CITY OF CRESCENT CITY
GENERAL PLAN

FINAL ENVIRONMENTAL IMPACT REPORT

SCH # 2000032062

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INTRODUCTION

This Environmental Impact Report (SCH# 2000032062) for the Crescent City General Plan was prepared pursuant to the California Environmental Quality Act (CEQA). CEQA mandates the preparation of draft and final environmental impact reports for projects or programs that have the potential to produce adverse impacts on the environment. Detailed requirements concerning both content and process are set forth in the California Code of Regulations, Title 14, Chapter 3: Guidelines for Implementation of the California Environmental Quality Act (hereinafter referred to as State CEQA Guidelines).

THE PURPOSE OF THIS EIR

The purposes of CEQA (and thus EIRs) are summarized in Article 1 of the State CEQA Guidelines. Article 1 reads, in part, as follows:

§15002. General Concepts

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:

(1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.

(2) Identify ways that environmental damage can be avoided or significantly reduced.

(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Subsection (f) of this section summarizes the purpose and content of an EIR:

(f) Environmental Impact Reports and Negative Declarations. An environmental impact report (EIR) is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the possible environmental damage.

(1) An EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment. (See: §15064(a)(1).)

Subsection (g) summarizes the concept of "significant effect":

(g) Significant Effect on the Environment. A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. (See: §15382.) Further, when an EIR identifies a significant effect, the government agency approving the project must make findings on whether the adverse environmental effects have been substantially reduced or if not, why not. (See: §15091.)

§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 effect 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 considerations 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.

This EIR serves two basic purposes. First, it establishes the environmental framework for adoption of the General Plan, providing information to the public, Planning Commission, and Board of Supervisors concerning the potential consequences of adopting the plan; and, second, it serves as a program EIR to streamline environmental review for subsequent projects that implement the General Plan (e.g., specific plans, individual projects).

RELATIONSHIP OF THE GENERAL PLAN AND EIR

The State CEQA Guidelines provides the following general directions concerning the coordination of planning and environmental impact assessment:

§15080. General

To the extent possible, the EIR process should be combined with the existing planning, review, and project approval process used by each public agency.

The State CEQA Guidelines provides for combining the EIR with the general plan as follows:

§15166. EIR as Part of a General Plan

(a) The requirements for preparing an EIR on a local general plan, element, or amendment thereof will be satisfied by using the general plan, or element document, as the EIR and no separate EIR will be required, if:

(1) The general plan addresses all the points required to be in an EIR by Article 9 of these Guidelines, and

(2) The document contains a special section or a cover sheet identifying where the general plan document addresses each of the points required.

This EIR documents the environmental considerations incorporated into the process of preparing the General Plan and evaluates the environmental implications and effects of the plan. In accordance with the two sections of the State CEQA Guidelines cited above, and in an effort to minimize repetition of information, three separate General Plan documents are being used to satisfy the requirements for an EIR. These are: 1)

the General Plan Policy Document; 2) the General Plan Background Report, which describes existing conditions and trends in Crescent City; and 3) this Environmental Impact Report, which assesses the environmental implications and effects of the General Plan. Together, these three documents address all of the issues required by the State CEQA Guidelines to be covered in an EIR.

USE OF THIS EIR AS A PROGRAM EIR

This EIR was prepared as and is intended for future use as a program EIR. The State CEQA Guidelines describes the program EIR as follows:

§15168. Program EIR

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 of 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.

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 programwide 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.

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.

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.

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.

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 the EIR 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 EIR costs of CEQA compliance and still achieve high levels of environmental protection.

FORECASTING, DEGREE OF SPECIFICITY, AND SPECULATION

The State CEQA Guidelines includes the following discussions regarding forecasting, speculation, and the degree of specificity required in an EIR:

§15144. Forecasting

Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

§15145. Speculation

If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

§15146. Degree of Specificity

The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

(a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

(b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

ORGANIZATION OF THIS DOCUMENT

The main body of this Program EIR is divided into eight chapters as follows:

Chapter 1 (Project Description and Impact Summary) describes the General Plan preparation process and key features of Crescent City's General Plan and summarizes the plan's significant environmental impacts.

Chapter 2 (Assumptions and Development Estimates) summarizes and explains development and intensity assumptions used to prepare development estimates upon which the Program EIR assessment is based. This chapter includes a discussion of existing and potential residential and non-residential development as well as employment growth and population estimates.

Chapter 3 (Land Use, Housing, and Population Impacts) evaluates the land use, housing, and population impacts of the plan.

Chapter 4 (Transportation) assesses transportation impacts and alternative transportation modes.

Chapter 5 (Public Facilities and Services) reviews impacts on public facilities and services, including water supply and distribution; wastewater collection, treatment, and disposal; storm drainage; law enforcement; fire protection services; schools; parks; general government; and public utilities.

Chapter 6 (Natural Environment) examines the plan's impacts on natural resources including water resources, agricultural resources, forestry resources, extractive resources, biological resources, scenic resources, cultural resources, and air quality.

Chapter 7 (Health and Safety) reviews health and safety impacts of the plan, which include seismic and geologic hazards, wildland and urban fire potential, flooding, hazardous materials, and noise.

Chapter 8 (Alternatives and Mandatory *CEQA* Sections) addresses mandatory EIR sections, including alternatives, short-term versus long-term uses, significant irreversible effects, growth-inducing impacts, and cumulative impacts.

For each subject addressed in Chapters 3 through 7, the discussion is broken generally into the following six parts:

Environmental Setting: This section briefly summarizes pertinent information concerning existing conditions. Since the General Plan Background Report constitutes the comprehensive setting for the EIR, this section focuses on the highlights, while referring the reader to appropriate sections of the Background Report.

Methodology: This section discusses the methodology, including assumptions and thresholds of significance, used to identify implications and to assess impacts.

Implications of the Land Use Diagram: This section projects conditions that could result from the development of the land uses shown on the General Plan Land Use Diagram without consideration of the policies and programs included in the General Plan Policy Document.

General Plan Policy Response: This section references specific policies and programs contained in the General Plan Policy Document that address the implications identified in the previous part. While this discussion focuses primarily on policies and programs that respond directly to the potential negative implications of the Land Use Diagram, it also in some cases identifies policies or programs that reduce impacts that may not be considered significant.

Impacts: This section describes any negative environmental impacts of the Land Use Diagram which would remain unresolved or potentially unresolved by the policies and programs contained in the Policy Document. The discussion includes an assessment of the severity of impacts, including a conclusion as to whether impacts are considered significant according to CEQA. The impacts are characterized as significant, potentially significant, or less than significant.

Mitigation Measures: This section identifies mitigation measures that could lessen or eliminate negative impacts identified as "significant" or "potentially significant" according to CEQA standards, or, in some cases, to identify additional mitigation for impacts considered "less than significant."

CHAPTER 1

PROJECT DESCRIPTION AND IMPACT SUMMARY

1.1 INTRODUCTION

The subject of this EIR is a comprehensive update of the City of Crescent City's General Plan. This chapter of the EIR describes the project setting, defines the project, explains the City of Crescent City's General Plan Update process, and summarizes the environmental effects of the General Plan found to be significant or potentially significant according to the standards of the California Environmental Quality Act (CEQA).

1.2 PROJECT SETTING

Located on the Pacific shoreline of Del Norte County midway between the borders of Oregon and Humboldt County, Crescent City is California's northernmost coastal city. Crescent City lies approximately 350 miles north of San Francisco and 330 miles south of Portland, Oregon. The city is bordered by the ocean, broad beaches, coastal bluffs, the harbor, scattered forests, and rural residences. Crescent City, which is bisected by U.S. Highway 101**,** is the most urbanized part of the county and is the county's only incorporated city. Figure 1-1 shows Crescent City's regional location relative to the western United States, Northern California, and Del Norte County.

A detailed description of the environmental setting of Crescent City is contained in the General Plan Background Report, which is formally incorporated by reference as part of this EIR.

1.3 PLANNING AREA, URBAN BOUNDARY, AND CITY LIMITS

PLANNING AREA

By law, the general plan must cover all territory within the boundaries of the city as well as "any land outside its boundaries which, in the planning agency's judgement, bears relation to its planning" (*Government Code* Section 65300). To meet the intent of the law, the City of Crescent City designated a *Planning Area* that extends beyond the city's incorporated limits and encompasses approximately six square miles. The Planning Area has been defined by an east-west line coinciding with Blackwell Road and includes the area within the Urban Boundary north of Blackwell Road. The eastern boundary follows south along Elk Valley Road and then follows the Federal and State lands on the east (see Figure 1-2).

URBAN BOUNDARY

Within the Planning Area, the County has an adopted urban boundary for Crescent City that encompasses all land considered for future water and sewer service expansion and thus for future urban development and annexation (see Figure 1-2). Since it is costly to provide infrastructure in low density areas such as rural communities, extension of water and sewer service is generally prohibited outside this boundary by both jurisdictions. Since development within this boundary is subject to higher densities and intensities, the City and County can provide long-term service planning within this area.

CITY LIMITS

The incorporated city limits contains approximately 1.4 square miles, over which Crescent City exercises zoning control and police powers and provides all public services. Del Norte County plans for and regulates land use and development in the unincorporated area just outside the city limits.

1.4 THE GENERAL PLAN PREPARATION PROCESS

The City of Crescent City and Del Norte County are both updating their general plans. Del Norte County began its General Plan Update in 1995 starting with the rural areas of the county. During 1997 through 1999, Crescent City and Del Norte County focused simultaneously on the Crescent City Area. The City focused primarily on incorporated Crescent City, and the County focused primarily on the surrounding unincorporated area.

The two general plan updates are separate programs but are being closely coordinated. They are being undertaken by the same team of consultants (Mintier & Associates in association with Jones & Stokes Associates and Steve Lowens, P.E.) and according to approximately the same schedule. The City and County have coordinating land use and policy decision-making for the Crescent City Area to ensure consistency and to avoid future land use conflicts.

The City of Crescent City is updating its General Plan for the first time since 1976. Like the County's Update program, the City's General Plan Update will involve three formal documents: a Background Report, a Policy Document, and an Environmental Impact Report. Each document will address all state-mandated general plan elements with an emphasis on the issues of greatest concern to Crescent City: Resources and Conservation; Safety; Noise; Land Use and Demographics; Public Facilities and Services; and Circulation and Transportation (but excluding the Housing Element). Geographically, the General Plan will include all of the Crescent City Planning Area, which roughly corresponds to Crescent City's sphere of influence.

As part of the Update process, the City is incorporating their existing Local Coastal Plans (LCP) in their new General Plan. The text of the consolidated plan will distinguish policies, programs, and diagrams that address issues specific to the Coastal Zone from those that address city area outside the Coastal Zone.

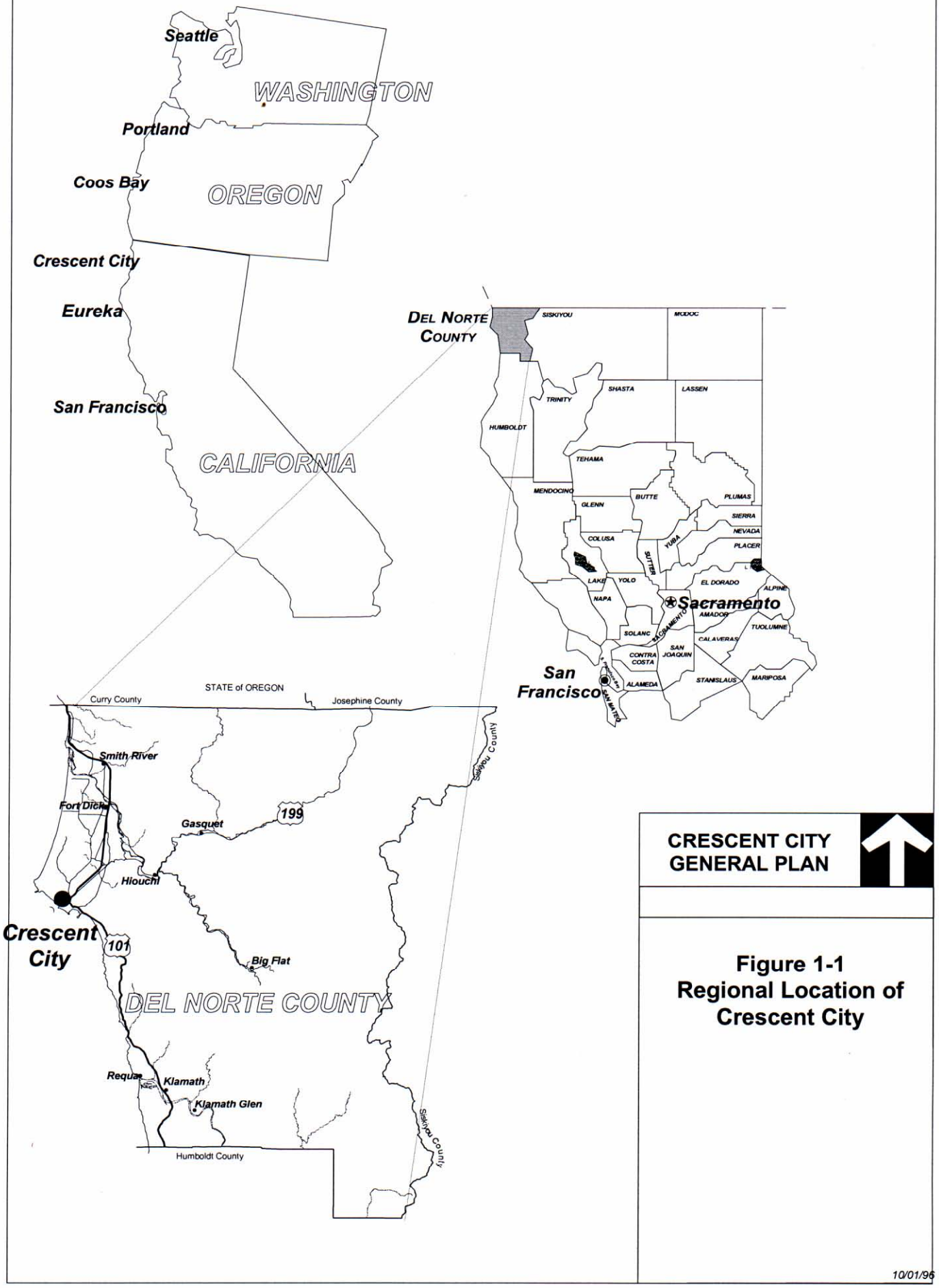
1.5 SUMMARY OF THE GENERAL PLAN

STRUCTURE OF THE GENERAL PLAN

The City of Crescent City General Plan consists of two documents: the General Plan Background Report and the General Plan Policy Document. The Background Report inventories and analyzes existing conditions and trends in Crescent City. It provides background information and technical data used to produce the Policy Document. The Background Report addresses six subjects:

1. Resource/Conservation;
2. Land Use and Population;
3. Transportation and Circulation;
4. Public Facilities and Services;
5. Safety; and
6. Noise.

The General Plan Policy Document constitutes the formal policy of the City of Crescent City for land use, development, and environmental quality. It includes goals, policies, standards, implementation programs, quantified objectives, the Land Use Diagram, and circulation diagrams.



CRESCENT CITY GENERAL PLAN

Figure 1-1
Regional Location of Crescent City

10/01/96

The Policy Document is divided into seven sections:

1. Land Use and Community Development;
2. Housing (not part of this update);
3. Transportation and Circulation;
4. Public Facilities and Services;
5. Recreational and Cultural Resources;
6. Natural Resources/Conservation; and
7. Health and Safety.

GENERAL PLAN THEMES

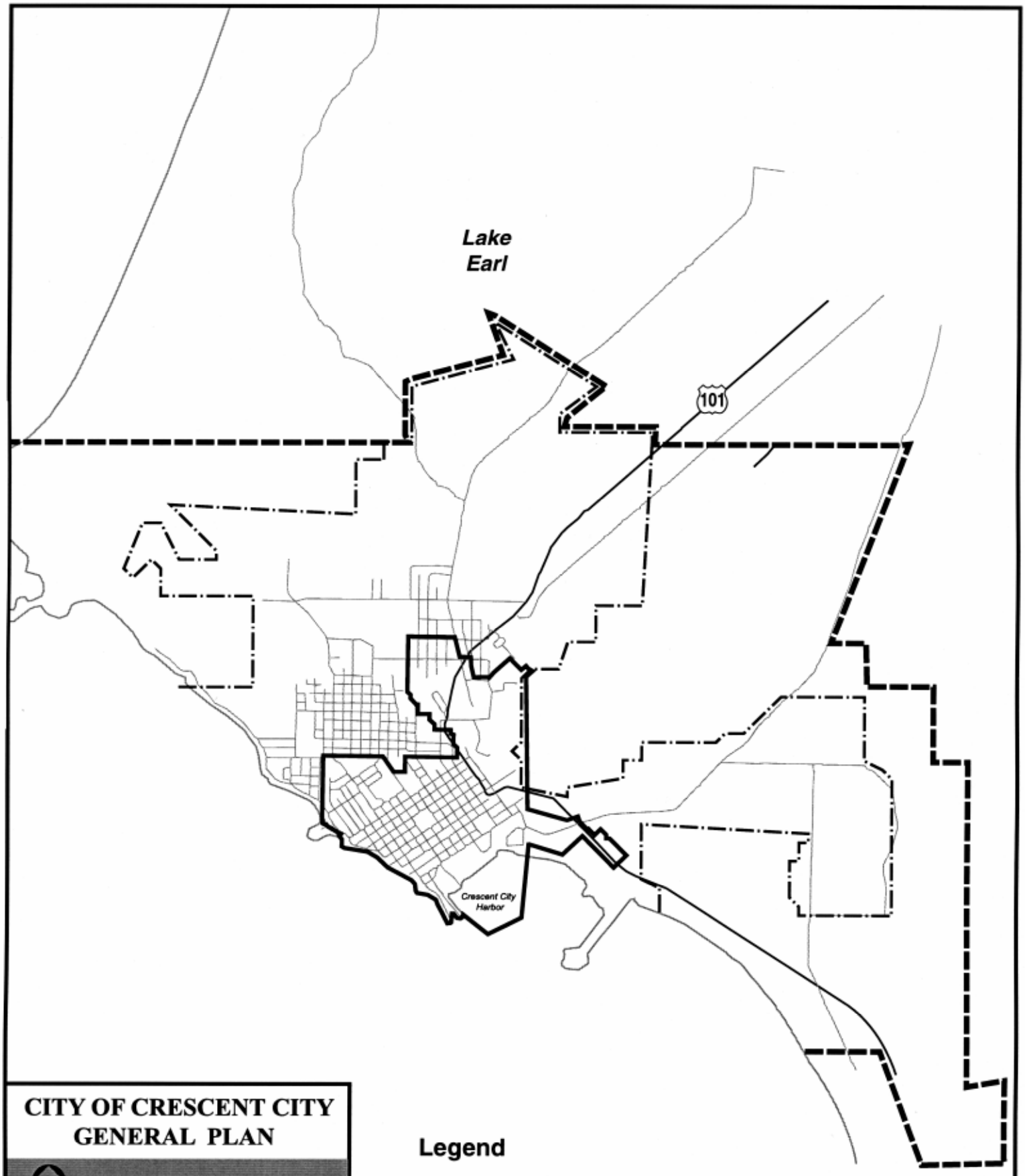
Consolidation of Coastal and Non-Coastal Planning Policy. In 1984, the City adopted the Local Coastal Plan of its General Plan as part of its Local Coastal Program certification. That action formally divided the City's comprehensive planning approach by establishing two sets of policies, one for the non-coastal and uncertified areas (the 1976 General Plan), and one for the areas within the Coastal Zone which were certified with the State Coastal Commission (the 1984 Local Coastal Plan). This Policy Document updates and consolidates the City's planning policies and programs into a single document, unifying policies that had been separated since 1984. Therefore, this General Plan also supersedes the 1984 Local Coastal Plan.

Economic Transition. Crescent City and Del Norte County are in transition from a resource production economy to a more diversified economy. Government, retail trade, and services have now become the largest employers in the county. Between 1993 and 1995, prior to initiation of this Plan revision, the Del Norte Economic Development Corporation and Chamber of Commerce 2020 Committee prepared economic reports for the community addressing future economic needs and goals. These reports supported the pursuit of diversified manufacturing, tourism, technology, telecommunication-based businesses, and small business development. This General Plan builds upon those reports by creating goals, policies, and implementation programs to assist the city in its transition.

Addressing Potential Growth. As of 1996, the city had a total population of 4,653 (8,334 with the prison population). By the end of the General Plan timeframe (2020), the city is expected to grow to 7,484 persons (growing at the historical growth rate of 2.0 percent). This represents an increase of 2,831 persons from the 1996 population. This increase would result in the demand for 1,089 new dwelling units, and new commercial, industrial, and public facility development. Under the same historical growth rate of 2.0 percent, Del Norte County's total population is expected to grow to approximately 42,000 persons and 16,000 dwelling units by the year 2020.

Since Crescent City has a very limited land supply, the majority of the growth must be accommodated by: 1) promoting infill of vacant and underutilized lots; 2) intensification or reuse of land; and 3) annexing unincorporated land. Crescent City will need to become a more compact city. Increased density will have several beneficial effects: 1) limit sprawl and thus reduce pressure for rural residential development; 2) create a more walkable community; 3) increase public transit opportunities; 4) reduce the cost of public services by limiting infrastructure expansion; 5) maintain the existing grid system of the city; and 6) minimize the impact of new development on the natural environment.

Visitor and Local Commercial. This General Plan introduces a new land use designation called Visitor and Local Commercial that promotes both visitor-serving and regional commercial development. This designation creates a new focus for the city taking advantage of the exposure of Highway 101 and the recreational amenities of Front Street. The traditional commercial focus on the central business district is replaced by a new focus on land along Highway 101 and Front Street to accommodate the tourists that frequent these locations. Along these routes will be a concentration of visitor-serving commercial uses such as quality lodging, dining, shopping, recreation, and entertainment which will create a focus or destination for tourists. Multiple-unit residential uses will be allowed as a secondary use to create a more pedestrian-



CITY OF CRESCENT CITY
GENERAL PLAN

Figure 1-2
City Limits, Urban Boundary, Planning Area

Legend

- Crescent City Urban Boundary
- Crescent City City Limits
- Crescent City Planning Area

0 1

friendly downtown. The designation is also designed to provide community commercial opportunities that tap into the regional market

.

Business-Professional Designation. This General Plan introduces another land use designation called Business-Professional. The intent of this designation is to serve as a transition between residential uses on the northwest side and commercial uses located along the Highway 101 couplet and Front Street and to attract and retain professional, administrative, government, business, and related uses. Uses in this designation primarily include administrative, business, and professional offices as well as multiple-unit residential uses as a secondary use.

Highway 101 and Front Street Improvements. For decades the City, Del Norte County, the Del Norte Local Transportation Commission, and Caltrans have considered the concept of a Highway 101 bypass of Crescent City. The 1976 Crescent City and Del Norte County General Plan proposed four alternative bypass routes that would create a bypass east of the highway's existing location. The bypass concept (but not a specific route) was adopted by Caltrans and was included in the Regional Transportation Plan. Due to the tremendous cost, environmental impacts, and because the bypass will likely draw business away from the central area of Crescent City, the City opposes the bypass concept. Instead, the City supports improvement and enhancement of the existing route by reconfiguring traffic lanes to improve traffic flow and creating a regional center and visitor-serving environment. In addition, the City supports the improvement and enhancement of Front Street to make it more efficient, provide more parking, and make it a pedestrian-friendly environment.

Citywide Pedestrian/Bicycle Trail. Promoting opportunities for pedestrian and bicycle travel is an important feature of this General Plan. This plan seeks to expand Crescent City's bike route/trail system in several ways: 1) creating linkages among sidewalks, bike routes, and pedestrian and equestrian trails; 2) creating bicycle links from downtown to the coast; 3) creating a coastal trail from Point St. George to South Beach; 4) creating better linkages to the Pacific Coast Bike Route; and 5) creating a linkage from downtown to Redwood National and State Parks.. Building such a network of trails will not only enhance alternative modes of travel within the city, but also create additional leisure/recreational opportunities for tourists and residents.
Compatibility with the Del Norte County General Plan. To minimize land use conflicts and to promote consistency in development standards, the City and Del Norte County have coordinated their general plans. The goals, policies, and implementation measures of the two General Plans are as consistent as practical, given the difference in perspectives between the City and County concerning the future development of the Crescent City area. Additionally, all the land use designations within this General Plan are consistent with those of the Del Norte County General Plan.

SUMMARY OF POLICY DOCUMENT

The following is a chapter-by-chapter summary of the major proposals set forth in the Crescent City General Plan, including references to show how the goals, policies, implementation programs, and diagrams in each chapter relate to the major themes described above.

As indicated earlier, the formal policy content of this General Plan is presented in Part II of this Policy Document. Part II is divided into seven sections, each of which deals with a single topical issue and several sub-issues related to the main topic. Following is a general summary of each section set forth in Part II.

Section 1: Land Use and Community Development

This section is the most familiar part of a general plan. It contains the Land Use Diagram that prescribes the uses for all land within the Crescent City Planning Area; describes standards for each of the land use designations shown on the Land Use Diagram; and presents a series of goals, policies, and programs designed to guide day-to-day decisions concerning land use, development, and environmental protection in Crescent City.

Section 1 contains goals, policies, and programs related to the following issues:

- Growth and Development;
- The Visitor an Local Commercial (VLC) area
- Public Open Space
- Tourism
- Maintenance an Safety
- Residential Development;
- Commercial Development;
- Industrial Development;
- Economic Development;
- Community Design and Appearance; and
- Harbor Development.

The Land Use Diagram depicts 20 land use designations falling within seven major categories (one of which represents simplified County designations), as shown in the following chart:

CATEGORY	DESIGNATION
Citywide Designations	
Residential	Single Family Residential—0 to 2 du/ac (SF 0-2) Single Family Residential—2 to 6 du/ac (SF 2-6) Multifamily Residential—6 to 15 du/ac (MF 6-15) Multifamily Residential—15 to 30 du/ac (MF 15-30) Mobilehome Park (MHPK)
Commercial	Visitor and Local Commercial (VLC) Business Professional (BP) General Commercial (GC)
Industrial	Light Industrial (LI) General Industrial (GI)
Public	Public Facilities (PF)
Harbor	Harbor Related (HR) Harbor Dependent (HD) Harbor Dependent Recreational (HDR) Harbor Dependent Commercial (HDC)
Natural Resources and Open Space	Natural Resources (NR) Open Space (OS)
Overlay	Urban Reserve Overlay (UR)
Outside Urban Boundary Within Planning Area	
Simplified County Designations	County Resource (CR) County Rural Development (CRD)

Section 2: Housing (Separate Document)

In August 1992, the Crescent City City Council adopted the City of Crescent City & Del Norte County Housing Element jointly with the County Board of Supervisors. The element was prepared and adopted according to specific statutory requirements established by the State of California. These requirements include a schedule for periodic updates which calls for the City to update its element in 2003. Because of this schedule, the City's Housing Element was not updated in conjunction with the General Plan Revision Program, and is, therefore, not included in this Policy Document.

Section 3: Transportation and Circulation

This Policy Document addresses several transportation issues that are critical to future development in Crescent City. The most critical consideration related to transportation in Crescent City is the assurance that all new and existing development has safe and reliable access for the motorist, cyclist, and pedestrian. This Policy Document, therefore, concentrates on policies that will ensure the development of a complete roadway

and trail system consisting of City-maintained roads, State highways, and bike and pedestrian trails that serve the needs of both residents and visitors. Section 3 focuses on cooperating with other public agencies to develop strategies that will improve the overall operation of Crescent City's transportation network, and which are feasible, both physically and fiscally.

In addition to addressing future roadway plans and improvements, Section 3 of Part II of this Policy Document contains goals, policies, and programs related to the following issues:

- State Highways;
- City Roads;
- Public Transportation;
- Non-Motorized Transportation;
- Air Transportation;
- Maritime Transportation; and
- Tele-transportation.

Section 4: Public Facilities and Services

One of the most important results of any comprehensive planning effort should be the assurance that all facilities and services needed to adequately serve development will be accounted for. While the development of specific plans for facilities and services is beyond the scope of the General Plan, this Policy Document does establish a framework for guiding planning decisions related to facility development and service provision. The general emphasis of the policies and programs in Section 4 of Part II is on ensuring adequate services, while discouraging unnecessary, wasteful, or inefficient extension of existing systems.

The policies and programs articulated in this section will ensure that current and future residents of and businesses in Crescent City are served by a well-rounded, efficient, and environmentally safe system of public facilities and services.

The issues covered in this section include the following:

- General Public Facilities, and Services;
- Water Supply and Delivery;
- Wastewater Treatment, Collection, and Disposal;
- Solid Waste Disposal;
- Storm Drainage and Flooding;
- School Facilities;
- Protection Services; and
- Utilities.

Section 5: Recreational and Cultural Resources

Crescent City is blessed with an outstanding array of recreational and cultural assets. The city's physical setting provides vast natural opportunities for outdoor recreation. The goals, policies, and programs in Section 5 of Part II of this Policy Document articulate Crescent City's high level of commitment to ensuring high quality recreational opportunities for Crescent City residents and visitors and to preserve the city's cultural heritage. The provision of access to the city's natural areas—both coastal and non-coastal—is an essential focus of the goals and policies in Section 5. The policy content of the section is divided into following six topics:

- City Parks and Recreation;
- Recreation Trails;
- Coastal Zone Recreation;
- Coastal Zone Public Access;
- Coastal Visual Resources;
- Private Recreational Facilities and Opportunities; and
- Cultural Resources.

Section 6: Natural Resources/Conservation

The natural resources in and around Crescent City contribute to the city's economy and are important elements in the quality of life for Crescent City's residents. These resources exist in limited quantity and are at risk of destruction or degradation through continued urban development. Recognizing the importance of this objective, Section 6 of this Policy Document presents policies addressing the full range of the city's natural assets. The section includes goals, policies, and programs addressing the following subjects:

- Marine Resources
- Water Resources;
- Soils Resources;
- Biological Resources;
- Air Resources;
- Agricultural Land; and
- Timber Resources.

Section 7: Health and Safety

Crescent City is located in a region that is subject to some potentially significant natural hazards. Most importantly, the area is vulnerable to earthquakes and their associated seismic effects. The primary intent of this section is to protect Crescent City residents, businesses, and visitors from the harmful effects of natural and man-made hazards. In doing so, the City hopes to protect both the physical well-being of its residents and visitors and to ensure that development investments fully consider the implications of potentially hazardous conditions in the area. The section includes goals, policies, and programs addressing the following subjects:

- General Hazards;
- Seismic Hazards;
- Geologic Hazards;
- Flood Hazards;
- Fire Hazards;
- Hazardous Materials;
- Disaster Planning; and
- Noise.

1.6 PROJECT ALTERNATIVES

CEQA requires that an EIR consider alternatives to a project (Section 15126 (a)), providing sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. Following is a description of the five alternatives addressed in this EIR, as described in Chapter 9.

1. **Alternative 1: No Project — No Development Alternative.** This alternative assumes no new development in Crescent City beyond what is currently built, essentially placing a moratorium on any future development. This alternative would not allow for new population or employment growth.

2. **Alternative 2: No Project — Existing General Plan Alternative.** The "No Project" Alternative is the existing 1976 Del Norte County/Crescent City General Plan, since this plan would continue to govern the city because a revised General Plan is not adopted. This would have a lower population and employment growth than under the General Plan.

3. **Alternative 3: High Density Alternative.** This alternative creates higher density residential development in the westerly portion of the city and in the harbor area. It includes predominantly multi-story, multi-family housing west of D Street, at the upper end of the MF 15-30 du/ac density range. This would provide an increased number of units in proximity to the coastal area, compared to the proposed plan. A mix of townhomes and other higher density unit types would in this location be within walking distance to local beaches and parks, and would provide housing for both year-around residents and seasonal visitors.

   Higher density residential development in the harbor area is also included in this alternative. The area adjacent to the small boat basin and north of Citizens Dock Road would be re-designated MF 15-30 du/ac, and would develop as a coastal marina. This would not necessarily displace the fishing industry uses south of Citizens Dock Road. Similar to the city area described above, there would be a mix of townhomes and other higher density units within walking distance to amenities such as local beaches and the harbor, and would provide housing for both year-around residents and seasonal visitors.

1.7 IMPACT SUMMARY

This EIR assesses the impacts of the General Plan by considering the impacts of development according to the Land Use Diagram and the policies and programs of the Policy Document. The EIR assesses the impacts of the General Plan as a whole (i.e., land use diagram, circulation diagram, goals, policies, and implementation programs) to reach a determination concerning the level of significance of impacts for CEQA purposes.

The impacts of the General Plan are summarized in Table 1-1. In the following two areas, the General Plan would have a significant impact without additional mitigation:

1. Street and Roadway System;
2. Wildland and Urban Fire Potential

After implementation of suggested mitigation measures, only the impact to streets and roadways would be considered potentially significant.

TABLE 1-1

IMPACT SUMMARY
Crescent City General Plan

Issue	Significance Finding	With Additional Mitigation
Chapter 3: Land Use, Housing and Population		
Land Use	less than significant	
Housing and Population	less than significant	
Chapter 4: Transportation and Circulation		
Street and Roadway System	potentially significant	potentially significant
Alternative Transportation	less than significant	
Chapter 5: Public Facilities and Services		
Water Supply	less than significant	
Wastewater*	less than significant	
Storm Drainage	less than significant	
Solid Waste	less than significant	
Law Enforcement	less than significant	
Fire Protection Services	less than significant	
Schools	less than significant	
Parks	less than significant	
Public Utilities	less than significant	
Chapter 6: Natural Resources		
Water Resources	less than significant	
Ag., Forestry, & Extractive Resources	less than significant	
Biological Resources	less than significant	
Scenic Resources	less than significant	
Cultural Resources	less than significant	
Air Quality	less than significant	
Chapter 7: Health and Safety		
Seismic and Geologic Hazards	less than significant	
Wildland and Urban Fire Potential	less than significant	
Flooding	less than significant	
Hazardous Materials	less than significant	
Noise	less than significant	

* Although impacts are considered less than significant, this EIR suggests an additional mitigation measure.

1.8 ISSUES OF CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123 of the State CEQA Guidelines requires an EIR to summarize areas of controversy known to the Lead Agency including issues raised by agencies and the public and issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects.

AREAS OF CONTROVERSY

The following areas of controversy were identified during the course of the General Plan update:

- changing land use patterns to accommodate tourism and infill development
- location of future development
- future traffic levels
- accommodating future residential growth
- provision of waster and wastewater treatment and delivery

RESOLUTION OF ISSUES

During the course of preparing, reviewing, and deliberating on the General Plan and considering the EIR, the City resolved several of the controversial issues listed above. The process of resolving these issues consisted of making policy decisions that necessarily involved choosing among potentially competing interests and values. In doing so, the City weighed several factors (i.e., demand for growth, economic development, environmental protection) and balanced the needs associated with these factors. The result is the set of policies and programs included in the Policy Document. While the final policies and programs may not optimize the needs of all interests represented in the community or eliminate all of the controversial issues raised during the General Plan Update, they do reflect a balanced approach to guiding future development in the Planning Area.

1.9 NOTICE OF PREPARATION

In March 2000, the City of Crescent City sent out a Notice of Preparation (NOP) for the Crescent City General Plan EIR. The City sent the NOP to several public agencies including:

- Department of Conservation
- California Department of Transportation
- California Coastal Commission
- North Coast Regional Water Quality Control Board
- North Coast Unified Air Quality Control District
- Del Norte County Community Development Department
- Del Norte County Health Care District
- California Department of Fish and Game
- Del Norte Sold Waste Management Authority
- California Department of Forestry
- Crescent City Harbor District
- Local Transportation Commission (LTCO)
- Del Norte County Library District
- Del Norte County Unified School District
- Crescent Fire Protection District

CHAPTER 2

ASSUMPTIONS AND DEVELOPMENT ESTIMATES

This chapter summarizes estimated development potential under the General Plan and the assumptions upon which these estimates are based. The chapter presents estimates of "buildout" potential, which includes existing development and new development potential. These estimates provide the basis for much of the impact assessment in the rest of this report.

2.1 GEOGRAPHIC BASIS FOR ANALYSIS

As described in Chapter 1, the Land Use Diagram designates land uses for the entire Crescent City Planning Area. The Planning Area extends beyond the city limits and encompasses approximately six square miles. For the purposes of this EIR, it is assumed that the City will annex all unincorporated Crescent City inside the Urban Boundary by the year 2020. No land outside the Urban Boundary is contemplated for annexation by the City in the timeframe of the General Plan.

This chapter quantifies new development that would be accommodated within the Urban Boundary (see Figure 2-1) in terms of housing stock, population, non-residential development, and employment.

2.2 DEVELOPMENT ASSUMPTIONS FOR ASSESSING IMPACTS

As the basis for the analysis in the EIR, the consultants made several assumptions concerning the amount, timing, and jurisdiction of development that could occur within the Planning Area. Following are descriptions of these assumptions.

AMOUNT OF DEVELOPMENT

The analysis presented in this EIR relates principally to the effect that future development consistent with the General Plan could have on the Planning Area's environment. In order to characterize these effects, the City had to prepare estimates of the amount of development that could occur within the Planning Area. This involved making assumptions about the amount and location of land that is or will be available for development and the intensity of development that could occur on that land. The following descriptions explain the City's assumptions concerning these two issues.

Land Available for Development

To determine the amount of development that could occur within the Planning Area under the General Plan, the consultants identified land that is either vacant or underutilized within the city limits and Urban Boundary. To derive information on vacant land and underutilized land (i.e., not developed to its permitted capacity) within the city, the consultants relied on a citywide parcel-based database containing information on the development status of property within the city limits. The acreage column in Table 2-1 summarizes the amount of land that was assumed to be available for development under each of the land use designations appearing on the Land Use Diagram.

The consultants obtained vacant and underutilized land information for the unincorporated Crescent City area (within the Urban Boundary) from the Del Norte County Community Development Department. These estimates were based on a survey conducted by County staff.

TABLE 2-1

VACANT AND UNDERUTILIZED LAND
Crescent City City Limits

RESIDENTIAL				
Land Use Designation	**Acres**		**Dwelling Units**	
	Vacant	**Underutilized**	**Vacant**	**Underutilized**
Single Family (0-2)	0	0	0	0
Single Family (2-6)	2.89	1.75	12	7
Multi-Family (6-15)	6.71	1.24	77	14
Multi-Family (15-30)	7.09	1.09	160	25
Mobilehome Park	0	0	0	0
NON-RESIDENTIAL				
Land Use Designation	**Acres**		**Square Feet**	
	Vacant	**Underutilized**	**Vacant**	**Underutilized**
Commercial				
Business Professional	3.16	3.02	89,589	65,687
Visitor and Local Commercial	34.53	10.59	601,576	161,401
General Commercial	10.20	1.73	177,695	26,321
Harbor Related	21.00	3.23	730,414	63,275
Industrial				
Limited Industrial	0	0	0	0
Heavy Industrial	0	0	0	0
Source: Mintier & Associates, 1999.				

Density/Intensity Assumptions

In estimating the increment of new development that could occur on the vacant and underutilized property with the city limits and Urban Boundary area, the consultants made several assumptions concerning the density and intensity of development that could occur given the standards and policies of the General Plan (see Table 2-2).

Residential Uses

To prepare estimates of development potential for vacant residential parcels, as reflected in the potential dwelling units, the consultants applied the General Plan's residential density standards to all vacant land. Instead of using the maximum development standards, the consultants used typical density standards.

TABLE 2-2

SUMMARY OF DENSITY/INTENSITY ASSUMPTIONS BY LAND USE DESIGNATION

Land Use Designation	Maximum Allowable Density/ Intensity	Assumed Typical Density/ Intensity	Assumed Employment Multipliers
Residential	***DUS per Gross Acre***	***DUS per Gross Acre***	**Square Feet per Employee**
Single Family (0-2)	0 to 2 DUs/acre	1 DU/acre	n/a
Single Family (2-6)	2.1 to 6.0 DUs/acre	4 DUs/acre	n/a
Multi Family (6-15)	6.1 to 15.0 DUs/acre	10.5 DUs/acre	n/a
Multi Family (15-30)	15.1 to 30 DUs/acre	22.5 DUs/acre	n/a
Mobilehome Park	Variable	12 DUs/acre	n/a
Non-Residential	***FAR***	***FAR***	***Square Feet per Employee***
Visitor and Local Commercial	0.50	0.40	500
General Commercial	0.50	0.40	500
Business Professional	0.85	0.65	500
Light Industrial	0.50	0.40	1,000
General Industrial	0.60	0.50	1,000
Harbor Related	0.55	0.45	500
Harbor Dependent	0.50	0.40	500
Harbor Dependent Recreational	0.25	0.20	500
Harbor Dependent-Commercial	0.40	0.35	500

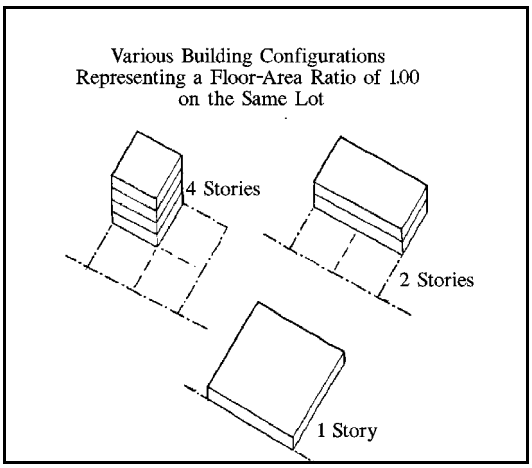
Source: City of Crescent City General Plan Policy Document, May 2001.

As the foundation for estimates of the number of residents that might ultimately reside in the new units, the consultants first assumed an overall eight percent housing vacancy rate and then assumed an average household size for each land use designation. The eight percent vacancy rate reflects the 1991 vacancy rate identified in the 1992 Crescent City/Del Norte County Housing Element. The average overall household size (2.524 persons per household) estimate was derived from estimates prepared by the California Department of Finance.

Non-Residential Uses

Potential non-residential development must be estimated using a different approach. The General Plan acknowledges that allowable intensity is a function of the size (in square-footage terms) of buildings that can be placed on each parcel. This is done by establishing a maximum "floor area ratio" (FAR) for each non-residential land use classification. A floor area ratio is a ratio of the gross building square footage permitted on a lot to the net square footage of the lot. For example, on a lot with 10,000 square feet of land area, a FAR of .50 would allow 5,000 square feet of floor area to be built regardless of the number of stories in the building (e.g., 2,500 square feet per floor on 2 floors or 5,000 square feet on one floor). As with residential uses, not all properties will develop to the maximum allowable floor area ratio. The plan assumes a "typical" FAR in determining the ultimate extent of development for each non-residential land use category.

The development potential for non-residential parcels, as reflected in the potential square footage of building area, was derived mathematically by applying an assumed typical FAR for each designation, as shown in Table 2-2, to the parcel area of vacant and underutilized properties.



The potential employee estimates were derived by applying typical employment densities for each type of development to the potential building square footage in Table 2-2.

TIMING OF DEVELOPMENT

In addition to the understanding of how much and where development will occur, the assessment of the development-related effects of development permitted under the General Plan requires an understanding of when development is likely to happen. For purposes of this EIR, the City and consultants assume that all of the development capacity reflected in Table 2-2 (i.e., within the city limits and Urban Boundary) will occur by the year 2020, which is the planning horizon of the Land use Diagram.

JURISDICTION OF DEVELOPMENT

For purposes of this analysis in this EIR, all of the development expected to occur according to the General Plan will occur within the city limits and Urban Boundary. In other words, the analysis assumes annexation of all of the currently (1999) unincorporated land inside the Urban Boundary. The City does not anticipate annexing any of the remaining land outside the Urban Boundary area.

SUMMARY OF ASSUMPTIONS FOR DEVELOPMENT

These are the basic assumptions upon which the analysis in subsequent chapters, including all impact conclusions and related mitigation recommendations, are based.

- Crescent City will annex all land within the Urban Boundary.
- All vacant and underutilized land within the city and urban service area will be developed.
- Crescent City will reach buildout by the year 2020, which is the planning horizon of the Crescent City Land Use Diagram.
- Housing within the City's Planning Area is expected to nearly double by 2020.
- No annexations are expected in the unincorporated area outside the Urban Boundary.
- The population size Pelican Bay State Prison will remain constant over the timeframe of the General Plan.

2.3 NEW DEVELOPMENT POTENTIAL

RESIDENTIAL

During the General Plan Update process, the Consultants prepared a unit potential summary showing how many additional residential units could be accommodated in the city under the General Plan. Table 2-3 below shows that buildout under the General Plan will generate an additional 13,405 residents. If the City utilized areas designated Business Professional and Visitor and Local Commercial for secondary residential units, Crescent City could accommodate an additional 877 dwelling units and 2,097 residents. With these addition of residential units in these areas, the city could accommodate an additional 6,414 dwelling units and 15,344 residents.

NON-RESIDENTIAL

As shown in Table 2-3, the city has approximately 4.7 million square feet of industrial development potential and approximately 1.7 million square feet of commercial development potential. Given the City and County's past economic growth and new trends in jobs, the amount of commercial and industrial land identified by the General Plan provides sufficient area for job development during the next 20 to 50 years.

Crescent City has the potential for an additional 12,113 new employees — 10,398 from commercial designated lands and 1,715 from industrial designated lands. For the purposes of this EIR analysis, employment from home businesses and governmental entities was not included under the non-residential development categories.

2.4 HOLDING CAPACITY/TOTAL BUILDOUT POTENTIAL

Holding capacity is normally referred to as the number of people that could theoretically be accommodated in the city if all land were to develop to the maximum potential allowed by the land use designations of the Plan. Buildout, which includes existing development plus new development potential, is the point in time at which the land in the City's Planning Area is being used to the maximum extent allowed by the Plan. Buildout of the Planning Area to its maximum holding capacity rarely occurs given such factors as limitations on resource capacity, infrastructure public services necessary to support new development, and the choices by individual property owners about the appropriate extent of development on each parcel. For the purposes of this EIR, it is assumed that the city will reach buildout at the year 2020.

RESIDENTIAL

Table 2-4 shows the residential holding capacity in terms of dwelling units, households, and population by planning subarea. Under the General Plan, the city has a holding capacity for approximately 11,283 dwelling units and 26,940 total residents in the Planning Area. Most of this residential growth (approximately 77 percent) will occur in the unincorporated Urban Boundary Area outside the current city limits. If the City utilized areas designated Business Professional and Visitor and Local Commercial for secondary residential units, Crescent City could accommodate an additional 877 dwelling units and 2,097 residents. With these addition of residential units in these areas, the city could accommodate a total of 12,160 dwelling units and 29,037 residents.

TABLE 2-3

NEW DEVELOPMENT POTENTIAL
City of Crescent City, Unincorporated Crescent City, and Planning Area

RESIDENTIAL

Category	Dwelling Units	Households	Population
City of Crescent City	294	271	706
Unincorporated Crescent City*	5,309	4,884	12,699
Crescent City Planning Area	5,603	5,155	13,405

NON-RESIDENTIAL

Category	Acres	Square Feet	Employees
Commercial			
City of Crescent City	87	1,915,958	4,774
Unincorporated Crescent City*	217	2,812,125	5,624
Crescent City Planning Area	304	4,728,083	10,398
Industrial			
City of Crescent City	0	0	0
Unincorporated Crescent City*	150	1,715,175	1,715
Crescent City Planning Area	150	1,715,175	1,715

Note: Crescent City could accommodate an additional 877 dwelling units if areas designated Business Professional and Visitor and Local Commercial were built with secondary residential units.
* This area represents the unincorporated area within the Urban Boundary.

Source: City of Crescent City Land Use Database; Del Norte County Community Development Department; and Mintier & Associates, January 2000.

NONRESIDENTIAL

Table 2-4 below shows the non-residential (commercial and industrial) holding capacity if the General Plan Planning Area reached full buildout. At buildout, the city would contain approximately 900 acres or 30 million square feet of commercial and industrial land and approximately 49,000 employees.

TABLE 2-4

TOTAL BUILDOUT POTENTIAL
City of Crescent City, Unincorporated Crescent City, and Planning Area

RESIDENTIAL

Category	Dwelling Units	Households	Population
City of Crescent City	2,197	2,087	5,207
Unincorporated Crescent City	9,086	8,359	21,733
Crescent City Planning Area	11,283	10,446	26,940

NON-RESIDENTIAL

Category	Acres	Square Feet	Employees
Commercial			
City of Crescent City	232	10,112,215	13,593
Unincorporated Crescent City	368	16,030,080	32,090
Crescent City Planning Area	600	26,142,295	45,683
Industrial			
City of Crescent City	0	0	0
Unincorporated Crescent City	304	3,438,735	3,438
Crescent City Planning Area	304	3,438,735	3,438

Note: Crescent City could accommodate an additional 877 dwelling units if areas designated Business Professional and Visitor and Local Commercial were built with secondary residential units.

Source: City of Crescent City Land Use Database; Del Norte County Community Development Department; and Mintier & Associates, January 2000.

CHAPTER 3

LAND USE, HOUSING, AND POPULATION

This chapter discusses potential impacts of the General Plan associated with land use, housing, and population.

3.1 LAND USE AND LAND USE PLANS

ENVIRONMENTAL SETTING

Regional Setting and City Limits

Located on the Pacific shoreline of Del Norte County midway between the borders of Oregon and Humboldt County, Crescent City is California's northernmost coastal city. The city is bordered by the ocean, broad beaches, coastal bluffs, the harbor, scattered forests, and rural residences. Crescent City, which is bisected by U.S. Highway 101, is the most urbanized part of the county and is the county's only incorporated city.

As of December 1997, Crescent City encompasses approximately 1.4 square miles, or 900 acres, of incorporated territory. Figure 2-1 shows Crescent City's city limits. Discontinuous with the City's boundaries is another incorporated exclave of Crescent City: the Pelican Bay State Prison. This 280-acre area is located 10 miles north of Crescent City along Lake Earl Drive. This area was annexed in 1992, two years after its construction.

Existing Crescent City General Plan

The existing Crescent City General Plan is a joint city/county plan. The General Plan includes a chapter that shows the Crescent City land use designations and addresses issues specific to Crescent City including: growth and development, community design and appearance, economic environment. For all other elements, the city refers to the overall county elements.

The current General Plan has evolved piecemeal since its original adoption in 1976 in response to changes in State Planning Law and local needs. Since its adoption, the General Plan has been amended by the subsequent adoption of several topical general plan elements. As a result, the current plan consists of the nine elements that were mandatory when the General Plan was adopted in 1976, a Recreational Element and two additional topical chapters, all under one cover. The General Plan also includes the updated joint City/County Housing Element, Local Coastal Plan, and Harbor Plan, under separate covers.

The following elements/chapters are included under one cover as the Crescent City General Plan:

Elements

- Housing Element (adopted in 1984 but superseded by adoption of the 1992 Housing Element);
- Circulation Element;
- Scenic Highway Element;
- Noise Element;
- Seismic Safety and Safety Element;

- Conservation and Open Space Element;
- Recreation Element;
- Land Use Element.

Special Chapters

- Crescent City;
- Land Subdivisions;
- Mobile Homes; and

Adopted under separate covers are the Land Use Plan (LUP) of the Local Coastal Program, adopted in 1984 and revised in 1997; the Harbor Plan, adopted in 1976 and revised in 1986; and the 1992 City of Crescent City and Del Norte County Housing Element, adopted August 24, 1992. These documents are summarized below.

Local Coastal Plan

The Crescent City Local Coastal Plan of the General Plan was adopted February 1984, and updated June 1997**.** The Local Coastal Plan includes the following chapters:

- Land Use;
- Public Access (to shoreline areas);
- Recreation and Visitor-Serving Facilities;
- Coastal Visual Resources and Special Communities
- Environmentally Sensitive Habitat Areas/Water and Marine Resources;
- Diking, Dredging, Filling, and Shoreline Structures;
- Industrial Development and Energy Facilities; and
- Public Works.

Each chapter includes a background discussion, summarizes the Coastal Act requirements for the subject area, lists existing local policies, then sets out Local Coastal Plan (LCP) policies and specific area policies and recommendations. The Local Coastal Plan also includes a land use diagram for the coastal zone planning area.

Harbor Plan

The Harbor Plan, adopted in 1976 and updated in 1986, addresses land use and policy for the Crescent City Harbor area including the portion under Crescent City's jurisdiction.

The Harbor Plan describes existing Harbor plans and programs, outlines existing Harbor facilities and development constraints, describes the land and water area requirements for optimum harbor development, establishes policies and criteria for future land use within the Harbor, and sets out a land use plan and implementation program for physical development of the Harbor.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to evaluate impacts to land uses that would be expected to occur in the Planning Area by buildout of the Land Use Diagram. Impacts are assessed qualitatively based on information contained in the Background Report and Land Use Diagram. The amount and location of development anticipated by buildout are based on the designations of the Land Use Diagram and growth projections as described in Chapter 2 of this Final EIR.

Assumptions

The following assumptions were made to assess the impacts of the General Plan's land use designations:

- Development will occur consistent with the projections described in Chapter 2 of this Final EIR.
- The rate at which vacant land in the city is developed will be determined primarily by market forces.
- Although the Housing Element is a component of the City's General Plan, the term general plan as used in this chapter refers to the other updated elements of the plan, excluding the Housing Element.

Thresholds of Significance

For the purposes of this Final EIR, a significant effect on the environment would occur if the General Plan would:

- constitute a major change in planned land uses in the city;
- conflict with adopted plans governing land use in the city; or
- divide or disrupt the physical arrangement of the community.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Land Use Diagram designates land uses for all land in the Crescent City Planning Area.

Changes from Existing Crescent City/Del Norte County General Plan

The General Plan is a comprehensive update of Crescent City's part of the Crescent City/Del Norte County's 1976 General Plan. This General Plan is a free-standing document that is entirely separate from the Del Norte County General Plan. The Housing Element is not proposed to be updated in connection with this update, and consistency with the plan is discussed in the next section. The General Plan will make changes to existing land use patterns and provides for more development than the existing General Plan in several important areas. In the current city limits, the biggest change is the redesignation of residential land (between Front Street and 5th Street and between A Street and G Street) to commercial designations. The General Plan extends the planning timeframe from 1995 to 2020 and establishes a new population, dwelling unit, and residential and non-residential holding capacity.

This plan creates a more comprehensive framework for addressing important issues such as tourism, downtown revitalization, visual quality and urban design, harbor development, economic development, pedestrian/bicycle linkages, and natural resource protection, generally building upon and refining the policies of the existing General Plan.

Buildout Differences

While the existing General Plan has a potential for 9,244 dwelling units and 24,034 people, the General Plan contains a potential of 11,283 dwelling units and 26,940 people.

Land Use Designations Differences

The General Plan establishes a revised set of land use designations which consolidates and expands upon the City's existing designations and includes definitions of allowable uses and density and intensity standards. In many cases, the Land Use Diagram merely replaces existing land use designations directly with new designations, resulting in no substantive changes in planned land uses. Table 3-1 indicates how the existing General Plan designations correspond to the new designations.

Adoption of the General Plan with the new set of land use designations will serve to more strictly define the types and densities of allowable uses, thus providing a clearer General Plan vision of the kinds of uses that may occur in the future. Land use designations that more specifically indicate allowable uses and permitted densities will reduce the potential for land use conflicts between incompatible land uses, and will allow the City to better plan for required infrastructure and services.

TABLE 3-1

COMPARISON OF EXISTING GENERAL PLAN AND NEW GENERAL PLAN LAND USE DESIGNATIONS
City of Crescent City

Land Use Type	Existing General Plan	New General Plan
Residential	Residential Multi-Family Residential	Single Family (0-2) Single Family (2-6) Multi-family (6-15) Multi-family (15-30) Mobilehome Park
Commercial	Commercial	Business-Professional Visitor and Local Commercial General Commercial
Industrial	n/a	Light Industrial General Industrial
Public or Institutional	Public Facilities	Public Facilities
Harbor	Harbor Related Harbor Dependent Harbor Consistent	Harbor-Related Harbor Dependent Harbor Dependent Rec. Harbor-Dependent Com.
Resource	Open Space Natural Resources	Open Space Natural Resources
Other	Medical Related	Urban Reserve Overlay County Resources County Rural Development

Source: Crescent City/Del Norte County General Plan, 1976; Crescent City General Plan, May 21, 2001.

Consistency with Adopted Local Plans

Del Norte County's General Plan

Crescent City's General Plan Planning Area shares much of the same area as the County's Crescent City Planning Subarea. The City is responsible for land use planning and regulation for land within the city limits while County is responsible within the City's planning area outside the Crescent City city limits. Prior to the end of this General Plan timeframe, it is likely that much of the land within the unincorporated Crescent City urban boundary will be annexed by the city. In the unincorporated part of the planning subarea, the designations on the City's Land Use Diagram closely follow those of the County's Land Use Diagram with two exceptions. The City proposes higher residential densities on the north and east side of the Urban Boundary, which provides for an additional 507 dwelling units.

As a whole the goals, policies, and implementation program contained in the Crescent City General Plan are generally consistent with those of the County's General Plan. The consistency between the City and County General Plans will reduce the potential for land use conflicts between incompatible land uses and lessen the chances for future land use disputes.

Local Coastal Plan

In 1984, the City adopted the its Local Coastal Program which formally divided the City's comprehensive planning approach. This action established two sets of policies, one for non-coastal and uncertified area (the existing General Plan), and one for the areas within the Coastal Zone which were certified (1984 Local Coastal Plan). The General Plan updates and consolidates the City's planning policies and programs into a single document, unifying policies that had been separated since 1984. By unifying these two documents, inconsistencies between policies inside and outside the Coastal Zone are avoided.

Harbor Plan

Land uses in the Land Use Diagram are consistent with the density and use limitations of the Harbor Plan in the harbor area under City jurisdiction. Additionally, the goals, policies, and implementation programs are consistent with the Harbor Plan concerning the physical development of the Harbor.

Physical Arrangement of the Community

The General Plan provides for additional residential, commercial, and industrial growth through the year 2020, with most of this growth occurring in the what is now the unincorporated Crescent City urban boundary. Development according to the General Plan would not substantially alter the land use patterns of the community, but will generally build upon and expand the existing land use pattern. Many of the changes in land use would relate to changes in density and intensity of the use rather than a change in the type of land use.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies and programs address the major issues concerning land use implications:

General Plan Policy

1.A.1. *The City shall provide for an orderly outward expansion/annexation of new and existing urban development within the Urban Boundary so that it is contiguous with existing development, allows for the efficient and incremental expansion of infrastructure and public services, and minimizes impacts on the environment.*

1.A.2. *The City shall encourage infill development that makes efficient use of existing public infrastructure and is compatible with existing development.*

1.A.3. *The City shall encourage project sites to be designed to increase the convenience, safety, and comfort of people using public transportation, walking, or cycling.*

1.A.4. *The City and County should cooperate closely in the development of the unincorporated area surrounding the city and should allow for appropriate uses contiguous to the city.*

1.A.5. *The City should avoid jeopardizing its own viability or ability to manage growth in and around the city by through overcommitting the capacity of its systems outside of the city limits.*

1.A.6. *The City supports annexation as a positive means of city expansions but shall evaluate annexation proposals on a case-by-case basis. In reviewing these proposals, the City shall consider the questions listed in Table 1-3. The City shall support only those annexations that:*

- *Promote orderly development and redevelopment of land within the Urban Boundary;*
- *Promote efficiency in service delivery;*

- *Are broadly supported by affected residents and property owners; and*
- *Are beneficial to the City.*

1.A.7. Among urban commercial uses, the City shall ensure that coastal dependant, visitor-serving uses have priority within the Coastal Zone. For those uses along the immediate shoreline, the City shall give priority to uses whose basic feasibility is dependent on a waterside location.

1.B.1. The City shall work jointly with the Redevelopment Agency to promote the development of a compact downtown of concentrated commercial, residential, civic, cultural, and recreational activities.

1.B.2. The City shall actively encourage, support, and provide incentives, where feasible, for the types of development it prefers in the VLC area, including the following:

a. Mixed-use projects;
b. Regional anchor stores;
c. Tourism-related uses;
d. Projects that reinforce viable existing uses; and
e. Projects that reinforce the identity of the VLC area.

1.B.3. The City shall work jointly with the Redevelopment Agency to promote the VLC area as the city's primary pedestrian, commercial, entertainment center, and gathering place for residents and tourists.

1.B.4. The City shall establish a better relationship of Beachfront Park to Downtown Third Street through improved signage and enhanced pedestrian access.

1.B.5. The City shall place uniquely-styled (i.e., consistent with the Redwood theme) directional signs along Highway 101 at both the South and North entrances to the downtown area.

1.B.6. The City shall improve signage so as to direct more Highway 101 tourist traffic to turn west on Front Street at the Ess Curve.

1.B.7. The City shall work jointly with the Redevelopment Agency to provide public parking facilities in the VLC area to accommodate tourist traffic.

1.B.8. The City shall work jointly with the Redevelopment Agency to design and install a traffic light at 3rd Street at Highway 101.

1.B.9. The City shall place signs at key points in the city, especially along Highway 101, that clearly identify local amenities such as Battery Point Lighthouse, the pier, and Beachfront Park.

1.B.10. The City shall provide easily identified RV parking within sight of both Beachfront Park and the downtown area.

1.B.11. The City shall underground power lines located on Third Street. When undergrounding the utilities, streetscape and sidewalk improvements, when feasible, should be made at the same time.

1.B.12. The City should consider widening sidewalks along Third Street to enhance pedestrian traffic. The width can be increased by extending the curb line by the approximate width of a parked car.

1.B.13. The City shall work jointly with the Redevelopment Agency to establish and maintain pedestrian-oriented commercial uses such as retail stores, cafes, and restaurants along Highway 101 between Front Street and 9th Street, particularly at the street level.

1.B.14. The City shall work jointly with the Redevelopment Agency to encourage economic investment in buildings, ranging from modest signage improvements and new paint, to major facade improvements, remodels, and new buildings.

1.B.15. The City shall promote the creation of a strong and appealing retail environment by requiring the use of transparent commercial storefronts (i.e., windows and doors) and continuous and compatible building facades.

1.B.16. The City shall provide leadership and support for creating a performing arts complex and youth/community center within the VLC area.

1.1 The City shall continue to implement the Action Plan for Downtown Revitalization.

1.F.1. The City should encourage retention of neighborhood convenience shopping that is compatible with the overall circulation and land use pattern so as to provide convenience for residential areas.

1.F.2. The City shall ensure that infill development (either new or rehabilitated residential structures) is compatible with the overall established character of residential neighborhoods.

1.F.3. The City shall encourage higher residential densities at locations where convenient access and adequate facilities, including parks and open space, are readily available.

1.G.1. The City shall promote high quality design, visual attractiveness, proper location, adequate sites, sufficient off-street parking, and a convenient circulation system for commercially-designated areas of the city.

1.G.2. The City shall discourage isolated and sprawling commercial activities along major roads and instead reinforce the vitality of the area designated as Visitor and Local Commercial (VLC).

1.G.3. The City shall encourage consolidation and upgrading of established commercial centers over the development of new shopping centers within the Planning Area.

1.G.4. The City shall support the retention and upgrading of small neighborhood retail centers serving the immediate residential neighborhoods and provide for such uses in new residential development. These centers should be located and designed to serve neighborhood pedestrian trade and should not occupy more than one-quarter of the block on which they are located.

1.G.5. The City shall require major commercial development to consolidate and control access to avoid congestion, confusion, and traffic conflicts.

1.G.6. The City shall work with property owners in older commercial areas to either rehabilitate their properties or convert them to productive uses that are consistent with this General Plan.

1.H.1. The City shall require that new industrial and heavy commercial development projects have convenient and safe access to major transportation facilities (highways and waterfront facilities) to minimize unnecessary and disruptive traffic through residential and other sensitive sections of the city.

1.H.2. The City shall prohibit residential or other incompatible uses which could have an adverse impact on the viability of industrial development. When possible, non-conforming residential uses in industrially-designated areas shall be discouraged and not allowed to expand.

1.H.3. The City shall permit mixed industrial and commercial uses only when such uses are determined to be compatible or necessary for operations.

1.H.4. The City shall require that industrial development avoids or minimizes creating substantial pollution, noise, glare, odor, or other significant offensive activity that would negatively affect adjacent uses and other areas of the city.

1.H.5. The City shall require that industrial development projects provide ample space for truck loading, parking, and maneuvering.

1.H.6. The City shall designate specific areas suitable for industrial development and reserve such lands in a range of parcel sizes to accommodate a variety of industrial uses.

IMPACTS

Development under the General Plan would not constitute a major change in planned land uses in the city, conflict with adopted plans governing land use in the city, or divide or disrupt the physical arrangement of the community. Therefore, its impact is considered less than significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

3.2 HOUSING AND POPULATION

ENVIRONMENTAL SETTING

The existing housing and population characteristics of Crescent City are summarized in Chapter 2 (Land Use and Population) of the General Plan Background Report. Chapter 2 of this Final EIR summarizes the existing housing stock and population and projected growth under the General Plan.

The City of Crescent City was founded in 1853 when F.E. Weston set up a small mill to cut wood for the lumbering industry. One year later the city incorporated. Since then the city and the surrounding area has seen many rises and declines in its population. Table 2-3 in the Background Report shows the changes in population from its inception to 1997.

From the early 1900s to the 1990s, the Crescent City area has seen significant population changes. In three separate decades the city's population nearly doubled. The largest increases were from 1900 to 1910 (37.3 percent), 1920 to 1930 (44.5 percent), and 1950 to 1960 (42.3 percent). The most significant decrease occurred between 1930 to 1940. Much of this fluctuation was due to the boom or bust nature of the logging industry which has led to several plant openings and closings over the years. In addition, there has been a historically high turn-over and mobility, reflecting high seasonal unemployment. Much of the fluctuation in growth leveled off in the 1970s and 1980s.

In the last decade, population has remained relatively steady with one major exception. The city experienced the most dramatic population increase in the city's history with the annexation of the Pelican Bay State Prison in 1992. The city's population went from 4,350 to 8,000, a 3,650 person increase which nearly doubled the population. However, if the last several years are any indication, the population is likely to show minimal growth increases. This pattern reflects a more stable core of population, mainly families and retirees moving to Crescent City for its amenities and small town environment. In 1997, the population of Crescent City was at 8,325 which is nearly 30 percent of the county's total population.

Housing Element

The City and Del Norte County adopted a joint housing element, the City of Crescent City & County of Del Norte Housing Element, on August 24, 1992. The Housing Element includes six sections. The first section provides background information on the community, including population growth trends, and background on the economy and households in Crescent City. The second section provides background information on housing, including discussions of housing stock, housing conditions, housing market areas, energy conservation, and an assessment of the 1984 Housing Element. The next section assesses housing needs,

including special needs, assisted rental housing at risk of conversion to market-rate housing, and emergency and homeless shelter needs. The fourth section discusses vacant land and development sites, including separate discussions of vacant land in incorporated Crescent City and surrounding unincorporated area. This section also discusses surplus lands, homeless shelter lands, and analyzes the availability of services. The fifth section describes development constraints on housing, including State and Federal governmental constraints, local governmental constraints, and nongovernmental constraints. The final section includes the goals, policies, and quantified objectives of the Housing Element for the 1992-1997 time frame.

Adoption of the 1992 Housing Element supersedes the 1984 Housing Element included under the General Plan cover. The 1984 element had superseded the City's first housing element, adopted in 1977.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to evaluate impacts from housing and population growth that would be expected to occur in the city by buildout of the Land Use Diagram. Impacts of housing and population are assessed both qualitatively and quantitatively. Dwelling units and population anticipated at buildout are based on General Plan Land Use Diagram designations and growth projections described in Chapter 2 of this Final EIR.

Assumptions

- New housing, population, and employment growth will occur consistent with the development estimates in Chapter 2 of this Final EIR.
- The development of jobs within the city will foster housing development.
- The City will update the Housing Element in 2003 in accordance with statutory requirements.

Thresholds of Significance

For the purposes of this Final EIR, the General Plan is considered to have a significant impact if adoption or implementation of the plan would be inconsistent with the City's adopted Housing Element. This Final EIR also considers it a significant impact if the General Plan would limit housing development substantially below forecasted growth, as it would thereby require other jurisdictions (i.e., Del Norte County) in the region to accommodate the growth.

IMPLICATIONS OF THE LAND USE DIAGRAM

Housing and Population Growth

In 1996, the Crescent City Planning Area had an estimated population of 15,971 (4,653 with the current city limits and 11,318 within the unincorporated Crescent City area) and a total of 6,143 housing units (1,790 with the current city limits and 4,353 within the unincorporated Crescent City area). By 2020, the Planning Area is estimated to grow to approximately 25,700 persons and 9,880 dwelling units using the historical growth rate of two percent. At buildout, the General Plan Land Use Diagram can accommodate a total of 11,283 housing units and 26,940 people, leaving a surplus of 1,403 housing units.

Indirect impacts of housing construction may result from increased traffic, the loss of valuable natural resources such as wildlife habitat, and the increase in demand for public services and facilities. The secondary and tertiary impacts resulting from the designation of additional land for housing are discussed in the appropriate corresponding sections of this Final EIR.

Consistency with Crescent City's Housing Element

The General Plan has a longer planning timeframe (2020) than the Housing Element and would, therefore, provide additional sites to accommodate projected housing development beyond 2003, the timeframe of the Housing Element.

GENERAL PLAN POLICY RESPONSE

The General Plan contains policies that address specific housing issues as they relate to land use development in the city. Beyond these few policies, the General Plan defers to the Housing Element to supply detailed policies that address the city's housing needs.

IMPACTS

The General Plan provides land in a range of residential densities to accommodate housing and population growth through buildout. The General Plan would not limit housing development substantially below forecasted growth. In addition, the policies of the General Plan are consistent with and build upon the adopted Housing Element policies. The housing and population impacts of the General Plan are, therefore, considered less than significant.

Among the indirect effects associated with housing and population growth are increased traffic with associated air quality impacts and increased demand for public services and facilities. These indirect effects are discussed in subsequent chapters of this Final EIR.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the General Plan and the Housing Element are necessary.

CHAPTER 4

TRANSPORTATION AND CIRCULATION

This chapter focuses primarily on the impacts of growth on street and highway system in Crescent City's Planning Area. The chapter also touches on alternative modes of transportation such as transit services, non-motorized transportation, goods movement and air transportation, all of which constitute small but important components of the city's transportation system.

4.1 STREET AND HIGHWAY SYSTEM

ENVIRONMENTAL SETTING

Chapter 3 of the Crescent City General Plan Background Report describes the existing street and roadway system and conditions. Crescent City is served by a hierarchal system of arterial, collector, and local streets, each of which serve a specific function in the overall circulation plan. Because much of the traffic data in the Background Report was collected in 1998 for 1996 conditions, an update to 1998 conditions has been made. Table 4-1 documents observed Average Daily Traffic, roadway capacity, and estimated Level of Service (LOS) for the system in 1998.

METHODOLOGY

Roadway Classification System

The Circulation Diagram (Figure 4-1) depicts the arterial and collector street system in Crescent City. U.S. 101 is the principal arterial street through most of Crescent City, turning into a freeway 1/4 mile north of Northcrest Drive. Front Street, Northcrest Drive, and Washington Boulevard are also considered arterial streets. Collector streets include:

- Pebble Beach Drive
- Inyo Avenue
- Glenn Street
- El Dorado Street
- Meridian Street
- Howe Drive
- 5th Street
- 9th Street
- Pacific Avenue
- Cooper Avenue
- Harding Avenue
- Small Avenue
- Parkway Drive

TABLE 4-1

1998 TRAFFIC VOLUME AND SERVICE LEVELS ON CRESCENT CITY AND DEL NORTE COUNTY ROADWAYS

Location	1998 Daily Volume	Capacity	Volume/ Capacity	LOS
US 101 - Crescent City Limits to Elk Valley Road	4,600	17,000	0.27	C
US 101 - Elk Valley Road to Front Street	10,500	35,800	0.29	C
US 101 - Front Street to 4th Street	16,600	44,700	0.37	D
US 101 - 4th Street to 9th Street	22,300	44,700	0.50	D
US 101 - 9th Street to Northcrest Drive	26,500	44,700	0.59	D
US 101 - Northcrest Drive to Crescent City Limits	11,000	35,800	0.31	C
US 101 - Crescent City Limits to Washington Blvd	11,000	72,000	0.15	B
US 101 - Washington Blvd to U.S. 199	9,600	80,000	0.12	B
Elk Valley Road - US 101 to Howland Hill Road	4,200	28,000	0.15	B
Parkway Drive - Washington Boulevard to US 199	5,700	23,000	0.25	C
Washington Boulevard west of Parkway Drive	3,200	23,000	0.14	A
Washington Boulevard west of Northcrest Drive	7,000	35,800	0.20	A
Northcrest Drive - U.S. 101 to Washington Boulevard	14,000	35,800	0.39	A
Northcrest Blvd/Lake Earl Drive - Washington Boulevard to Blackwell Lane	7,600	28,000	0.27	C

Sources: Caltrans 1998 Traffic Volumes, Elk Valley Road Corridor Study, Whitlock & Weinberger, 1998 (AM+PM Peak hours * 5)

Traffic Modeling

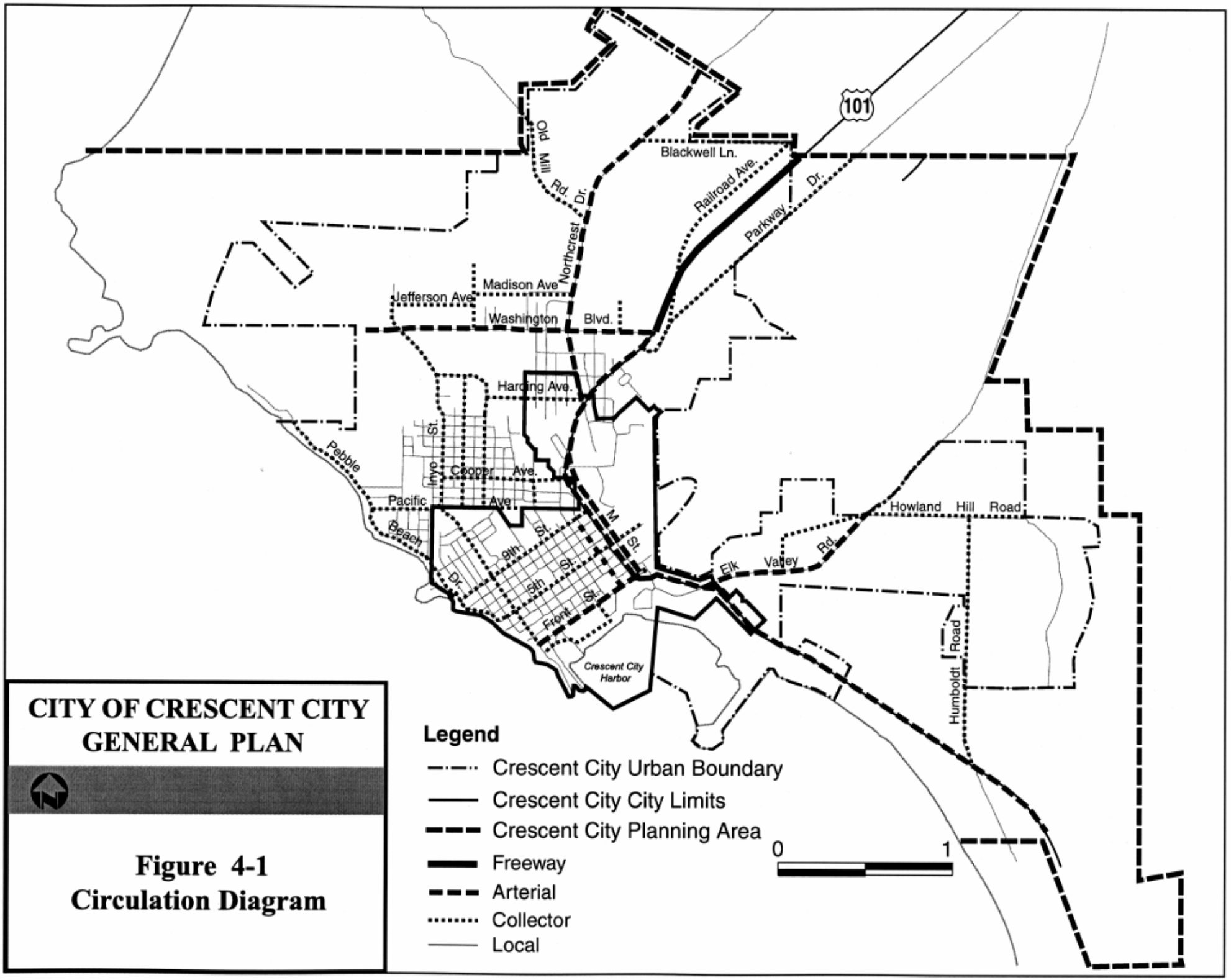
A determination of the impacts of the Land Use Diagram on the circulation system requires a forecast of traffic for the target year in which the General Plan is predicted to be built out. Many cities/counties in California have a formal travel forecasting model upon which to base such a forecast. However, due to the relatively low traffic volumes on Del Norte County roadways, there has never been a need to create a formal analytical tool for traffic forecasting. Therefore, the forecast prepared in support of the EIR for the Crescent City General Plan makes use of simpler techniques, as described in the following paragraphs.

The Del Norte County and Crescent City General Plans are being prepared concurrently. As the majority of growth anticipated for the unincorporated portion of the county is in the Crescent City Urban Boundary area, a single traffic forecasting system has been prepared for the two combined General Plans, as development based on the two plans will have similar results. There are minor differences in assumptions between the two plans; otherwise all data, assumptions, and methodology for traffic modeling in both EIRs are identical.

Traffic in Del Norte County can be divided into three components:

- Traffic generated within the county - that is, trips which either begin or end somewhere in the county.
- Traffic passing through the county.
- Summertime vacation traffic, present only 2-3 months per year.

The projection of traffic to the buildout of the General Plan investigates each of these three components, and welds them together for a final future year traffic forecast.


CITY OF CRESCENT CITY
GENERAL PLAN
Figure 4-1
Circulation Diagram
Legend
Crescent City Urban Boundary
Crescent City City Limits
Crescent City Planning Area
Freeway
Arterial
Collector
Local
0
1
101
Old Mill Rd.
Blackwell Ln.
Railroad Ave.
Dr.
Parkway
Northcrest Dr.
Madison Ave
Jefferson Ave
Washington Blvd.
Harding Ave.
Pebble Beach Dr.
St.
Inyo
Cooper Ave.
Pacific Ave
M St.
8th St.
5th St.
Front St.
Crescent City Harbor
Howland Hill Road
Elk Valley Rd.
Humboldt Road

Traffic Generated in Del Norte County

In support of the projection of locally generated traffic, the General Plan consultants developed a system of zones that divides up the Planning Area geographically and developed estimates of existing and potential land uses for each zone.

For the purposes of traffic forecasting, the number of dwelling units is the primary determinant of how much traffic exists today and will exist in the future. Uses, including retail, office, industrial, and others, act as receivers of traffic generated by people living in Del Norte County homes, but they do not determine how much traffic will be generated overall. For this reason, the estimate of potential future dwelling units was used as the primary forecasting statistic in deriving the traffic projection. Table 4-2 documents estimates of existing and potential dwelling units by zone in the county. Table 4-3 documents an aggregation of this data into six districts. The growth factors in Table 4-3 were used as a guide in developing growth factors for internal traffic for all of the roadway segments listed in Table 4-1.

TABLE 4-2

CRESCENT CITY URBAN AREA DWELLING UNITS -- POTENTIAL NEW GROWTH, AND GROWTH PERCENTAGE

Zone	Potential New	Growth Percentage		Zone	Potential New	Growth Percentage
1	0	0%		25	8	47%
2	4	200%		26	188	671%
3	46	24%		27	23	767%
4	139	41%		28	82	8200%
5	40	73%		29	250	66%
6	102	69%		30	141	68%
7	20	23%		31	144	400%
8	34	309%		32	0	0%
9	11	110%		33	71	323%
10	2	40%		34	0	0%
11	0	0%		35	0	0%
12	0	0%		36	0	0%
13	1	50%		37	321	31%
14	53	312%		38	250	147%
15	0	0%		39	267	127%
16	251	425%		40	34	340%
17	421	216%		41	107	52%
18	375	37500%		42	175	44%
19	130	13000%		43	293	166%
20	181	6033%		**Crescent City Proper**	**294**	**15%**
21	509	536%				
22	200	500%				
23	27	20%		**Total Urban**	**5,314**	**85%**
24	20	154%				

Source: Steven Lowens, PE, May 2000.

TABLE 4-3

DISTRICT TOTALS FOR DWELLING UNITS IN DEL NORTE COUNTY

Area	Existing	Potential New	Percent Increase
Northeast Urban Area	661	1,324	200%
Lake Earl Drive	1,169	1,878	161%
US 101 North Urban Area	500	450	90%
Elk Valley Corridor	420	487	116%
Crescent City Proper	3,086	642	21%
Southeast Urban Area	427	533	125%

Source: Steven Lowens, PE, May 2000.

Traffic Passing Through Del Norte County

The estimate of traffic passing through Del Norte County has been made by an inspection of traffic volumes on the county boundaries. Table 4-4 documents historical traffic volumes on U.S. 101 since 1980.

TABLE 4-4

US 101 HISTORICAL TRAFFIC VOLUMES - AVERAGE ANNUAL DAILY TRAFFIC

Year	Humboldt Co. Line	State Line
1980	3,700	4,000
1985	3,300	4,800
1990	3,850	6,500
1995	3,900	6,700
1998	3,400	6,600

This table illustrates two key points: 1) traffic volumes entering Del Norte County from the south have been relatively stable over the 18 year period, and 2) traffic entering and leaving from California is less than traffic entering and leaving to Oregon. For the purposes of this analysis, the volumes at the Del Norte/Humboldt County Line control the estimate of traffic passing through the county. As some of this traffic is generated internal to the county, it is estimated for the purposes of this analysis that approximately 2,000 vehicles a day pass through the county.

The only statistical means available for projecting through traffic out to the buildout year (assumed to be 2025) is to establish a trend line based on historical data. The data in Table 4-4 has been used to generate the graph in Figure 4-2.

The data in Figure 4-2 indicates a stable to declining trend on U.S. 101 over the past 20 years. Some of this can be attributed to the decline in the forestry industry. Also, in recent years, the affects of weather have had an impact on the tourist industry.

It is unlikely that this decline in traffic will continue for the indefinite future, yet it is not reasonable either to project major increases in through traffic. For the purpose of this analysis, therefore, an assumption has been made that through traffic will begin to grow at a rate of one percent per year beginning in the year 2000.

Summertime Vacation Traffic

The northern California and southern Oregon coastline is one of the premier vacation sites in all of western America, though it is not as well known as it might be. The remote location compared to other areas has left the area relatively unspoiled as a tourist destination. Traffic counts from Caltrans identify traffic volumes in the peak month as well as the average for the year. This data is useful in identifying the relative increase in traffic on Del Norte County highways in the summertime. Table 4-5 compares average and peak month traffic volumes on U.S. 101 at the county lines.

TABLE 4-5

PEAK VERSUS AVERAGE TRAFFIC VOLUMES AT THE COUNTY LINES

Year	Humboldt Co. Line			State Line		
	Average	Peak	Increase	Average	Peak	Increase
1980	3,700	5,900	2,200	4,000	6,000	2,000
1985	3,300	5,600	2,300	4,800	6,800	2,000
1990	3,850	5,600	1,750	6,500	9,200	2,700
1995	3,900	5,400	1,500	6,700	8,100	1,400
1998	3,400	5,300	1,900	6,600	7,400	800

Table 4-5 indicates that approximately 2,000 additional cars per day have entered Del Norte County at the Humboldt County Line; the data is fairly constant over the 18 year period. If the statistics are correct, they show Del Norte County becoming more of a destination and less a pass-through area over the last 20 years. The data suggests that some increase in traffic can be expected within Del Norte County during the summer months due to additional vacation travel that stays in the county.

The final piece of data collected in support of the traffic forecast comes from Redwood National Park. The park is one of the key destinations in the county for visitor traffic. In this chart, the vertical bars indicate the annual attendance, while the line indicates a three-year moving average attendance.

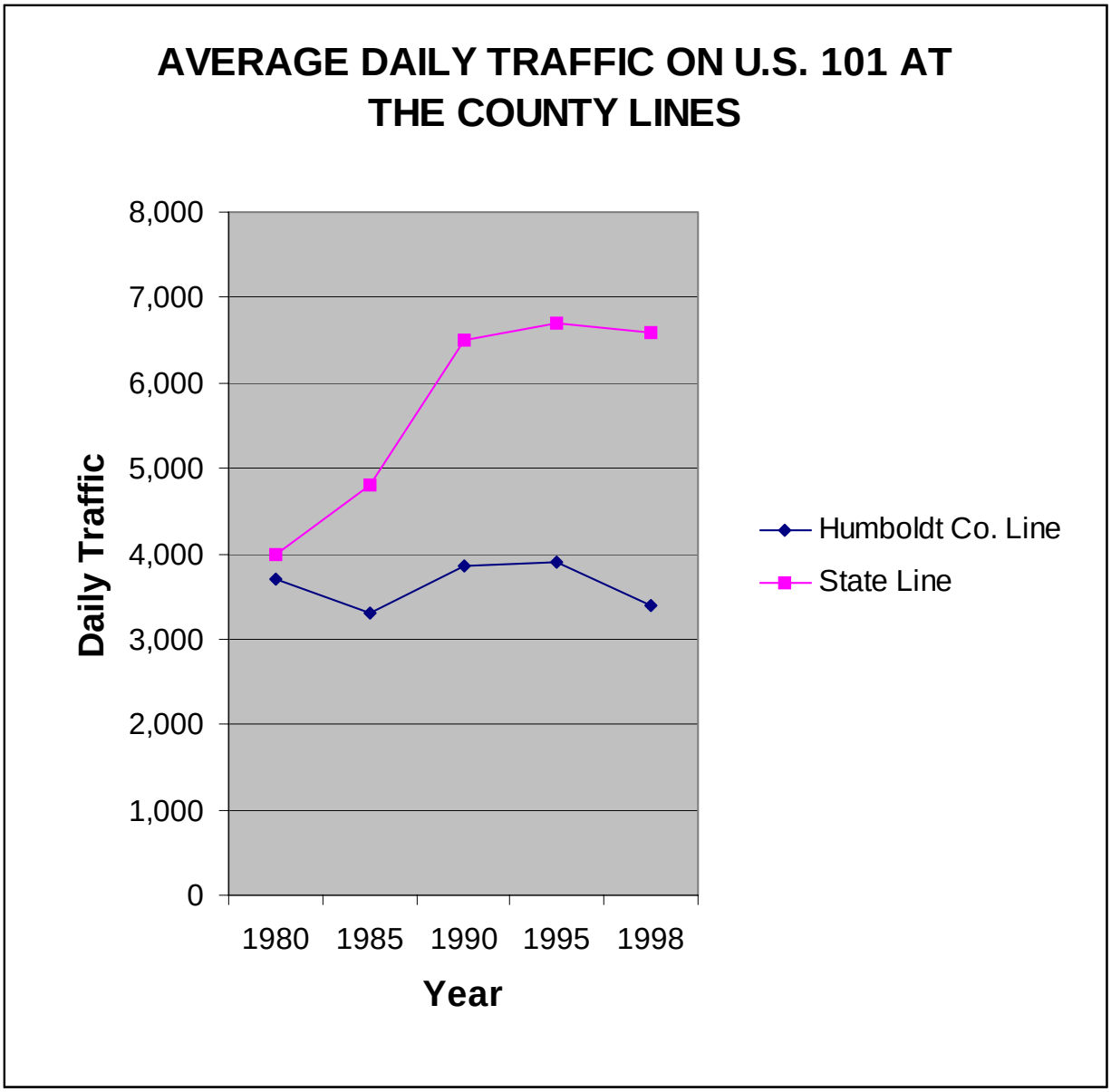


FIGURE 4-2
AVERAGE DAILY TRAFFIC

The Redwood Park attendance data (see Figure 4-3) indicates a steady increase in visitation until 1995, when attendance declined significantly. The decline is attributed to the effects of several seasons of damage from severe weather conditions. It is unlikely that the decline will continue; park representatives indicated that early 2000 data indicates an increase of 40 percent over the previous year.

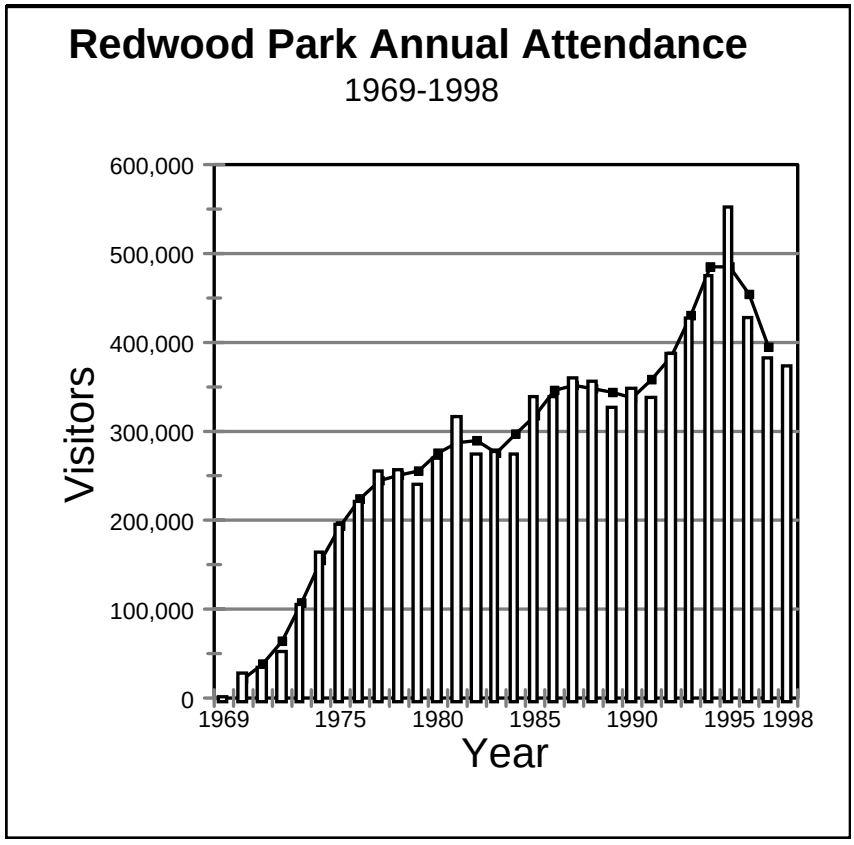


FIGURE 4-3
REDWOOD PARK ANNUAL ATTENDANCE

Traffic Forecast for the Buildout Scenario

All of the data above have been combined to prepare an estimate of traffic for the buildout of the General Plan, assumed to occur around the year 2025. Table 4-6 documents this forecast, together with Level of Service estimates that are discussed in following sections.

TABLE 4-6

TRAFFIC FORECAST AND LEVEL OF SERVICE ESTIMATE BUILDOUT (2025) OF THE GENERAL PLAN

Location	Buildout Traffic	Capacity	V/C	LOS
US 101 - Crescent City Limits to Elk Valley Road	6,900	17,000	0.41	A
US 101 - Elk Valley Road to Front Street	19,600	35,800	0.55	A
US 101 - Front Street to 4th Street	29,100	44,700	0.65	B
US 101 - 4th Street to 9th Street	39,500	44,700	0.88	C
US 101 - 9th Street to Northcrest Drive	47,200	44,700	1.05	F
US 101 - Northcrest Drive to Crescent City Limits	20,600	35,800	0.58	A
US 101 - Crescent City Limits to Washington Blvd	20,600	72,000	0.29	A
US 101 - Washington Blvd to US 199	20,100	80,000	0.25	A
Elk Valley Road - US 101 to Howland Hill Road	9,200	28,000	0.33	C
Parkway Drive - Washington Boulevard to US 199	13,100	23,000	0.57	D
Washington Boulevard west of Parkway Drive	6,000	23,000	0.26	A
Washington Boulevard west of Northcrest Drive	14,700	35,800	0.39	A
Northcrest Drive - US 101 to Washington Boulevard	28,000	35,800	0.78	C
Northcrest Drive - Washington Boulevard to Old Mill Road	19,900	35,800	0.56	A

A formal forecast of traffic for the summer months has not been made, due to the fact that it is not the typical condition in the city. As described below, there are locations in the city which will experience levels of congestion in the summer higher than shown in Table 4-6.

Levels of Service

To measure operating conditions of the roadway system, future buildout traffic on the proposed transportation system was evaluated in terms of level of service (LOS). Service levels vary qualitatively from "A" (the best) to "F" (the worst). Tables 4-7 and 4-8 contain the standards for the six service levels used in the Crescent City Planning Area. Table 4-9 provides a relationship between the computed "volume/capacity" ratio and the six service level standards.

TABLE 4-7

LEVEL OF SERVICE DEFINITIONS FOR ROADWAY SEGMENTS

Level	Extent of Delay	Operating Characteristics
A	Insignificant Delays	Free flow. Drivers are virtually unaffected by other vehicles.
B	Minimal Delays	Stable flow. Drivers begin to feel restricted.
C	Acceptable Delays	Stable flow. Most drivers feel somewhat restricted.
D	Tolerable Delays	High-density, but stable, flow. Queues may develop but dissipate rapidly, without excessive delays.
E	Significant Delays	Volumes at or near capacity. Low speeds and difficult maneuvering. Queues of vehicles may form upstream.
F	Excessive Delay	Conditions at capacity, with extremely long delays. Queues and unstable stop-and-go operation.

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, 1985.

TABLE 4-8

LEVEL OF SERVICE DEFINITIONS FOR FOR SIGNALIZED INTERSECTIONS

LOS	SIGNALIZED INTERSECTIONS	Unsignalized Intersections	
	Average Delay per Vehicle (Seconds)	**Reserve Capacity (pcph)***	**Expected Delay to Minor Street Traffic**
A	≤5.0	≤400	Little or no delay
B	5.1 to 15.0	300 to 399	Short traffic delays
C	15.1 to 25.0	200 to 299	Average traffic delays
D	25.1 to 40.0	100 to 199	Long traffic delays
E	40.1 to 60.0	0 to 99	Very Long traffic delays
F	>60.0**	--	Severe congestion/Intersection blocked

*pcph = passenger cars per hour
**60 seconds of stopped delay is considered to be unacceptable to the majority of drivers.

Source: Transportation Research Board, *Highway Capacity Manual*, 1994.

TABLE 4-9

VOLUME/CAPACITY RATIOS VARIOUS HIGHWAY FACILITIES

Level of Service	Freeways	Two-Lane Rural Highways	Multi-lane Rural Highways	Urban Streets
A	0.35	0.10	0.26	0.60
B	0.55	0.21	0.52	0.70
C	0.78	0.34	0.71	0.80
D	0.93	0.65	0.88	0.90
E	1.00	1.00	1.00	1.00
F	>1.00	>1.00	>1.00	>1.00

Source: Florida Guidelines for Highway Capacity Evaluation, 1995

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if the projected level of service on an existing or proposed roadway would deteriorate below the service level standards of the General Plan, as laid out in *Policies 3.A.5* and *3.A.12* as follows:

3.A.5. The City shall encourage Caltrans to maintain a Level of Service D or better on Highway 101.

3.A.12 The City shall endeavor to manage its roadway system so as to maintain Level of Service C operation, except for when streets intersect with Highway 101, where Level of Service D shall be acceptable.

IMPLICATIONS OF THE LAND USE DIAGRAM

Using the above standards as a guide, service levels were computed for existing conditions on the major roadways in the urban area of Crescent City. The results of this analysis are contained in Table 4-1. The table indicates that all roadways in the urban area are operating at or better than the standards set forth in the General Plan.

Future Roadway Improvements

The significant roadway improvements included in the General Plan are as follows:

- The General Plan proposes to add a center median lane to Elk Valley Road between U.S. 101 and Howland Hill Road. This is also a component of the Del Norte County General Plan.

- Bulbing of Highway 101 Couplet: As shown in Figure 4-4a, the General Plan proposes that the couplet be effectively narrowed to two through lanes, with a left-turn lane created at each intersection. By bulbing Highway 101, the couplet would maintain its function of providing through traffic and create a more pedestrian-friendly environment that is conducive to shopping and other commercial activities. Designing bulbs into the beginnings of each block can help channelize traffic and also provide streetscaping opportunities. The bulbs would also reduce the crossing distance for pedestrians.

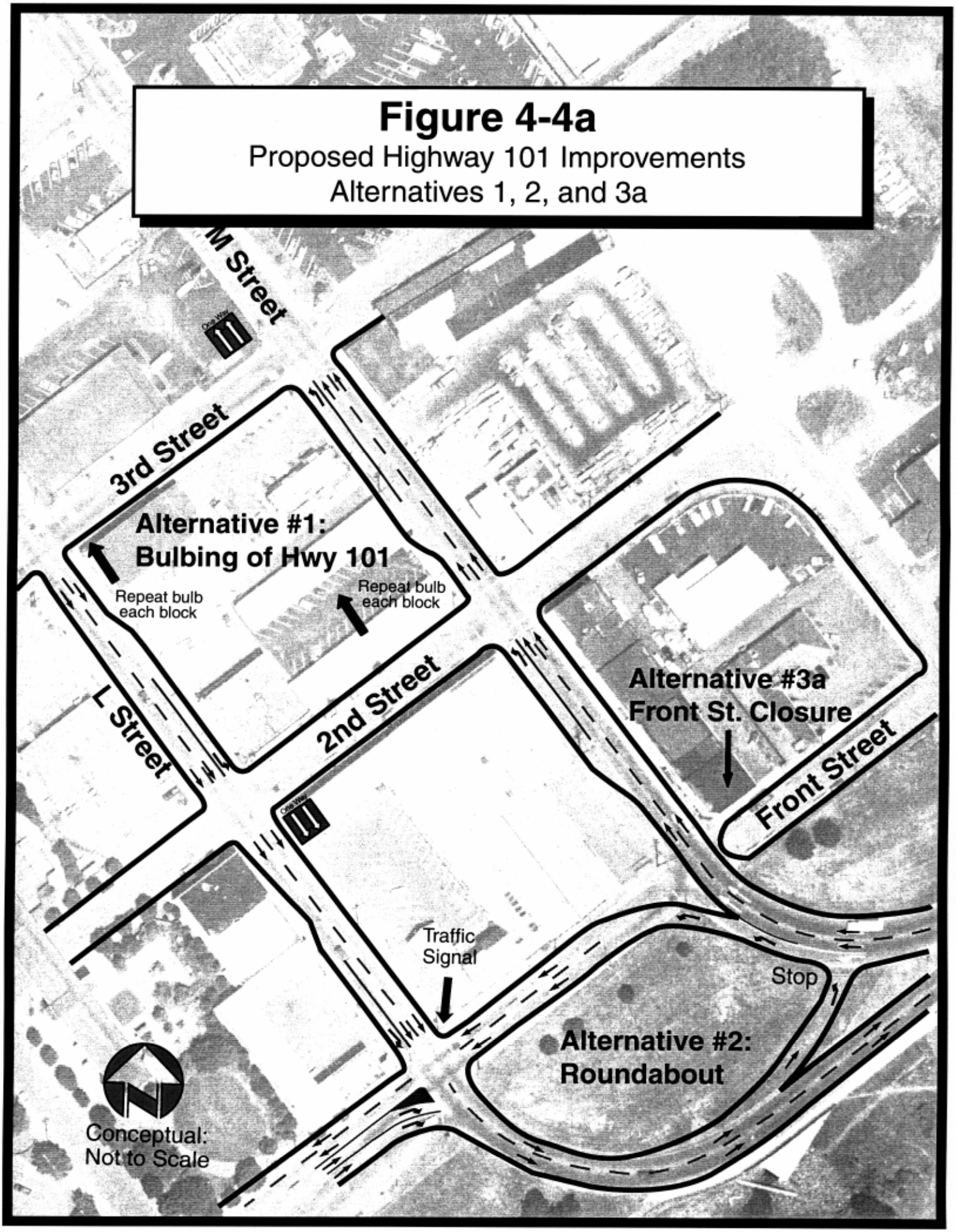


Figure 4-4a
Proposed Highway 101 Improvements
Alternatives 1, 2, and 3a
M Street
3rd Street
Alternative #1:
Bulbing of Hwy 101
Repeat bulb
each block
Repeat bulb
each block
L Street
2nd Street
Alternative #3a
Front St. Closure
Front Street
Traffic
Signal
Stop
Alternative #2:
Roundabout
Conceptual:
Not to Scale

The third lane on M Street could be refocused into a left-turn lane. A similar concept could be applied to L Street left-turn lanes which would better serve the block between the two streets and enhance access onto and from the parcels within the couplet.

- Roundabout at the "S-Curve": This concept involves improving access to the downtown and Front Street by redesigning the area known as the "S-Curve" just south of Front Street. The concept shown in Figure 4-4a uses many of the elements of a traffic circle to place more emphasis on allowing northbound traffic to turn left onto Front Street from Highway 101. It incorporates the traffic signal proposed at the Front Street/L Street intersection. Front Street between L and M Streets is proposed to be effectively converted to a one-way westbound operation, and creating half of a traffic circle for northbound-to-westbound traffic provides a higher-speed left-turn lane. Eastbound traffic from Front Street is also directed around the circle, and the southern half of the circle creates a new opportunity to turn left. Because the space is too small to create a true circle, the eastbound-to-northbound traffic is controlled by a stop sign.

  The concept is intended to retain the proposed safety improvements that should occur with the installation of the L Street and Front Street traffic signal while reducing, removing, and/or better controlling other key conflicting traffic movements. It also is intended to make the accessibility to Front Street and the intensified commercial area more attractive to northbound traffic.

- Front Street - Closure at M Street: To prevent possible cut-over traffic from the new stop sign location at the roundabout on the southern entrance of the couplet, this alternative proposes that the eastern leg of the M/Front Street intersection be closed, with access to this area being provided by the current connection from N Street.

- Front Street - Right turn only: Another alternative for Front Street at the M/Front Street intersection is to keep the street open, but only allow for right turns onto M Street/Highway 101 from Front Street. Since a right turn from Highway 101 onto Front Street would likely slow down traffic into the city, such a turn would be prohibited (see Figure 4-4b).

- Front Street between U.S. 101 and D Street: The General Plan proposes to narrow the traveled way of Front Street to a single lane in each direction, so that additional parking can be provided and the roadway can effectively be narrowed for pedestrian crossing (see Figure 4-5).

Traffic Service Levels Without Roadway Improvements

Without further improvements, the following segments would exceed the standards of the General Plan:

- US 101 between 9th Street and Northcrest Drive - LOS F
- Parkway Drive - Washington Boulevard to US 199 - LOS D

Traffic Service Levels with Roadway Improvements in the Circulation Diagram

The service levels for buildout of the General Plan are included in Table 4-6. The projects involving the one-way couplet and the Front Street/U.S. 101 intersection should not significantly affect the capacity of the facility, but rather will rechannelize the existing capacity of the roadway as it is currently designed. No changes to service level are anticipated from the redesign of the couplet and the provision of the traffic circle.

The Front Street proposal between U.S. 101 and D Street would reduce the capacity of Front Street. Traffic counts have not been made on Front Street, so numerical evaluation of the proposal has not been made.

However, observations of traffic flow on Front Street indicate that there is far more capacity than required for the volumes that use the street. The proposed project should easily fit within the City's LOS standards.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies and programs address the effects of future development on the street and roadway system:

General Plan Policies

3.A.1. The City shall expand and maintain its streets and highway system according to the classifications depicted in Figure 3-1.

3.A.5. The City shall encourage Caltrans to maintain a Level of Service D or better on Highway 101.

3.A.8. The City shall encourage the Department of Corrections to address and mitigate traffic impacts of future expansion of its facilities upon local and State roadways.

3.A.9 The City shall expand and maintain its road system according to the classifications and designations shown in Tables 3-1, 3-2, and 3-3 of the Draft General Plan Policy Document.

3.A.10 The City shall require that all developers of commercial, industrial, and multi-family residential development provide public road access, unless the development is part of a private planned development for which special road management provisions are approved.

3.A.11 The City shall utilize the Caltrans Highway Design Manual and Traffic Manual to ensure the development of adequate, safe public roadways, including, but not limited to, warrants for traffic control devices such as stop signs or traffic signals.

3.A.*12 The City shall endeavor to manage its roadway system so as to maintain Level of Service C operation, except for when streets intersect with Highway 101, where Level of Service D shall be acceptable.*

3.A.13 The City shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

3.A.14 The City shall attempt to minimize through-traffic on neighborhood roadways. This through-traffic, including through truck-traffic, shall be directed to appropriate arterials and collectors in order to maintain public safety and local quality of life.

3.A.15 The City shall continue to require all new development to provide off-street parking, either on-site or in consolidated lots.

3.A.16 The City shall require new land development projects to contribute their fare share of transportation improvement costs, based on trip generation. Any project that is expected to generate more than 50 trips per day shall be required to submit a traffic analysis as part of the permit application and will be required to mitigate traffic impacts identified. Regardless of the number of trips generated by a given project, a traffic study may be required if traffic safety issues warrant such a study.

3.A.17 The City shall secure financing in a timely manner for all components of its transportation system to achieve and maintain its adopted level of service standards.

3.A.18 The City shall continue its program of maintenance and minor improvements to the existing public roadway system in order to maintain its capacity.

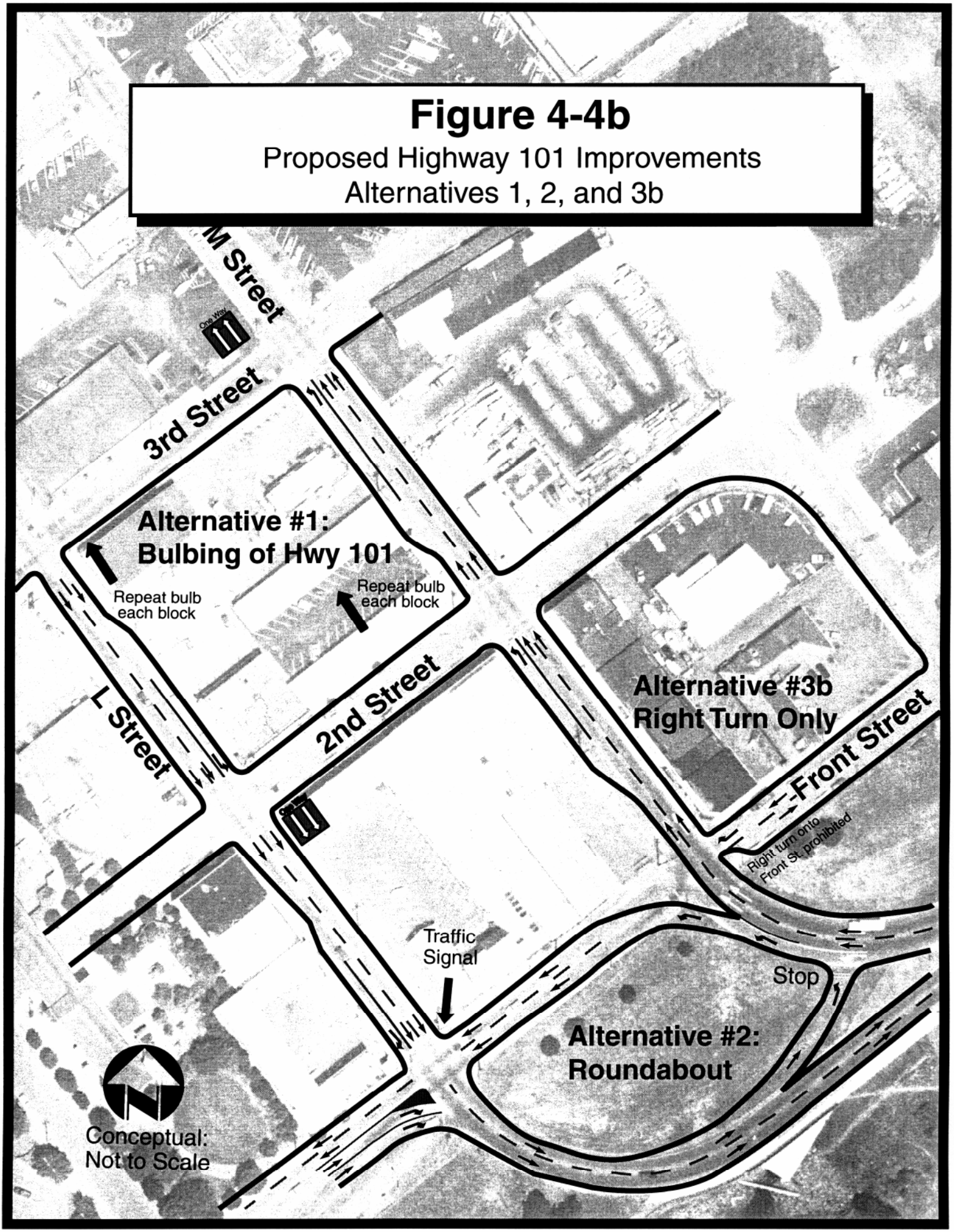


Figure 4-4b
Proposed Highway 101 Improvements
Alternatives 1, 2, and 3b
M Street
One Way
3rd Street
Alternative #1:
Bulbing of Hwy 101
Repeat bulb
each block
Repeat bulb
each block
L Street
2nd Street
Alternative #3b
Right Turn Only
Front Street
One Way
Right turn onto
Front St. prohibited
Traffic
Signal
Stop
Alternative #2:
Roundabout
Conceptual:
Not to Scale

3.A.19 Local road construction located within the incorporated limits of Crescent City should be at the discretion of, and in accordance with, priorities established by the City Council and the City Department of Public Works.

3.A.20 The City should develop a listing of future improvements and construction projects to be undertaken within the City and categorize these projects as to need, cost, length of time involved, and public support. The City should prioritize these projects. This list will serve only as a guide to development and can be used by various agencies in their planning efforts.

3.A.21 The City and County should cooperate in improving the approaches to the City area by Highway 101.

3.A.22 The City shall investigate the possibility of using "bulbing" along the couplet, creating a roundabout on Highway 101 just south of Front Street, and closing off Front Street at Highway 101 (see Figure 3-3a).

3.A.23 The City shall investigate the possibility of making improvements to Front Street (between A and L Street) such as providing additional parking and constructing landscaped and concrete median strips (see Figure 3-4).

General Plan Response

Maintaining Acceptable Levels of Service

Policies 3.A.5., 3.A.12, and *3.A.13* will help ensure the City will maintain acceptable levels of service on the city's street and highway system.

Future Improvements

Policy 3.A.22 ensures that the City will identify future improvements and construction projects in order to maintain acceptable levels of service.

Financing for Improvements

Policy 3.A.17 ensures that the City will secure financing improvements to the system to achieve and maintain its adopted level of service standards.

IMPACTS

Based on the standards of the General Plan and the thresholds of significance, the Land Use Diagram, in conjunction with projected future growth in through traffic, is projected to create significant impacts at the following two locations:

- U.S. 101 between 9th Street and Northcrest Drive
- Parkway Drive - Washington Boulevard to U.S. 199

MITIGATION MEASURES

The locations where significant impacts are projected can be considered separately in determining appropriate mitigation measures:

U.S. 101 between 9th Street and Northcrest Drive: This is a location where the demand is projected to exceed capacity at the buildout of the General Plan (LOS F). Current City and County policy is to not construct a bypass around Crescent City, a project that would alleviate this problem. An alternative is to widen U.S. 101 in this location; however, this would create a nine-lane cross-section in this segment, a facility size that is not in keeping with the size and nature of the community.

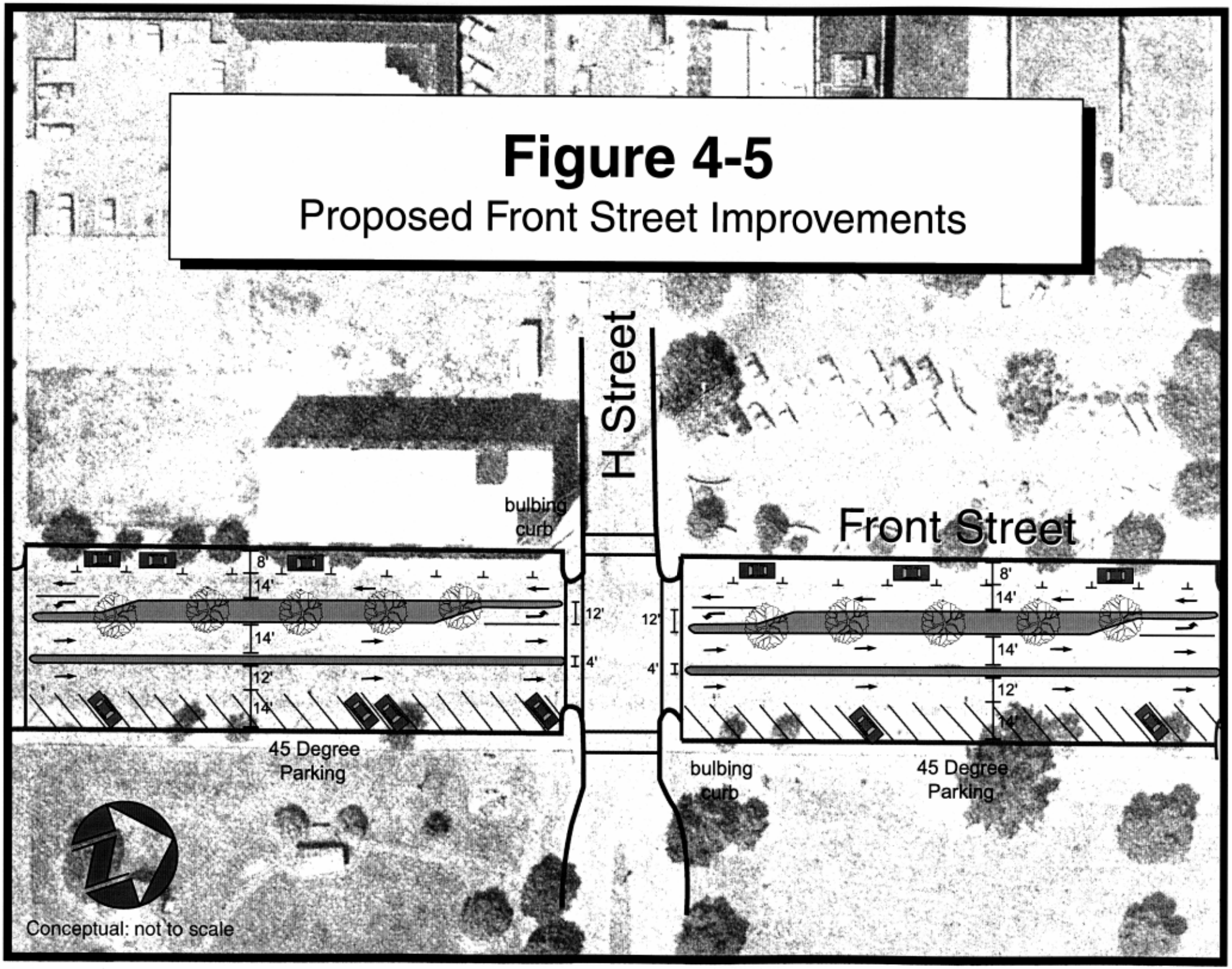


Figure 4-5
Proposed Front Street Improvements
H Street
Front Street
bulbing curb
8'
14'
14'
12'
14'
12'
4'
45 Degree Parking
bulbing curb
45 Degree Parking
Conceptual: not to scale

The traffic analysis in this EIR is based on the assumption that buildout of the General Plan will occur in 25 years. At buildout this segment is projected to exceed capacity by only five percent. Further, it is expected that the LOS F condition would occur for at most one hour a day (PM Peak Hour). Twenty-five years is a very long time frame for projecting traffic impacts. It is speculative that traffic volumes will reach LOS D, E, or F within this time frame. Because of this uncertainty, it is unreasonable for the city at this point to commit to a major traffic improvement that may not be needed.

General Plan *Policy 1.L.1* requires that the City review the General Plan annually and *Policy 1.L.3* calls for a major update every five years. Therefore, traffic impacts, transportation policies, and proposed improvements will be reevaluated several times over the next 25 years, providing ample time to address problems projected at this point for build out.

To more specifically address this potentially significant impact, a policy/program could be addressed in the General Plan that suggests that this segment of U.S. 101 be monitored every five years to validate the traffic projection and to determine if congestion beyond acceptable levels is actually occurring. If demand comes within 10 percent of capacity (the boundary between LOS D and E), the involved agencies (City, County, LTCo, and Caltrans) should undertake a traffic study to consider alternative solutions. However, even with this mitigation, the impact is still considered significant.

Parkway Drive - Washington Boulevard to U.S. 199: This is a county road that is projected to operate at Level of Service D, whereas the standard in the General Plan is LOS C. A review of Table 4-6 indicates that the volume/capacity ratio for this segment is less than 0.60. However, the Highway Capacity Manual defines this range as LOS D. In actuality, it is possible that this roadway will continue to operate efficiently, regardless of the computed volume/capacity ratio.

Similar to that discussed above, a policy/program could be addressed in the General Plan that specifically addresses this potentially significant impact, such as monitoring the roadway every five years to determine if congestion is actually occurring.

Even with the implementation of the aforementioned mitigation measures, the impact to U.S. 101 between 9th Street and Northcrest Drive and Parkway Drive between Washington Boulevard to U.S. 199 is still considered significant.

4.2 ALTERNATIVE TRANSPORTATION MODES

This section assesses the potential effects of development under the General Plan on Crescent City's several alternative modes of transportation.

ENVIRONMENTAL SETTING

Existing public transportation, non-motorized transportation, aviation, maritime, railroad and tele-transportation modes are discussed in Chapter 3 of the General Plan Background Report.

There are several providers of public transportation in Del Norte County. The Redwood Coast Transit - Klamath Public Bus Component provides fixed route service between Crescent City and Klamath twice per day, six days a week. The Redwood Coast Transit - Dial-A-Ride Component provides demand-responsive service in the greater Crescent City Area. The Consolidated Transportation Service Agency provides service for several social service agencies and needs.

Private service is provided by Western Greyhound Lines with service to and from Crescent City north and south on U.S. 101.

The Del Norte County and Crescent City Bicycle Facilities Plan was originally adopted in 1987 and is subsequently updated every two years, most recently in 1994, 1996 and 1998. The Plan identifies a system of bikeway routes in the city and county. Table 4-10 identifies the facilities in the Greater Crescent City Area.

TABLE 4-10

BIKE ROUTES IN GREATER CRESCENT CITY AREA
City of Crescent City
1996

Bikeway	Class
Hobbs Wall Trail (Parkway to Howland Hill)	Class I
K Street (9th to Front Street)	Class III
Harbor Trail (Howe Drive Path to 101 via Starfish)	Class I and II
Front Street (A to N St)	Class I and III
Railroad Ave (Parkway to Elk Valley Rd)	Class I and II
Coastal Trail/Highway 101 (selected segments)	Class I and II
A Street (Front Street to Lighthouse)	Class I and III
Riverside Trail (Washington through Dead Lake SP)	Class I and II
Enderts Beach Road (Hwy 101 to lookout)	Class I and II
Pebble Beach Drive (Washington to 9th St)	Class I, II and III
2nd Street (K Street to Elk Creek)	Class I, II and III
Coast to Caves Trail (RNSP/SRNRA)	Class I, II and III
Inyo Street (Washington to Hamilton)	Class II
Hamilton Ave (El Dorado to Inyo)	Class II
Howe Drive/Lighthouse Path (Lighthouse to Elk Creek)	Class I
Blackewll Ave (Northcrest to Railroad)	Class II
Parkway Drive (Washington Blvd to Route 199) -	Class II
Howland Hill Road (Elk Valley Rd to RNSP)	Class II
Humboldt Road (Howland Hill Road to Hwy 101)	Class II
Coastal Trail (Pebble Beach Dr. to Lighthouse)	Class I, II and III
Old Mill Road (Northcrest to Wildlife Area)	Class II
Northcrest Drive (Washington to Standard Veneer)	Class II and III
Washington Blvd	Class II and III
Elk Valley Road	Class II and III
El Dorado Street (Hamilton to DNHS)	Class III
Harding Ave (El Dorado to City Limits)	Class III
Fresno Street (Hamilton to Pacific)	Class III
Pacific Ave (Pebble Beach to H St)	Class III
Magruder St. (Elk Valley Road to Kent Street)	Class I
Harbor x Trail (Rees/Towers from Magruder - Harbor Trail)	Class I

Source: Del Norte County and City of Crescent City Bike Plan, 1999; and City of Crescent City Planning Department, 1999.

Jack McNamara Field serves as the principal airport for the City of Crescent City and the greater Crescent City area. Due to the lack of railroads in the county, this airport serves as an important transportation route for business persons and tourists from outside the immediate region. Commuter airline services, such as United Express, provide flights to and from Eureka/Arcata airport with connections to major cities. Aviation activity is not expected to increase significantly.

Maritime activities in Del Norte County are confined to the Crescent City Harbor area, the Klamath River area and the Smith River area. The Crescent City Harbor is not included within the study area for the update of this portion of the General Plan. There are several float landings supporting sport fishing at the mouth of the Klamath River; only small boat activities are possible on either river due to narrow and shallow channels.

There are currently no railroads within Del Norte County. A narrow gauge railroad between Smith River and Crescent City existed to assist with the logging industry in the 19th century. The nearest railroad services are provided by the Northern California Railroad Authority.

Tele-transportation is a new form of communication that has the potential to be particularly valuable in relatively isolated areas of California such as Del Norte County. Technology and services are changing rapidly, and a present-day status is likely to become obsolete between the time that this section was written and the time that it is published. The North Coast has several local Internet service providers. The communications potential of tele-transportation can become a partial substitute for other forms of transportation, and can potentially reduce demand somewhat on the roadway system.

METHODOLOGY

Assumptions

- Current forms of alternative modes of transportation will continue to be present at essentially the current levels of service throughout the lifetime of this plan.

- Increases in communications technological capabilities may allow for minor substitutions of communication for transportation.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss public transit and other alternative modes of transportation as an issue to be addressed in the environmental review process. Such services do, however, play an important role in the overall development of a community's transportation system. For the purposes of this EIR, an impact is considered significant if new development would adversely affect existing transit services or would create demand for such services that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Land Use Diagram proposes an extension of essentially the same development patterns and densities that are present today in Crescent City Planning Area. The increased population will bring with it an increased demand for public transportation services; funding for a major portion of the public transit system is population-based. Thus, it is expected that population growth and funding growing in parallel should not create an unacceptable demand on the City's ability to provide public transit services at its current level.

Other alternative modes of transportation will not be affected by any expansion of population or non-residential growth.

GENERAL PLAN RESPONSE

General Plan Policy

3.B.1. The City and County, jointly, shall continue to work with public transportation service providers to plan and implement additional services within and to the city that are timely, cost-effective, and responsive to growth patterns and ridership demand.

3.B.2. The City shall continue to pursue all available sources of transit funding for transit services.

3.B.3. In conjunction with the Local Transportation Commission (LTCO), the City shall consider the transportation needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding public transportation services and in compliance with the Americans with Disabilities Act.

3.B.4. The City shall continue to support efforts to provide demand-responsive service ("dial-a-ride") and other transportation services for those unable to use conventional transit.

3.B.5. The City shall give highest priority for public transit facilities and services to areas of high intensity use and/or focused commuter-employment areas.

3.B.6. Where appropriate, the City shall require new development to dedicate easements for and provide sheltered public stops for transit patrons.

3.B.7. The City shall work to broaden ridership of public transit to increase farebox revenue and decrease reliance on subsidies.

IMPACTS

No significant impacts are projected on alternative modes of transportation as a result of the Land Use Diagram.

MITIGATION MEASURES

No mitigation measures will be required beyond the policies and programs included in the General Plan.

CHAPTER 5

PUBLIC FACILITIES AND SERVICES

This chapter assesses the potential impacts of development under the General Plan on public facilities and services including: water supply and distribution; wastewater collection, treatment, and disposal; storm drainage; solid waste; law enforcement; fire protection; schools; parks; and public utilities.

5.1 WATER SUPPLY AND DISTRIBUTION

ENVIRONMENTAL SETTING

The City of Crescent City operates the water supply and distribution system serving the city and portions of the greater Crescent City area. Figure 5-1 shows the City's current Water Service Area. Crescent City originally purchased the water system from a private water company called the Crescent City Water Company. Prior to purchase of the water system, the water company provided service to the City and the unincorporated areas surrounding the city. After the purchase, the City installed a cement-lined, cast-iron pipe in 1958 to transport water from the Ranney Well on the Smith River to the City's distribution system. The City also continued to provide service to existing customers outside the city limits. In the 1960s, booster pumps were added to the system. In 1963, the City built a storage and pumping facility to increase the water supply to the downtown area of Crescent City. In the 1970s, pumps were added to the system to increase the amount of water into the city. By the 1980s, the City experienced difficulties with system pressures.

Demand

According to estimates in the 1992 Water Master Plan, 70 percent of the system users are outside the city limits. However, since 19.3 percent of that usage is from the prison, total incorporated city usage is 50.7 percent. Excluding the prison from both the county and the city, the distribution would be 62.8 percent of accounts and 61.3 percent flow in the unincorporated area, and 37.2 percent of accounts and 38.7 percent flow in the city limits. Current commercial flows of both the city (18 percent) and the unincorporated areas (21 percent) are very close. Residential flows are much higher. Residential usage in the unincorporated areas is twice that of the city's residential areas.

In 1997, the water system serves 3,696 accounts per month (including Pelican Bay Prison). Water consumption is at 62,387,688 gallons per month (gpm) and 748,652,256 gallons per year (gpy). The average daily demand for the water system is 2,051,102 gallons per day (gpd). Without the Pelican Bay State Prison, the average daily demand is 1,679,667.

The water supply has started to fall behind consumer demand. Transmission lines have become increasingly inadequate in delivering water to meet peak demands. As a result, water flow can reach low pressure levels, especially during summer peak periods, causing concern for fire protection districts who rely on the water pressure to fight fires.

Facilities

Wells

Crescent City obtains all of its water from the Smith River via a well point type structure known and patented as a "Ranney Well." A Ranney Well is a large caisson built with feeder tubes with vertical turbine pumps located on the top of the caisson. River water flows through the natural sands and gravels on the river bottom and through the pipelines into the caisson. The pumps deliver the water from the caisson to the City's water system. The well is located on the river's bank approximately 8.5 miles north of the city limits.

The well and the transmission line were constructed in 1958. Since that time, the Smith River has continued to be an abundant and reliable source of water. Due to the high quality of the water taken from Ranney Well, the City has limited water treatment to additions of chlorine and fluoride prior to distribution.

Booster Pump Stations and Storage Facilities

There are five pump stations with 11 individual pumps within the Crescent City water system. Three pumps are located within the Ranney Well on the Smith River. A telemetry circuit signals these pumps to operate based on the water level in the elevated 50,000 gallon reservoir. The first pump operates at a depth of 10 feet in the reservoir, the second pump becomes operational when the levels in the reservoir drop to eight feet, and the third pump begins operating when the reservoir level falls to six feet in depth.

There are three large reservoirs in the system. An elevated 50,000 gallon equalization-storage tank is located nearly three and a half miles from the Ranney Well, and is utilized for suppression and pump control. The water surface elevation is 210 feet and the ground elevation is approximately 135 feet, providing 75 feet of static elevation. Each of the pumps has the capability of pumping 1,680 gpm into the elevated reservoir at a depth of 235 feet of total dynamic head. The Washington Blvd. Reservoir has a one million gallon capacity and has a maximum water surface elevation of 77.1 feet and a base elevation of 45.4 feet. The Amador Street Reservoir is the largest reservoir in the water system with a 1.5 million gallon capacity. The maximum water surface level is 89 feet and the base elevation is 50.4 feet.

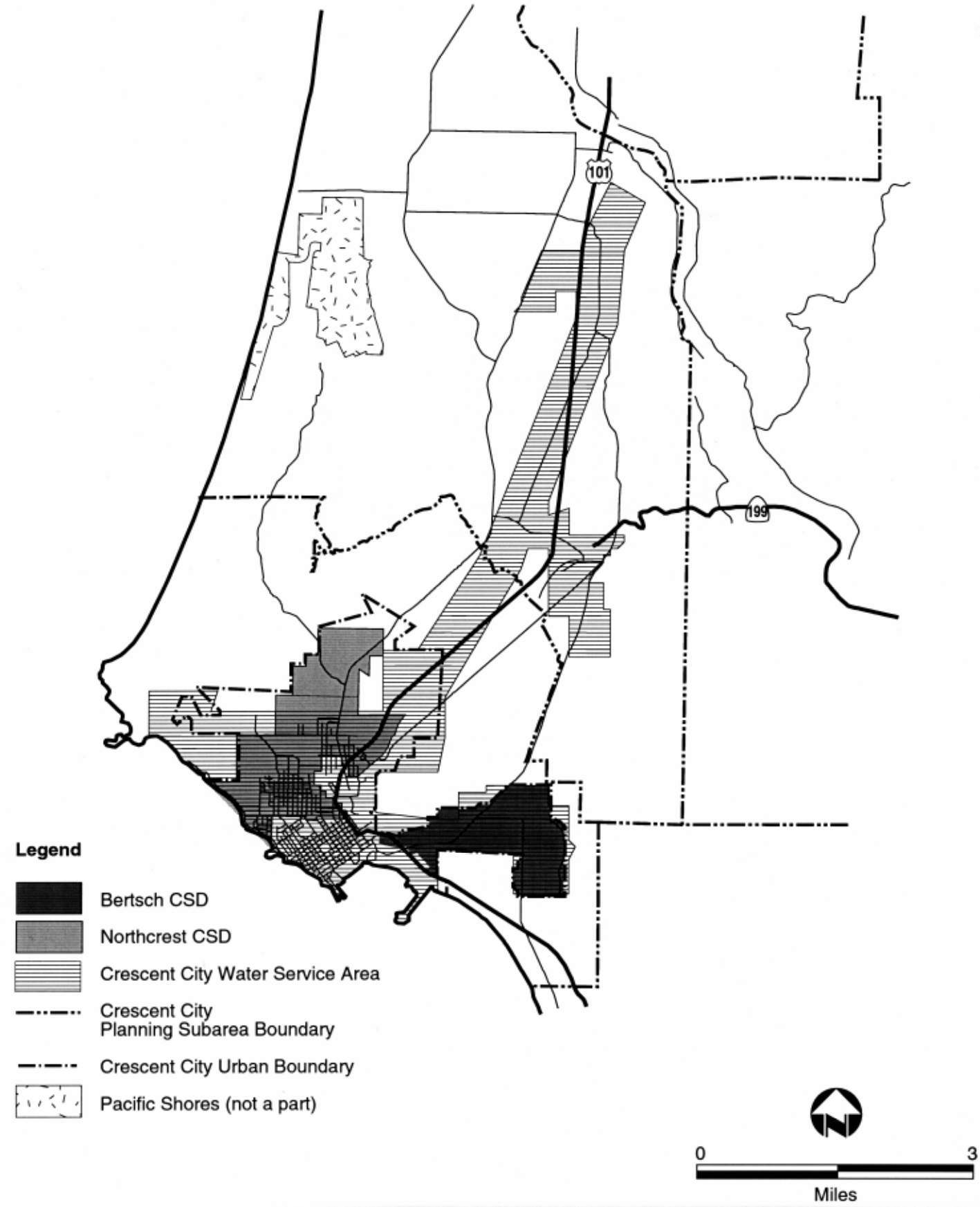
Transmission and Distribution

Water is pumped at high pressure levels from the Smith River through a single-barrel transmission system for approximately nine miles to the City distribution system. The original transmission main, approximately 44,600 feet in length, begins as a 14-inch pipeline at the water intake, and reduces in size as it approaches the city to a 10-inch pipe before it interconnects with the distribution system. Pelican Bay State Prison is linked to the main transmission system by a 18-inch diameter ductile iron line.

Many pipes are constructed of cement lined cast iron. Much of the cement lined pipe has been replaced since 1960, with steel and unlined cast iron. The second most abundant type is asbestos cement, used mostly in the 1970s. From 1980 to the present, the most common replacement pipe has been PVC .

Facility Improvements

The City water system has started to fall behind consumer demand. The existing single transmission line has become increasingly inadequate in delivering water to meet peak demands. As a result, water pressure levels are low at times, especially during summer peak periods. In early 1998, the City of Crescent City approved a plan for an expansion project that would add $7 million in improvements to the current system. Including indirect costs, the total cost to the City would be roughly $9 million. The proposed improvements include the following:



Jones & Stokes Associates, Inc.

Figure 5-1
Crescent City Water Service Area, Crescent City Urban Area, and CSD Boundaries

- install a new 24-inch transmission line (approximately 37,000 lineal feet);
- install distribution lines, from the new transmission line to the existing distribution line, approximately 5,000 lineal feet of 16 inch distribution lines;
- install approximately 600 lineal feet of 8 inch line, to loop new-to-existing dead-end;
- demolition of an existing pumping station and an on-site one million gallon storage tank;
- install a new pumping station and a four million gallon storage site on same parcel where demolition occurred;
- modify an existing pumping station (i.e., change out one of the pumps and dedicate by controls) to an outlying area;
- intertie new system to an existing system at eight different locations;
- major telemetry and system controls upgrade (i.e., nine RTU sites and SCADA installation at Corp. Yard);
- add a fill inlet to an existing storage tank (currently only one inlet from which to fill or to supply demand); and
- increase the system's capacity to 7.13 mgd.

The capital improvement plan for the expansion project is divided into two phases: Priority 1 and Priority 2 improvements. Priority 1 will start at Highway 101 and Wonderstump at the elevated tank site, and go south into the city. Priority 2 improvements will add a 24 inch transmission main from the river to the Priority 1 starting point (Highway 101 and Wonderstump) and some distribution system improvements (i.e., looping in order to eliminate dead-ends). Construction of Priority 1 began in May 2000.

Areas Outside the Crescent City City Limits

The City of Crescent City water system provides water service for the Bertsch Ocean View Community Service District (BOV CSD) and most of the unincorporated area within the Crescent City urban boundary. There are several enclaves within the urban boundary north of Crescent City that do not receive their water from the City's water system. These enclaves, which include urban-sized lots, obtain their water from individual wells. In addition, portions of the Crescent City Planning Area within the urban boundary, such as Jack McNamara Airport, have substandard pipelines. The rest of the Crescent City subarea outside the urban boundary relies on individual on-site wells.

Bertsch Ocean View Community Services Area

The Bertsch Ocean View Community Service District (BOV CSD) serves a small outlying area just east of Crescent City. The District contracts with the City of Crescent City for its water service. The system connects to the Crescent City water system near Highway 101 and consists of a pump station (which operates at 180 gallons per minute (gpm)), 6 to 12 inch water lines, and a 750,000 gallon storage tank. There are 583 residential and commercial service accounts within the District that consume 53,885 gallons per month and 646,620 gallons per year. The average daily demand is 1,772 gallons per day.

Since the BOV CSD system is hooked onto the Crescent City Water System, improvements to the Crescent City water production facilities must be made before capacity in the BOV CSD can be improved. In other words, the current water distribution system (pipelines) must deliver adequate water volume and pressure to the BOV CSD connection point to ensure all users are adequately served.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess water supply and distribution impacts resulting from development under the General Plan.

Assumptions

- This analysis assumes each dwelling unit will generate between 250 and 330 gallons of potable water per day.
- This analysis assumes commercial land use will generate average demand for 1,170 gallons of potable water per acre.
- The typical water demand for an industrial building in the Planning Area is difficult to determine due the tremendous range in use. Therefore, it is difficult to identify a reasonable generation rate. However, since industrial land use requires large quantities of water, it is important to reflect the typical amount industrial water demand. This analysis assumes industrial land use will require an average of 3,500 gallons of water per acre per day. This number is based on Consultant estimates derived from other city/county General Plan EIRs.
- Gallons per day refers to average dry weather flows.
- For the purposes of this analysis, water demand from land uses such as agriculture and public facilities will not be estimated.
- The City of Crescent City will give the highest priority for water service provision to all development within the Urban Boundary.
- The City will continue to work with the County in following the water conservation program outlined in the 1992 Crescent City Water System Master Plan.
- Estimates for the Pelican Bay State Prison water demand at buildout (2020) were based on projections in the 1992 Crescent City Water System Master Plan.
- The new system will be completed with a capacity of 7.13 mgd.

Thresholds of Significance

For purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in new development whose water demand would exceed existing system capacity or planned capacity (i.e., facility expansion or addition of wells), if the water supply would not be adequate to serve projected new development, or substantially degrade or deplete groundwater supply.

IMPLICATIONS OF THE LAND USE DIAGRAM

Table 5-1 shows existing water demand and estimated future demand based on development estimates for buildout of the Land Use Diagram.

TABLE 5-1

ESTIMATED RESIDENTIAL WATER DEMAND
Crescent City Planning Area

Land Use	New Growth		Buildout	
	Units/ Acres	Gallons/ Day	Units/ Acres	Gallons/ Day
Residential				
City of Crescent City	294	62,500 -97,020	2,197	549,250 -725,010
Unincorporated Crescent City	5,309 (4,924)*	1,327,250-1,751,970 (1,231,000 - 1,624,920)	9,086 (8,711)	2,271,500 - 2,998,380 (2,177,750 - 2,871,330)
SUBTOTAL	5,603 (5,218)	1,400,750 - 1,848,990 (1,304,500 - 1,722,010)	11,283 (10,908)	2,820,750 - 3,723,390 (2,727,000 - 3,596,340)
Commercial				
City of Crescent City	87	101,790	232	271,440
Unincorporated Crescent City	217	253,890	368	430,560
SUBTOTAL	304	355,680	600	702,000
Industrial				
City of Crescent City	0	0	0	0
Unincorporated Crescent City	150	525,000	304	1,064,000
SUBTOTAL	150	525,000	304	1,064,000
Pelican Bay State Prison	1	0	1	450,000
TOTAL	n/a	22,814,460 -2,729,670 (2,185,180 - 2,602,620)	n/a	5,036,750 - 5,939,390 (4,943,000 -5,812,340)

Note: Utilization of secondary units in the areas designated BP and VLC will add an additional 877 new dwelling units or 2,097 new residents. These new units would further increase the amount of water consumption in the city to 289,410 gallons per day. *Of the 5,309 units, 4,924 will be on the public water system while the other 385 will be on wells. Demand within the Urban Boundary will create a demand for 1.62 mgd.

Source: Mintier & Associates, May 2000.

Buildout of the General Plan will increase demand for potable water in the Crescent City Planning Area. New development under the General Plan Land Use Diagram will result in consumption of approximately 2.6 million gallons per day (mgd) from the water system. At buildout, the total demand in this area will reach nearly 5.8 mgd on the water system.

The other 385 units outside of the urban boundary will be dependent upon individual on-site wells. Since groundwater is plentiful in this area, there are no anticipated deficiencies in meeting the demand.

GENERAL PLAN POLICY RESPONSE

The following policies address the implications of development under the General Plan on the City's water supply and distribution system:

General Plan Policy

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2. The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.B.1. The basic improvements to the Crescent City area public water system should be made to increase its production and transmission capability so it will serve development within the Urban Boundary.

4.B.2. The City shall consider requiring, when determined necessary, that new development institute water conservation measures (e.g., flow restrictors, industrial recycling, or usable wastewater) to lessen cumulative impacts on existing water systems and supplies. The City should also encourage existing development to apply such measures.

4.B.3. The City shall approve new development only if an adequate water supply to serve such development is demonstrated and require that water supplies serving new develop meet State water quality standards.

4.B.4. The City shall require that all new development within the Urban Boundary using a private water system have the ability to connect to the municipal water system should service become available.

4.1 Upon annexation of land within the Urban Boundary, the City shall prepare an analysis of that land to determine if the infrastructure and capacity are available for connection to the water system.

General Plan Response

Water Service Availability

Policy 4.A.1. ensures the City will only approve new development when adequate water service delivery is available. *Policy 4.B.1.* ensures that basic improvements to water system be made so it will serve development within the Urban Boundary**.**

Funding

Policy 4.A.2. addresses the need for new development to contribute its fair share of providing water service.

Water Conservation

Policy 4.B.2. addresses the need lessen cumulative impacts on existing water systems and supplies by requiring new development to institute water conservation measures.

IMPACTS

Buildout of the General Plan will increase the demand for potable water. Within the Planning Area, development under the General Plan will result in the demand for a total of 5.8 mgd. Under existing conditions, it is likely that water demand will exceed the planned capacity of the existing water system by

1.3 mgd. However, with construction of the improvements to the transmission system underway, the improved water system will have a capacity of 7.13 mgd, enough to accommodate buildout under the General Plan. In addition, *Policy 4.A.1.* ensures that adequate facilities are available or will be available before new development may be improved. With these policies in place and improvements to the existing system expected to be completed in 2001, the impact is considered less than significant.

MITIGATION MEASURES

No additional mitigation measures beyond those in the General Plan are necessary.

5.2 WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL

ENVIRONMENTAL SETTING

The Crescent City Municipal Wastewater Treatment and Disposal Facility, located at 210 B Street and Battery Point, serves the City of Crescent City and parts of the greater Crescent City area. This facility, which serves a population of 12,000, is designated by State and Federal agencies as the Regional Waste Water Facility The facility's original (1979) design capacity was 1.55 mgd for average dry weather flow and 3.1 mgd for wet weather flows. The current design capacity is 1.89 mgd for average dry weather flow and 4.3 mgd for peak wet weather flows. Treatment consists of screening, preaeration, primary sedimentation, rotating biological contactors, secondary sedimentation, digestion, disinfection, and dechlorination. Sludge is anaerobically digested and dewatered with a filter belt process. Treated and disinfected effluent is discharged through a short outfall into the Pacific Ocean at Battery Point Lighthouse. In 1987, Nolte & Associates conducted a facility improvement study that recommended improvements that would bring the design capacity up to 7.3 mgd. Several improvements were made by the City in 1990 that increased capacity of the plant to roughly five to six mgd. These improvements fell short of the study's recommended design capacity due to limitations with effluent pumps.

Hydraulically, the plant is overloaded by the inflow and infiltration in the winter. In summer months, the plant is organically overloaded. Also during the summer, the physical solids handling process is at capacity and sometimes exceeds capacity, to the point where digestion time for the solids is short-circuited. Needed short-term improvements include digester modifications and polymer enhancement for solids setting, to improve biological removal and improve solids handling, so that digester residual times are increased. In addition, long-term plans for solids disposal must be considered since the landfill will close in the year 2001. Therefore, a land application program needs to be ready for implementation by 2001.

Despite the aforementioned problems and the treatment plant running at full capacity with some days exceeding the design capacity, there are no current plans for expansion of this facility. However, long term facility improvement planning will begin within the year that will include consideration of this facility. The study will consist of a feasibility study that examines treatment capacity alternatives for the county-wide area.

Harbor Wastewater Treatment Plant

The Harbor Wastewater Treatment Plant, located at and owned by the Crescent City Harbor District, serves solely as a seafood processing wastewater facility. The treatment plant has a design capacity of approximately 800,000 gpd, and currently runs considerably below design capacity. All by-products left from processing are disposed of at Hambros and some fish carcasses are disposed of at the Crescent City Landfill. Wastewater from this plant is discharged through the same outfall into the Pacific Ocean. The outfall is shared with the Municipal Wastewater Treatment Plant.

This treatment plant has proven to be controversial due to the odors produced by the plant's fish processing. Hydrogen sulfide produced by the plant during shrimping season (April through October) creates a nuisance

for recreational users within the harbor. In early 1998, the City turned over ownership of the treatment plant to the Crescent City Harbor District. The Harbor District is working with the City and County to correct the odor problems in the near future.

Outside Crescent City City Limits

A portion of the unincorporated Crescent City subarea is served by a wastewater collection system, which is owned and maintained by the County Service Area No.1 (CSA). CSA No. 1 consists of two areas — Northcrest and Bertsch Ocean View. The remainder of the Crescent City unincorporated area uses on- site sewage disposal(the predominant type of disposal in the area) - even in areas within the urban boundary. Sewers were put into the Northcrest and Bertsch-Ocean View areas because soils were not suitable for higher densities.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess wastewater collection and treatment impacts resulting from development under the General Plan.

Assumptions

- This analysis assumes each dwelling unit will generate between 250 and 330 gallons of wastewater per day.
- This analysis assumes commercial land use will generate an average of 1,170 gallons of wastewater per acre.
- The typical wastewater generation for an industrial building in the Planning Area is difficult to determine due the tremendous range in use. Therefore, it is difficult to identify a reasonable generation rate. However, since industrial land use produces large quantities of wastewater, it is important to reflect the typical amount industrial wastewater generated. This analysis assumes industrial land use will generate average 3,500 gallons of wastewater per acre per day. This number is based on Consultant estimates derived from other city/county General Plan EIRs.
- Gallons per day is based on dry weather flows.
- The Crescent City Wastewater Treatment Plant has experienced high levels of inflow and infiltration. However, since reliable estimates of inflow and infiltration I&I quantities are not available, they will not be factored into this analysis.
- The City has been undertaking measures to reduce I&I on the system. I&I reductions/improvements will reduce wet weather volumes.
- The Pelican Bay State Prison will continue to operate their own wastewater system.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in new development whose wastewater demand would exceed existing system capacity or planned capacity (i.e., facility expansion).

IMPLICATIONS OF THE LAND USE DIAGRAM

Table 5-2 below shows the estimated future residential, commercial, and industrial wastewater generation levels at buildout of the Land Use Diagram.

TABLE 5-2

ESTIMATED WASTEWATER GENERATION
Crescent City Planning Area

Land Use	New Growth		Buildout	
	Units/ Acres	Gallons/ Day	Units/ Acres	Gallons/ Day
Residential				
City of Crescent City	294	62,500 - 97,020	2,197	549,250 - 725,010
Unincorporated Crescent City	5,309 (3,767)*	1,327,250 - 1,751,970 (941,750 - 1,243,110)	9,086 (7,544)	2,271,500 - 2,998,380 (1,886,000 - 2,489,520)
SUBTOTAL	5,603 (4,601)	1,400,750 - 1,848,990 (1,150,250 - 1,340,130)	11,283 (9,741)	2,820,750 - 3,723,390 (2,435,250 - 3,214,530)
Commercial				
City of Crescent City	87	101,790	232	271,440
Unincorporated Crescent City	217	253,890	368	430,560
SUBTOTAL	304	355,680	600	702,000
Industrial				
City of Crescent City	0	0	0	0
Unincorporated Crescent City	150	525,000	304	1,064,000
SUBTOTAL	150	525,000	304	1,064,000
TOTAL	n/a	2,281,430 - 2,729,670 (2,030,930 - 2,220,810)	n/a	5,036,750 - 5,489,390 (4,201,250 - 4,980,530)

Note: Utilization of secondary units in the areas designated BP and VLC will add an additional 877 new dwelling units or 2,097 new residents. These new units would further increase the amount of wastewater generated in the city to 289,410 gallons per day.

*Of the 5,309 units, 3,767 units will be on the public wastewater conveyance and treatment system while the other 1,542 will require individual septic tanks. Demand within the Urban Boundary will create a need for 1.2 mgd to be collected and treated.

Source: Mintier & Associates, May 2000.

A large portion of the area within the Crescent City urban boundary is serviced by the Crescent City Municipal Wastewater Treatment and Disposal Facility. At buildout the area within the Crescent City Urban

Boundary will generate approximately 5.0 mgd of wastewater. Due to limitations by the ocean outfall, the capacity of the treatment plant is nearly 4.0 mgd, which would leave a gap of approximately 1.0 mgd. In addition, the existing wastewater treatment plant currently (May 2000) has insufficient hydraulic and treatment capacity to meet discharge requirements. Much of the hydraulic overload is attributed to excessive inflow and infiltration due to an old, poorly constructed collection system. This has resulted in the release of partially treated and/or undisinfected wastewater to both the ocean outfall and the harbor. Under the current treatment and conveyance system, new growth under the Land Use Diagram could not be supported by the wastewater treatment plant in its current condition.

Areas outside of the urban boundary will continue to rely on individual septic systems. The area's 1,542 dwellings units would create a demand for 508,860 gallons per day. This area has good soil conditions and has the capacity to accommodate new growth at low densities.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's wastewater collection, treatment, and disposal systems:

General Plan Policies

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2. The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.C.1. The City shall promote efficient water use and reduce wastewater system demand by:

- *a. Requiring water-conserving design and equipment in new construction;*
- *b. Encouraging retrofitting with water-conserving devices; and*
- *c. Designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible.*

4.C.5. The City shall reserve funds to expand the capacity of its wastewater treatment system in order to develop additional operational capacity necessary for the full development of areas in and out of the Coastal Zone.

4.C.2. The City shall work with the County to develop a Crescent City wastewater master plan based on the recommendations of the Community Wastewater Conveyance and Treatment Feasibility Study to reduce hydraulic and nutrient loading on the Crescent City Wastewater Treatment Plant. The master plan shall recommend either establishment of a regional wastewater treatment facility for the Crescent City urban area, establishing satellite wastewater treatment facilities, expanding the existing wastewater treatment plant, or a combination of two or more improvements.

4.C.3. The City shall provide sewer services to those areas in the Coastal Zone in a manner which will allow the development consistent with the City's zoning regulations, and which will not preclude development in the Zone by the arbitrary assignment of services outside the Zone.

4.C.4. In order to assure that the City is preserving adequate capacity for Coastal Zone development, the City shall meet bi-annually with representatives of the County of Del Norte and the Harbor District to discuss future development plans and sewer services demands.

4.2 The City shall reserve funds to expand the capacity of its wastewater treatment system in order to develop additional operational capacity necessary for the full development of areas in and out of the Coastal Zone. The City shall prepare a summary report of its meetings with the County and Harbor Commission, and a copy of

its Capital Improvement Budget. Said report shall describe the future development plans and method for providing sewer connections. Upon completion of the report, copies shall be available for public review and comment.

General Plan Response

Wastewater Treatment Service Availability

Policy 4.A.1. ensures that adequate capacity is available to serve new development before that development is approved. *Policy 4.C.2.* addresses the need for the City to identify system improvement alternatives that will relieve demand on the current system.

Funding

Policy 4.A.2. addresses the need for the City to identify funding sources to pay for improvements to the system that will serve new development.

Wastewater Reduction

Policy 4.C.1. addresses the need for the City to reduce the load on the wastewater system demand by requiring water conservation techniques and minimizing inflow and infiltration.

IMPACTS

Buildout of the General Plan will increase the need for wastewater collection and treatment. New growth in the Crescent City Planning Area will create demands on the wastewater treatment system that exceed current capacities. However, *Policy 4.A.1.* ensures that adequate facilities are available or will be available before new development may be approved. With this policy in place, the impact is considered less than significant. With this mitigation measure in place, the impact on the City's wastewater collection and treatment system is considered less than significant.

MITIGATION MEASURES

No mitigation measures beyond the policies of the General Plan are necessary.

5.3 STORM DRAINAGE

ENVIRONMENTAL SETTING

Storm water runoff is collected and conveyed by a combination of surface and underground drop inlets/storm drainage pipes, that discharge into various marsh areas within the city, into Elk Creek, or the Pacific Ocean, depending on the location. Water collected in the collection and conveyance system is segregated from the sewer/treatment system.

Storm Drainage Description by Area

- There are six ocean discharge points that dispose of collected storm water from the extreme northwesterly areas of the city, roughly the area contained within Pacific Avenue, D Street, and the beach to the west.

- There are five Elk Creek Discharge points that dispose the collected storm water from the areas east of D Street to west of N Street.

- The areas easterly of N Street, drain naturally by surface, to marsh land that is a part of the Elk Creek drainage basin.

- The city areas south of the S-curve and easterly of Highway 101, are collected and disposed of through two marsh land drainage points previously mentioned and two Elk Creek discharge points, located south of the creek crossing, both on the westerly and easterly sides of Highway 101.

- For the city areas north of the cemetery, the storm water is collected and conveyed into the marsh adjacent to the cemetery. When the area is surcharged, overflow is conveyed through a combination of a storm drainage culverts and surface/creek drainage areas, to the Fairgrounds marsh. Previously, the marsh was a man-made ditch system that drained into Elk Creek.

- The city areas located along Highway 101 North of the Northcrest and Highway 101 intersection, collect storm water in combination with surface/storm drainage pipe, and discharge into marsh lands north of the city.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess storm drainage impacts resulting from development estimated under the General Plan.

Assumptions

- The City will continue to use a conventional drop inlet/storm drainage pipeline collection and conveyance system.

- The City will continue to utilize detention/retention facilities, creeks, and marshes to eliminate increased storm water discharge.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in new development without adequate existing or planned storm drainage system capacity.

IMPLICATIONS OF THE LAND USE DIAGRAM

Storm drainage discharge volumes will increase as a result of increased impervious surfaces (e.g., paving, roadways, and structures) associated with new development under the Land Use Diagram. Some of this storm drainage is collected in creeks (i.e., Elk Creek) and is ultimately disposed of into the Pacific Ocean.

It is difficult to estimate the implications on storm drainage facilities since development patterns resulting from the implementation of this General Plan can only be approximated and cannot be predicted with precision. However, new development from the Land Use Diagram in the Crescent City area will require new drainage system facilities to meet the increasing discharge volumes.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's stormwater drainage systems:

General Plan Policies

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2 The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.E.1. The City shall encourage the use of natural stormwater drainage systems in a manner that preserves and enhances natural features.

4.E.2. The City shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain stream courses in a natural state.

4.E.3. The City shall consider recreation opportunities and aesthetics in the design of stormwater detention/retention and conveyance facilities.

4.E.4. The City shall promote sound soil conservation practices and carefully examine the impact of proposed urban developments with regard to water quality and effects on drainage courses.

4.E.5. The City shall encourage new project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.

4.E.6. Future drainage system requirements shall comply with applicable State and Federal pollutant discharge requirements.

4.E.7. The City shall consider using stormwater of adequate quality to replenish the local groundwater basin, restore wetlands and riparian habitat, and irrigate agricultural lands, or as open space or recreational enhancements.

4.E.8. The City shall permit the joint use of City parks as drainage detention basins.

General Plan Response

Policy 4.A.1. ensures that adequate storm drainage facilities are in place before new growth may be approved. *Policy 4.A.2.* adequately addresses the need for new development to contribute its fair share to providing all public services and infrastructure, including storm drainage facilities, necessary to serve that development.

IMPACTS

Development from the General Plan will increase stormwater runoff from urban development covering pervious surfaces such as dirt or fields with impervious surfaces such as roofs and pavement. The aforementioned General Plan policies ensure that the impact of new development on the stormwater drainage system is less than significant.

MITIGATION MEASURES

No mitigation measures beyond the policies of the General Plan are necessary.

5.4 SOLID WASTE

ENVIRONMENTAL SETTING

The City of Crescent City disposes of its solid waste at the only solid waste landfill in the county. The Crescent City Landfill is currently owned by Del Norte County. The landfill, which was constructed and operational in 1974, is located approximately three miles north of Crescent City towards the westerly end of Old Mill Road. The landfill is operated in conjunction with transfer stations in Klamath and Gasquet. The site has reached its design capacity. Table 4-1 outlines some of the general characteristics of the Crescent City Landfill.

The City of Crescent City and Del Norte County are part of a Joint Powers Authority (JPA) known as the Del Norte County Solid Waste Management Authority (DNCSWMA). The DNCSWMA has recently (1997) gained approval for a closure plan for the landfill. As of December 1997, half of the landfill was closed under a phased closure. The DNCSWMA is planning for full closure of the landfill by the year 2001. Once the landfill is closed, the DNCSWMA is not planning any expansion of the Crescent City Landfill or designating any specific areas for future landfill or incineration disposal. Instead, plans are to have a transfer station materials recovery facility operating by Fall 2001 so that solid waste may be exported out of the county. As part of the *Del Norte County Integrated Waste Management Plan*, the DNCSWMA has identified 15 potential sites (ranking of each site according to a set of 14 criteria) as alternatives to their current plans. In addition, the DNCSWMA is aggressively pursuing waste prevention, recycling, and composting within the county to prolong the existing capacity as long as possible. The DNCSWMA has adopted the policies of "Zero Waste, End Welfare for Wasting," and "Jumpstart Jobs with Design and Discards" as a means of reducing waste disposed in the county.

CRESCENT CITY LANDFILL CHARACTERISTICS
Crescent City Planning Area

Facility Name	Crescent City Landfill
Location	End of Hights Access Rd., Crescent City
Facility Property Owner	Del Norte County
Responsible Authority	Del Norte Solid Waste Authority
Date of Last Permit Review	Currently under review (December 1997)
Estimates of Remaining Site Life	Conservative estimates indicates final refuse contours will be reached by 2001
Average rate of daily waste receipt in Fiscal Year 1996-97	52.3 tons, 123 cubic yards
Maximum average daily tonnage	75 tons per day
Maximum peak daily tonnage	200 tons per day
Source: Del Norte Countywide Integrated Management Plan, 1997.	

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess solid waste disposal impacts resulting from development estimated under the General Plan.

Assumptions

- The City and County will continue to implement the *Del Norte Countywide Integrated Waste Management Plan*.

- This analysis assumes an average solid waste generation rate of 307 pounds per day per household. The per-capita rate is a composite figure that includes commercial and industrial waste.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if solid waste facilities and services cannot serve, or be expanded to serve, waste generated by projected development under the plan.

IMPLICATIONS OF THE LAND USE DIAGRAM

Table 5-3 shows how much solid waste would be generated by the population levels estimated for buildout of the Land Use Diagram, as well as for existing development.

TABLE 5-3

ESTIMATED SOLID WASTE DISPOSAL AND ADDITIONAL RECOVERY
Crescent City Planning Area
1996 and Buildout

Planning Subarea	1996 to Buildout		General Plan Buildout	
	Households	Waste Disposal*	Households	Waste Disposal or Additional Recovery**
City of Crescent City***	1,816	5.9	2,087	6.8
Unincorporated Planning Area	3,475	11.4	8,359	27.3
TOTAL	5,921	17.3	10,446	34.1

Note: Utilization of secondary units in the areas designated BP and VLC will add an additional 833 new dwelling units. These new residents would further increase the amount of solid waste produced by the city to 2.7 tons per day.
* Represents 40 percent of the tons per day disposal at the Crescent City Landfill.
**Represents tons per day disposal or additional recovery based of 1996 per capita disposal.
** *Includes Pelican Bay State Prison

Source: Del Norte Solid Waste Management Authority, September 2000.

Development under the Land Use Diagram would increase the population of the Planning Area by nearly 5,921 households resulting in increased waste generation from residential, commercial, and industrial development. This would result in the generation of approximately 34 tons of waste per day or nearly 12,000 tons per year. Nearly half of this waste would be generated from new growth under the Land Use Diagram.

GENERAL PLAN POLICY RESPONSE

The General Plan includes policies and implementation programs to address the effect of development on solid waste collection and disposal services. The following policies and programs address the implications of the Land Use Diagram on these services.

General Plan Response

4.D.1. The City shall direct the solid waste management agency in ensuring that solid waste facilities do not violate State standards for contamination of surface or groundwater.

4.D.2. The City shall continue planning for the eventual full utilization of the Crescent City Landfill. This planning may include identification of alternative sites and investigation of the long-term economic feasibility of alternative disposal methods.

4.D.3. The City should seek funding to accommodate alternative disposal methods.

4.D.4. The City shall promote, in conjunction with the solid waste management agency, maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

4.D.5. The City should encourage the development of regional and community-based recycling facilities in heavy and industrial areas.

4.D.6. The City shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.

4.D.7. The City shall work with the solid waste management agency to ensure that all new development complies with applicable provisions of the Del Norte Integrated Waste Management Plan.

4.D.8. For permits within the city limits, the City shall encourage the countywide solid waste management authority to evaluate the environmental impacts of additional transportation need for solid waste disposal proposals as a separate process from this Plan.

4.D.9. The City shall support the countywide solid waste management authority's efforts in obtaining necessary permits for new facilities, and related environmental impact evaluations.

4.D.10. The City shall continue to support the countywide solid waste management authority in utilizing and updating as necessary, the Countywide Integrated Waste Management Plan, including the Siting Element, which plans for the need and establishment of recovery programs, processors, facilities, and disposal of residual solid waste.

4.3 The City shall work with the solid waste management agency to regularly review and revise as necessary the Del Norte Integrated Waste Management Plan.

General Plan Response

Future Disposal Sites

To ensure that adequate landfill space is provided, *Policy 4.D.2* addresses the concerns for additional disposal sites once the Crescent City Landfill has reached capacity and closed down. Similarly, *Policy 4.D.3.* adequately addresses the need to fund alternative disposal sites.

Solid Waste Reduction

Policy 4.D.4. ensures that the City will work to reduce solid waste disposal through source reduction, recycling, composting, and environmentally-safe transformation of wastes.

IMPACTS

Using current generation rates, new development under the General Plan Land Use Diagram could include an additional 17 tons per day or approximately 60 tons per year within the Crescent City Planning Area. At buildout of the Land Use Diagram, the City would generate approximately, 34 tons of waste per day or nearly 12,104 tons per year. If the City increases its waste diversions to 50 percent by the year 2000, as required by State law, the annual waste disposal would be reduced by 6,052 tons per year.

Development under the General Plan would not impede the ability of the City to provide solid waste facilities and services that serve, or be expanded to serve, projected development. Therefore, the impact is considered less than significant.

MITIGATION MEASURES

No additional mitigation is required other than the policies and programs of the General Plan.

5.5 LAW ENFORCEMENT

ENVIRONMENTAL SETTING

The Crescent City Police Department, located at 686 G Street, is responsible for all law enforcement within a 1.4 square mile area within the city limits. The Department is organized into five divisions: including Administration, Patrol, Investigation, Communications, and Community Relations. Department staff consist of 12 sworn officers, one civilian officer, 12 senior volunteers, 10 youth explorer scouts, and three contract dispatchers. In 1997, the department was operating under an annual budget of $1,038,100.

Serving a population of 4,380 residents (excluding Pelican Bay State Prison Population), the Department has 2.7 officers per 1,000 residents. This ratio is slightly higher than the national average of 2.2 officers per 1,000 residents. Response times for the police average approximately two to five minutes per call due to the small geographic radius patrolmen must cover. The Department responded to 9,536 calls between 1990 and 1997, an annual average of 1,362 calls per year.

The Crescent City Police Department will respond to other agencies outside its city limits when necessary. These other agencies include the California Highway Patrol and the Del Norte County's Sheriff's Department. Table 4-3 of the Background Report details the type of offenses that have been documented by the Police Department over the last six years. Crescent City has very low incidents of violent crime. From 1991 to 1997 there were only two homicides, 21 rapes, and eight incidents of arson.

Anticipated needs for the Police Department in the near future include: one officer for the Narcotic Task Force, one Citizen Assistant Officer, one parking garage and storage facility, upgrade of main police radio antenna, upgrade of a computer system (within two years), and remodeling of evidence room.

Traffic Safety

The responsibility of traffic safety is split between the City Police Department and the California Highway Patrol, which employs 23 uniformed officers that patrol throughout county. Table 4-4 of the Background Report shows the number of traffic violations and traffic accidents that the Police Department responded to between 1993 and 1997. The most significant findings is that there has been only one traffic related death in the last five years and the number of traffic citations issued has dropped by nearly half.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to describe impacts to law enforcement resulting from development estimated under the General Plan.

Assumptions

- Law enforcement services in the city will continue to be provided by the Crescent City Police Department.

- For the purposes of this analysis, the City's objective is to maintain it current FBI service ratio of 2.0 officers per 1,000 residents.

Thresholds of Significance

For the purpose of this Final EIR, an impact is considered significant if adoption or implementation of the General Plan would generate demand for law enforcement services that would exceed the ability of the local law enforcement agency to comply with the aforementioned service ratio and achieve the response time goals included in the General Plan.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development proposed under the Land Use Diagram would result in new residential, commercial, and industrial development, which would increase the population and the need for Police services. Table 5-4 shows the increased demand for Police Department officers resulting from estimated population growth through buildout of the Planning Area. This table shows the number of needed officers (i.e., 26 officers) within the Planning Area broken down by the current (May 2000) city limits and the unincorporated Crescent City area.

TABLE 5-4

INCREASE IN DEMAND FOR POLICE OFFICERS
1996 to Buildout

Subarea	1996 Population	Buildout Population	1996 to Buildout Increase	
			Population	Officers
City of Crescent City*	4,501	5,207	706	1
Unincorporated Crescent City Area	8,328	21,733	12,699	25
TOTAL	12,829	26,940	13,405	26

Note: Utilization of secondary units in the areas designated BP and VLC will add an additional 877 new dwelling units or 2,097 new residents. These new residents would further increase the demand for fire protection services and thus require an additional 4 police officers.
*Excludes Pelican Bay State Prison Population.

Source: J. Laurence Mintier & Associates, May 2000.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies to address law enforcement.

General Plan Policy

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2. The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.G.1. The City shall provide law enforcement facilities (including patrol and other vehicles, necessary equipment, and support personnel) sufficient to maintain adequate service standards.

4.G.2. The City shall, through adequate staffing and patrol arrangements, endeavor to maintain the minimum feasible response times for officer calls.

4.G.3. The City shall monitor law enforcement response times and patrol time to review staffing requirements necessary to maintain established levels of service.

4.G.4. The City shall support public safety programs, such as neighborhood watch, child identification and fingerprinting, and other public education efforts.

General Plan Response

Maintaining Levels of Service

Policies 4.G.1. and *4.G.3.* address the need for the Police Department to provide facilities and personnel to maintain adequate levels of service.

Response Times

Policy 4.G.2. addresses the need to maintain the minimum feasible response times for officer calls by providing adequate staffing and patrol arrangements.

IMPACTS

Currently (May 2000), the city has a relatively high deputy-to-resident ratio of 2.7/1,000, which is higher than both the national average (2.2 deputies per 1,000 residents) and FBI standard (2.0 deputies per 1,000 residents). However, for the purposes of this analysis, the consultants chose the FBI standard of 2.0 deputies per 1,000 residents to determine future demand for officers. Using this ratio, the city will need an additional 26 officers to serve the area within the Urban Boundary. The city also has a very low crime rate which can offset any potential service level gap. With the successful implementation of these policies, the impact of new development on the ability to provide adequate law enforcement services will be less than significant.

MITIGATION MEASURES

No additional mitigation is required other than the policies of the General Plan.

5.6 FIRE PROTECTION

ENVIRONMENTAL SETTING

Within the Crescent City area there are two fire districts that are responsible for fire protection: Crescent City Volunteer Fire Department and Crescent Fire Protection District. These districts focus primarily upon emergency response services (EMT) and structural fires, though they also handle wildfires and, in the case of Crescent Fire Protection District, are capable of handling aircraft emergencies. Mutual aid agreements exist between the districts for back-up in large or multiple fire scenarios and for general emergencies.

Crescent City Volunteer Fire Department

The Crescent City Volunteer Fire Department provides fire protection and emergency services for the City of Crescent City. The department has 40 active volunteer firefighters, five non-active firefighters, and one part-time paid fire chief. Since the operation is volunteer, there are no employees at the station until they are called.

The Department has only two facilities: the administrative office located a 377 J Street and the fire station located at 520 I Street. The Department's equipment is housed in a 7,500 square foot facility with four bays that are double width. Inside the facility are three Class I pumpers and a van that carries emergency medical, hazardous material, and personal protective equipment.

The volunteer firefighters provide typical fire protection services including fire suppression and rescue, assisting private ambulance companies, and public education (e.g. fire training for schools and local businesses, Scout group tours). Annual emergency calls have averaged around 150. In 1997, there were 170 calls to which the fire department responded. Emergency response times are around three minutes per call on average.

Crescent Fire Protection District

The Crescent Fire Protection District provides fire protection and emergency services for an area of 75 square miles that includes 16,700 residents or roughly two thirds of the entire Del Norte County population. The District's headquarters and main station are located at Washington Blvd. and Amador Street in the Crescent City area. There are two other substations located in the southern and eastern part of the district: a 5,000 square foot facility at 550 East Cooper Avenue and a 1,760 square foot facility at 175 Humboldt Road.

The District has 39 employees: four administrative support staff; 35 "volunteers" who work on a call-paid basis (i.e. they receive a stipend for every fire/emergency call); and one full-time district chief.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess fire protection impacts resulting from development estimated under the General Plan.

Assumptions

- The Crescent City Volunteer Fire Department and the Crescent Fire Protection District will continue to serve the Crescent City area.

Thresholds of Significance

For the purposes of this Final EIR, an impact is considered significant if adoption or implementation of the General Plan would generate demand for fire protection services that could adversely affect response times or required additional fire protection resources.

IMPLICATIONS OF THE LAND USE DIAGRAM

Fire service is similar to law enforcement service in terms of the need to maintain a 24-hour response capability and the need to minimize response times to calls. For fire service, however, the location of stations in relation to service is critical, while the Police Department typically responds to calls from a patrol beat.

Development proposed under the Land Use Diagram would result in an increase of approximately 13,405 new residents and additional commercial and industrial uses. This increase would create a demand for additional fire protection, such as new stations and additional staff. Since new development would increase the geographic area for which fire service must respond to, typical response times would likely increase. The Crescent Fire Protection District and Crescent City Volunteer Fire Department provides two main stations and two substations that service the area; it is expected that the these facilities will need to be expanded or new facilities built to handle fire protection for this additional development.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies to address fire protection within the city.

General Plan Policy

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2. The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.G.5. The City shall ensure that proposed projects are reviewed for compliance with fire safety standards by local fire agencies per the Uniform Fire Code and other state and local ordinances.

4.G.6. The City shall cooperate with the Crescent Fire Protection District in creating an inventory and eliminating structurally unsafe and fire-hazardous housing structures that are beyond repair or rehabilitation.

4.G.7. The City shall continue to encourage local fire districts to maintain and strengthen automatic aid agreements to maximize efficient use of available resources.

General Plan Response

Meeting Future Service Demand

Policy 4.A.1. ensures that adequate fire protection facilities and services are in place before new growth may be approved.

Funding Availability

Policy 4.A.2. adequately addresses the need for new development to contribute its fair share to providing all public services and infrastructure, including fire protection facilities, necessary to serve that development.

IMPACTS

Development proposed under the Land Use Diagram would result in an increase of 13,405 residents, 304 acres of commercial space, and 150 acres of industrial uses at buildout. These increases would require additional fire protection resources, such as personnel and equipment. However, with successful implementation of this policy, the impact of new development on the ability to provide adequate fire protection services will be less than significant.

MITIGATION MEASURES

No mitigation measures other than the policies of the General Plan are necessary.

5.7 SCHOOLS

ENVIRONMENTAL SETTING

Primary and Secondary Education

The Del Norte County Unified School District (DNCUSD) and the Del Norte County Office of Education provide public educational services for the Crescent City area. DNCUSD operates seven public schools (see Figure 1-3 of the Background Report) including two high schools and one middle school. The County Office of Education provides alternative education services for the city including Alternative Education and Juvenile Hall. Both DNCUSD and the County Office of Education share the same boundaries and have the same five board members. There are three schools in the Crescent City area that provide private educational opportunities: St. Joseph's Catholic School, Four Square Christian School, and Crescent City Junior Academy.

Table 4-2 of the Background Report shows date of construction, size of the building and site, grade levels at each school, number of teachers, and students enrolled. The table shows that most of the schools are older. With the exception of Mary Peacock School, all of the schools were built prior to 1966. The median teacher to student ratio is 1:21. Total enrollment for Del Norte County as of January 1997 was 5,341 students.

Approximately 3,900 of the total enrollment in the county is comprised of students within the greater Crescent City area.

In 1997, the DNCUSD discovered that the district lost 224 students from the previous year. If this decline continues, it could create problems for the district 's budget since lower daily attendance translates into a drop in State aid. The 1997 drop in State aid was absorbed by budget reserves; however, future district reserves are uncertain which may lead to financial hardship for the district should the enrollment numbers continue to decline.

Colleges

Located within the greater Crescent City area, the College of the Redwoods is Del Norte County's only school providing college level courses. This facility is a branch of the main campus of the College of the Redwoods, located outside Eureka. There are 1,200 students enrolled each year and 29 permanent employees at the Del Norte Branch. Most of those attending the Del Norte Branch are older students, with an average age of approximately 36. The branch provides programs to meet general education requirements for a college degree and a vocational nursing program. The branch grants Associate of Arts degrees, Associate of Science degrees, and certificates in various vocational programs.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess school impacts resulting from development estimated under the General Plan.

Assumptions

- School enrollment trends in the Planning Area will be consistent with those of the Department of Finance's school enrollment projections.

- The Del Norte County Unified School District will continue to service the educational needs of the entire county.

Thresholds of Significance

For the purposes of this Final EIR, an impact is considered significant if adoption or implementation of the General Plan creates a demand on school services that exceeds the current or feasibly expanded capacity of the school district affected.

IMPLICATIONS OF THE LAND USE DIAGRAM

Table 5-5 summarizes the projected number of new students from new residential development through buildout.

TABLE 5-5

DEL NORTE COUNTY SCHOOL ENROLLMENT
K-12 and High School

Year	K-12	High School (Graduates)
1999-2000	5,094	314
2000-2001	4,989	299
2001-2002	4,926	335
2002-2003	4,817	335
2003-2004	4,697	306
2004-2005	4,634	297
2005-2006	4,598	303
2006-2007	4,564	289
2007-2008	5,462	311
2008-2009	4,553	291

Source: Department of Finance, November 1999.

Since using the growth under the General Plan Land Use Diagram does not give an accurate reflection of the current trends in school enrollment, this analysis used Department of Finance (DOF) school projections. Although these numbers represent enrollment for the entire county, approximately 75 percent of the schools are located within the Planning Area boundaries. The projections show that the largest drop will be in K-12 enrollment with a decrease of 541 students over the next 10 years. High school enrollment remains relatively steady with a slight decline (23 students) over the next 10 years. Although population, dwelling units, and employment will be growing over the next 20 years, school enrollment will likely drop according to DOF estimates. This drop reflects a change in the county's demographic structure, such as the population getting older and a decrease in the inmigration of child-bearing age couples.

It is unlikely that these trends will change dramatically within the timeframe of the General Plan unless the City and/or the County receives an economic "boost," such as an expansion of the prison, which would attract those between the ages of 25-45 years of age.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's school system:

4.F.1. The City shall encourage the Del Norte Unified School District (DNUSD) to work cooperatively in monitoring housing, population, and school enrollment trends and in planning for future school facility needs, and shall assist the DNUSD in locating appropriate sites for new schools.

4.F.2. The City shall encourage the location of schools in areas with safe pedestrian and bicycle access.

4.F.3. The City shall encourage the DNUSD to coordinate the planning of school facilities and should involve the City in the early stages of the land use planning process.

4.F.4. The City should plan and approve residential uses in those areas that are most accessible to school sites in order to enhance neighborhoods, minimize transportation requirements and costs, and minimize safety problems.

4.F.5. Whenever possible, the City shall support and participate with the DNUSD in joint development of recreation areas and multi-purpose buildings.

4.F.6. The City and the DNUSD should work together in using existing school facilities for non-school-related and child care activities.

4.F.7. The City shall continue to support and promote the development of higher education facilities in Del Norte County.

General Plan Response

Future School Needs

Policy 4.F.1. addresses the need for the City to work with the Del Norte Unified School District (DNUSD) in monitoring housing, population, and school enrollment trends and in planning for future school facility needs. Additionally, *Policy 4.F.3.* addresses the need for the City and DNUSD to coordinate in the planning of school facilities.

IMPACTS

Although growth will continue to the end of the General Plan timeframe, DOF projections show a decline in the number of students enrolled in the Del Norte County Unified School District. Therefore, the City should have the necessary facilities to accommodate growth under the Land Use Diagram.

With successful implementation of General Plan policies, the impact of new development on the ability to provide school facilities will be less than significant.

MITIGATION MEASURES

No mitigation measures other than the policies of the General Plan are necessary.

5.8 PARKS

ENVIRONMENTAL SETTING

The Crescent City area provides opportunities for hiking, bicycling, beach combing, fishing, camping, surfing, boating, and many other activities. Figure 1-3 of the Background Report shows many of these recreational resources. There are 192 acres of parkland serving nearly 4,500 residents within the city limits, which results in a service level ratio of 48 acres per 1,000 residents. In addition, the Crescent City area contains several public artworks and performance centers. Located on the Pacific coast, the city lies amidst broad beaches, coastal dunes, and the Crescent City Harbor, with mountains and redwood forests providing an impressive backdrop.

The following lists the major recreational features located within the city and the unincorporated Crescent City area:

City Parks and Recreation Facilities

- Peterson Park
- Brother Jonathan Park and Vista Point
- Tetrapod Area
- Beach Front Park
- Cultural Center
- Public Swimming Pool
- Marine Mammal Center
- Improved Beach Access at 4th, 5th, and 7th Streets
- Harbor-City Bicycle Path
- Citizens Dock and Launching Facilities
- B Street Pier

County Parks and Recreation Facilities

- Florence Keller Regional Park
- Never Dying Redwood Tree Historical Site
- Point St. George Fishing Access: Historical Site and Lighthouse Viewing
- Pebble Beach Access and Park
- Bertsch Park (undeveloped)
- Recreational Gym and Fields
- Elk Creek (currently undeveloped)
- Battery Point Vista and Lighthouse
- Del Norte County Historical Museum
- County Fairgrounds
- McNulty Home
- Pioneer Church Site
- Preston Island
- Whaler Island

Camping and Recreation Vehicle Parks

- Shoreline RV
- Bayside RV
- Harbor Anchorage
- Sunset Harbor
- Forest Village

Several camping areas also contribute to the city's varied recreational experience. At the present time, Crescent City provides camping and RV access at four privately managed facilities shown above, and at the Shoreline RV park, a public facility. All facilities are within the city limits except the Forest Village camping area, which is approximately ½ mile from the city limits. A KOA campground and the Rambling Rose camping area are located outside the city area.

Two golf courses are located outside of the city and Harbor area and are available for use by tourists.

In addition to these City and Harbor facilities, residents and visitors to the area use many of the Federal, State, and County recreational facilities in the Planning Area. For example, the Redwood National Park headquarters is located in the Planning Area, as well as, Point Saint George and the County Fairgrounds among others.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess park impacts resulting from development estimated under the General Plan.

Assumptions

- The City's park-to-resident ratio shall meet Quimby Act standards of up to five acres of parkland per 1,000 population.

Thresholds of Significance

For the purposes of this Final EIR, an impact is considered significant if adoption or implementation of the General Plan would create an unmet demand for parks.

IMPLICATIONS OF THE LAND USE DIAGRAM

Table 5-6 below shows the amount of improved parkland that would be needed to accommodate the increase in population provided for by the General Plan based on the park acreage standard discussed under the assumptions.

As Table 5-6 indicates, the Land Use Diagram would require a total of nearly 67 acres of improved parkland with the Planning Area using a Quimby Act standard of five acres per 1,000 residents.

TABLE 5-6

POPULATION CHANGES AND ASSOCIATED NEW PARK ACREAGE REQUIREMENTS 1996 to Buildout

Subarea	1996 Population	Buildout Population	1996 to Buildout Increase	
			Population	Park Acreage
Crescent City	4,502	5,207	706	3.5
Unincorporated Crescent City area	8,323	21,733	12,699	63.5
TOTAL	12,825	26,940	13,405	67.0

Source: J. Laurence Mintier & Associates, March 2000.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's park system:

General Plan Policy

5.A.1. The City should continue to provide indoor and outdoor parks and recreation program activities directed toward the needs and interest of all City residents and visitors to Crescent City.

5.A.2. The City should strive to provide diverse programs coordinated with Del Norte County, the Del Norte Unified School District, the Harbor District, and State, Federal, and private agencies.

5.A.3. The City shall cooperate with other public agencies to ensure flexibility in the development of park areas and recreational services to respond to changing trends in recreation activities.

5.A.4. The City shall ensure that park design is appropriate to the recreational needs and, where feasible, access capabilities of all residents of and visitors to Crescent City.

5.A.5. The City shall encourage public recreational development that complements the natural features of the area, including the topography, waterways, vegetation, and soil characteristics.

5.A.6. The City shall encourage public and private park and recreation agencies to acknowledge the natural resource values present at park sites during the design of new facilities.

5.A.7. The City shall encourage compatible recreational use of riparian areas along streams and creeks where public access can be balanced with environmental values and private property rights.

5.A.8. The City shall review and address the potential for development or expansion of recreational wildland parks, beaches, and/or easements in the Crescent City Planning Area at locations such as Marhoffer Creek, Pebble Beach, Pt. St. George, and/or South Beach.

5.A.9. The City shall work with the County to continue to support the protection and use of Battery Point and Point St. George Lighthouses as County parks.

5.A.10. The City shall work with the County in seeking funding to restore facilities at Pebble Beach in disrepair and to revegetate the damaged promontory for recreation use.

5.A.11. The City shall support the development of teen activities in the central Crescent City area, near schools, and other entertainment/recreational areas.

5.A.12. The City shall work jointly with the Redevelopment Agency to develop a recreation center which includes weightroom facilities, racquetball/handball courts, tennis courts, and a teen center.

5.A.13. The City should investigate the feasibility of constructing a skateboard park at/near the County Fairgrounds.

5.A.14. The City shall work jointly with the Redevelopment Agency to rehabilitate improve existing athletic fields.

5.A.15. The City shall continue to maintain and enhance Beachfront Park so that it remains a focal point for community events and waterfront recreation.

5.A.16. The City shall maintain the recreation areas which the City owns as identified in Table 5-1 and illustrated in Figure 5-1.

5.C.1. The City shall assure the preservation of areas which are zoned Open Space in a manner consistent with the uses allowed in open space areas.

5.C.2. The City shall continue its policy of designating land uses for recreational and visitor-serving facilities, provided that the fiscal integrity of the City is retained and such services shall be located within those areas zoned as highway services. In such highway service areas, recreational uses shall be a priority use.

5.C.3. The City shall recommend the improvement and maintenance of the Battery Point Lighthouse as a museum available to the public.

5.C.4. If the City pursues the Battery Point Recreation Area project, the City shall assure conformance of such development with the provisions of the sand management program and conditions prescribed in the Diking, Dredging, and Filling Element herein.

5.C.5. The City shall encourage the continued maintenance of coastal recreation areas by both the private sector and public agencies.

5.C.6. The City shall ensure that new recreational development is located and distributed throughout the Coastal Zone in a manner to prevent undue social impacts, overuse, or overcrowding.

5.C.7. The City shall grant priority to visitor-serving facilities that provide recreational opportunities to persons of low- and moderate-income over higher-cost visitor facilities.

5.C.8. The City shall protect the rights of private property owners in all provisions for public and private recreation facilities.

5.C.9. The City shall allow visitor-serving and commercial-recreational facilities on ocean-front parcels only when such development provides an increased opportunity for shoreline access and coastal recreation and enhances scenic and environmental values of the area.

5.C.10. The City shall ensure that fragile coastal resources are considered and protected to the greatest possible extent in all new coastal recreational development.

5.C.11. The City should minimize recreational use conflicts on coastal beaches through provisions separating incompatible activities by time and/or space. Outdoor recreation projects should preserve and enhance scenic and environmental values.

5.C.12. The City shall encourage the continued maintenance of existing recreational boating facilities by private operators and public agencies.

5.C.13. The City shall protect designated agricultural lands from inappropriate development, including but not limited to, recreational development.

5.C.14. The City supports the continued development of day use, trail, recreational boating, and related visitor-serving uses at the Crescent City Harbor and encourages the Harbor District to coordinate and participate with local and State agencies for the provision of connecting access trails and facilities.

IMPACTS

Using the Quimby Act standard of 5 acres of improved parkland per 1,000 residents, new development proposed under the Land Use Diagram would require the addition of 67 acres of parkland. However, Crescent City maintains a tremendously large amount of parkland that adequately serves the existing population. For instance, there are 192 acres of parkland serving nearly 4,500 residents within the city limits, which results in a service level ratio of 48 acres per 1,000 residents. This is due in large part to Beachfront Park, which has an area of 176 acres. Excluding parkland within the rest of the Planning Area (unincorporated Crescent City area), the City's existing parkland is sufficient to accommodate the Planning Area's buildout population (26,940) and still have a service level (7.7 acres per 1,000 residents) that exceeds that of the Quimby Act standards.

The current city limits has enough parkland to accommodate buildout population for growth in the entire Planning Area. Therefore the impact of the General Plan on city parks would be less than significant.

MITIGATION MEASURES

No additional mitigation measures other than the General Plan policies are needed.

5.9 PUBLIC UTILITIES

ENVIRONMENTAL SETTING

Pacific Power and Light (PPL) is a privately-owned company that provides electricity to Planning Area. PPL has disclosed that they intend to sell their entire assets. A joint powers authority including both Crescent City and Del Norte County has been established to purchase the system.

GTE provides telephone infrastructure to the greater Crescent City area. However, GTE has a pending sale of the telephone system to Citizen's Telephone. Currently (May 2000), there are three cellular service providers in the Crescent City Planning Area: U.S Cellular, MobiLink, and SKYCELL.

Falcon Cable provides the cable television service to the Planning area. The company has an office on 1440 Parkway Drive in Crescent City.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess public utilities impacts resulting from development estimated under the General Plan.

Assumptions

- The current service providers will continue to be responsible for serving future development in the Crescent City Planning Area.

Thresholds of Significance

For the purposes of this Final EIR, an impact is considered significant if adoption or implementation of the General Plan would require the upgrade of local gas or electric lines or facilities, dependent upon the precise nature of the proposed use.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the General Plan may require the upgrade of local gas or electric lines or facilities, dependent upon the precise nature of the proposed use.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's utilities:

General Plan Policies

4.A.1. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities will be installed or adequately financed and maintained (through fees or other means).

4.A.2. The City shall encourage new development to contribute its fair share to providing all public services and infrastructure necessary to serve that development.

4.H.1. The City shall facilitate the provision of adequate electric, communications, and telecommunications service and facilities to serve existing and future needs while minimizing noise, electromagnetic, and visual impacts on existing and future residents.

4.H.2. The City shall work with local electric utility companies for appropriate expansion of systems.

General Plan Response

Coordination with Facility Providers

Policy 4.H.1. ensures that the City will work to facilitate the provision of adequate electric, communications, and telecommunications service and facilities to serve existing and future needs. Similarly, *Policy 4.H.2.* addresses the need for the City to work with local electric utility companies for appropriate expansion of systems.

IMPACTS

Development under the General Plan would require extensions and improvements to electric, gas, and telephone lines. Expansion of existing substations would also be required. Extensions and improvements to electrical, gas, cable television, and telephone lines would be funded by new development as it occurs and specific improvements and extensions would be addressed in the planning process. The impact of the General Plan on gas, electricity, and telephone service would therefore be less than significant.

MITIGATION MEASURES

No additional mitigation measures other than the General Plan policies are needed.

CHAPTER 6

NATURAL RESOURCES/CONVERSATION

This chapter assesses the impacts of development under the Crescent City General Plan on the natural environment. The issues in this chapter include: water resources; agricultural resources, forestry resources, and extractive resources; biological resources; air quality; cultural resources; and scenic resources. Issues on water supply and demand are addressed in Chapter 5.

6.1 WATER RESOURCES

To provide the context on which potential water resource impacts can be assessed, this section presents information on surface water resources, water quality and groundwater resources in the Crescent City Planning Area. Issues relating to flooding concerns are discussed in Chapter 7, "Health and Safety." This section provides a summary of information contained in the water resources section of Chapter 1, "Resources/Conservation," of the General Plan Background Report. More detailed information is provided in that report.

ENVIRONMENTAL SETTING

Surface Water Resources and Quality

Crescent City is located within the Lake Earl/Jordan Creek watershed drainage basin. However, drainage from the city also flows through several minor drainages, such as Elk Creek and Marhoffer Creek, to the Pacific Ocean. The mouth of Elk Creek is within the Crescent City Harbor, where it has one square mile of floodplain. Marhoffer Creek enters the Pacific Ocean at Pebble Beach. Other surface water resources within the planning area include the Crescent City Harbor waters and the Pacific Ocean.

Potential threats to surface water quality include runoff from urban area fills and roadway pollutants (e.g., oil). Elk Creek is considered a high quality fisheries stream and is particularly sensitive to these pollutants.

Groundwater Resources and Quality

The Crescent City Planning Area overlies the Smith River Plain Ground Water Basin, which is bordered by the Pacific Ocean on the west and the foothills of the California Coast Ranges to the east. The north end of the plain narrows abruptly at the mouth of the Smith River (California State Resources Agency, Smith River Plain Groundwater Study 1987).

Groundwater generally flows from the mountains downward to the coastal plain. There is a divide one mile north of Crescent City where subsurface flow is north to Lake Earl and south to the Pacific Ocean via local drainages.

Active recharge and discharge is evident in the Smith River Plain where groundwater elevations increase rapidly during storms and decline after storms end. One recharge area was identified near the airport.

Groundwater Uses

The Crescent City Planning Area relies on groundwater supplies to serve municipal water users and for irrigation in the Crescent City area. Even though abundant groundwater resources exist, these resources may not be sufficient during all periods of time or in all parts of the basin. Potential sources of groundwater contamination include urban storm drainage, onsite sewage disposal, irrigation return flows, and hazardous materials storage.

Findings

The following findings were identified in the General Plan Background Report that apply to water resources:

- Very few surface water resources exist in the Crescent City area.
- Crescent City municipal water use is dependent upon groundwater resources.
- There are local areas where groundwater quality may limit development uses.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess impacts on water resources that would be expected to occur based on implementation of the Land Use Diagram. Impacts are assessed qualitatively based on information in the General Plan Background Report and the Land Use Diagram contained in the Policy Document.

Assumptions

- Any existing farmlands proposed for residential use within and adjacent to the City's Planning Area will continue to respond hydrologically as agricultural land for the duration of the planning period (through 2020).
- Level of chemical contamination in the city was assumed static, therefore, the rate of contaminant migration into the regional groundwater basin was assumed to continue as in the recent past.
- The principal source for the city's municipal drinking water supplies will continue to be the Smith River.

Thresholds of Significance

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- violation of any water quality standards;
- substantial depletion of groundwater supplies or substantial interference with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level;

- substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite;

- creation or contribution of runoff water in quantities that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

- other substantial degradation of water quality.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

Overall, surface water resources in the Crescent City Planning Area would be protected from degradation and contamination because land surrounding surface waters would be designated as County Resources areas (e.g., resource conservation area, greenery, etc.) or Open Space. Implementation of the Land Use Diagram would raise concerns in the following areas:

- Increased amounts of residential land uses would increase the amount of impermeable surfaces in the Planning Area, increasing the quantities of pollutants collected in runoff and decreasing groundwater recharge.

- General and Light Industrial designations along Elk Valley Road near the harbor could result in contaminants entering the harbor.

- While residential land uses are proposed to increase in density under the City's General Plan Update, municipal drinking water supplies are expected to be sufficient to satisfy future demand based on historical recharge rates of the aquifer and estimates of use.

- The North Coast Regional Water Quality Control Board (NCWQCB) has identified onsite sewage systems as a potential water quality concern; one of the areas identified as an area of critical development is the North Crescent City Elk Creek Drainage.

GENERAL PLAN POLICY RESPONSE

The following policies address impacts on water resources associated with development proposed under the Land Use Diagram.

General Plan Policies

Marine Resources

6.A.6 The City shall enforce regulations which promote that all surface and subsurface waters be maintained at the highest level of quality to insure the safety of public health and the biological productivity of coastal waters.

Water Resources

6.B.1 The City shall maintain, and where feasible, enhance the existing water quality for public health and safety and biological productivity.

6.B.2 The City shall follow all existing and future Federal and State water quality standards.

6.B.3 The City shall discourage conversion of coastal dunes to residential use, recognizing their importance as groundwater recharge areas, barriers to seawater intrusion, and their severe limitation for individual sewage effluent.

6.B.4 The City shall require that proposals to create new parcels have a minimum of a 100-foot setback from the edge of designated coastal wetlands and a 50-foot setback from the centerline of riparian watercourse areas such as creeks and streams. All site improvements (e.g., buildings, sewage disposal where applicable, and appurtenant structures) shall be outside the required protection area.

6.B.5 The City shall encourage community programs (e.g., fish hatcheries, habitat rehabilitation) designated to improve the quality of fisheries and other water resources.

6.B.6 The City shall require that proposals to create new parcels have a 50 foot setback from watercourse areas. All place improvements (e.g., buildings, sewage disposal where applicable, and appurtenant structures shall be outside the required protection area.

General Plan Response

Surface Water and Groundwater Quality

Policies *6.B.1, 6.B.2, 6.B.3, 6.B.5* and *6.B.6* adequately address concerns regarding water quality in the Planning Area. Removal of existing groundwater contamination, however, is not addressed by the plan.

Water Supply

Policy *6.B.4* addresses concerns regarding water supply in the City's Planning Area.

IMPACTS

Existing groundwater contamination is not currently a serious threat to water supply or public health within the City's Planning Area because contaminated areas are not within aquifers used for public water supply. The ability to respond to the expected need for additional water supply is addressed in Chapter 5 and includes the current upgrade of the City's existing water systems to provide a 7.13 mgd capacity.

Impacts on water resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

6.2 AGRICULTURAL, FORESTRY, AND EXTRACTIVE RESOURCES

To provide the context on which potential impacts can be assessed, this section describes existing agricultural (e.g., prime farmland) and forestry resources within the Crescent City Planning Area. This section includes a summary of information that is provided in the soil resources section of Chapter 1, "Resources/Conservation," of the General Plan Background Report. More detailed information is provided in that report.

ENVIRONMENTAL SETTING

Though Crescent City is the primary developed area of Del Norte County, it does retain some areas of agriculture. A small area of prime agricultural soil, Arcata (Ar2), exists south of Elk Valley Road. There has been some loss of former pasture land in the Ocean View Drive, Lake Earl and Elk Valley Road areas. The cumulative effect of conversion from larger tracts of agricultural land that can be efficiently farmed to smaller parcels, whether ranchettes or residential subdivisions, will continue to have deleterious effects on the availability of agricultural resource land.

While the larger timberland areas of Del Norte County abut the northern and eastern boundaries of the City's Planning Area, small portions of the Planning Area contain timberlands. Timberland areas are concentrated within the lower eastern portion of the Crescent City Planning Area.

The Crescent City Planning Area contains no commercially developed mineral resources.

Findings

- Prime agricultural soils in the Planning Area are limited to a small area south of Elk Valley Road.
- Timber production has diminished substantially in recent years, due more to harvest restrictions for habitat protection than to soil or other growing limitations.

METHODOLOGY

This section describes the assumptions, methodology, and thresholds of significance use to assess impacts on agricultural, forestry, or extractive resources that would be expected to occur by 2020 as presented in the Land Use Diagram. Impacts are assessed qualitatively based on information in the Del Norte General Plan Background Report, Crescent City General Plan Background Report, and the Land Use Diagram.

Assumptions related to Agricultural Resources

- No conversion of farmland was considered in areas identified in the General Plan Background Report for urban uses (industrial/residential/parks/public facilities) despite the fact that small parcels within these areas may support agricultural resources (cropland/orchard/vineyard/pasture).

- Land designated for agriculture but adjoining urban areas was assumed to remain usable for future agricultural operations as farmland for the purpose of this analysis, which extends to 2020.

Assumptions related to Forestry Resources

- Forestry resources will continue to be managed in accordance with U.S. Forest Service and California Board of Forestry requirements through 2020.

- Trends toward decreasing mill production and increasing amounts of second-growth timber production will continue.

- State and Federal parklands will continue to be managed consistent with current practices that encourage multiple uses (e.g., recreation, timber harvesting, scientific study).

Thresholds of Significance

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- conversion of 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 conflict with a Williamson Act contract;

- other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use;

- conversion of land protected under Timber Production Zone (TPZ) contract to non-timber-producing use;

- substantial adverse effect on any sensitive natural community (e.g., old growth forest) 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;

- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan;

- loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

- loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

The Crescent City Planning Area is the primary developed area within Del Norte County; however, it retains some land along the eastern and northern edges of the planning area for agricultural use. These areas are primarily designated County Resources (e.g., Agriculture Prime and General). Development concerns are as follows:

- The proximity of agricultural lands to urban development raises concerns regarding conflicts with surrounding land uses. Conflicts with residential development adjacent to agricultural uses can also result in loss of production due to complaints regarding chemicals, noise, smells, or dust.

The Crescent City Planning Area also has areas designated Timberland that abut areas of General Commercial, General and Light Industrial, and Visitor-Serving Commercial designations. Development concerns are as follows:

- Forestry management practices may cause conflict with surrounding land uses if buffer areas between these uses are not provided.

Extraction of mineral, sand, and gravel resources is an acceptable use under the Timberland designation and, with a conditional use permit, under the General Industrial designation. The Crescent City Planning Area has areas designated Timberland and General Commercial that abut areas of General Commercial, Light Industrial, and Visitor-Serving Commercial designations. No extraction activities take place in this Planning Area at present; however, the Land Use Diagram provides for these uses. Development concerns are as follows:

- Mining practices may cause conflict with surrounding land uses if buffer areas between these uses are not provided.

- Extraction activities could drastically change the natural environment (e.g., through removal of sand and gravel beyond natural replenishment rates, habitat degradation) in areas where they occur; when these activities are discontinued, environmental degradation would remain.

GENERAL PLAN POLICY RESPONSE

The following policies and implementation programs address impacts on agricultural, forestry, and extractive resources associated with development proposed under the Land Use Diagram.

General Plan Policies

Agricultural Resources

6.F.1 The City shall encourage the County to require development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses.

6.F.2 The City shall encourage the County to require new non-agricultural development immediately adjacent to agricultural lands to be designed to provide a buffer in the form of a setback of sufficient distance to avoid land use conflicts between the agricultural uses and the non-agricultural uses.

6.F.3 The City shall encourage the County to support appropriate efforts by private conservation organizations to use conservation easements as a tool for agricultural preservation.

Soil Resources

6.C.1. The City shall encourage the County to reserve in timber production those soils capable of producing commercial timber stands.

6.C.2. The City shall encourage the County to limit the intensity of development in areas of unstable soils and/or steep terrain in order to minimize the potential for erosion and landform instability.

6.C.3. The City shall encourage the County to control the grading of land to minimize the impact of soil erosion from wind, water, and landslides in areas with slope instability.

Timber Resources

6.G.1. The City shall encourage the County to continue to maintain in a commercial timberland use those lands possessing climate and soils suitable for growing commercial conifer timber crops (including spruce) through the State Timberland Production Zone (TPZ) program.

6.G.2. The City shall encourage the County to ensure that other lands within the Coastal Zone designated Timberland, and not identified as commercial timberland per Policy 6.G.1 and not specifically designated for another use, shall be included as commercial timberland and subject to the restrictions of Policy 6.G.1.

6.G.3. The City should encourage the County to require the placement of commercial timberland uses and adjacent uses so that, in general, lower intensity uses are adjacent to commercial timberlands with higher intensity uses placed in a logical transition away from these timberlands. Lower intensity uses shall include other resource activities as set forth in the Agriculture, Marine Resources, and Water Resources policies of this General Plan.

6.G.4. The City shall encourage the County to protect commercial timberland and timber production activities from development practices that erode their economic viability. The City shall encourage the County to design new non-timber development immediately adjacent to timberlands to provide a buffer in the form of a setback of sufficient distance to avoid land use conflicts between timber management and the non-timber uses.

6.G.5. The City and County recognize commercial timberland as a resource in its own right as well as a protector of many other resources and shall strive to maintained commercial forest land as such.

6.G.6. The City and County support the productive use of wood waste generated in the Planning Area.

General Plan Response

Conflicts with Surrounding Land Uses

Policies 6.F.1, 6.F.2, and *6.F.3* address concerns regarding the ability of the city to protect agricultural land from potential conflicts with surrounding land uses under development identified in the Land Use Diagram.

Risk of Timberland Conversion

Policies 6.G.1, 6.G.2, and *6.G.5* adequately address concerns regarding the risk of forestry resources being converted to more developed uses.

Timber Management Practices

Policies 6.G.3-6.G.5 adequately address concerns regarding potential conflict between timber management practices and other nearby land uses. In particular, *Policy 6.G.4* identifies a requirement that, where timberland areas are located near more developed land uses, buffer zones be designated to protect both areas from conflicts.

IMPACTS

While no commercially developed mineral resources currently exist within the city's Planning Area, mining activities are considered an acceptable use under the Timberland designation and, with a conditional use permit, under the General Industrial designation. Impacts on agricultural and forestry resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

6.3 BIOLOGICAL RESOURCES

To provide the context on which potential impacts can be assessed, this section presents information on the existing vegetation and wildlife resources present in Del Norte County. Specific topics include sensitive habitats, waters of the United States (including wetland communities), special-status plant species, special-status wildlife species, and marine resources. This section provides a summary of the information that is provided in the vegetation resources and special status species section of the Crescent City General Plan Background Report and the marine resources section of the Del Norte County General Plan Background Report.

ENVIRONMENTAL SETTING

Marine Resources

Due to the Crescent City Planning Area's location on the coastline, Crescent City has diverse and valuable marine resources. The upwelling created by currents off the California coast bring nutrient-rich waters to the surface supporting vast quantities of plankton and which attracts heavy concentrations of fish. These special marine conditions result in an excellent fishery resource for Crescent City. In 1995, the annual commercial fish landing in the City, as reported by the California Department of Fish and Game, was 21.9 million pounds valued at more than $11,600,000.

Onshore, the intertidal zone (the region between low and high tide) contains a variety of ecologically significant marine organisms. Tidal flat regions (areas of mud and sand, such as the Smith River Delta or Lake Talawa) are often highly productive, containing numerous invertebrate animals that are significant links in the marine fishery food chain. Rocky portions of the shoreline are also productive components of the marine environment and by their nature are acutely sensitive to disruptions. Tidepools (depressions in the substrate of the intertidal zone where an accumulation of seawater occurs after the tide recedes) are unique intertidal habitats for a diversity of marine organisms specifically adapted to the harsh and constantly fluctuating environmental conditions found at the sea's edge. Numerous off shore rocks are used as resting or haul-out sites by migratory marine mammals such as the California and Steller sea lion.

Vegetation Resources

Coastal dune and scrub communities are characterized by vegetation adapted to harsh environmental conditions resulting from salt spray, strong winds, shifting sand, and low moisture. Active dunes can be found in the vicinity and north of Point St. George. These dunes support a variety of vegetation species and provide important habitat for small mammals and birds. Coastal dune and scrub communities are also recognized for their importance as groundwater recharge areas for the coastal plain.

High sea cliffs occur within the coastal dune and scrub communities. Many coastal dune and scrub communities are considered important native communities because of their limited extent relative to historic distributions. Some dunes are considered Resource Conservation Areas by the county. On the coastal plain, dunes are important in providing sites for groundwater recharge.

Also occurring within the Crescent City Planning Area are grasslands and coniferous forest communities. Detailed explanations of primary coniferous forest subtypes are described in the Crescent City General Plan Background Report.

Special Status Species

Due to the urbanization of the Crescent City Planning Area, opportunities for the occurrence of a variety of habitats and wildlife species are limited. Although the city itself has little natural vegetation, the outlying areas within the City's sphere of influence contain natural communities comprised of coastal dune and scrub habitats, coniferous forests, and grasslands. A total of 115 special-status plant species and 57 special-status wildlife species have the potential to occur within Del Norte County. Although not all of these species listed for the county occur in the vicinity of Crescent City, those associated with coastal dune and scrub, grasslands,

and coniferous forests may be found in the Crescent City Planning Area. Cultural influences, natural disturbances, and urban development have resulted in modifications in species composition and habitat arrangement. Tables 1-1 and 1-2 of the Crescent City General Plan Background Report identify these species and provide information regarding their occurrence.

Findings

The following findings were identified in the Crescent City General Plan Background Report and apply to biological resources:

- While the incorporated area of Crescent City contains little native vegetation resources, small riparian areas exist along the creek corridors of Elk Creek and its tributaries.
- A majority of the vegetation resources in the Crescent City Planning Area are comprised of coastal dune habitat and grasslands.
- Coastal dune communities are considered important native communities because of their limited extent relative to historic distributions.
- The county supports 115 special status plant species and 57 special status wildlife species, some of which may occur in the Crescent City Planning Area.

METHODOLOGY

This section describes the assumptions, methodology, and thresholds of significance used to assess impacts on biological resources that would be expected to occur based on the Land Use Diagram. Impacts are assessed qualitatively based on information contained in the Del Norte County General Plan Background Report, Crescent City General Plan Background Report, and the Land Use Diagram contained in the Policy Document.

Assumptions

- Impacts on drainages that flow into the Pacific Ocean, anywhere along their length, are assumed to affect sensitive marine habitats and the vegetation and wildlife that occupy them.
- State and Federal lands and tribal lands are assumed not to be under the jurisdiction of the City, and impacts of activities that take place on these lands are addressed in this analysis.
- Existing agricultural, industrial, and timber operations are assumed to be operating in compliance with current water quality regulations.
- Impacts on wildlife species are assumed to be directly correlated with the loss of terrestrial and aquatic communities that provide their primary habitat. The direct loss of the native habitats to urban or industrial uses, therefore, will result in impacts to associated wildlife species.

Thresholds of Significance

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- substantial adverse effect, either directly or through habitat modifications, on any aquatic species identified as a candidate, sensitive, or special status species 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 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 any riparian habitat or other sensitive natural community (e.g., estuaries, wetlands) 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, marshes, vernal pools, coastal wetlands, etc.) Through direct removal, filling, hydrological interruption, or other means;

- substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or with the use of native wildlife nursery sites;

- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or

- conflict with any local policies or ordinances protecting biological resources;

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

With implementation of the Land Use Diagram, sensitive habitats (e.g., seacliffs, rocks and islands, tidepools, and tidal flats) would be protected from development-related impacts by the County Resources designation surrounding Lake Earl and other areas located along the coastline. Development concerns are as follows:

- The proximity of residential and agricultural areas to sensitive habitats raises concerns regarding increasing pollutant loading of runoff into the lake.

- Increased amounts of residential, industrial, and visitor-serving commercial development would reduce the amount, quality, and diversity of wildlife habitat in the Crescent City Planning Area.

Residential growth would increase the area of impervious surfaces and result in increased levels of runoff into local waterways, including those that flow to the Pacific Ocean. The pollutants that typically accompany runoff in urban areas would adversely affect marine resources. Urban development in the Crescent City Planning Area would be likely to affect coastal resources because of its proximity to the ocean.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts on biological resources associated with development proposed under the Land Use Diagram.

General Plan Policies

Marine Resources

6.A.1. In the portion of Elk Creek corridor located in the Coastal Zone, the City shall permit vegetation removal only where necessary to maintain the free flow of the drainage sources. Vegetation removal shall not consist of construction of new drainage channels or removal of established native trees or shrubs.

6.A.2. The City shall protect those areas that are designated as environmentally sensitive so that these habitats and their resources are maintained, and any development shall be consistent with adjacent areas and with Section 30240 et seq of the California Coastal Act.

6.A.3 The City shall require a minimum 100-foot buffer zone around designated coastal wetlands. Buffer zones for wetlands shall be measured landward form the edge of the wetlands. The only allowable uses within this buffer zone shall include the following:

a. Fish and wildlife management;
b. Wetland restoration;
c. Nature study, including minor facilities constructed by hand such as blinds, lookouts, and unimproved trails;
d. Hunting and fishing, including minor facilities constructed by hand such as blinds and unimproved trails;
e. Those recreational facilities included in a State Park and Recreation Department or Department of Fish and Game master plan submitted and approved by amendment to the Local Coastal Plan;
f. The maintenance of flood drainage control and drainage channels;
g. Removal of windblown trees which threaten existing structures; and
h. Diking or dredging in accordance with other land use plan policies and the Coastal Act, where there is no feasible less environmentally-damaging alternative and where feasible mitigation measures are provided.

6.A.4. The City shall seek to maintain and where feasible enhance the existing quality of all marine resources.

6.A.5. The City shall enforce regulations which promote that all surface and subsurface waters be maintained at the highest level of quality to insure the safety of public health and the biological productivity of coastal waters.

6.A.6. The City shall encourage community programs (e.g., fish hatcheries, habitat rehabilitation) designed to improve the quality of coastal fisheries and other marine resources.

6.A.7. The City shall require implementation of approved management measures specified for urban areas in the recently approved State Water Resource Control Board and California Coastal Commission's Nonpoint Source Pollution Control Program to minimize polluted runoff from construction activities and land use activities to ensure the safety of public health and the biological productivity of coastal waters.

Offshore Rocks and Islands Policies

6.A.8 The City shall require that offshore rocks and islands, expect for permitted navigational aides, be maintained in their existing state to insure the viability of the wildlife inhabiting or utilizing these sites.

Intertidal Zone, Beaches, and Bluffs Policies

6.A.9 The City shall require that all tidepools and tidal flats be managed to maintain their present characteristics and shall encourage the application of all feasible measures to mitigate uses that prove harmful to the biota inhabiting these areas.

6.A.10 The City shall encourage the California Department of Fish and Game to carefully monitor recreational activities at or near tidepools and tidal flats to insure the continued viability of these habitats.

6.A.11 In order to discourage all but light recreational use of tidepool regions, the City shall ensure that shoreline access and recreational facilities are located so as to direct use towards the open, sandy beaches of the City.

6.A.12 The City shall cooperate with the State to prohibit the collecting of all tidepool organisms with the exceptions for scientific purposes on a permit basis.

6.A.13 In order to ensure the continued maintenance and productivity of intertidal flat areas, the City shall continue to work with the State to develop and implement enforceable regulations to regulate vehicles in the intertidal zone.

Estuaries Policies

6.A.17 The City shall strive to ensure that estuarine systems are maintained at their highest feasible level of productivity in order to protect and enhance coastal fisheries and other marine resources.

6.A.18 The City shall allow the alteration of existing estuarine water channels through dredging, diking, or filling only when consistent with the Coastal Act Policy 30233 A & B and when such activity would enhance the biological productivity of the estuary.

6.A.19 The City shall require that all permitted activities in estuaries as identified in Policy 6.A.17 are carried out in a manner that will minimize impacts on the biota and productivity of the area.

6.A.20 The City may permit the extraction of sand and gravel consistent with the applicable marine resources, extraction, and habitat policies.

Biological Resources

6.D.1 The City shall support preservation, restoration, and enhancement of the habitats of State or Federally listed rare, threatened, endangered, and/or other special status species.

6.D.2 The City shall support the preservation or reestablishment of fisheries in the streams within the City, whenever possible.

6.D.3 The City should recognize and encourage the various uses of wildlife and their habitat, including such activities as passive watching, scientific studies, educational purposes, and hunting and fishing.

6.D.4 The City shall continue to consult with the California Department of Fish and Game for identification and protection of rare, threatened, and endangered plant species that may be adversely affected by public or private development projects.

6.D.5 The City shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants).

6.D.6 The City shall require that development on hillsides be limited to maintain natural vegetation, especially forests and open grasslands, to control erosion.

6.D.7 The City shall continue to pursue a cooperative role with the U.S. Forest Service and State and National Park services in the protection and continued maintenance of all plants and animal species and their habitat.

6.D.8 The City should encourage the maintenance of forest lands in production under the multiple use concept which includes recreation and wildlife habitat.

6.D.9 The City shall cooperate with other public agencies to acquire conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of State or Federally listed rare, threatened, or endangered, and/or other special status species.

Environmentally-Sensitive Habitat Areas Policies

6.D.10 The City shall continue to define the following as specific environmentally-sensitive habitat areas:

Coastal Wetland - Lands within the coastal zone which may be covered periodically or permanently with shallow water such as saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, bogs, and fens. Farmed wetlands shall be defined as wetland areas which are used for agricultural purposes such as grazing, planting or forage during parts of the year.

Riparian Vegetation - The plant cover normally found along water courses including rivers, streams, creek and sloughs, usually characterized by dense growths of trees and shrubs.

6.D.11 The City shall maintain maps that identify the locations of specific environmentally-sensitive coastal estuary and wetlands and riparian habitat areas within the unincorporated portion Crescent City Planning Area. Due to the scale of such maps, questions may arise as to the specific boundary limits of an identified environmentally sensitive habitats area. Where there is dispute over the boundary or location of an environmentally sensitive habitats area, the City may request the applicant to provide the following information:

- *A base map delineating topographic lines, adjacent roads, location of dikes, levees, flood control channels, and tide gates;*
- *Vegetation map;*
- *Soils map;*
- *A biologist's report, where necessary.*

Coastal Sand Dune Policies

6.D.12 To ensure their values as groundwater recharge regions and wildlife habitats, the City shall encourage the maintenance in their existing states or return to their natural states where feasible of coastal sand dunes, as mapped on the City sensitive habitat maps.

6.D.13 The City shall develop enforceable regulations to limit the use of motorized vehicles to unvegetated dunes.

Coastal Wetlands Policies

6.D.14. If it is determined that a designated sensitive habitat area is a wetland, the City shall require that a study be conducted of the area to define the precise boundary of the wetland. City approval of any development in this area shall await the applicant's completion of a site-specific study of the presence and location of wetlands. The study shall utilize the criteria contained in the U.S. Army Corps of Engineers Wetlands Delineation Manual. The City shall, on the basis of this study and after consulting with the California Department of Fish and Game and U.S. Army Corps of Engineers, determine whether all or part of the site constitutes wetlands, and will apply General Plan policies accordingly.

6.D.15. The City shall permit the diking, filling, or dredging of wetlands in accordance with other applicable provisions of this General Plan where there is no feasible less environmentally- damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects. Within the coastal zone, such projects shall be limited to those identified in Section 30233 of the Coastal Act.

6.D.16. The City shall ensure that development in areas adjacent to environmentally-sensitive wetland habitat areas be sited and designed to prevent impacts which could significantly degrade such areas, and shall be compatible with the continuance of such habitat areas. The primary tool to reduce impacts around wetlands between the development and the edge of the wetland shall be a buffer of 50 feet in width. A buffer of less than 50 feet may be utilized where it can be determined that there is no adverse impact on the wetland. A determination to utilize a buffer area of less than 50 feet shall be made in cooperation with the California Department of Fish and Game and the City's determination shall be based upon specific findings as to the adequacy of the proposed buffer to protect the identified resource. Firewood removal by owner for on site use and commercial timber harvest pursuant to CDF timber harvest requirements are to be considered as allowable uses within 50-foot buffer areas.

6.D.17. The City shall require that dredging and spoils disposal be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment (as determined by compliance with 404 permit requirements) should be used for such purposes to appropriate beaches or into suitable longshore current systems.

6.D.18. The City shall discourage direct runoff of pollutants and siltation into wetland areas from development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.

6.D.19. The City shall require new development to mitigate wetland loss through any combination of the following, in descending order of desirability:

- *a. Avoidance of wetland habitat;*
- *b. Where avoidance is not possible, minimization of impacts on the resource; or*
- *c. Replacement, including use of a mitigation banking program.*

6.D.20. In cases where the City requires replacement for a wetland loss, the level of replacement will be determined according to the following criteria:

a. On-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind;
b. Functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and
c. Acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses.

Riparian Area Policies

6.D.21. The City shall ensure that riparian vegetation be maintained along streams/creeks, and other water courses for their qualities as wildlife habitat, stream buffer zones, and bank stabilization.

6.D.22. The City shall require mitigation for development projects where segments of stream habitat are unavoidably altered. Such impacts should be mitigated on-site with in-kind habitat replacement or elsewhere in the stream system through stream or riparian habitat restoration work.

6.D.23. The City shall require development projects proposing to encroach into a creek corridor or creek setback to do one or more of the following, in descending order of desirability:

a. Avoid the disturbance of riparian vegetation;
b. Replace riparian vegetation (on-site, in-kind);
c. Restore another section of creek (in-kind); and/or
d. Participate in a mitigation banking program.

6.D.24. The City should provide for diversified recreational use of fish and wildlife while providing preservation of their habitat.

6.D.25. The City should seek funding to reestablish riparian vegetation in selected stream corridors.

6.D.26. The City shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

General Plan Response

Water Quality

Policies *6.A.6*, *6.A.7*, *6.D.12*, *6.D.18* and *6.D.19* adequately address concerns regarding water quality effects on wildlife habitat resources.

Timber Management

Policy *6.D.7* and *6.D.8* adequately addresses concerns regarding the effects of timber management on wildlife resources.

Cooperation with State and Federal Agencies

Policies *6.A.10*, *6.A.12*, *6.A.13*, *6.A.14*, *6.D.4* and *6.D.7* identify the City's intention to cooperate and work in conjunction with State and Federal agencies to ensure that wildlife, marine, and vegetation resources under State and Federal, as well as County, jurisdiction are adequately protected.

Protection of Sensitive Habitats

All of the policies above address the protection of sensitive habitat and resources for the benefit of biological resources. In particular, Policies *6.D.10 - 6.D.14* (and the resulting limitations on the use of motorized vehicles on unvegetated dunes).

IMPACTS

Impacts related to biological resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

6.4 AIR QUALITY

ENVIRONMENTAL SETTING

To provide the context on which potential impacts can be assessed, this section describes existing air quality conditions of the Crescent City Planning Area. Pollutants discussed in this section include carbon monoxide, ozone, and particulate matter smaller than 10 (PM10) microns in diameter. Air Quality information for this section was provided by the North Coast Unified Air Quality Management District (NCUAQMD). This section provides a summary of information contained in the air quality section of the General Plan Background Report. More detailed information is provided in that report.

Climate and Atmospheric Conditions

The climate within the City's Planning Area is typical of other coastal areas found throughout the county. The coastal areas experience cool summers with frequent fog and mild winters with frequent rain.

Predominant winds in the planning area exhibit seasonal patterns. During the summer, frequently strong north to northwesterly winds are common. In winter, storms from the south Pacific result in an increase of southerly winds. Offshore and onshore wind flows are common along the coast and within the City's planning area. Onshore flows frequently bring cool temperatures, while offshore flows often push marine air away from the coast and result in warm temperatures. The average annual wind speed is about eight miles per hour.

Two types of temperature inversions are common on the North Coast: radiation inversion and subsidence inversion. Coastal regions are also sometimes affected by what are known as modified subsidence inversions. A radiation inversion is caused by a cooling of the air layer near the ground that may extend upward several hundred feet. This type of inversion is most common from late fall to early spring. During winter months, the radiation inversion may occur throughout the morning hours and, at times, may persist for several days. This type of inversion occurs most frequently in California's inland valleys, although it also occurs in the coastal areas. A subsidence inversion is caused by downward-moving air aloft, which is common in the area of high pressure along and off the coast. This type of inversion is present mainly from late spring through early fall and generally affects only the coastal areas of the county. (North Coast Unified Air Pollution Control District 1995.)

Air Pollutants and Ambient Air Quality Standards

Background information on State and Federal air quality standards is provided in Table 6-1. The pollutants of greatest concern in the planning area are carbon monoxide (CO), ozone, and PM10.

- **Carbon monoxide** (CO) is a public health concern because it binds strongly to hemoglobin, the oxygen-carrying protein in blood, and thus reduces the blood's capacity for carrying oxygen to the heart, brain, and other parts of the body. High CO levels develop primarily during winter when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning), which result in reduced dispersion of emissions.

- **Ozone** is not emitted directly into the air, but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include reactive organic gases (ROG) and oxides of nitrogen (NOx), react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

- **Particulate Matter Smaller than 10 Microns in Diameter (PM10)** consists of particles small enough to remain suspended in the air for long periods. Fine particulate matter (PM10) includes particulates of 10 microns or less in diameter—those which are small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, with resultant health effects. Acute and chronic health effects associated with high PM10 levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children.

TABLE 6-1

AMBIENT AIR QUALITY STANDARDS
California and United States

Pollutant	Symbol	Average Time	Standard, as parts per million		Standard, as micrograms per cubic meter		Violation Criteria	
			California	National	California	National	California	National
Ozone	O_3	1 hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	N/A	7,000	N/A	If exceeded	N/A
Nitrogen dioxide	NO_2	Annual average 1 hour	N/A 0.25	0.053 N/A	N/A 470	100 N/A	N/A If exceeded	If exceeded N/A
Sulfur dioxide	SO_2	Annual average 24 hours	N/A 0.04	0.03 0.14	N/A 105	80 365	N/A If exceeded	If exceeded If exceeded on more than 1 day per year
		1 hour	0.25	N/A	655	N/A	N/A	N/A
Hydrogen sulfide	H_2S	1 hour	0.03	N/A	42	N/A	If equaled or exceeded	N/A
Vinyl chloride	C_2H_3Cl	24 hours	0.010	N/A	26	N/A	If equaled or exceeded	N/A
Inhalable particulate matter	PM10	Annual geometric mean Annual arithmetic mean 24 hours	N/A N/A N/A	N/A N/A N/A	30 N/A 50	N/A 50 150	If exceeded N/A N/A	N/A If exceeded If exceeded on more than 1 day per year
Sulfate particles	SO_4	24 hours	N/A	N/A	25	N/A	If equaled or exceeded	N/A
Lead particles	Pb	Calendar quarter	N/A	N/A	N/A	1.5	N/A	If exceeded no more than 1 day per year
		30 days	N/A	N/A	1.5	N/A	If equaled or exceeded	N/A

Notes: All standards are based on measurements at 25°C and 1 atmosphere pressure.
National standards shown are the primary (health effects) standards.
N/A = not applicable.

Source: California Air Resources Board, 1997; U.S. Environmental Protection Agency, 1997.

Existing Air Quality Conditions

Air quality on the North Coast, unlike in many areas of California, has not deteriorated over the last three decades; in fact, the quality of air on the North Coast has actually shown improvement in most areas. In the Planning Area, the main sources of the pollutants described above are as follows:

- CO: woodstove/open waste burning and residential fuel combustion;
- ROG: burning and vehicle exhaust;
- NOx: ship and boat exhaust, truck exhaust, and industrial equipment exhaust; and
- PM10: airborne sea salts, woodstoves, and automobile exhaust, with minor contributions from industrial sources, road dust and open burning.

The latest available five years of air quality monitoring data for the project area are summarized in Tables 6-2 and 6-3. As shown in the tables, there were no carbon monoxide monitoring stations located in the City's Planning Area or anywhere in Del Norte County during the summary period. Long-term pollutant monitoring is typically halted or never begun in areas where pollutant concentrations are well below the standards. The monitoring data shows no exceedances of the State and Federal one-hour ozone standards and the State and Federal PM10 standards during the available reporting periods.

TABLE 6-2

SUMMARY OF OZONE MONITORING DATA
Del Norte County
1991 to 1995

Station Location	Yearly Monitoring Data				
	1991	**1992**	**1993**	**1994**	**1995**
Gasquet - Airport					
1st High (ppm)	0.06	0.07	0.06	0.06	0.06
2nd High (ppm)	0.06	0.06	0.06	0.06	0.05
Days above standard (a)	0	0	0	0	0
Redwood National Park - Requa					
1st High (ppm)	ND	ND	0.05	0.05	0.05
2nd High (ppm)	ND	ND	0.05	0.05	0.05
Days above standard*	ND	ND	0	0	0

ND = no data available.
* Days above standard = days with one-hour concentration above State one-hour standard of 0.09 ppm.

Source: California Air Resources Board 1997.

TABLE 6-3

SUMMARY OF PM10 MONITORING DATA
Crescent City
1995 and 1996

Station Location	Yearly Monitoring Data	
	1995	1996
Crescent City		
Highest 24-hour concentration (ug/m3)	41	41.7
Geomentric mean (ug/m3)	17.5	15.9
Arithmetic mean (ug/m3)	20.4	17.8
Percentage of days above standard*	0%	0%

ND = no data available.
* Percentage of days above standard = days above State 24-hour standard of 50 ug/m3 divided by number of days sampled.

Sources: California Air Resources Board 1997; North Coast Unified Air Quality Management District 1997.

Air Quality Management in the Crescent City Planning Area

The NCUAQMD is responsible for monitoring compliance with the requirements of the federal and California Clean Air Acts in the North Coast Air Basin, which includes Humboldt, Trinity, and Del Norte Counties. Prompted by the nonattainment status of the three counties within its jurisdiction, the NCUAQMD adopted the Particulate Matter (PM10) Attainment Plan in May 1995 (North Coast Unified Air Quality Management District 1995). The Attainment Plan identifies several transportation control measures, land use measures, and open burning and woodstove measures that could reduce PM10 concentrations within the air basin.

The Federal Clean Air Act Amendments of 1977 established a program to prevent the significant deterioration (PSD) of air quality in areas where the air is relatively clean. The areas of the country covered by the PSD program provisions are divided into three classes. Congress designated Redwoods National Park in Del Norte County as a Class I area where relatively pristine air quality is to be preserved. Consequently, large new sources of air pollution in Del Norte County and major modifications to existing sources must be evaluated by the NCUAQMD for their potential impacts to existing air quality conditions within Redwoods National Park.

Findings

The following findings were identified in the General Plan Background Report that apply to air quality.

- The main sources of CO in the Crescent City area are burning and residential fuel combustion; the main sources of ROG are burning and vehicle exhaust; the main sources of NOx are ship and boat exhaust, truck exhaust, and industrial equipment exhaust; the main sources of ozone are ROG and Nox reactions in the atmosphere in the presence of ultraviolet lights; and the main sources of PM10 are entrained road dust, burning, construction and demolition, and fuel combustion.

- No exceedances of air quality standards for any pollutants occur in the Crescent City area.

- Although no monitoring stations near the City's Planning Area are in exceedance of pollutant standards, the North Coast Air Basin, within which the planning area is located, is designated a nonattainment area for the state PM10 standards. One of the primary causes is attributed to smoke from wood-burning stoves.

METHODOLOGY

This section describes the assumptions, methodology, and thresholds of significance used to assess impacts on air resources that would be expected to occur by 2020 as presented in the Land Use Diagram.

Assumptions

- Roadway improvements and future traffic and congestion levels are expected to occur consistent with the transportation section of the Policy Document.

- The gasoline-powered automobile will remain the primary mode of transportation in the county through 2020.

Thresholds of Significance

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- conflict with or obstruction of implementation of the NCVAQMD's air quality plan;

- violation of any air quality standard or substantial contribution to an existing or projected air quality violation;

- cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);

- exposure of sensitive receptors to substantial pollutant concentrations; or

- creation of objectionable odors affecting a substantial number of people.

IMPLEMENTATION OF THE GENERAL PLAN LAND USE DIAGRAM

Development in accordance with the Land Use Diagram would have the following effects on air resources in the Crescent City Planning Area:

- Increased residential, visitor and local-serving commercial, and industrial development would increase levels of CO, PM10, NOx, and ROG as a result of additional automobiles, trucks, woodstoves, and construction equipment.

- Increased levels of construction associated with new development in the area would exacerbate the existing nonattainment status of the North Coast Air District and, without careful planning, could result in local exceedance of State and Federal standards.

GENERAL PLAN POLICY RESPONSE

The General Plan Policy Document includes a comprehensive set of goals and policies, which, if implemented, would partially mitigate the air quality impacts of future growth within the City's Planning Area. The following policies address impacts on air quality associated with development under the Land Use Diagram.

General Plan Policies

6.E.1. The City shall cooperate with other agencies to develop a consistent and effective approach to air quality planning and management. To this end, the City shall coordinate with other jurisdictions on the North Coast to establish parallel air quality programs and implementation measures.

6.E.2. The City shall support the North Coast Unified Air Quality Management District (NCUAQMD) in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.

6.E.3. The City shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality.

6.E.4. The City shall submit major development proposals to the NCUAQMD for review and comment in compliance with California Environmental Quality Act (CEQA) prior to consideration by the appropriate decision-making body.

6.E.5. The City shall encourage project proponents to consult early in the planning process with the City and the NCUAQMD regarding the applicability of transportation control measures (TCM) programs.

6.E.6. The City shall encourage development to be located and designed to minimize direct and indirect air pollutants.

6.E.7. In reviewing project applications, the City shall consider alternatives or amendments that reduce significant emissions of air pollutants.

6.E.8. The City shall support and participate in the air quality education programs of the NCUAQMD.

6.E.9. The City shall require developers to pave all access roads, driveways, and parking areas serving new commercial and industrial development.

6.E.10. The City shall not accept any unpaved roads into the City-maintained public road system.

Public Transportation Policies

3.B.1. The City and County, jointly, shall continue to work with public transportation service providers to plan and implement additional services within and to the city that are timely, cost-effective, and responsive to growth patterns and ridership demand.

3.B.5. The City shall give highest priority for public transit facilities and services to areas of high intensity use and/or focused commuter-employment areas.

Bicycling Policies

3.C.1. The City shall promote the linkage of sidewalks and walkways with bike and pedestrian trails leading to and through outdoor recreational areas such as parks and schools, as well as commercial areas.

3.C.2. The City shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the city's major recreation, employment, and housing areas and between its existing and planned bikeways.

3.C.3. The City shall work with State and local agencies to accommodate and promote the development of recreation/tour travel bicycle routes on Highway 101.

3.C.4. The City shall continue to coordinate with LTCO and Del Norte County in updating and implementing the Del Norte County and Crescent City Bicycle Facilities Plan and continue to include or consider trails of interest to the public such as the Harbor and Pebble Beach routes in addition to commuter routes and those which may be coordinated with State and Federal trails.

3.C.5. The City shall work with Federal, State, and other local agencies to coordinate planning and development of interconnected bikeways.

3.C.6. The City shall work with other interested agencies, including the Del Norte Local Transportation Commission and the North Coast Unified Air Quality Management District, to pursue available sources of funding for the development and improvement of trails for bicycle transportation.

3.C.7. The City shall encourage the promotion of bicycle travel through appropriate facilities, programs, and information, including through the school system and local media.

Pedestrian Transportation Policies

3.D.1 The City shall provide for the extension of sidewalks, trails, and walking facilities throughout the city limits to allow for convenient and safe pedestrian movement.

3.D.4. The City shall work with Federal, State, and other local agencies to coordinate planning and development of interconnected multi-purpose trails.

3.D.5. The City shall work with other interested agencies, including the Del Norte Local Transportation Commission and the North Coast Unified Air Quality Management District, to pursue available sources of funding for the development and improvement of trails for pedestrian transportation.

3.D.7. The City shall encourage the promotion of pedestrian travel through appropriate facilities, programs, and information, including through the school system and local media.

3.D.8. The City should develop a program of constructing pedestrian walkways and sidewalks for its street system. Those streets which carry heavy traffic loads should be considered as priority for sidewalk construction.

General Plan Response

Integrated Land Use, Transportation, and Air Quality Planning

Policies 3.B.1, 3.B.5, 3.C.1 through *3.C.7, 3.D.1, 3.D.4, 3.D.5, 3.D.7, 3.D.8*, and the implementation programs provide ways to integrate alternative modes of transportation into land planning decisions in an effort to improve the City's existing air quality conditions.

Air Quality Plans and Strategies

Policies 6.E.1-6.E.5 and *6.E.8* address concerns regarding regionwide, countywide, and long-term project planning to protect air resources in the City and prevent deterioration of air quality. The NCUAQMD's Attainment Plan also addresses these concerns.

Air Pollutant Emissions

In addition to the policies identified above, *Policies* 6.E.6-6.E.7, 6.E.9-6.E.10 address ways to reduce direct emissions in the context of specific projects. The NCUAQMD's Attainment Plan also addresses these concerns.

IMPACTS

Population and employment growth associated with development under the Land Use Diagram would contribute to an increase in regional air pollutants. However, as described above, the General Plan Policy Document provides a comprehensive strategy for reducing the air quality impacts associated with development and includes several policies designed to integrate alternative modes of transportation in an effort to improve local air quality conditions.

Impacts related to air quality would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

6.5 CULTURAL RESOURCES

ENVIRONMENTAL SETTING

There are several areas in the region that have a significant concentration of prehistoric and/or historic archaeological sites. Predictably, these areas are mostly along rivers and on the coast.

Prehistoric Sites

Crescent City is located within the ethnographic territory of the Tolowa Indians, who spoke a language of the Athapaskin linguistic family. The Tolowa language was linguistically related to languages spoken by other groups tothe south, but more closely related to dialects spoken by Native American populations along

the southern Oregon Coast. (Bommelyn and Humphrey 1989).

The Tolowa occupied approximately 640 square miles of land along the northwest California coast, from the California-Oregon border to the north to Wilson Creek to the south. Tolowa territory encompassed four ecological zones

A. The coastal strip with offshore rocks and adjacent beaches;
B. The relatively narrow redwood belt characterized by dense forest habitat;
C. A mountainous region of Douglas Fir and oak woodland to the east; and
D. The Smith River and its tributaries passing through the other three zones.

The Tolowa utilized seasonally available resources in a cyclical pattern. The coastal zone was a primary focus of activities. Major Tolowa settlements, referred to as villages, were situated along or near the coast. A village was a major socio-political unit, occupied nine to ten months of the year, with temporary residences taken up near the beach in late summer to harvest smelt and other marine resources. (Roscoe, Van Kirk, and Smart 2000)

The Tolowa and the Yurok exploited marine and riverine resources, thus most prehistoric sites lie along rivers or on the coast. Large prehistoric village sites are located outside the Crescent City area at the mouth of both the Smith and the Klamath Rivers, and there are Tolowa sites on Lake Earl.

Historic Sites

Historic sites are also located along rivers and on the coast in the region. Remnants of World War II include a Japanese shipwreck off Crescent City.

The Yontocket Historic District, north of the Crescent City area, is listed on the National Register of Historic Places (NRHP). The district includes the Yontocket village site and associated historic cemetery; areas to the south of the village that are important for shaman activities, a group of pools south of the site, and Troolet, a major occupation site at the north edge of the district. Although Yontocket is the sacred center, it is unclear whether Troolet is a "suburb" of Yontocket, or if Troolet is the secular area. The district covers roughly 1,000 acres. It is eligible under "criterion C" because it is an unique example of a Yurok village with both prehistoric and historic components, and under "criterion D" because it is a deep deposit with the potential to yield a large amount of data on environmental and cultural aspects of the prehistoric and historic habitation. Additionally, this was the site of the Burnt Ranch Massacre, which took place in 1853. The Tolowa inhabitants were overtaken and killed by Euro-Americans who were moving into the area to establish Crescent City and work the mines on the Smith River.

Built in 1856, the Battery Point Lighthouse is a historical landmark that is located on a small island about 200 yards off the coastline of the harbor area, accessible only at low tide. Lit only two years after Crescent City was incorporated, the lighthouse is one of the oldest inhabited lighthouses in California. The lighthouse is now a museum run by the Del Norte County Historical Society and is home to historical society curators who maintain the building for visitors. The inside of the Lighthouse contains authentic artifacts from signaling vessels through the last hundred years.

The Point St. George Archaeological District is another significant historical area listed on the National Register. This area is located northwest of the incorporated Crescent City area along the coast near the County airport. The St. George Reef Lighthouse also stands several miles offshore of Point St. George as the tallest lighthouse ever constructed. At 140-feet tall, this lighthouse was finished in 1882 after nine years

of construction following the sinking of *Brother Jonathan*, a side-wheel paddle ship. This accident was labeled as California's worst maritime disaster.

METHODOLOGY

Assumptions

This analysis was conducted qualitatively by considering archaeological and historical resources known or anticipated to present in the five planning subareas, as described in the Background Report, in relation to the Land Use Diagram. The analysis specifically incorporates the following assumptions about cultural resources in the Planning Area:

- The existing knowledge of documented archaeological and historical resources in the Planning Area is a satisfactory basis for assessing the potential effects of the General Plan;
- Previously unrecorded archaeological resources have the potential to exist in the Planning Area, although these currently unknown resources may be identified in conjunction with proposed development projects;
- Additional individual structures within the Planning Area will gain historical significance as time passes; and
- Additional structures of historical significance will be lost because of fires, nuisance abatement, and other natural and non-natural causes.

Thresholds of Significance

Impacts are considered significant and adverse if the General Plan would do any of the following:

- Disrupt or adversely affect a prehistoric archeological site determined to be an "important archeological resource" as defined by the CEQA Guidelines;
- Disrupt or adversely affect a property of historic or cultural significance to a community or ethnic or social group;
- Disrupt or adversely affect a paleontological site; or
- Disrupt or adversely affect a property that may eligible for inclusion in the California Register of Historic Places.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Crescent City Planning Area has various sites of historical or cultural significance, with most associated with early settlement activities. Historic sites include the St. George Lighthouse, the Battery Point Lighthouses, the old coast guard station at Point St. George, in addition to several known archaeologic sites along the coastal bluffs in the Planning Area which are connected to the Tolowa people. The Point St. George site is listed as a Nationally Registered Archeological Site. None of these sites would be affected by buildout of the Land Use Diagram because they are located in non-intensive designations such as County Resources

or Open Space.

GENERAL PLAN POLICY RESPONSE

The following policies address implications of development under the General Plan, on the Planning Area's cultural resources.

Policies

5.G.1. The City shall require appropriate surveys and site investigations when needed as part of the initial environmental assessment for development projects in accordance with the California Environmental Quality Act (CEQA). Surveys and investigations shall be performed under the supervision of a professional archaeologist or other person qualified in the appropriate field approved by the City.

5.G.2. The City shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a citywide cultural resource database.

5.G.3 The City should encourage property owners and other land managers to preserve or rehabilitate important historical, archaeological, paleontological, and cultural sites rather than destroying or allowing them to deteriorate.

5.G.4. The City shall encourage cooperation from owners of cultural and paleontological resources to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

5.G.5. The City should work with the County to prepare a cultural resource/heritage guide to encourage local and visitor knowledge and enjoyment of the local cultural heritage.

5.G.6. The City shall continue to solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

5.G.7. The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

5.G.8. The City shall require that discretionary development projects are designed to mitigate potential impacts to significant paleontological or cultural resources whenever possible. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

5.G.9. In cooperation with the State Historic Preservation Office, where it is determined development would adversely affect archaeological resources, the City shall require reasonable mitigation measures.

5.G.10 The City should work with the Del Norte County Historical Advisory Committee in identifying the cultural resources of Del Norte County, and process the necessary records and forms for submission of those features worthy of recognition and/or protection by the National Register, State Historic Landmarks program, or other appropriate official record.

5.G.11 The City shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark).

5.G.12 The City shall continue to encourage local cultural events and organizations such as the Del Norte Historical Society, the Del Norte Association for Cultural Awareness, and Native American groups.

5.G.13 The City should continue to provide opportunities for cultural arts and artifact display in the public areas of its facilities and encourage other public agencies to do the same.

5.G.14 The City should work toward building a performing arts center in the central Crescent City area (i.e., the VLC area) in proximity other similar facilities and to visitor services such as motels and restaurants.

IMPACTS

Archaeological (Prehistoric) Resources

Development in the Planning Area could result in the loss of archaeological resources. The General Plan includes an extensive set of policies and programs to preserve archeological sites from development. The impacts on archeological resources are therefore considered less than significant.

Historic Resources

Development and redevelopment in the Planning Area could result in demolition or alteration of historically-significant buildings. The General Plan includes an extensive set of policies and programs to preserve historic and architecturally-significant sites from development and redevelopment, and to ensure that surrounding development is compatible with the surrounding buildings. The impacts on historic resources are therefore considered less than significant.

MITIGATION MEASURES

No mitigation measures beyond the Policy Document policies and programs are necessary.

6.6 SCENIC RESOURCES

ENVIRONMENTAL SETTING

The City of Crescent City area has an abundance of visual resources. The Pacific Ocean and the Battery Point Lighthouse are the most significant scenic features to be found.

Approximately seventy-five percent of the land between the first road and the ocean within the Crescent City urban area is owned by local government agencies, providing continued opportunities for the enjoyment of these scenic areas by the public.

Coastal Resources Survey

City Staff conducted a review of existing scenic coastal resources in the coastal Crescent City urban area as a part of the General Plan Update process. City Staff incorporated into this document much of the existing conditions information (e.g., scenic resource locations) from the City of Crescent City and Del Norte County certified (1984) Local Coastal Plans. Additionally, City Staff consulted the State Department of Parks and Recreation California Coastline Preservation and Recreation Plan and conducted a field review of the Coastal Zone areas to update the information reflected in these Plans. Criteria for the identification of coastal areas

of particular landform, vegetation, or transition significance included:

1. Broad views of special natural interest to the general public (e.g., Pacific Ocean, off-shore rocks, seacliffs, territorial views of State or National Parks);
2. Broad views of distinctive scenes resulting from unique contrasts or diversity between land use and/or landscape patterns (e.g., harbor activities and ocean, urban development and landscape;
3. Views of special cultural features (e.g., historical structures, significant public works structures, unique maritime settings).

Table 1-3 and Figure 1-3 of the Background Report reflect the results of these reviews. Indicated are coastal vista points which consist of specific locations where scenic resources may be viewed from a stationary setting, coastal scenic view corridors along which a pedestrian or vehicle traveler may view scenic resources, and the Battery Point Lighthouse which is a significant coastal historic resource.

After review of the California Department of Parks and Recreation's California Coastline Preservation and Recreation Plan, City Staff determined that there are no areas within the Planning Area classified as Highly Scenic Resources.

Additional Unique Scenic Resources

City Gateways

While not scenic in the same manner as open coastal vistas, three developed Crescent City urban commercial land use areas have been identified as entrances to the city. These areas have, or have the potential for, improvements such as special signage, landscaping, and/or undergrounding of utilities that may serve as welcoming gateways into the community. They are as follows:

- Highway 101 South between Anchor Way and Elk Creek
- Highway 101 North between Parkway Drive and Cooper Street
- Front Street between "N" Street and "A" Street

Scenic Drives

Both the existing City and County General Plans propose the creation of a special marked driving route which visitors can follow to visit scenic areas and spend additional time in the community. With more recent development and regulations, the exact location of the route requires adjustment however within the Crescent City urban area, an updated route can be divided into two segments:

- Harbor Drive - from Anchor Way through the harbor to Highway 101 to Front Street to the B Street Pier/Battery Point Lighthouse.
- Lighthouse-to-Lighthouse Drive - from Battery Point Lighthouse to 5th Street west to Pebble Beach Drive and north to the Washington Boulevard/Pt. St. George area.

Historic Structures

Within the Coastal Zone the City has identified Battery Point Lighthouse as a structure of historical significance. Older structures of local historic or architectural interest can also be found outside the Coastal Zone in the central city area, though none have nearly the same significance as the lighthouse.

Development Standards

The City currently has standards which affect the overall visual impact of development/redevelopment in designated residential, commercial, and industrial areas. These development standards include: zoning height and yard standards for residential and commercial areas; a sign ordinance; and landscaping/tree ordinance requirements. The City also has a LCP certified Architectural Review Implementation Program which implements these standards and thereby assures compatibility and harmony in the appearance of city neighborhoods.

The City has no General Plan/LCP policies in place that require new development lighting to be shielded to minimize glare impacts. Additionally, the City does not have an existing (November 2000) light pollution ordinance. It has, however, conditioned new development projects to provide shielded, downward lighting. Biological studies for the Marhoffer Creek/Pt. St. George areas indicate that lighting should be directed away from rocky shoreline areas to minimize impacts upon marine habitats. Unlike the incorporated area, unincorporated sections of the greater Crescent City Urban Area are not currently provided with public street lights.

METHODOLOGY

Assumptions

Both visual and scenic resources are subjective by nature, and therefore the level of the project's visual impact is difficult to quantify. In addition, it is difficult to estimate the impact development would have on scenic resources, since individual development projects can enhance the aesthetic quality of an area. Therefore, this analysis was conducted qualitatively, assessing potential growth implications of the Land Use Diagram, including the potential degradation of the existing scenic character within the urban boundary. The General Plan policies are evaluated to determine the extent to which they would protect existing scenic resources and minimize the degradation of visual quality.

The analysis specifically incorporates the following assumptions about scenic resources in the Planning Area:

- new development will be limited to existing standards for height, setbacks, and architectural review;
- no new urban development will occur outside the urban boundary;
- the City will not annex land outside the urban boundary within the General Plan timeframe; and
- scenic resources includes both the built and natural environment.

Thresholds of Significance

Impacts are considered significant and adverse if the General Plan would do any of the following:

- Cause substantial or demonstrable negative aesthetic alteration to the existing scenic/visual character of the area;
- Disrupt existing designated scenic coastal and historic views or designated scenic vistas; or
- Produce of light and glare which would result in negative aesthetic effects to adjacent lands.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Crescent City Planning Area has two very significant scenic resources: Battery Point Lighthouse and views of the Pacific Ocean. New development under the Land Use Diagram would have a minimal effect on the scenic views. All of the scenic resources run along the coastline. A large percentage of this stretch of coastline is occupied by publically-owned land and open space (e.g., Beachfront Park and Pebble Beach access areas) which offers unrestricted views of the ocean and lighthouse. Additionally, the Pebble Beach Drive corridor offers motorists spectacular coastal views from high atop the coastal bluff.

There is very little land available along the coastline available for new development. Although there is land available for single family development, visitor and local commercial uses, public facilities, and harbor related uses, the majority of this land is already developed. New development on vacant land along the coast would not likely restrict access to the numerous vista points, scenic view corridors, or views of the lighthouse. Additionally, new urban development that is well-designed can enhance the aesthetic or scenic quality of the Crescent City coastline.

New development under the General Plan on the remaining vacant land may produce light and glare which could impact nighttime scenic views on adjacent lands.

GENERAL PLAN POLICY RESPONSE

The following policies address the implications of development under the General Plan on the scenic resources within the Planning Area.

General Plan Policies

5.E.1 The City shall continue to provide for protection of designated scenic resources through such means as land use designation, zoning, design review, and sign control.

5.E.2 The City shall encourage the continuation and infill of existing urban land use areas, where appropriate, in order to maintain views in those designated coastal scenic areas shown in Table 5-3 and shown on Figure 5-3.

5.E.3 The City shall encourage proposed development within designated coastal scenic areas to be visually compatible with its key viewshed characteristics by reflecting the character of the existing and compatible land uses while conforming to the land use development standards, as set forth in the Land Use and Community Development section and the Zoning Ordinance.

5.E.4. The City shall require new development in highly scenic coastal areas designated in the California Coastline Preservation and Recreation Plan (State Department of Parks and Recreation) to be subordinate to the character of its setting.

5.E.5. The City shall permit existing residential uses on the west side of Pebble Beach Drive to continue. The City shall reserve publically-owned parcels west of Pebble Beach Drive for use as open space, public access, and road maintenance and slope protection of Pebble Beach Drive.

5.E.6. The City's major entrances at Highway 101 north, Highway 101 south, and Front Street shall be developed as scenic gateways through the use of architectural review, removal of overhead utilities, landscaping, and sign regulations.

5.E.7. The City shall limit nonconforming or unpermitted signs as well as signs advertising commercial or privately-owned businesses in these areas zoned Open Space. The City shall continue its sign amortization program and support participation in centralized logo signage programs.

5.E.8. The City shall develop a roadway sign program which provides for specially marked scenic driving routes, which visitors can follow to visit coastal scenic areas in the Crescent City urban area, including the Harbor and Lighthouse-to-Lighthouse routes. Where feasible, these routes should link with any county scenic drive routes.

5.E.9. The City shall preserve those structures that are historically and architecturally significant unless proven that (a) the structure is over 50 percent unrepairable or, (b) adequate funding, either public or private, is unavailable to restore the structure.

5.E.10. The City has identified the Battery Point Lighthouse as having historical significance. The City shall participate with other public and private agencies to preserve this structure provided that adequate public or private funding is available.

5.E.11. The City shall coordinate with the County in developing an underground utilities priority list, utilizing identified scenic or commercial areas, for use when funding for undergrounding is available.

5.E.12. The City shall require the placement of new or relocated utility lines underground whenever feasible. When it is not feasible to place utility lines underground, the lines should be aligned so that they do not interfere with scenic resources.

5.E.13. The City shall, whenever feasible, require all public facilities and new development to use low-energy shielded lights so they are directed downward for better efficiency and to minimize nighttime glare.

5.E.14. The City should require lights in the Pt. St. George and Pebble Beach area to be shielded so they are directed down and away from the ocean to minimize impact on off-reef and island habitats.

5.E.15. The City shall limit nonconforming or unpermitted signs as well as signs advertising commercial or privately-owned businesses in these areas zoned Open Space. The City shall develop provisions for permit term limit organization and support participation in centralized logo signage programs.

1.E.1. The City shall work jointly with the Redevelopment Agency to demolish or rehabilitate dilapidated structures within the VLC area.

1.J.1. The City shall preserve, to the greatest degree possible, the remaining older structures which serve as a physical reminder of the City's historical past. The City shall give priority to preserving those structures of architectural or historical significance.

1.J.3. The City shall make the improvement or removal of dilapidated buildings throughout the city a code enforcement program priority. This is particularly important in the downtown area and the residential neighborhoods of the city.

1.J.7. The City shall pursue streetscape improvements, such as public art, landscaping, and street enhancement, in the VLC area.

1.J.10. The City's major highway entrances should be developed as scenic corridors through the use of an architectural design theme, removal of overhead utilities, landscaping, and similar measures to improve the appearance of the approaches to the City.

1.J.12. The City shall work jointly with the Redevelopment Agency to enhance the pedestrian environment through streetscape elements such as attractive planter boxes, comfortable seating, attractive and functional lighting and street signs, and attractive trash receptacles.

General Plan Response

Scenic Corridor

Policies 5.E.6 and *1.J.10* adequately address protecting the scenic quality of Highway 101 by designating it as a scenic highway. These policies also place restrictions of placement and design of signs, create architectural design standards, remove overhead utilities, and improve the landscaping and streetscape along the highway.

Built Environment Improvements

Policies 5.E.1, 5.E.4, 5.E.7,, 5.E.9, 5.E.11, 5.E.12, 1.J.1, 1.J.3, 1.J.7, and *1.J.12* address maintaining an attractive urban environment through a variety of means such as streetscape and landscape improvements, restricting signs, preserving historical structures, and removing dilapidated structures.

Lighthouse Preservation

Policy 5.E.4 preserves one of the City's most important scenic resources — Battery Point Lighthouse. The policy ensures that the City will participate with other local agencies and private entities in preserving this historic structure.

Nighttime Glare Reduction

Policies 5.E.13 and *5.E.15*. encourages new development to use low-energy shielded lights to reduce nighttime glare that might detract from the scenic quality of the City's scenic resources.

IMPACTS

Impacts related to scenic resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

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CHAPTER 7

HEALTH AND SAFETY

This chapter assesses the impacts of development under the Crescent City County General Plan on the health and safety of the residents of and visitors to Crescent City. The issues in this chapter include: seismic and geologic hazards, wildland and urban fire potential, flood hazards, hazardous materials, and noise.

7.1 GEOLOGIC AND SEISMIC HAZARDS

To provide the context on which potential impacts of the General Plan Land Use Diagram can be assessed, this section provides information on the soils, geological, and seismic conditions of Crescent City Planning Area. Soil issues related to prime farmland concerns are discussed in Chapter 6, "Natural Environment" of this document. This section provides a summary of information provided in the soils resources section of Chapter 1, "Resources/Conservation," and the geologic and seismic hazards section of Chapter 5, "Health and Safety," of the Crescent City General Plan Background Report. More detailed information is provided in that report.

ENVIRONMENTAL SETTING

Soils

The northern portion of the Crescent City Planning Area is primarily composed of poorly draining, nonprime soil types. The eastern and southeastern portions of the planning area transition to prime agricultural soils (Arcata and Rowdy), parts of which are already developed areas. The coastal area is comprised primarily of sand dunes, wet sand areas, and swamps.

Limitations for Septic System Use

All soils in the Smith River-Crescent City coastal plain mapped by the University of California, Davis soil mapping project have either a moderate or severe limitation for septic system use. Among the factors that limit suitability are localized flooding, soil wetness resulting from a high water table, sandy soil texture resulting in poor filtration, clay soil texture resulting in slow percolation, and excessive slope.

Susceptibility to Erosion and Shrink-Swell

High and very high erosion hazard upon disturbance of existing vegetation and groundcover have been identified on private forestland on slopes in excess of 50 percent.

The Smith River-Crescent City coastal plain soils generally have low expansive clay contents and are, therefore, not subject to shrinking and swelling (i.e., expansion) from changes in seasonal moisture content.

Geologic and Seismic Hazards

The following geologic and seismic hazards have potential to occur in Del Norte County:

- surface rupture and ground shaking related to earthquakes;
- liquefaction during earthquakes (liquefaction is the tendency of some soils, especially fine unconsolidated sands and silts that are saturated with water, to lose their structural capabilities during seismic events);
- landslides;
- tsunami runup (tsunamis are large sea-waves that can be generated by seismic events); and
- coastal erosion.

Ground Shaking and Stability

There are no active faults identified within the county. The closest identified faults are the Grogan fault, located offshore and slightly diagonal to the Del Norte County coastline; the Little Salmon fault located south of Eureka, in Humboldt County; and the Cascadia Subduction Zone (CSZ), also located offshore. The CSZ is a 750-mile-long offshore major-thrust fault zone extending from northern California to southern Canada.

The CSZ appears to pose the greatest potential seismic risk to the Crescent City Planning Area. The potential risk of a seismic event along the CSZ has been assessed and a regional geologic and seismologic basis for determining potential damage from ground shaking, liquefaction, and seismically induced landslides has been developed for the county. This assessment illustrates potential regional damage that could result on the Gorda Segment of the CSZ from an earthquake with a magnitude of 8.4.

The area around Lake Earl and the western portion of the coastal plain from Lake Earl north to the Smith River have the potential to experience considerable ground shaking intensity and high liquefaction potential from a major seismic event. The northern half of the Crescent City Planning Area is less susceptible to liquefaction because the area contains consolidated sedimentary, igneous, volcanic, or metamorphic rock. The main population center is on the Crescent City platform. The platform and its overlying beach deposits are of Pleistocene age. Due to consolidation and cementation over time, deposits of this age in California have not been known to liquefy in modern times. Liquefiable deposits in the Crescent City Planning Area are confined mostly to the areas northwest of Lake Earl.

Lurching, cracking or ground fissuring, may occur in unconsolidated soils under moderate to intense ground shaking. Structures located on such ground can be severely tilted or disrupted depending on the level of ground shaking.

Differential subsidence or settlement may also occur in underconsolidated (loose and poorly compacted) materials during ground shaking. The effects of differential subsidence are most likely to be felt on improperly compacted man-made fill.

Landslides

Although most natural slopes in the Crescent City Planning Area are considered stable, landslides and slope failure do occur. While most of the known landslides have occurred in low density or unpopulated foothill or mountain areas, developed areas are not immune to landslides. Areas susceptible to coherent landslides were identified for slopes greater than 30 percent and less than 70 percent, and whenever the ground-shaking intensity was greater than VII.

Tsunami Hazards

Earthquakes may generate a local seismic sea wave or tsunami that may arrive just minutes or up to several hours after an earthquake occurs. A tsunami run-up zone, resulting from a major seismic event along the CSZ, has been modeled for the Crescent City Area. The run-up zone would be within the Crescent City area. Crescent City's combination of near-shore undersea topography, resonant characteristics of the surrounding shoreline, and exposed position on the coast, make the city particularly susceptible to tsunamis originating in the Pacific. In low-lying coastal areas, strong shaking should be taken as a warning of a potential tsunami, and individuals should immediately attempt to move to higher ground.

Special Publication 115 presented by the Department of Conservation (1995) presents a tsunami scenario associated with a large earthquake of an 8.4 magnitude occurring on the Gorda segment of the CSZ. This model would assume an incident wave of 30 feet in height in water 150 feet deep. Within the Crescent City Planning Area, the tsunami destruction would exceed that which resulted from the 1964 Alaska earthquake. The report does not examine the possibility of tsunami bores traveling up river valleys, which were a hazard during the 1964 tsunami and should be considered for future potential earthquakes.

Coastline Hazards

The Crescent City Planning Area's coastline has a mix of sand beaches and coastal dunes, rocky headlands with steep slopes, pocket beaches, and estuaries. The U.S. Army Corps of Engineers (Corps) has identified several areas where the coastline is experiencing critical erosion:

- from Point St. George to Crescent City, where active erosion often impacts adjacent public roads necessitating on-going bluff stabilization or protection projects;

Other critical erosion hazard areas include a one mile stretch of coastline south of Crescent City, within the Redwoods National Park, and one mile south of False Klamath Cove.

Structural Hazards

The effects that earthquakes have on buildings and facilities depends on many variables, including but not limited to the magnitude of the earthquake, geologic characteristics of the site, and the engineering or construction characteristics of the affected buildings. Chapter 5 "Health and Safety" of the Crescent City General Plan Background Report provides a list of applicable regulations related to earthquake hazards. It also provides additional information on potentially hazardous building characteristics that may occur within the city's Planning Area.

Findings

The following findings were identified in the General Plan Background Report that apply to geologic and seismic hazards:

- There are no active faults identified in the Crescent City area.
- The Cascadia Subduction Zone, located offshore, poses a potential seismic hazard.
- Landslides, groundshaking, lurching, and liquefaction resulting from a major seismic event could cause damage in the city.
- Disturbance to steep slopes with highly erodible soils can lead to ground slippage or landslides.
- Tsunami runup could result from a seismic event occurring far outside the county, and could have significant impacts on the Crescent City area.
- Ground motion and seismic events may cause structural damage to certain types of structures.
- Certain types of structures, such as unreinforced masonry buildings, pre-1940 wood frame houses, tilt-up concrete structures, and mobile homes are more prone to seismic-related damage than other building types.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess impacts on geologic and seismic hazards that would be expected to occur based on the Land Use Diagram. Impacts are assessed qualitatively based on information contained in the General Plan Background Report and the Land Use Diagram contained in the Policy Document.

Assumptions

- Development in the coastal plain will take place in accordance with the NCRWQCB's regulations regarding septic system limitations.
- Development in areas on coastal bluffs will remain subject to the regulations identified in the Grading, Excavating, and Filling Ordinance and Coastal/Hazard Zoning Ordinance.
- The potential for seismic activity, and related groundshaking, surface rupture, and liquefaction, was assumed to be greater along the coast, based on information documented in the General Plan Background Report.
- The potential for landsliding is greater in the mountainous area of the county and along the coastal bluffs, based on information documented in the General Plan Background Report.
- New construction will be subject to State and local seismic safety building standards.

Thresholds of Significance

For the purposes of this Final EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure (including liquefaction), and landslides;
- substantial soil erosion or loss of topsoil;
- location on a geologic unit or soil that is unstable or that would become unstable and potentially result in an onsite or offsite 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 risks to life or property;
- development on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater; or
- contribution to inundation by seiche, tsunami, or mudflow.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

With implementation of the Land Use Diagram, some coastal areas would be protected from development-related impacts by the Public Facility land use designation, which includes parks and recreation-related land uses. However, the U.S. Army Corps of Engineers has designated the entire area as a critical erosion hazard area, and the potential for seismic and geologic hazards is high. Development concern are as follows:

- All development in the Crescent City Planning Area, particularly that in the coastal zone, is at risk for high-intensity groundshaking, liquefaction, and tsunami risk resulting from a large-magnitude earthquake.
- Coastal bluffs and sand dunes are designated critical erosion areas, and development in these areas could subject occupants and structures to erosion and landslide-related dangers.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts related to seismic and geologic hazards associated with development proposed under the Land Use Diagram:

General Plan Policy

General Hazards

7.A.1 The City shall evaluate proposed projects and land use policy decisions based on the environmental hazards identified in this element. Low intensity / occupancy uses (such as open space, agricultural production, or extremely low density residential land use) shall be preferred in hazard areas.

7.A.2 The City shall work with local, State, and Federal agencies to maintain natural hazards information or sources of information that can be used to fulfill the natural hazard disclosure statements.

7.A.3 To the extent practicable, the City shall discourage the location of "critical facilities or uses" from being located in areas subject to natural hazards as identified in this Element. For purposes of the General Plan, "critical facilities or uses" are defined as facilities or uses (i.e., hospitals, fire stations, utility stations, communication centers) that would be used to respond to the needs of the City in the event of a natural or manmade hazardous event or uses with high occupancies, such as schools.

Seismic Hazards

7.B.1 Since no active or potentially active earthquake faults have been identified within Crescent City Planning Area, the provisions of the Alquist-Priolo Special Status Studies Zone are not applicable.

7.B.2 The City shall utilize the most current seismic design criteria in the construction of new public buildings. Buildings meant to accommodate activities and equipment related to public safety, especially police, fire, and communications services, should be constructed to ensure continued operation and availability of services after an earthquake.

7.B.3 The City should consider establishing a program to have structures highly susceptible to seismic damage either reinforced or demolished. Priority for abatement action should be based on the type of occupancy and the severity of risk.

7.B.4 The City shall require site-specific investigations prior to the construction of all high intensity and / or public use structures. Site-specific investigations should assess the potential for liquefaction induced ground failures and suggest measures to mitigate the hazards from vertical and / or horizontal displacement. If it is found that engineering techniques cannot mitigate the hazards to within acceptable risk levels appropriate with the intended use, the location of the proposed development shall be reconsidered.

7.B.5 The City shall continue to use the amended California Uniform Building Code, and adopt the new version if appropriate to the City's needs.

7.B.6 In order to minimize risks, the City should periodically inspect and improve new public roads, bridges, and overpasses should be designed to the most current seismic design criteria, and existing bridges.

7.B.7 To reduce the probability of ruptured utility lines, the City shall ensure that new major pipes, both for sewer and water, ne made of the strongest, most flexible materials available and still be economically feasible.

7.B.8 The City, in conjunction with local, State and Federal agencies, should begin a program of disseminating available seismic safety information to citizens and property owners.

7.B.9 The City should require all public and private schools within the City to undergo periodic inspections and upgrading, when necessary, to ensure conformity to current Field Act Standards.

7.B.10 The City shall require that construction contemplated in low-lying coastal areas, those in the zone of possible run-up, be designed in accordance with recommendations stated in the report entitled, Protection of Crescent City, California from Tsunami Waves.

7.B.11 The City should encourage State and Federal agencies to further investigate the phenomena of "resonance" in the coastal area off Crescent City to see if remedial measures could be instituted to decrease the effect.

7.B.12 The City should urge State and Federal agencies to develop new programs to aid local governments in dealing effectively with existing buildings an facilities that might present a hazard to life and property in the event of a severe earthquake.

7.B.13 The City should urge State and Federal agencies to continue research aimed at refining earthquake data and developing workable building code provisions based on seismic monitoring and construction technology and testing.

7.1 The City should review existing codes and ordinances regulating development and modify them if necessary to ensure their consistency with seismic policies.

7.2 It is recommended that programs be initiated through the Uniform Code for the Abatement of Hazardous Structures for the identification and abatement of buildings susceptible to earthquake damage. These programs should be long range in order to avoid economic hardship and/or dislocation problems. Structures should be allowed to remain as is if their occupancy is significantly reduced, or if their use is made less critical. In establishing a program of hazardous building abatement, the following structures should be given priority:

- *unreinforced masonry structures;*
- *buildings constructed prior to a specific date determined by the history of adoption and enforcement of building codes; and*
- *critical facilities: essential facilities whose use is necessary during an emergency, building whose occupancy is involuntary, high occupancy buildings.*

Single family dwellings should be given lowest priority in abatement programs, since they are predominantly wood frame construction and should, therefore, perform relatively well during seismic shaking.

7.3 The City, with the assistance of other governmental agencies, should develop and disseminate seismic safety information to the City's citizens. This should include such matters as:

- *what to do in case of an earthquake;*
- *how to get official information in case of a disaster;*
- *directions to the closest disaster center; and/or*
- *public health information.*

7.4 The City should ensure that adequate records are kept of the materials penetrated and rates of penetration in water (or other) wells drilled in the Smith River Plain. Generally, one or two core holes fifty feet deep should accomplish this, drilled under the supervision of an engineering geologist.

Geologic Hazards

7.C.1 Any development proposed adjacent to a coastline erosion area should be preceded by:

- *an assessment of the rates of coastal retreat*
- *in the case of bluffs, a detailed examination of underlying geology by a registered geologist or engineering geologist; and*
- *an analysis of the potential for tsunami run-up.*

The results of the assessment of coastal retreat and geologic analysis shall be utilized to identify the setback or special construction measures required to insure that the proposed development will not require the use of shoreline protection over the full economic life of the proposed development (i.e., 75-100 years).

7.C.2 In lieu of the above, the City may establish specific area setbacks of sufficient distance to mitigate potential coastal erosion hazards.

7.C.3 The City shall petition appropriate Federal and State agencies to aid in a study of coastal bluff erosion and its impact on the Crescent City Harbor. The study should include:

- *the source of harbor deposition material, specifically the impact of beach erosion north of Battery Point;*
- *the impact harbor deposition has on beach sand replacement south of Crescent City Harbor;*
- *the impact of harbor dredging practices on the former hospital site west of Front and A st.;*
- *the impact of harbor dredging on potential tsunamis hazard;*
- *the direct and indirect costs of harbor dredging to the City; and*
- *the economic benefit of harbor dredging to the City.*

Additionally, the City should request of the U.S. Army Corps of Engineers a more detailed study of the critical coastline erosion areas in and adjacent to Crescent City, to ascertain the feasibility of installing seawalls, as recommended by the Corps.

7.C.4 The City should support the County's efforts to discourage development involving significant alteration of natural land forms or surface conditions, particularly on sloped between 20 and 30 percent which are identified to have high risk soils. Development on slopes greater than 30 percent is discouraged.

7.C.5 The City shall require that a geologic investigation be made by a registered geologist, engineering geologist, or Registered Civil Engineer for all proposals in landslide potential areas and development on sloped greater than 20 percent, including road construction. These investigations should assess the stability of the site under both normal and seismic conditions as well as recommend mitigation measures. If it is found that the hazards cannot be mitigated to within acceptable risk levels appropriate with the intended land use, the proposal should be denied.

7.C.6 The City should maintain in its Public Works division a public file of all geological and soil investigations.

7.C.7 The City should support the County's efforts to inform the public of how they can minimize slope stability problems on their own property.

7.C.8 The City, in conjunction with other governmental agencies, when feasible, should utilize lands subject to severe geologic hazards for low intensity park and recreational activities or open space.

7.C.9 The City shall require that any construction contemplated on filled areas be preceded by an analysis of the fill and its capabilities or limitations.

7.5 The City should designate a responsible person to coordinate the ongoing implementation of those geologic hazard policies which will require engineering and/or geologic expertise. Under this person's direction, procedures should be established for:

1) *requiring detailed geologic and/or soils investigations for proposals within landslide and coastal erosion areas designated herein;*
2) *reviewing of such investigations;*
3) *establishing a systematic filing procedure for such investigations so that over time, a detailed database can be developed for specific areas;*
4) *establish a standardized landslide and coastal erosion report procedure and format;*

5) develop and make available to the public upon request information on potential slope stability problems and mitigation measures designed for the City; and

6) establishing the required building setbacks and/or foundation design for proposed new development based upon the full economic life of the proposed new development (i.e., 75-100 years) such that the need for future shoreline protection works is fully precluded.

Disaster Planning

7.G.1. The City should continue to assign high priority to the maintenance and continual updating of the Emergency Response Plan to ensure that the City will be able to respond effectively in the face of disaster. This plan shall include an effective emergency evacuation system. This system shall include redundant routes to facilitate an effective evacuation.

7.G.2. The City shall design an effective emergency evacuation system for tsunami inundation areas.

7.G.3. The City shall encourage all agencies responsible for public health and safety services to routinely evaluate the response of their facilities to a damaging earthquake and develop contingency plans for post-disaster emergency operations.

7.G.4. Even though location and amount of damage to roads cannot be precisely predicted, the City should prepare and maintain a generalized contingency evacuation plan, indicating alternative routes based on the most probable assumed failures. Such a plan would facilitate efficient emergency operations following a major flood, wildland fire, tsunami, and other seismic events.

7.G.5. Since an effective emergency warning system is of critical importance in the event of tsunami or flood events, the City shall continue to cooperate with all appropriate State and Federal agencies in efforts to improve their facilities and programs for the operation of the early warning system.

7.G.6. The City shall locate VHF receivers, capable of automatically receiving early warning messages, in all hazard prone areas of the City.

7.11 In revising and updating the Emergency Response Plan, emphasis should be placed upon Readiness Condition No. 4 (the Normal peace time situation) in accordance with the recommendations outlined in this Chapter, under Disaster Plan.

General Plan Response

Erosion and Sediment Transport

Policies 7.C.1 - 7.C.9 adequately address concerns regarding increased erosion hazard and sediment transport, primarily in timberlands and along coastal bluff areas. Additional concerns are addressed by the County's Coastal Zone Ordinance.

Earthquake

Policies 7.B.1 - 7.B.13 address concerns regarding development in areas that are at risk from intense groundshaking, liquefaction, or tsunami-related hazards which could result from a large-intensity earthquake. *Policies 7.G.1 - 7.G.6* address the appropriate disaster planning and recovery capabilities needed to deal with the range of natural hazards that could affect the Crescent City Planning Area. Additional concerns are addressed by the Uniform Building Code, and the Coastal Hazard zoning ordinance.

IMPACTS

Impacts on seismic and geologic hazards would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required.

7.2 WILDFIRE AND URBAN FIRE POTENTIAL

To provide the context on which potential impacts of the General Plan Land Use Diagram can be assessed, this section provides information on the fire hazard potential in the Crescent City Planning Area. This section provides a summary of information provided in the wildland and urban fire hazards section of Chapter 5, "Health and Safety," of the General Plan Revised Background Report. More detailed information is provided in that report.

ENVIRONMENTAL SETTING

Much of unincorporated Crescent City is surrounded by forest lands. Wildlife fire hazard potential associated with these timberlands is a critical concern to life and property losses. Wildfires can originate from both natural (e.g., lightning) or artificial (e.g., human-related) sources.

The Crescent Fire Protection District is the county agency responsible for approximately 75 square miles of the unincorporated county land in the Crescent City Planning Area. This area contains approximately two-thirds of the county's population. Mutual Aid and Automatic Aid agreements exist between the County's other fire districts, the California Department of Forestry, and the Crescent City Fire Department. Additionally, the Crescent Fire Protection District has jurisdiction over the Crescent City Harbor and provides crash and rescue services to the County Airport.

In outlying and wildland areas surrounding Crescent City, one of the most pressing fire safety issues is the lack of water supply for fighting fires. Infrastructure to supply water to new developments and large developments in outlying areas does not exist. In the event of structural or wildland fires in these areas, the fire districts must truck water out to the fire sources. Access to these areas may also be a concern.

Structural deficiencies may also pose fire hazards within the City's Planning Area. Because many parts of the city and county are old, dated structures do not meet new fire codes. Structures in residential, commercial, industrial, and other areas in the planning area are susceptible to potential fire hazards due to a lack of code compliance. Many old structures are being retrofitted to comply with new fire safety standards, while others are being rebuilt (Cox pers comm).

Findings

The following findings were identified in the General Plan Background Report that apply to wildfire and urban fire potential:

- The lack of water supply infrastructure and increasing development in outlying areas outside the Urban Boundary may pose safety risks from fire hazards.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess impacts on wildfire and urban fire potential that would be expected to occur based on the Land Use Diagram.

Assumptions

- New urban development in the city is expected to support additional needed fire protection services, which are expected to generally meet General Plan levels of service and response time standards.

- New suburban and rural development in high fire hazard areas will expose a larger population to existing wildland fire hazards and result in the potential for greater structural fire concerns in these areas.

Thresholds of Significance

For the purposes of this Final EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- exposure of people or structures 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; or

- substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives related to fire protection.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

Development within the Crescent City Planning Area is relatively free of fire hazards. However, the Planning Area's outlying or wildland areas lack sufficient water supply to effectively fight fires. Access to these areas may also be a concern.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts related to wildfire and urban fire potential associated with development proposed under the Land Use Diagram.

General Plan Policy

7.E.1 The City should avoid, where possible, the development of areas identified as fire hazard areas. Structures located in extreme or high fire hazard areas should be constructed with fire-resistant materials, utilizing fire-resistant design standards, and the surroundings should be irrigated.

7.E.2 The City shall develop a set of basic design standards for fire-resistant design.

7.E.3 Projects which encroach into areas which are determined to have a high or extreme fire hazard shall be reviewed by the appropriate Fire Agency to determine if special fire prevention measures are advisable.

7.E.4 The City should not approve major developments if fire fighting services are not available or are not adequate for the area.

7.E.5 These City shall apply the following standards to all subdivisions planned for structural development.

- *There will be at least two different ingress/egress routes.*
- *The minimum right of way for any street, roadway, or thoroughfare within a subdivision shall conform to the classifications and improvements of the City's Public Facility Design Standard requirements. Where critical conditions warrant, added width for vegetative treatment or vehicle turn-outs may be recommended.*
- *Cul-de-sacs should not exceed 600 feet, terminated by a turn-around right-of-way of not less than 90 feet in diameter.*
- *Street grades shall be limited to 15 percent, except for short distances where topographic conditions make lesser grades impractical.*
- *No street or road shall have a center line radius of curvature of less than 50 feet.*
- *No dead end roads are allowed within any subdivision unless deeded limited access emergency service roads tie two or more dead end roads together. Emergency service roads shall be no less than 16 feet wide with a 24 foot right-of-way.*
- *All streets and roads will be named and signed at each intersection with a street sign containing the street names in letters at least four inches high. The street sign will also show block number and directional arrows in numbers at least one inch high. All improved lots must display four inch high hose numbers on the curb in front of the lot, on the house, or on a sign not less than three feet high conspicuously posted with numbers four inched high readily readable from the frontage street.*
- *Any lot within a subdivision that does not have street or thorough-fare frontage must have two ingress/egress routes. One of these routes may be a service alley with no less than 20 feet of right-of-way and no more than 300 feet in length.*

7.E.6 The County Fire Protection Districts' shall conduct a review of structures in the county that do not meet current fire code. A list of these structures shall be prepared, and a system shall be designed to assign priorities for retrofitting. This program shall be conducted in conjunction with the County's current efforts to retrofit such structures.

7.E.7 The city shall coordinate with utility providers to develop a plan for directing existing water supply and or finding alternative water supplies for use during fire fighting activities that may occur in the areas surrounding Crescent City.

7.10 The City should ensure that appropriate fire prevention agencies are consulted for review and recommendations relative to all development proposals in fire prone areas.

General Plan Response

Development in Fire Hazard Areas or Areas with Minimal Fire Protection

Policies *7.E.3-7.E.5* adequately address concerns regarding the potential for increased fire hazard relating to additional development in high-risk areas or areas with minimal existing fire protection. Policy 5.E.7 requires

the city to coordinate with utility organizations to develop a plan for efficiently directing existing water and finding alternative water supplies in the case of wildfire in the developed areas surrounding Crescent City.

Old Structures

Policy 5.E.6 requires a review of substandard structures and assignment of priorities for bringing these structures up to code.

IMPACTS

With implementation of the General Plan policies and programs, the potential fire hazard impacts associated with development identified in the Land Use Diagram are considered less than significant.

MITIGATION MEASURES

No mitigation measures are required.

7.3 FLOOD HAZARDS

To provide the context on which potential impacts can be assessed, this section provides information on flood hazard conditions within the Crescent City Planning Area. This section provides a summary of the information provided in the flooding section of Chapter 5, "Health and Safety," of the General Plan Background Report. More detailed information is provided in that report.

ENVIRONMENTAL SETTING

Flooding is a natural hazard that continually threatens some portions of the Crescent City Planning Area. Significant flooding hazards in the planning area are limited to Elk Creek and the coastal areas (including portions of the Harbor, small tributaries emptying into the Pacific Ocean south of the Harbor and in the Pebble Beach area). These streams represent a flooding hazard associated with development occurring within, or in close proximity to, their respective floodplains. Flood hazards are presented in a Federal Emergency Management Agency (FEMA) flood insurance study conducted for the County in 1986 . The study was prepared to revise and update previous flood insurance rate maps for the County and to promote sound land use and floodplain development.

Flooding along the Pacific coast near Crescent City is often associated with the simultaneous occurrence of very high tides, large waves, and storm swells during the winter. Additionally, strong storm surges are the major cause of serious coastal flooding, with strong winds, heavy rains and high tides that back-up river and creek flows and cause flooding at river mouths.

Flooding along portions of the coastal area may also be attributed to tsunamis. Tsunamis could flood a considerable amount of the Elk Creek floodplain, including portions of downtown Crescent City. Additional environmental setting and impact information relating to the occurrence of tsunamis in the planning area is presented in Section 7.1 "Geology and Seismic Hazards" of this chapter.

Findings

The following findings were identified in the General Plan Background Report that apply to flood hazards:

- Flooding occurs along Elk Creek, and other minor watercourses in the Crescent City Planning Area. Future development usually increases flooding by reducing permeable surfaces, concentrating flows, and eliminating storage.

- Flooding hazards along the coast may also be attributed to tsunamis and pose threats to the Crescent City Planning Area.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess impacts on flood hazards that would be expected to occur based on the Land Use Diagram. Impacts are assessed qualitatively based on information contained in the General Plan Background Report and the Land Use Diagram contained in the Policy Document.

Assumptions

- Flooding and inundation impacts are assumed to be generally limited to defined floodways and floodplains along county watercourses and coastal areas.

- Some existing urban, suburban, and rural residences may continue to be exposed to existing flood hazards. This exposure to existing flood hazards is not considered an impact of the Crescent City General Plan Update.

-

Thresholds of Significance

For the purposes of this Final EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- placement of 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; or

- placement within a 100-year flood hazard area of structures that would impede or redirect flood flows.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

Areas subject to flooding within the Planning Area would be protected from additional development by the County Resources and Public Facility designations. No additional development concerns are identified.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts related to flood hazards associated with development proposed under the Land Use Diagram.

General Plan Policies

7.D.1. The City shall discourage inappropriate development in flood prone areas.

7.D.2. The City's emphasis on flood control should be aimed at restricting development in flood prone areas, and not rely on traditional structural flood control techniques.

7.D.3. The City land use policy shall continue to recognize that floodplains have unique and significant public values, including wildlife habitat or recreational, aesthetic and scientific value, open space, and groundwater recharge. The value of the flood plain as an environmental resource and the public benefits to be derived from it should be considered.

7.D.4. When structures are deemed necessary in flood prone areas, the City should require appropriate flood proofing standards.

7.D.5. The City should revise floodplain districts to coincide with flood prone areas designed in conjunction with the National Flood Insurance Program.

7.D.6. The City should restrict and control construction of roads in flood prone areas due to their growth inducement potential.

7.D.7. The City shall maintain/develop an effective emergency warning system is of critical importance for flood hazard areas.

7.D.8. The City should use the National Flood Insurance Program as a framework for the City's flood damage prevention policies and programs.

7.D.9. The City should provide flood hazard information for owners and buyers of lands which are unsuited for intended purposes because of flood or shore erosion hazard.

7.6 The City should review all existing flood proofing structural standards to ensure their adequacy, and/or need for their revision.

7.7 The City should ensure that the Public Works Department has the opportunity to review, comment, and make recommendations on any development proposal which might be affected by flooding.

7.8 The City should investigate methods for the permanent retention of flood prone areas in open space or low intensity use. Methods to be studied should include, but not be limited to:

- *fee simple purchase;*
- *purchase of easements;*
- *development rights;*
- *leaseback and saleback;*
- *tax delinquent property;*
- *mandatory dedication;*
- *tax incentives;*
- *donation; and*
- *land banking.*

7.9 The City should develop, and make available to the public upon request, information on flood prone areas and City policies dealing with them.

General Plan Response

Floodplain Construction

Policies 7.D.1, *7.D.2*, *7.D.4*, and *7.D.6* adequately address concerns regarding floodplain constriction caused by additional development in floodprone areas. In addition, Federal Emergency Management Agency flood insurance rate maps address these concerns.

IMPACTS

With implementation of the General Plan policies and programs, the potential flood hazard impacts associated with development identified in the Land Use Diagram. are considered less than significant.

MITIGATION MEASURES

No mitigation measures are required.

7.4 HAZARDOUS MATERIALS

To provide the context on which potential impacts can be assessed, this section presents information regarding the presence of hazardous materials in the Crescent City Planning Area. This section provides an assessment of the potential for health and safety impacts associated with development in areas where hazardous materials are being or may have been used, stored, generated, or disposed. This section provides a brief description of these concerns; however, a more detailed discussion that includes the various Federal, State and local regulations that govern the use, transportation, and storage of hazardous materials is provided in Chapter 5 of the General Plan Background Report.

ENVIRONMENTAL SETTING

Specific hazardous materials concerns in the Crescent City Planning Area include pesticides, petroleum spills, and toxic hazards associated with potential contamination at two millsites. These hazards are briefly described below.

Pesticides

Pesticides are widely used on public and private lands throughout the North Coast Region for a variety of agricultural, industrial, and silvicultural purposes. Insects, fungus, nematodes, and weeds are the principle pests being controlled. One of the principal concerns in pesticide application is the potential to contaminate surface and groundwater (Water Quality Control Board, North Coast Region 1985). The California Department of Food and Agriculture, represented locally by the County Agricultural Commissioners, is responsible for regulating pesticide use statewide through the California Agricultural Code. Hundreds of different pesticides are used in the region; however, some present a greater contamination risk due to their chemical properties. Volatility, solubility, rate of hydrolysis, degradation pathways, and other chemical-specific properties govern the behavior of pesticides in the environment, and determine the potential for the contamination of water resources (Water Quality Control Board, North Coast Region 1985).

A majority of the pesticide use within the County is outside the Crescent City Planning Area on approximately 800 acres associated with the Easter Lily Farms in the Smith River area (Buckles pers com). Within Crescent City, nurseries and other domestic uses represent minor areas of pesticide application.

Petroleum Spills

Crescent City is not likely to experience impacts resulting from large-scale oil spills. No oil production facilities are operating offshore of the North Coast area. Additionally, the Crescent City Harbor no longer accommodates oil transport shipping traffic. The most likely sources for potential oil or petroleum spills within the Crescent City Harbor are fuel piers and watercraft (Miller pers comm). It is also possible that minor petroleum or fuel spills could occur as a result of boating accidents within the harbor. However, these sources are considered minor sources and it is not anticipated that they would cause major damage or create hazards to people or wildlife.

Additionally, petroleum or other chemical spills may occur on local roadways as a result of vehicle or truck accidents. While these petroleum or chemical spills would not typically be considered significant hazards for people, they are of particular concern to wildlife and/or sensitive habitats. Water quality degradation of rivers and creeks in the vicinity of local roadways is also considered a significant hazard.

Toxic Hazards

The use, transportation, and storage of hazardous materials is managed under several Federal, State, and local regulations.

Federal Regulations

The principal Federal regulatory agency is the Environmental Protection Agency (EPA). Two key Federal regulations pertaining to hazardous wastes are described below. Other applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations.

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) enables the EPA to administer a regulatory program that extends from manufacturing hazardous materials to their disposal, regulating the generation, transportation, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation.

*Comprehensive Environmental Response, Compensation, and Liability Act***.** The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, was passed to facilitate the clean-up of the nation's toxic waste sites. In 1986, Superfund was amended by the Superfund Amendment and Reauthorization Act (SARA) Title III (community right-to-know laws). Title III states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup, even if the material was dumped illegally when the property was under different ownership.

State Regulations

In California, State regulations are equally as or more stringent than Federal regulations. The State has been granted primary oversight responsibility by the EPA to administer and enforce hazardous waste management programs. State regulations have detailed planning and management requirements to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key laws pertaining to hazardous wastes are discussed below.

Hazardous Materials Release Response Plans and Inventory Act of 1985. The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step and are not considered hazardous wastes. Health concerns pertaining to the release of hazardous materials; however, are similar to those relating to hazardous wastes.

Hazardous Waste Control Act. The Hazardous Waste Control Act (HWCA) created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The HWCA is implemented by regulations contained in Title 26 of the California Code of Regulations, which describes requirements for the proper management of hazardous wastes, including criteria for:

- identification and classification;
- generation and transportation;
- design and permitting of recycling, treatment, storage, and disposal facilities;
- treatment standards;
- operation of facilities and staff training; and
- closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such wastes. Under the HWCA and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with the California Department of Toxic Substances Control (DTSC).

Emergency Services Act. Under the Emergency Services Act, the state developed an emergency response plant to coordinate emergency services provided by Federal, State, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key part of the plan, which is administered by the California Office of Emergency Services (OES). OES coordinates the responses of other agencies, including the EPA, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

Other Laws, Regulations, and Programs. Various other State regulations have been enacted that affect hazardous waste management. These include:

- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65); and

- California Government Code Section 265962.5, which requires the Office of Permit Assistance to compile a list of potentially contaminated sites in the state.

At the present time, there are two known potentially-contaminated sites within the Crescent City Planning Area. The Hooshnam property (site), also known as the former Dutton Mill site, consists of one 69.9 acre parcel, located approximately one mile east of Crescent City on Elk Valley Road. Limited information is known about the history of the site; however, it was common practice at the time of its operation to use such chemicals as pentachlorophenol/tetrachlorophenol (PCP/TCP). The mill site has also been used for logging equipment repair and as a small wrecking yard. Recommendations outlined in a Phase 1 environmental site assessment (URS Greiner Woodward Clyde, Inc., 2000a) prepared for the site call for both soil and groundwater sampling to be performed at the site to determine the possibility and extent of any residual contamination at the site.

The second potentially-contaminated site, the Standard Veneer property, is located approximately two miles north of Crescent City on Standard Veneer Road. The Standard Veneer Mill was in operation from 1951 to 1975. The mill began as a veneer manufacturer but was converted to plywood manufacturing after approximately five years of operation. PCP/TCP was added to the glue during plywood manufacturing; however, it is not known where the PCP/TCP was stored, how it was handled, or if any spills occurred. As with the Hooshnam site, recommendations outlined in a Phase 1 environmental site assessment (URS Greiner Woodward Clyde, Inc., 2000b) call for both soil and groundwater sampling to be performed at the site to determine the possibility and extent of any residual contamination at the site.

Findings

The following findings were identified in the General Plan Background Report that apply to hazardous materials:

- Pesticide application is a concern due to the potential to contaminate extensive valuable groundwater resources. However, pesticides are not widely used in the Crescent City Planning Area.

- The Crescent City Planning Area is not likely to experience impacts resulting from large-scale petroleum spills. However, in the event of any smaller-scale ocean spills associated with fuel piers or water craft, the U.S. Coast Guard maintains facilities to accommodate cleanup efforts.

- The Del Norte County Health Department is a Certified Unified Planning Agency (CUPA) responsible for the regulation of hazardous materials within the city.

- Currently, no active groundwater or drinking-water supply sources are contaminated. However, future potential for methyl tertiary butyl ether (MTBE) contamination to occur in drinking water or groundwater resources is a concern.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess public health and safety impacts that would be expected to occur based on the Land Use Diagram. Impacts are assessed qualitatively, by considering existing and anticipated activities that would generate hazardous materials as they relate to areas proposed for development under the Land Use Diagram.

Assumptions

- Increased development or growth in the Crescent City Planning Area will result in the increased generation of hazardous materials.

- Some development proposed under the Land Use Diagram is expected to be located in and near areas where hazardous materials have been used or are currently being used.

Thresholds of Significance

For the purposes of this Final EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- creation of a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;

- creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- emission of hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or

- creation of a significant hazard to the public or the environment as a result of being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

Development in accordance with the Land Use Diagram would have the following public health and safety effects related to hazardous materials in the Crescent City Planning Area:

- Increased residential development has the potential to generate increased household waste generation.

- Increased industrial development has the potential to increase hazardous materials generation.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address hazardous materials impacts associated with development under the Land Use Diagram.

General Plan Policy

Hazardous Materials Policies

7.F.1. The City shall provide educational materials and information to the public regarding the types of household hazardous waste and the proper methods of disposal.

7.F.2. The City shall provide disposal options to the public for the proper disposal of household hazardous waste.

7.F.3. The City shall ensure that new hazardous waste facilities and those commercial and industrial land uses that use or produce hazardous materials or waste are sited in an appropriate manner to maintain an acceptable level of risk.

7.F.4. The City shall continue to maintain a hazardous materials response capability for the control and cleanup of hazardous materials releases and accidents.

7.F.5. The City shall work with the Highway Patrol to limit the movement of hazardous wastes to approved routes within the Crescent City Planning Area.

General Plan Response

Hazardous Materials/Household Waste Generation

Policies 7.F.1 through *7.F.3* address concerns related to increased hazardous materials and household waste generation associated with development identified in the Land Use Diagram.

Hazardous Materials Response Plans

Policies 7.F.4 and *7.F.5* adequately address public health and safety concerns regarding the ability of the City to implement multi-agency coordinated measures that address the storage, use and transportation of hazardous materials.

IMPACTS

With implementation of the General Plan policies and programs, combined with continued implementation of the County's Hazardous Materials Response Plan and the Underground Storage of Hazardous Substances Ordinance, the potential for hazardous materials impacts associated with development identified in the Land Use Diagram are considered less than significant.

MITIGATION MEASURES

No mitigation measures are required.

7.5 NOISE

To provide the context on which potential impacts can be assessed, this section provides information on existing baseline noise levels and sources of noise within the Crescent City Planning Area. This section provides a summary of information provided in Chapter 6, "Noise" of the General Plan Background Report. Definitions of acoustics terms used below, additional background information on environmental acoustics, and State and Federal noise regulations are also provided in Chapter 6, "Noise".

ENVIRONMENTAL SETTING

Noise sources can be grouped into two categories: mobile and stationary. Mobile sources are noise producers that move within the county. In the Crescent City Planning Area, these include vehicle traffic on local roads and highways, and aircraft noise. Stationary noise sources typically include facilities such as manufacturing plants, processing plants, mines, shooting ranges, and so forth. There are no significant sources of stationary noise within the Planning Area.

Land uses such as residences, health care facilities, schools, libraries, and parks are typically considered sensitive to noise. These land uses are concentrated within Crescent City, however, residential land uses are also scattered throughout the Planning Area.

Mobile Sources

Roadway and Highway Noise

The noise generated from vehicles using roads and highways within the Planning Area is governed primarily by the number of vehicles, type of vehicles (mix of automobiles, trucks, and other large vehicles), and the

speed. Sound32 is Caltrans' computer implementation of the Federal Highway Administration Traffic Noise Prediction Model (FHWA-RD-77-108). Sound32 and traffic information were used to develop baseline traffic noise contours for major roadways in the Planning Area. Noise levels within the Planning Area ranged from between 55 Ldn (at 100 feet from the noise source) for lesser traveled roadways to 72 Ldn (at 100 feet from the noise source) for heavier traveled roadways.

Aircraft Noise

In addition to roadway and highway noise, another mobile noise source in the Planning Area is air traffic using the County airport (McNamara Field) (see Figure 7-1). To date, a noise study of the airport has not been done for this facility. Aircraft using the McNamara Field are primarily small, general aviation propeller aircraft; however, the airport also supports a few commercial turbo-prop aircraft and an occasional corporate jet.

Stationary Sources

As described above, there are no significant sources of stationary noise within the Planning Area.

Findings

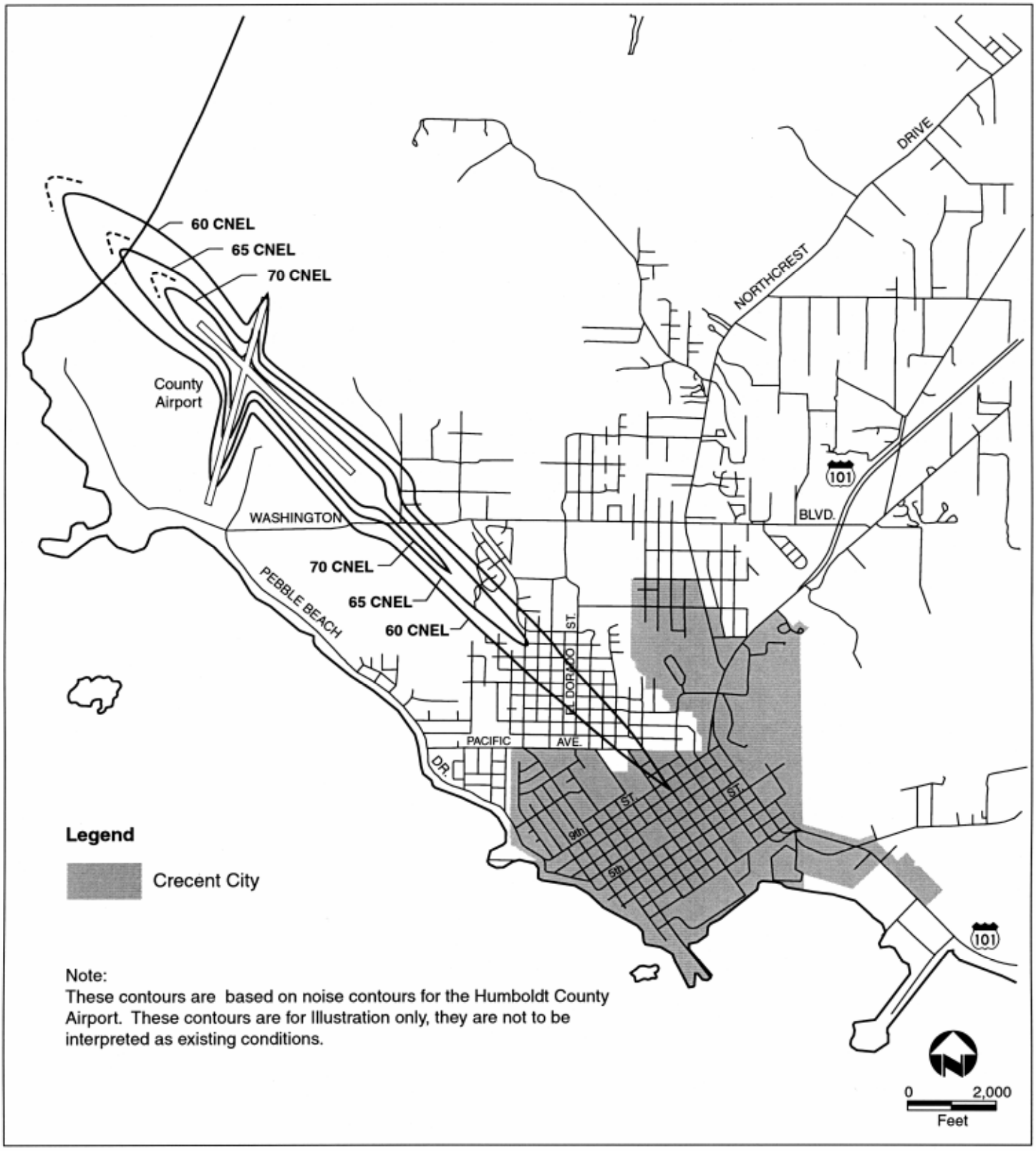
The following findings were identified in the General Plan Background Report that apply to noise:

- Currently, the City does not have a noise ordinance. Development of a noise ordinance will enable the City to develop noise standards for the consideration of future development and to reduce the siting of proximate incompatible land uses.
- Noise reduction may be accomplished through both physical and administrative methods.
- The primary source of noise in the city is from highway and roadway noise.
- Changes in the existing noise environment will be more noticeable in the rural portions of the city given the relatively quiet conditions that exist.
- A noise assessment of the County airport is needed in order to assess impacts on future growth near the airport facility.
- Overall, the city can be defined as having low ambient noise levels.

METHODOLOGY

This section identifies the assumptions, methodology, and thresholds of significance used to assess noise-related impacts that would be expected to occur based on implementation of the Land Use Diagram. While specific types of industrial/commercial uses and thereby resultant noise levels are not currently known, the assessment of stationary noise sources qualitatively describes potential impacts related to industrial development proposed under the Land Use Diagram. Similarly, the assessment of mobile noise sources are assessed qualitatively based on information contained in the General Plan Background Report and the Land Use Diagram contained in the Policy Document.

Assumptions



Jones & Stokes Associates, Inc.

Figure 7-1
Crescent City - Noise Contour Map

- Development throughout the Crescent City Planning Area will occur according to the Land Use Diagram.

- As development occurs throughout the Planning Area, increased vehicle and aircraft noise is expected to increase mobile noise sources. In addition, development of industrial or commercial land uses will increase the number of stationary noise sources.

Thresholds of Significance

For the purposes of this Draft EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the following effects:

- 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 persons to or generation of excessive groundborne vibration or groundborne noise levels; or

- substantial permanent, temporary, or periodic increases in ambient noise levels in the project vicinity above existing levels without the project.

IMPLICATIONS OF THE GENERAL PLAN LAND USE DIAGRAM

Mobile Noise Sources and Levels

Development according to the Land Use Diagram would result in an increase in mobile noise levels. Traffic noise levels resulting from existing and future land uses may exceed acceptable noise levels. Noise sensitive land uses could be located along these roadways and may experience noise levels that exceed acceptable levels.

Stationary Noise Sources and Levels

Development proposed under the Land Use Diagram provides the potential for noise-sensitive land uses to encroach upon existing or proposed fixed noise sources. While it is currently not possible to determine noise impacts associated with specific developments (e.g., manufacturing plant, etc.), land uses designated for commercial, office, mixed uses, and industrial uses could potentially result in the development of noise sources which may exceed acceptable standards.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts related to noise associated with development under the Land Use Diagram.

General Plan Policy

7.H.1 The following land uses shall be considered to be "noise sensitive":

- *single and multi-family residential;*
- *hospitals and extended care facilities;*
- *schools and other learning institutions;*
- *libraries; or*

- *similar uses as may be determined by the City.*

7.H.2. Where there are development of new noise sensitive land uses, the City shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation sources exceed 65 CNEL/Ldn or 55 CNEL/Ldn from stationary sources. This study shall include recommendations and evidence to establish mitigation which will reduce noise exposure to acceptable levels.

7.H.3 Transportation-Related Noise. The development of new noise sensitive land uses adjacent to existing or planned transportation facilities or development of new transportation facilities adjacent to existing or planned sensitive land uses shall require a noise impact analysis in areas where current or future exterior noise levels from transportation sources exceeds 65 CNEL/Ldn. This study shall include recommendations and evidence to establish mitigation which will reduce noise exposure to acceptable levels. Areas subject to this criteria are defined as follows:

- *Roadway Noise. For major roadways in the County, the future noise levels estimated on Table 7-1 shall be used to determine the applicability of this policy.*

- *Aircraft Noise. Until completion and adoption of new noise contours for McNamara Field, the noise contours estimated on Figure 7-1 shall be used to determine the applicability of this policy.*

7.H.4 Stationary Noise. Proposed projects which include potentially significant noise generation (i.e., with the potential to exceed the standards shown on Table 7-2) or development of new land uses adjacent to an existing or proposed stationary source of noise shall be required to submit a noise study that includes specific recommendations for mitigation. This policy does not apply to noise levels associated with agricultural and gravel extraction (but not processing) operations.

TABLE 7-1

MAXIMUM NOISE EXPOSURE FOR NOISE SENSITIVE AND OTHER USES DUE TO STATIONARY NOISE SOURCES (HOURLY L_{eq} IN dB[1,2])

Duration	Day (7 a.m. to 10 p.m.)	Night (10 p.m. to 7 a.m.)
Sensitive Land Uses (See Policy 2.H.1)		
Residential	62	57
Other Sensitive Land Uses	52	47
Other Land Uses		
Commercial uses	62	57
Industrial and Heavy Commercial uses	67	62

[1] As determined at the property line of the receiver. When determining effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property-line noise mitigation measures.

[2] Sound level measurements shall be made with the noise meter set to the slow response setting.

7.H.5 In the event that acceptable outdoor noise levels cannot be achieved by various noise mitigation measures, indoor noise levels for residential uses should be designed to not exceed 45 CNEL/Ldn with windows and doors closed. (New)

7.H.6 The City should encourage the DNUSD to design and locate schools so that interior noise levels in classrooms do not exceed 45 CNEL/Ldn and exterior noise exposures do not exceed 65 CNEL/Ldn at classroom buildings and 70 CNEL/Ldn on playgrounds or athletic fields.

7.H.7 The City should design and locate passive recreational areas so that noise levels do not exceed 65 CNEL/Ldn and active recreational areas (e.g., sports fields, playgrounds) so that noise levels do not exceed 70 CNEL/Ldn.

7.H.8. The City shall investigate the use of noise-reducing flight procedures for airplanes and helicopters, such as maintaining minimum flight altitudes, using less noise sensitive flight paths, or flying during less sensitive hours.

7.H.9. The City should cooperate with the County and other agencies active in Del Norte County in noise abatement measures.

7.H.10. The City should develop performance standards (acceptable noise levels) for residential, public, industrial, commercial, and recreational uses.

7.H.11. The City should consider noise standards in future development. The City shall evaluate the new development according to the impact of such development upon the immediate area.

7.H.12. The City should not allow existing activities within a commonly zoned area to increase the noise level over 5 dB (A) above the ambient noise level.

7.H.13. The City, in recognizing that noise data for the Citywide area is limited, should develop a more adequate database as resources become available.

Airport Noise

7.H.14. The City shall encourage the County to consider the establishment of an air corridor zone which would alert citizens of the effects of future jet flights upon the area.

7.H.15. The City shall encourage the County to consider not allowing the construction of any noise sensitive facilities (i.e., schools, hospitals, etc.) within 1/4 mile of the corridor.

7.H.16. The City shall encourage the County to consider any future lengthening of runways to accommodate commercial jet flights should, if feasible, be extended on the northern ends of the runways to reduce noise impact in the approach area.

7.H.17. The City shall encourage the County to consider restricting the use of current non-residential land use within the corridor to compatible uses of industrial, commercial, or open space.

7.H.18. The City should encourage the County to consider investigating the possibility of a prop-jet air corridor.

7.H.19. The City shall encourage the County to consider the compatibility of land use in regards to the noise level generated and the noise level acceptable by adjoining uses of land. No proposed use of land should be allowed which would eventually infringe upon the use of the adjoining land, (unless the proposed use is contractually bound to acceptable performance standards).

7.12 The City shall develop a public education outreach program and planning initiatives to minimize the risks of both life and property to tsunami hazards. Public education shall be focused on providing hotel/motel fact sheets, beachfront signage, mailers to residents, inclusion local schools' public safety curriculum. The tsunami planning initiatives shall include detailed procedures for hazard assessment, warning, and evacuation response.

IMPACTS

Impacts related to mobile and stationary noise sources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.

MITIGATION MEASURES

No mitigation measures are required for impacts related to mobile and stationary noise sources.

CHAPTER 8

ALTERNATIVES AND MANDATORY CEQA SECTIONS

8.1 INTRODUCTION

This chapter of the EIR addresses several topics that the State CEQA Guidelines required to be discussed in all EIRs. These include: alternatives, significant irreversible effects, growth-inducing impacts, cumulative impacts, and mitigation monitoring. The State CEQA Guidelines suggest that these subjects are discussed in separate sections or paragraphs, but allows for the inclusion of a table showing where each of the subjects is discussed within the EIR. This chapter combines the two approaches, with separate discussions of each mandatory topic and references to appropriate sections elsewhere in the EIR for elaboration on the discussion included here.

8.2 REQUIREMENTS FOR ALTERNATIVES

The following paragraphs discuss the requirement of State law that EIRs include descriptions of the alternatives to a proposed project that have been considered. The first section describes the general requirements of CEQA and the second section summarizes the directions of the California General Plan Guidelines with respect to the consideration of alternatives in general plan projects.

CEQA Guidelines

According to the State CEQA Guidelines (as amended March 29, 1999), an EIR "shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasiblely 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 (§15126.6)." Following are the directions that the State CEQA Guidelines provides regarding the discussion of alternatives within an EIR.

(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 §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.

(2) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record.

(3) Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be

used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail that the significant effects of the project as proposed *(County of Inyo v. City of Los Angeles, 124 Cal. App.3d).*

(4) "No project" alternative. The specific alternative of "no project" shall also be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonable expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives...

(5) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasiblely attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

General Plan Guidelines

The 1999 General Plan Guidelines discusses the nature of alternatives in the general plan update process as follows:

> For any set of goals and objectives, there will be a number of possible courses of action a community may pursue. Alternative plan proposals should be developed and examined at this stage to enable a community to weigh its possible directions. Besides the goals and objectives, the varying plans should contain alternative sets of principles, policies, standards and plan proposals . . .
>
> The nature and detail of the alternatives will depend upon the extent of the planning program. For new general plans and comprehensive general plan revisions, the alternatives may focus on population levels and on the scale, location, and type of development. The alternatives in a more limited planning program, such as for a single element, may deal with a narrower range of options . . .
>
> The alternatives need not be mutually exclusive. Ultimately, the decision makers may select an amalgamation of two or more alternatives as the best choice.

8.3 SELECTION OF GENERAL PLAN ALTERNATIVES

As a practical matter, because of the comprehensive nature of the general plan, the policy and program alternatives that could conceivably be combined with these land use alternatives are infinite. For most policies in the plan, there is at least one alternative, and for many, if not most, individual parcels of land, there is at least one feasible alternative land use designation. The evaluation of the impacts of all these alternatives and their many combinations is simply not feasible or useful. For purposes of satisfying the spirit of CEQA's requirement to address alternatives, this Final EIR identifies feasible alternatives, focusing on land use alternatives for those areas where the General Plan proposes major changes in planned land use and in those areas where the General Plan has been identified as having the greatest environmental impact.

The Final Environmental Impact Report will consider the following range of alternatives:

Proposed Plan. For the purposes of the Final EIR analysis, the General Plan is the Proposed Plan. The residential and non-residential growth estimates for the Proposed Plan are consistent with those identified in Chapter 2 of this Final EIR.

1. **Alternative 1: No Project — No Development Alternative.** This alternative assumes no new development in Crescent City beyond what is currently built, essentially placing a moratorium on any future development. This alternative would not allow for new population or employment growth.

2. **Alternative 2: No Project — Existing General Plan Alternative.** The "No Project" Alternative is the existing 1976 Del Norte County/Crescent City General Plan, since this plan would continue to govern the city because a revised General Plan is not adopted. This would have a lower population and employment growth than under the General Plan.

3. **Alternative 3: High Density Alternative.** This alternative creates higher density residential development in the westerly portion of the city and in the harbor area. It includes predominantly multi-story, multi-family housing west of D Street, at the upper end of the MF 15-30 du/ac density range. This would provide an increased number of units in proximity to the coastal area, compared to the Proposed Plan. A mix of townhomes and other higher density unit types would in this location be within walking distance to local beaches and parks, and would provide housing for both year-around residents and seasonal visitors.

   Higher density residential development in the harbor area is also included in this alternative. The area adjacent to the small boat basin and north of Citizens Dock Road would be re-designated MF 15-30 du/ac, and would develop as a coastal marina. This would not necessarily displace the fishing industry uses south of Citizens Dock Road. Similar to the city area described above, there would be a mix of townhomes and other higher density units within walking distance to amenities such as local beaches and the harbor, and would provide housing for both year-around residents and seasonal visitors.

8.4 EVALUATION OF ALTERNATIVES

This Final EIR examines three alternatives and compares them against the "Proposed Plan," which is the General Plan. See Table 8-1 for a detailed comparison of the three alternatives' impacts.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
New Growth				
Dwelling Units	5,603	0	3,635	7,860
Population	13,405	0	9,454	18,793
Buildout				
Dwelling Units	11,283	5,680	9,315	13,540
Population	26,940	13,535	24,219	32,328
Land Use, Housing, and Population				
Land Use	The Proposed Plan would not constitute a major change in planned land uses in the Planning Area, conflict with adopted plans governing land use in the Planning Area; or divide or disrupt the physical arrangement of the community. The impacts would therefore be less than significant.	Under this alternative, no new development would be planned for the Crescent City Planning Area beyond that which is currently built. Additionally, this alternative would allow for no new population or employment growth. Therefore, this alternative would have no additional effect on land use.	This alternative would make no changes to existing plans, and would therefore be consistent with the 1976 General Plan. This alternative would not meaningfully alter the physical arrangement of the community. The impacts would therefore be less than significant.	Alternative 3 would have essentially the same make up of land use types as the proposed plan with the only difference being higher residential densities in the harbor area and on the city's west side along the coast. This alternative would not divide or disrupt the physical arrangement of the community and would be consistent with adopted plans within the Planning Area. The impacts would therefore be less than significant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Housing/ Population	The Proposed Plan has a holding capacity of 11,283 DUs -- 5,603 of which are new. Using a 2 percent (historical) growth rate, the Crescent City Planning Area will have a demand for a total of 9,880 DUs expected at the end of the General Plan time frame (2020). There is enough holding capacity to accommodate growth until 2020. The Proposed Plan is generally consistent with the 1992 Crescent City/Del Norte County Housing Element. The impact is considered less than significant.	Alternative 1 would not allow for any additional housing and population growth, and would therefore be unable to accommodate the city's projected population growth. This is considered a significant impact. Furthermore, this alternative would not provide the opportunity for the City to meet its fair share of regional housing needs, and would therefore be inconsistent with the adopted Housing Element. This impact would also be considered significant. No mitigation measures would be available to reduce this impact to a less-than-significant level.	The 1976 Crescent City General Plan has a holding capacity of 9,315 DUs. Using a 2 percent (historical) growth rate, the Crescent City Planning Area will have a demand for a total of 9,880 DUs (3,737 new DUs) in the year 2020. Under this alternative there is not enough holding capacity (565 units short) to accommodate growth until 2020. The impact is considered significant.	Alternative 3 would have a holding capacity of nearly 13,500 DUs. The holding capacity is enough to accommodate the demand for 9,880 DUs at the end of the General Plan time frame. Additionally, the policies and programs would remain consistent with the 1992 Crescent City/Del Norte County Housing Element. The impact is considered less than significant.
Transportation and Circulation				

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Street and Highway System	The Proposed Plan is projected to create significant impacts on two roadways in the Crescent City Planning Area: including: 1) U.S. 101 between 9th Street and Northcrest Drive and 2) Parkway Drive, from Washington Bvld. to U.S. 199. Even with the implementation of the mitigation measures identified in this Final EIR, the impacts will be considered significant.	Alternative 1, which proposes no further development in the Planning Area, would result in relatively little growth in traffic over the duration of the Plan. Added traffic would be due to external sources, including tourist and commercial traffic using the City's principal streets. There is sufficient capacity on the system to absorb the projected level of external growth, and traffic operation conditions would remain similar to what is currently observed throughout the City. No significant impacts would be expected from this alternative.	Alternative 2 proposes to continue the concepts of the current General Plan. Within the Crescent City urbanized area, this alternative would generate approximately 50% less new local traffic compared to the Proposed Plan. With this alternative, it can be projected that the significant congestion anticipated on US 101 in Crescent City would not occur; some portions of US 101 in this level might operate at Level of Service D during some portions of the year. No facilities would have a demand that exceeds its current capacity. Other locations, such as Northcrest Drive and Parkway Drive - indicated as exceeding allowable thresholds under the proposed project - would operate acceptably with the levels of development proposed for Alternative 2. Thus the only possible significant impact for this alternative would be the portion of US 101 between 9th Street and Northcrest Drive.	Alternative 3 proposes a substantially higher level of development than the Proposed Plan. It is estimated that locally generated traffic volumes would average 20% higher under this alternative than the Proposed Plan. As a result, all locations where impacts are projected for the Proposed Plan would show impacts for this alternative as well, and the impacts would be more substantial. In addition, it can be expected that the one-way couplet of US 101 between Front Street and 9th Street would also operate at capacity. Therefore, the impacts to this segment of U.S. 101 would be considered significant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Alternative Transportation Modes	The Proposed Land Use Diagram proposes an extension of essentially the same development patterns and densities that are present today in the Crescent City Planning Area. Consistent with congestion management and air quality policies, densities have been increased within the existing urban boundary areas to provide more opportunities for transit use without service area expansion. The increased population will bring with it an increased demand for public transportation services; funding for a major portion of the public transit system is population-based. Other alternative modes of transportation will not be affected by any expansion of population or non-residential growth. No significant impacts would be expected from the Proposed Plan.	Impacts on non-automotive travel under Alternative 1 would also be negligible. Little if any additional demand for transit, pedestrian, or bicycle transportation services would be expected, as all of this demand is generated internal to the county. Relatively little change would be anticipated in air passenger transportation demand due to the stable level of population. No significant impacts would be expected from this alternative.	Alternative 2 would add to demand for transit, pedestrian, and bicycle services. The transit demand could be substantive enough to require additional buses or bus trips. The added pedestrian activity could lead to the need for additional pedestrian traffic signals and pedestrian walkways in areas of high pedestrian activity. Increased levels of business activity could also lead to an increase in demand for air transport service, and additional airplane activity in Crescent City.	The alternative would also add to demand for transit, pedestrian, and bicycle services. The transit demand could be substantive enough to require additional buses or bus trips. The added pedestrian activity could lead to the need for additional pedestrian traffic signals and pedestrian walkways in areas of high pedestrian activity. Increased levels of business activity could also lead to an increase in demand for air transport service, and additional airplane activity in Crescent City.
Public Facilities and Services				

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	**Alternative 1**: No Project - No Development Alternative	**Alternative 2**: No Project - 1976 General Plan Alternative	**Alternative 3**: High Density Alternative
Water Supply and Distribution	Growth under the Proposed Plan would create a demand for water in the Crescent City Planning Area that cannot be met under the current system. However, with the implementation of the policies included in the General Plan Policy Document and improvements to the existing system being constructed, impacts from the Proposed Plan are considered insignificant.	This alternative would not place any additional demands on the City's ability to supply and distribute water and would therefore have no impact.	Alternative 2 will have lower water demands than the Proposed Plan. The Crescent City Planning Area will have a total water demand of approx. 3.3 mgd. Once improvements to the existing system are completed, development under this alternative will not create significant impacts.	This alternative will have higher water demands than the Proposed Plan and Alternatives 1 & 2. The Crescent City Planning Area will have a total water demand of approx. 4.7 mgd. Once improvements to the existing system are completed, development under this alternative will not create significant impacts.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Wastewater Collection, Treatment, and Disposal	New growth in the Crescent City Planning Area under the Proposed Plan will create demands on the wastewater treatment system that will exceed current capacity. However, with the implementation of the policies included in the General Plan Policy Document, impacts from the Proposed Plan are considered insignificant. In addition, Chapter 5 identifies further mitigation to address the need to expand the existing wastewater treatment capacity and improve the existing collection system.	This alternative would not place any additional demands on the City's ability to collect and treat wastewater and would therefore have no impact.	Alternative 2 will generate less wastewater than the Proposed Plan. Under this alternative, the Crescent City Planning Area will generate an additional 1.57 mgd of wastewater. The existing capacity of the treatment plant is not enough to meet demand and no policies are in place to address system improvements that would limit excessive I&I flows. The impact under this alternative is considered significant.	This alternative will generate more wastewater than the Proposed Plan and Alternatives 1 & 2. Under this alternative, the Crescent City Planning Area will generate an additional 2.97 mgd of wastewater. This alternative would generate wastewater that could not be accommodated by the existing system. However, with implementation of the policies and programs from the Policy Document along with mitigation suggested in Chapter 5 of this Final EIR, the impact of this alternative is considered insignificant.
Storm Drainage	The Proposed Plan would require expansion of the drainage system in the Crescent City Planning Area. The policies and programs under the Proposed Plan would mitigate impacts to a less-than-significant level.	Alternative 1 would not place any additional demands on the City's public facilities and services and would therefore have no impact.	This alternative would require expansion of the drainage system in the Crescent City Planning Area to serve new development in that area. Since policies are not in place to address potential impacts, this alternative is considered potentially significant.	Impacts on the storm drainage system would be similar to those of the proposed project. The policies and programs under this alternative would mitigate any negative environmental effects. Thus, the impacts are considered less than significant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Solid Waste	Growth under the Proposed Plan would increase the population of the Planning Area by nearly 13,500 residents resulting in increased waste generation from residential, commercial, and industrial development. This would result in the generation of approximately 62 tons of waste per day or nearly 22,630 tons per year. Nearly half of this waste would be generated from new growth under the Land Use Diagram. The policies and programs under this alternative would mitigate impacts to a less-than-significant level.	Alternative 1 would result in no increases in solid waste collection and disposal.	Alternative 2 will require the need for future solid waste disposal, but to a lesser extent than under the Proposed Plan. Since the existing General Plan does not contain policies that identify future disposal sites after closure of the Crescent City Landfill, this is considered a potentially significant impact.	Due to the higher population that this alternative could accommodate, this alternative would have higher waste volumes. However, the policies and programs under this alternative would mitigate impacts to a less-than-significant level.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Law Enforcement	New development under the Proposed Plan would create additional demand for 26 law enforcement officers. The policies and programs under this alternative would mitigate impacts to a less-than-significant level.	Alternative 1 would not place any additional demands on the City's public facilities and services and would therefore have no impact.	This alternative would create demand for 19 additional law enforcement officers. Since there are no policies in the existing General Plan that address these services, the impacts are considered potentially significant.	New development under this alternative would create demand for an additional 38 law enforcement officers. The policies and programs under this alternative would mitigate impacts to a less-than-significant level.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Fire Protection	Development under the Proposed Plan would result in an increase of development that would require additional fire protection resources, such as personnel and equipment. With successful implementation of the General Plan policies, the impact will be less than significant.	Alternative 1 would not place any additional demands on the City's public facilities and services and would therefore have no impact.	This alternative would create demand for additional fire protection services. Since there are no policies in the existing General Plan that address these services, the impacts are considered potentially significant.	New development under this alternative would create additional demand for fire protection services. The policies and programs under this alternative would mitigate impacts to a less-than-significant level.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Schools	Although population, dwelling units, and employment will be growing over the next 20 years, school enrollment will likely drop according to DOF estimates. This drop reflects a change in the city/county's demographic structure, such as the population getting older and a decrease in the inmigration of child-bearing age couples. Therefore, the impact is considered less than significant.	This alternative would create no additional demand for schools.	Alternative 2 would accommodate less population growth than the Proposed Plan. Since development under the Proposed Plan will not create unmet demand for schools, the impact is considered insignificant.	Since Alternative 3 could accommodate more population growth than the Proposed Plan, this alternative could theoretically have a greater impact on schools. However, according to DOF projections, it is unlikely this growth would create unmet need for schools. This impact is considered insignificant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Parks and Recreation	The City's existing parkland is sufficient to accommodate the Planning Area's buildout population (26,940) and still have a service level (7.7 acres per 1,000 residents) that exceeds that of the Quimby Act standards. Therefore, the impact of the General Plan on city parks and recreation would be less than significant.	This alternative would not place any additional demands on the City's various parks and recreational facilities and would therefore have no impact.	Alternative 2 would create the demand for an additional 47 acres of parks and recreation facilities. Since the City's existing parkland is sufficient to accommodate the Planning Area's buildout population, the impacts would be considered less than significant.	Alternative 3 would create the demand for an additional 93 acres of parks and recreation facilities. Since the City's existing parkland is sufficient to accommodate the Planning Area's buildout population, the impacts would be considered less than significant.
Natural Resources				

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Water Resources	Existing groundwater contamination is not currently a serious threat to water supply or public health within the city's Planning Area because contaminated areas are not within aquifers used for public water supply. The ability to respond to the expected need for additional sources of water is not considered a problem. Therefore, the impact of the General Plan on the Planning Area's water resources would be less than significant.	Would result in no further impact to surface and groundwater quality.	This alternative would allow for the development of land in areas similar to those proposed under the Land Use Diagram; therefore water resource impacts related to groundwater quality would be similar. The existing groundwater contamination is not currently a serious threat to the Planning Area's water supply or public health. The increase in development proposed under this alternative, although slightly lower than that of the Proposed Plan, would have similar impacts to groundwater resources and quality.	Although this alternative calls for a higher intensity of development, Alternative 3 would call for the development of land in areas similar to those proposed under the Land Use Diagram; therefore water resource impacts related to groundwater quality would be similar. The increased intensity of development proposed under this alternative would result in similar impacts to the Proposed Plan in terms of groundwater resources and quality.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Agricultural and Forestry Resources	Under the Proposed Plan no impacts to agricultural resources are expected. This Proposed Plan would provide for the continuation of timberland uses in areas that have been designated for timberland use. Forestry management practices may cause conflict with surrounding land uses if buffer areas between these uses are not provided. With successful implementation of the General Plan policies, the impact of new development on forestry resources will be less than significant.	Would result in no further loss of agricultural resources. Extraction of forestry resources would continue to occur under this alternative.	This alternative would allow the continuation of agricultural and timberland land uses in areas that have been designated for these purposes. Development pressures proposed under this alternative may lead to the conversion of agricultural or timberlands in areas where these uses are designated near developing areas (e.g., rural residential or commercial uses). This increase in development, although lower than that proposed under the Land Use Diagram, would result in slightly lower impacts to agricultural and forestry resources.	Although this alternative calls for a higher intensity of development, Alternative 3 would allow the continuation of agricultural and timberland land uses in areas that have been designated for these purposes (e.g., County Resources). With successful implementation of the General Plan policies, the impact of new development on agricultural and forestry resources will be less than significant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Extractive Resources	No extraction activities take place in this Planning Area at present; however, the Land Use Diagram provides for these uses. Impacts on extractive resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the Policy Document.	Extraction of mineral resources would continue to occur under this alternative.	No commercially developed mineral resources currently exist within the city's Planning Area. Impacts to extractive resources are similar under this alternative and the proposed Land Use Diagram.	While no commercially developed mineral resources currently exist within the city's Planning Area, mining activities are considered an acceptable use under the Timberland designation and, with a conditional use permit, under the General Industrial designation. The Crescent City Planning Area has areas designated as General Industrial and County Resources (which may include timberland uses); therefore it is recommended that the City adopt, where applicable, goals, policies, and programs similar to the County as they relate to extractive resources. As the extent of development proposed under this alternative would be similar to that proposed under the Land Use Diagram, impacts to extractive resources would be similar under this alternative as they would be under the proposed Land Use Diagram.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Biological Resources	Development under the Proposed Plan will reduce, quality, and diversity of wildlife habitat in the Planning Area. Successful implementation of the General Plan policies and programs would reduce impacts to a less-than-significant level.	No impacts to biological resources are expected to occur under this alternative.	The conversion of undeveloped portions of land to more urban uses will be lower under this alternative. The vast majority of sensitive plant and animal communities are found in areas that will remain as open space under this alternative. As with the Proposed Plan, development proposed under this alternative will result in similar impacts to plant and animal communities due to an overall reduction of habitat. Impacts under this alternative are considered potentially significant.	The conversion of undeveloped portions of land to more urban uses will be similar under this alternative. The vast majority of sensitive plant and animal communities are found in areas that will remain as open space under this alternative. As with the proposed Land Use Diagram, increased development proposed under this alternative will result in similar impacts to plant and animal communities due to an overall reduction of habitat. Successful implementation of the General Plan policies and programs would reduce impacts to a less-than-significant level.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Air Quality	Population and employment growth associated with development under the Proposed Plan would contribute to an increase in regional air pollutants. However, the General Plan Policy Document provides a comprehensive strategy for reducing the air quality impacts associated with development. Successful implementation of the General Plan policies and programs would reduce impacts to a less-than-significant level.	Would result in no further impacts on air quality.	Impacts on air quality would be less under this alternative due to the decreased intensity of development proposed for the Crescent City Planning Area. As compared to the Land Use Diagram, the lower population and employment growth proposed under this alternative would result in a decreased amount of traffic-related emissions and slightly lower fugitive dust emissions during specific project development. Less impacts to air quality are anticipated under this alternative.	Impacts on air quality would be slightly greater under this alternative due to an increased intensity of development proposed. While the number of acres to be developed under this alternative are similar to the proposed Land Use Diagram, the intensities of development are increased and would therefore increase the amount of traffic produced under this alternative. This alternative would experience similar fugitive dust emissions during development. Overall, greater impacts to air quality are anticipated under this alternative. However, successful implementation of the General Plan policies and programs would reduce impacts to a less-than-significant level.
Health and Safety				

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Seismic and Geologic Hazards	With the implementation of the policies and programs described in the Policy Document, the impact of allowing continued development in areas subject to earthquake-related hazards (e.g., intense groundshaking, liquefaction, tsunami) is considered less than significant.	Dangers to the population relating to seismic and geologic conditions would be the same as with the Proposed Plan.	This alternative would have similar impacts on geology and seismicity to those proposed under the Proposed Plan. Additionally, while some portions of the Planning Area will be developed at slightly lower intensities, the overall grading of sites will be similar and therefore have similar impacts to soils. Dangers to the population relating to seismic and geologic conditions would be the same as with the proposed Land Use Diagram.	This alternative would have similar impacts on geology and seismicity to those proposed under the Proposed Plan. Additionally, while some areas of the Crescent City Planning Area will be developed at higher intensities, the overall grading of sites will be similar and therefore have similar impacts to soils. Dangers to the population relating to seismic and geologic conditions would be the same as with the proposed Land Use Diagram.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Fire Hazards	The Proposed Plan fails to address concerns regarding the need for existing structures to meet existing fire code standards is considered a significant impact. Additionally, the Proposed Plan does not provide policies ensuring that a sufficient water supply is available for fighting wildfires within the outlying portions of the city's Planning Area. However, the Plan identifies mitigation measures to reduce the impact associated with existing, substandard structures to a less-than-significant level.	While existing development faces some risks from fire hazards from urban and wildland fires, continued abatement and fire protection services will keep this risk to a minimal level.	Development proposed under this alternative will result in the same likelihood of wildfire and urban fire potential. Proposed development under this alternative would put additional populations at risk, similar to the proposed Land Use Diagram.	Development proposed under this alternative will result in the same likelihood of wildfire and urban fire potential. Proposed development under this alternative would put additional populations at risk, similar to the proposed Land Use Diagram.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	**Alternative 1**: No Project - No Development Alternative	**Alternative 2**: No Project - 1976 General Plan Alternative	**Alternative 3**: High Density Alternative
Flood Hazards	Under the Proposed Plan, areas subject to flooding within the Planning Area would be protected from additional development by the County Resources and Public Facility designations. With successful implementation of the General Plan policies, flood hazard impacts will be less than significant.	This alternative would not result in any increased flood hazards in the Planning Area.	Impacts related to flood hazards would be similar to the proposed Land Use Diagram. As development occurs, infrastructure will be built to protect structures and down stream properties which will occur under this alternative.	Impacts related to flood hazards would be similar to the proposed Land Use Diagram. With successful implementation of the General Plan policies, flood hazard impacts will be less than significant.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Hazardous Materials	Implementation of the Proposed Plan has the potential to subject humans to common hazardous material waste problems. With successful implementation of the General Plan policies, hazardous material impacts will be less than significant.	This alternative would not increase the use or exposure of Crescent City residents to hazardous materials.	This alternative has the potential to subject humans to common hazardous materials waste problems similar to what would occur with the proposed Land Use Diagram. Under this alternative, the proposed increase in population, although slightly lower than that proposed under the Land Use Diagram, resulting from development of currently undeveloped lands will put more persons at risk and increase the potential for hazardous wastes.	Implementation of this alternative has the potential to subject humans to common hazardous materials waste problems similar to what would occur with implementation of the proposed Land Use Diagram. Under this alternative, the proposed increase in population resulting from development of currently undeveloped lands will put additional persons at risk and increase the potential for hazardous wastes.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	Alternative 1: No Project - No Development Alternative	Alternative 2: No Project - 1976 General Plan Alternative	Alternative 3: High Density Alternative
Noise	The Proposed Plan will experience increases in ambient noise levels due to increased development, resulting in an overall increase in mobile and stationary noise sources. With successful implementation of the General Plan policies, noise impacts of new development will be less than significant.	This alternative would not result in any increased noise levels.	This alternative will experience increases in ambient noise levels due to increased development resulting in an overall increase in mobile and stationary noise sources. However, this alternative will experience less impacts from noise due to the decreased intensity of development proposed throughout the Crescent City Planning Area. Noise-related impacts resulting from this alternative are considered less than those anticipated for the proposed Land Use Diagram.	This alternative will increase the ambient noise levels associated with mobile noise sources resulting from the higher intensities of residential development proposed under this alternative. While the number of vehicles will be increased over that proposed under the Land Use Diagram, the Crescent City General Plan provides policies that highlight the need for noise reduction measures to be included as a condition of approval on most residential developments where current or future exterior noise levels from transportation sources exceed 65 Ldn. Impacts on noise under this alternative are slightly greater than those anticipated for the proposed Land Use Diagram.

TABLE 8-1

COMPARATIVE IMPACTS OF ALTERNATIVES
Crescent City Planning Area

Impact Category	Proposed Plan	**Alternative 1**: No Project - No Development Alternative	**Alternative 2**: No Project - 1976 General Plan Alternative	**Alternative 3**: High Density Alternative
Growth Inducing Effects				
Growth Inducement	The Proposed Plan designates additional land for development including 5,600 new DUs and 13,405 new residents. Therefore it is considered growth inducing.	This alternative would not allow any additional development and would therefore not be growth inducing.	This alternative designates land for additional development for nearly 3,635 DUs and 9,454 residents. This plan is growth-inducing, but to a lesser extent than the other alternatives except Alternative 1.	This alternative designates additional land for development through 2020 and is therefore growth-inducing. Therefore, Alternative 3 is considered as growth inducing as the proposed plan and Alternative 2.

8.5 SIGNIFICANT IRREVERSIBLE EFFECTS

Section 15126.2(c) of the State CEQA Guidelines requires an EIR to include a discussion of significant irreversible environmental effects that would result from implementation of a project. Development proposed under the Land Use Diagram would result in the commitment of nonrenewable natural resources used in construction (such as gravel, and petroleum products) in addition to slowly renewable resources (such as wood products for individual project construction). Development and operation of specific projects throughout the Crescent City Planning Area would also result in the commitment of energy resources in the form of fossil fuels, including fuel oil, natural gas and gasoline for automobiles, and any facility utility services.

Significant and Unavoidable Environmental Effects

In accordance with the State CEQA Guidelines (Sections 15126, 15064, 15382), an EIR must examine in detail all impacts that are potentially significant and must examine the significance of the impacts in light of mitigation measures that can reduce the impact.

With application of the mitigation measures proposed in Chapters 3 -7 of this Final EIR, all Land Use Diagram impacts are reduced to a less-than-significant level.

8.6 GROWTH-INDUCING IMPACTS

CEQA requires that EIRs address the growth-inducing impact of the proposed action. The State CEQA Guidelines requires that EIRs discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities, so consideration must be given to this impact. The Guidelines also calls for EIRs to discuss the characteristic of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Arguably, any general plan that designates undeveloped land for future development can be defined as "growth-inducing." Since one of Crescent City's objectives in updating its General Plan is the promotion of economic development/transition and accommodation of demand for residential growth, this is the case with the General Plan. In promoting such development and accommodating such growth, the General Plan, however, attempts to address the potentially adverse implications through policies and programs for adequate infrastructure, promotion of housing to meet the city's needs, and protection of environmentally-sensitive resources.

8.7 CUMULATIVE IMPACTS

The State CEQA Guidelines requires a discussion of the potential cumulative impacts that could result from a proposed project in conjunction with other projects in the vicinity. Cumulative impacts occur when two or more individual effects together create a significant environmental impact, or if they compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place simultaneously or over time.

As a practical matter, an EIR on a comprehensive general plan is an assessment of the cumulative impacts of development withing the area covered by the plan. The impact analyses contained in this EIR are, in effect,

cumulative analyses because they examine the cumulative effects of growth over the next 20 years in the Planning Area and the entire County. Further discussion of the Planning Area's cumulative impacts are not necessary considering the Planning Area has no true cumulative impacts due to its slow population growth and relative geographic isolation.

8.8 MITIGATION MONITORING

CEQA prohibits a public agency from approving or carrying out a project for which an environmental impact report identifies significant environmental effects, unless one of specified findings relative to mitigation of those effects has been made. Section 21081.6 of the State of California's Public Resources Code states that when an agency approves a project subject to implementing mitigation measures (in an EIR or Negative Declaration), the public agency must adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

The policies and programs of the General Plan Policy Document operate to mitigate most of the impacts of new development under the Plan. The City must annually review the General Plan Policy Document. As stated in the program, this review shall be used to satisfy the requirements for a mitigation monitoring program.

NOTICE OF PREPARATION

In March 2000, the City of Crescent City sent out a Notice of Preparation (NOP) for the Crescent City Draft General Plan EIR. The City sent the NOP to several public agencies including:

- Department of Conservation
- California Department of Transportation
- California Coastal Commission
- North Coast Regional Water Quality Control Board
- North Coast Unified Air Quality Control District
- Del Norte County Community Development Department
- Del Norte County Health Care District
- California Department of Fish and Game
- Del Norte Sold Waste Management Authority
- California Department of Forestry
- Crescent City Harbor District
- Local Transportation Commission (LTCO)
- Del Norte County Library District
- Del Norte County Unified School District
- Crescent Fire Protection District