). Humboldt County General Plan, Volume I.


McLaughlin, J. and F. Harradine, (1965). Soils of Western Humboldt County. Prepared as a Cooperative Project between the Department of Soils and Plant Nutrition, UC Davis and the County of Humboldt.


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**RESOURCE WEBSITES**

California Department of Finance Demographics Research Unit.  
http://www.dof.ca.gov/html/demograp/drunpar.html

http://cdec.water.ca.gov/

California Environmental Resources Evaluation System (CERES), California Geology.  
http://ceres.ca.gov/ceres/calweb/geo.html

California Natural Resources Department (1997).  
http://www.ca.gov/s/natres/

California Rivers Assessment (1997), UC Davis.  
http://endeavor.des.ucdavis.edu/newcara/

Caltrans (California Department of Transportation) Traffic Volumes Data (1997).  

http://glinda.cnrs.humboldt.edu/earthquakes/eqk_info.html

http://glinda.cnrs.humboldt.edu/earthquakes/shaky_ground.html

http://www.consrv.ca.gov/dmg/eq-index.html

Hackett, Steven (1996). Index of Economic Activity for Humboldt County. School of Business and Economics, HSU.  
http://www.humboldt.edu/~economic/ieahc.html

Information Center for the Environment, UC Davis.  
http://ice.ucdavis.edu
http://www.pond.net/~fishlifr/

State Water Resources Control Board. 
http://www.swrcb.ca.gov/index.html

US Census Bureau, Tiger Mapping Service. 
http://tiger.census.gov/

USGS Water Data Retrieval. 
http://waterdata.usgs.gov/nwis-w/CA/
Appendix A: Notice of Preparation, written comments and responses

 Notices of Preparation

Written comments received from:

1. John Kolb, Department of Parks and Recreation, North Coast Redwoods District
2. Larry Preston, Department of Fish and Game, Northern California- North Coast Region
3. Neva Sotolongo, Department of Transportation, District I
4. Charles Wilson, resident of Orick
5. Kevin Caldwell, Real Properties Solutions

Note: The letters are scanned (GIF) images of the original documents

Responses to comments made on the Avenues Plan
APPENDIX A: Notice of Preparation

PROJECT TITLE: Avenue of the Giants Community Plan

PROJECT DESCRIPTION

Summary: The Avenue of the Giants Community Plan is an update of the Humboldt County General Plan, prepared pursuant to Ca. Gov. Code Section 65300 et seq., for the area described below. The project also includes zoning implementation of the general plan designations in the affected area. The general plan was last updated for the areas involved in 1968.

Location: The Avenue of the Giants Community Planning Area (AGCPA) is made up of 5 community planning areas that include 9 towns: Stafford, Holmes, Redcrest, Shively and Pepperwood; Weott; Myers Flat; Miranda and Phillipsville. The area encompasses 16 square miles and is located in southern Humboldt County along the main stem and South Fork of the Eel River. The AGCPA is adjacent to the 35 mile Avenue of the Giants, State Highway 254. The planning boundary, generally shown on the attached map, will be adjusted to a parcel-specific boundary for zoning implementation purposes and to reflect public comment.

General Plan Overview: The Avenue of the Giants Community Plan is a component of the Humboldt County General Plan. Under state planning law, counties and cities are required to prepare and adopt comprehensive long-range general plans for the physical development within their jurisdictions. The general plan must include discussion of land use, circulation, housing, conservation, open space, noise, and safety issues either in distinct "elements" or combined as deemed appropriate.

The Humboldt County General Plan Program is organized as follows:

Volume I: Goals, policies and standards for county-wide issues; development of the rural areas of the County; Community Planning Area boundaries.

Volume II: Individual plans for specific geographic areas identified in Volume I, including Local Coastal Plans for the Coastal Zone, and Community Plans for the non-coastal areas; and identifying urban/rural boundaries, designating land use categories, and specific policies addressing the special needs of each community or plan area.

Community plans focus in more detail on a specific area. These plans provide a framework for appropriate development and growth through land use and development goals and policies. The Avenue of the Giants Community Plan is organized into five chapters:

1. Introduction

2. Community Development and Land Use
3. Natural Hazards and Resources

4. Public Facilities and Services

5. Action Plan / Community Action Plans

**Key Features of the Draft Avenue of the Giants Community Plan**

The 1999 draft Avenue of the Giants Community Plan is being prepared by the Humboldt County Planning Division, following a series of public input meetings and community workshops conducted over an approximate 1-year period. The Plan addresses the following issues:

- Proposed land use designations and zoning regulations
- Community character and future development
- Rural land use and appropriate zoning of agricultural lands
- Siting of industrial locations based on historic and/or current uses
- Potential building and population density changes
- Water and wastewater facilities and capacities
- Business/economic development and appropriate zoning
- Community specific policies and issues
- Water resources and fishery restoration
- Circulation and trails
- Geologic, fire and flood hazards
- Adjacent State Park management

**Plan Alternatives and Probable Environmental Effects**

At present, three alternatives have been identified:

1. The *Proposed Community Plan Alternative* (Preferred Alternative):

   This alternative comprises the draft community plan, with its proposed goals and policies. The primary objective is to provide land use guidelines that meet the needs of the communities. Growth will occur in keeping with community character. Specific objectives include retention of community character, protection of natural resources and promotion of appropriate development and growth. Zoning is recommended for each town, facilitating business development in existing commercial centers. Avenue-wide projects, such as Amador and the Avenue Trail, are supported, as well as smaller, specific community projects.
2. The *Higher Growth Alternative*:
   This alternative is based on maximized development as allowed under the various land use designations. All highway frontage parcels are zoned commercial to allow for maximum business development. There is less protection of agricultural lands and more opportunity for lands to be developed into the highest value use, i.e. tourism related services. Emphasis is placed on employment-creating commercial and industrial development under this option. Consideration of community character is effectively voluntary on the part of developers.

3. The *No Growth Alternative*:
   In this option, development would be kept to the minimum allowed under the land use designations. No conversions of agricultural lands or other resource lands would be permitted. Commercial and residential zoning would be limited to existing uses and densities. Activities incompatible with the Humboldt Redwoods State Park would be discouraged. Continued expansion of HRSP would be encouraged.

4. The *Retained 1968 Southern Humboldt County General Plan Alternative* (*"No Project"):
   Growth under this option would be governed by the existing community plan, last updated in 1968. The present plan does not focus on community development overall, and half of the Avenue communities are not included in the analysis. Land use designations are fairly reflective of current uses, but all zoning is unclassified. Issues that have been highlighted as important to the communities are not covered. The emphasis is on protecting and conserving timber and agricultural resources for long term economic utilization.

**ADDITIONAL INFORMATION**

To obtain further information regarding the hearing draft community plan, its environmental review, or to be notified when the *Public Hearing Draft* is released, please contact:

Liz Haynes, Project Planner  ◆ (707) 268-3737 ◆
lhaynes@co.humboldt.ca.us
Tom Hofweber, Supervising Planner  ◆ (707) 268-3738 ◆
thofweber@co.humboldt.ca.us

or write to:

**Humboldt County Planning & Building Department**
3015 H Street
Eureka, CA 95501
STATE OF CALIFORNIA—RESOURCES AGENCY

DEPARTMENT OF PARKS AND RECREATION

NORTH COAST REDWOODS DISTRICT

P.O. Box 2006
Eureka, CA 95502-2006

(707) 445-6547   Fax (707) 445-6551
STATE OF CALIFORNIA - THE RESOURCES A

DEPARTMENT OF FISH AND
NORTHERN CALIFORNIA-

619 SECOND STREET
EUREKA CA 95501

(707)445-8493
Charles Wilson, resident of Orick
Tom Hofweber
Humboldt County:
3015 H Street        
Eureka

Re Draft Program
RESPONSES TO COMMENTS
ON THE DRAFT ENVIRONMENTAL IMPACT REPORT (SCH # 99032043)
FOR THE AVENUE OF THE GIANTS COMMUNITY PLAN

Response to letter from the Department of Parks and Recreation, North Coast Redwoods District, dated June 8, 1999; received June 16, 1999.

DP&R-1

This has been an issue of significant discussion throughout the Avenue of the Giants Community Plan (AGCP) process. Section 65402 (a) may provide the County with the authority to review State Park acquisitions. This section reads, in part, that if a general plan has been adopted, no real property shall be acquired for park or other public purposes until the location, purpose and extent of such acquisition or disposition has been submitted to and reported upon by the planning agency as to conformity with the general plan. Staff feel that the policies in the community plan are sufficiently flexible to allow the County to fulfill its objectives and to permit the State to meet its obligations.

DP&R-2

The Avenue Trail is a conceptual idea at this stage and the AGCP reflects this, with policies that are supportive in a general sense. The EIR for the Avenue of the Giants Community Plan is a program level EIR that does not address specific projects in detail. Projects such as the Avenue Trail will require CEQA review by the appropriate parties. The project is at an early stage, and there are no firm details, such as a trail route, that could serve as the basis of detailed environmental impact analysis. Noise disturbance is noted in the AGCP on Chapter 2, page 35 in relation to the Phillipsville moto-cross facility. Noise hazards are covered in the EIR, Chapter 3, pages 10-11. The legal decision regarding the moto-cross permit was not final at the time of writing this document, however policy 2500.13 has been changed to reflect the new situation.

DP&R-3

The AGCP supports the development of concessionaires, cottage industry and support services for park visitors.

DP&R-4

The main recreational need identified in the community meetings across the Avenue was the Avenue Trail concept. This concept is described and supported in the AGCP.

DP&R-5

Comment noted.
Response to letter from the Department of Fish and Game, Northern California - North Coast Region, dated July 2, 1999; received July 2, 1999 by fax.

DF&G-1
These comments have been noted and incorporated into Chapter 3, page 14 to clarify the impacts to aquatic resources in the project area.

DF&G-2
Comments noted.

DF&G-3
The impact of water diversion has been noted in Chapter 3, page 20.

DF&G-4
The comment has been incorporated into the text.

DF&G-5
The comment has been incorporated into the text.

DF&G-6
The comment has been incorporated into the text.

DF&G-7
Comment noted.

DF&G-8
Comment noted.

Response to letter from the Department of Transportation, District 1, dated June 28, 1999, received June 28, 1999 by fax.

Caltrans-1
After receiving this letter, the County received a petition signed by Miranda area residents requesting a change of the town speed limit to 30 miles per hour due to public safety concerns. Fifty-seven (57) signatures were on the petition. This continues to be an issue of concern to the residents of Miranda, and the County hopes to work with Caltrans on the issue.

Caltrans-2
Comment noted.

Caltrans-3
Comment noted.


Frequently, the commentator has focused on editorial details. When a staff believed comments significantly clarified text, we incorporated the changes. Those comments that were so minor as to not merit change are so noted.

CW-1
State Park land acquisition was discussed in detail at the 2<sup>nd</sup> and 3<sup>rd</sup> Planning Commission hearings. See comment DP&R-1 above for more discussion. In addition, a new policy has been recommended to the Planning Commission to further highlight this issue. The policy reads: "The County shall request that the impacts of increasing State Park land acquisition be addressed in the Park Management Plan and EIR."

CW-2
The suggested policy was incorporated into the text and can be found in Chapter 4, page 2.

CW-3
The comments were incorporated into the text.

CW-4
The comments were incorporated into the text.

CW-5
The comments were noted, no change recommended.
"AGCPA" and the "Community Plan" are used interchangeably.

The terms "towns" and "communities" refer to the same area as shown in the land use maps. Myers Flat commercial core has been changed to commercial center. Weott is not described with either term. Rural Community Centers are used for very small communities outside of community planning areas where it is not necessary to differentiate between commercial and residential uses. Rural Community Centers are not an appropriate designation for the AGPCA.

The comments were noted, no change recommended.

The comments were noted, no change recommended.

The comments were noted, no change recommended.

The comments were incorporated into the text.

The comments were incorporated into the text.

The land use designations CF and CFR are proposed to be added to the Framework General Plan, see page A-5 and A-6. The land use designations AL 40, AL 20, AR 5-20 and RL 1-5 all follow the format in the Framework Plan to indicate specific densities as encouraged by California planning law. CR is a Framework Plan land use designation and this sentence has been clarified in the text. Other comments have been noted.

The comments were incorporated into the text.
The comments were noted, no change recommended.

CW-16

See response for CW-13

CW-17

CH with the Q and D apply only the AGCPA.

CW-18

The comments were incorporated into the text.

CW-19

The comments were incorporated into the text.

CW-20

See response CW-1.

CW-21

The comments were incorporated into the text.

CW-22

The comments were noted, no change recommended.

CW-23

The comments on pages 3-6 & 7 were noted, no change recommended. Changes were incorporated on page 3-8.

CW-24

The comments were incorporated into the text.

CW-25

The commentator is incorrect, reoccurrence intervals have been calculated for river reaches in the planning area.
This language is taken directly from the CEQA, Appendix G Environmental Checklist Form.

The comments were incorporated into the text.

The stream habitat variable figures are described as average values. Additional data is available that compares the Eel River Watershed Assessment Area with other watersheds in the county.

Canopy closure is a percent value. This is a quantitative measure of the amount of overhead area that is occupied by vegetation, regardless of the type or density of vegetation. It is measured with a spherical densiometer. Measurements were taken at specific monitoring stations. A Monitoring Station Map is available in PALCO HCP/SYP, Vol. V., Map 17 (PALCO 1998).

Water withdrawals from Potter Valley dam are discussed in the AFCP (policy 3400.5). Humboldt County is working to restore flows from Potter Valley dam. Out of county mitigation are not considered feasible.

The sentence includes the phrase "or other animals" which may include wildlife.

"Seral" is the correct spelling when used in reference to forest habitats. The seral stage refers to one of several successional stages of plant community development, beginning with an early seral stage, following a major disturbance, and ending with a late-seral stage near or at the climax stage. (CDF&G FEIS/EIR and HCP/SYP, Vol. 11)

The term "priority species" has been defined on page 3-16.

Further definition of "old growth" has been included on page 3-17.
The comments were incorporated into the text.

"NMFS" stands for National Marine Fisheries Service, and it is a Federal agency.

The comments were incorporated into the text.

Comment regarding changing should to shall noted, no changes recommended. The typo has been changed.

The comments were noted, no change recommended.

The comments were noted, no change recommended.

The comments were noted, no change recommended.

The comments were incorporated into the text.

Community Plan policy 4200.5 has been added to the AGCP and the EIR.

The Avenue Trail is a project in its early conceptual stage. No impact analysis has been started, and the issues raised would likely be part of such an analysis.

"Sewer" has been changed to "wastewater".
The Weott moratorium is for new water hook-ups.

The comments were noted, no change recommended.

The comments were noted, no change recommended.

"Sewer" has been changed to "wastewater".

The term ADD means average daily demand. GPD means gallons per day.

The comments were noted, no change recommended.

The comments were incorporated into the text.

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The comments were noted, no change recommended.

The comments were noted, no change recommended.
Clarification of Garberville CDF station noted. Other comments noted, no change recommended.

The comments were incorporated into the text.

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The comments were noted, no change recommended.

Response to letter sent to Roger Rodoni from Kevin Caldwell of Real Property Solutions, dated June 24, 1999; received via fax on July 01, 1999.

The case cited, Citizens Association for Sensible Development of the Bishop Area v. County of Inyo (1985) 172 Cal. App.3d 151), related to breaking a project down into components to do negative declarations on each component. This is not the same process as the tiered approach used in the AGCP EIR. The AGCP EIR is a program level EIR, which addresses the impacts associated with Plan recommendations rather than undertaking site-specific analysis which may or may not occur in the future. The AGCP EIR generally addresses the impacts associated with the moto-cross use in Phillipsville. The Plan contains policy language for the Phillipsville location in question, requiring full environmental evaluation should that site be used as a future moto-cross facility.

We believe the commenter’s main intent in recommending inclusion of environmental analysis for the moto-cross proposal is to avoid adequate assessment by encouraging the County to adopt a statement of overriding considerations. We believe a good faith application of CEQA would be to tier the environmental analyses for this and other site-specific proposals. The particular issue
of the moto-cross facility has been before the court with respect to inadequacy of environmental review under the conditional use permit. We believe that attempting to address the environmental impact of this use within the context of the AGCP EIR would be contrary to the courts’ directive to provide full environmental analysis of the moto-cross facility.

KC-16

The commenter mentions the Lewis proposed RV park and the Redwood Amphitheater projects. The AGCP EIR addresses the moto-cross use at the level we believe is appropriate, in Chapter 2, pages 5-6 and Chapter 3, page 10. The Lewis proposal is treated in the AGCP EIR certification of findings and statement of overriding considerations, and in Chapter 2, pages 5-6. Mitigation was incorporated into the project by way of the CUP process for a portion of the development and an agriculture easement. With respect to the Redwood Amphitheater, this is a previously considered use which had heavy opposition prior to this planning process and was not approved. The project proponent did not provide any indication that they were considering this proposal within the project area, therefore we feel it would be speculative to discuss impacts associated with this former proposal. Community plan policy language is included to require a CUP, which would trigger environmental review, should the project resurface.

Response to letter from Kevin Caldwell of Real Property Solutions, dated October 18, 1999; received on October 19, 1999.

KC- Ag Conversion

Comments noted, we are preparing a statement of overriding considerations with respect to these parcels.

KC-Flood Plain

We disagree with commenter that policies in the AGCP and its implementation would trigger the EIR process for the simplest of projects. Commenters’ reference to "if findings for overriding considerations can be made" refers to a clause in the Flood Hazard Combining Zone regulations. These regulations prohibit certain uses in floodways and/or flood plains unless overriding considerations are made. This is a separate this from CEQA compliance.