ATTACHMENT 11:

City of Arcata. 2000. *Excerpts from the Environmental Impact Report (EIR) for the Arcata General Plan*. SCH# 96072062. Revised June.

CITY OF ARCATA GENERAL PLAN: 2020
AND
LOCAL COASTAL LAND USE PLAN

DRAFT FINAL
PROGRAM EIR

STATE CLEARINGHOUSE # 98072069

The City of Arcata
736 F Street
Arcata, CA 95521

Revised: June, 2000

Impacts found to be potentially significant include:

- Impacts to the street and highway system levels of service

Impact: Increased Traffic Affecting Street and Highway System Levels of Service
Future population and employment increases will add traffic on streets and highways.

Analysis of Impacts. The General Plan projects an increased in population, by the year 2020, to approximately 20,000 persons. This population increase will also cause an increase in vehicle trips. The Arcata Traffic Model (ATM) was developed to assess existing trip volumes and project the increased trip generation from residential and employment growth. The ATM divides the planning area into 42 Traffic Analysis Zones (TAZ's) and assigns vehicle trips based on existing and projected land uses within the TAZ. For example a TAZ in the residential portion of Sunny Brae would have trips projected for each residential dwelling, based on average travel patterns for residential areas.

The vehicle traffic impact evaluation assumes growth in population and employment in TAZ's, growth in demand at the external gateways (a factor which controls the amount of travel external to the City), and growth in through traffic (a factor independent of population and employment growth in Arcata). The analysis utilizes the ATM to develop global measures, to project traffic volumes on roadways, and project intersection turning volumes. The global measures of effectiveness include:

- Vehicle Miles of Travel (VMT) – a composite measure of the total peak hour miles of travel for each roadway type within the modeled area including freeways and highways, arterials, collectors, local streets and rural roads. This useful measure (an important input to the air quality analysis) indicates 1) whether the land use plan provides a housing/jobs imbalance resulting in increased in-commuting or out-commuting, 2) a lack of mixed-uses in close proximity resulting in longer travel for purposes such as shopping, and 3) the relative magnitude of trip generators creating travel demand.
- Total Trip Generation-- identifies the number of peak hour vehicle trips produced by the land use plan. This measure does not necessarily indicate roadway capacity problems.
- Travel Distribution Characteristics -- a measure of the amount of travel which remains internal to the City. These characteristics, including the percentage of travel which is internal-to external (IX), external-to-internal (XI) and internal-to-internal (II), identify the change in in-commuting and out-commuting and the balance of production and attractions within the City. High levels of IX and XI travel indicate a poor housing to jobs balance. An additional distribution characteristic includes the average percentage of trips which remain internal to a traffic analysis zone, indicating a good mix of land uses within a single zone resulting in reduced vehicle miles of travel.

TABLE 4 - 4 EXISTING & PROPOSED PM PEAK HOUR INTERSECTION SERVICE LEVELS

Signalized Intersections	Exist V/CR*	Exist LOS	Prop V/CR*	Prop LOS
23/24) G & H Streets/Samoa Blvd (both)	0.3	A	0.35	A
Unsignalized Intersections	**Delay (sec)**	**LOS**	**Delay (sec)**	**LOS**
1A) Giuntoli / 101 SB Ramps	8	B	>45	F
1B) Giuntoli / 101 NB Ramps	3	A	>45	F
2) Alliance Road / Spear Ave.	5	A	6	B
3) Alliance Road / 17th Street	1	A	14	C
4) Bayside Road / Crescent Way	4	A	7	B
5) Alliance Road / Foster Ave.	1	A	11	C
6) Sunset Ave. / G & H Streets	4	A	9	B
7) Alliance Road / 14th Street	1	A	5	A
8) Janes Road / 11th Street	2	A	5	A
9) K Street / 11th Street	6	B	10	A
10) K Street / 7th Street	1	A	9	B
11) K Street / Samoa Boulevard	>45	F	>45	F
12) H Street / 11th Street	7	B	15	C
13) G Street / 11th Street	10	C	23	D
14) Union Street / 14th Street	2	A	5	A
15) H Street / 14th Street	7	B	12	C
16) G Street / 14th Street	12	C	16	C
17) H Street / 7th Street	4	A	7	B
18) G Street / 7th Street	4	A	11	C
19) Union Street / 11th Street	2	A	3	A
20) Union Street / Samoa Boulevard	4	A	>45	F
21) Union Street / 7th Street	3	A	4	A
22) L. K. Wood Blvd. / 14th Street	5	A	5	B

23) Sunset Ave. / US 101 NB Ramp	2	A	10	B
24) Sunset Ave. / L. K. Wood Blvd.	8	B	11	C

* V/CR = volume to capacity ratio. LOS = Level of Service

The Foster Avenue Extension. The ATM was used to evaluate the Impacts related to the potential Foster Avenue extension from Alliance to Sunset Avenue, which is planned for in the General Plan. The proposed extension has not been designed, but is planned to be a two lane roadway with separate bike lanes and sidewalks. The roadway will incorporate traffic calming measures designed to keep traffic speed low and improve livability in the Sunset neighborhood. A Sunset Avenue connection is proposed for the east end, and Eastern and Western Avenue connections are proposed for the west end of the extension. The extension would have a separate bicycle and pedestrian path, and improved bus routing, from Alliance Road to L. K. Wood Boulevard.

The Foster Avenue extension would reduce traffic volumes on Sunset; complete the City's arterial framework; provide improved bicycle and pedestrian access; and improve bus routing through the area. It would also encourage more automobile travel overall; increase traffic volumes on Alliance Road, G and H Streets, and Sunset Avenue; and necessitate the need for additional traffic controls. These issues related to the extension are addressed through professional transportation planning analysis, which is included in the appendices of this EIR (Evaluation of the Foster Avenue Extension from Alliance Road to Sunset Avenue, Fehr & Peers Associates Inc. 1997) .

In general, the extension of Foster Avenue will cause moderate to high increases in traffic volumes on some surrounding streets, between 3% and 30%. This is not necessarily due to the extension creating additional travel demand, but more the result of diverting traffic from other streets. Many of the surrounding streets experience a decrease in traffic volumes, as the extension diverts traffic away. Table 4 - 4 shows the p.m. peak hour traffic on surrounding streets with and without the extension and the percent change in traffic volumes. The Foster Avenue extension is projected to reduce traffic on Sunset Avenue east of Alliance Road and on Eastern and Western Avenues. It is expected that speeds would be reduced and the livability of these streets would improve.

In summary, there are advantages and disadvantages of the Foster Avenue extension. In the professional opinion of the traffic engineers conducting the analysis, the extension provides more advantages than disadvantages. A balance must be struck between some increase in traffic volumes on Alliance Road and improved livability on Sunset, Eastern and Western Avenues, improved transit routing and, most importantly, a direct bicycle and pedestrian connection between Alliance Road and H Street.

14th Street Connection. 14th Street, between Alliance Road and J Street, is closed to through traffic. This street segment is currently planned to remain closed, or opened for local traffic only if the adjacent hillside can be stabilized and additional right-of-way acquired. The street will continue to provide bicycle and pedestrian access.

TABLE 4 - 5 FOSTER AVENUE EXTENSION PM PEAK HOUR TRAFFIC VOLUMES

Street	Direction	PM Peak Hr. Volume W/O Ext.	With Ext.	Percent Change
Alliance Road (North of Foster Ave)	NB SB	485 491	486 500	< 1% 2 %
Alliance Road (South of Foster Ave)	NB SB	529 520	568 565	7 % 9 %
Alliance Road (South of 17th Street)	NB SB	633 538	634 546	< 1% 2 %
Sunset Ave (between Eastern Wilson)	EB WB	76 114	73 41	- 4 % - 64 %
Sunset Ave (West of H Street)	EB WB	128 195	165 197	29 % 1 %
Sunset Ave (between G & H Streets)	EB WB	515 250	425 238	-18 % -5 %
Sunset Ave (East of G Street)	EB WB	557 563	600 289	8 % - 49 %

Note: Comparison of PM peak hour traffic volumes on adjacent streets (based on year 2020 buildout scenario)

Significance Standard. The impacts on the street and highway system would be potentially significant if implementation of the General Plan would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) or exceed, either individually or cumulatively, a level of service standard.

Level of Significance / Mitigation Measures. There is projected to be a 13% increase in VMT, and a 16 % increase in total trips, from buildout of the proposed General Plan. Peak hour congestion on arterials and collector streets is a potentially significant impact. Average daily traffic is projected to continue operating within acceptable levels of service.

The peak travel periods in Arcata are shorter that in more populated cities and larger metropolitan areas. Increasing roadway and intersection capacities to accommodate these briefer periods of congestion, which is typical mitigation for more populated areas, is not always the best mitigation for a City of Arcata's size. The City proposes to take a broader, network approach to mitigating traffic related impacts. This means

east of State Route 101 and Humboldt State University, generally coinciding with Soil-Vegetation Projects soil types (see map):

Boomer	Melbourne	Mendocino
Comptche	Atwell	Empire
Hugo	Larabee	Hely
		Other

In addition, active slide areas have been identified in various locations, particularly along upper Jacoby Creek east of State Route 101.

Impacts Found to be Potentially Significant

Impacts found to be potentially significant include:

- Seismicity and liquefaction
- Tsunami
- Potential landslides and soil instability

Impact: Seismicity and Liquefaction
Arcata's location in a seismically active area, within the Cascadia Subduction Zone, makes it susceptible to potential adverse impacts from seismic events.

Analysis of Impacts. Fault and liquefaction zones are found throughout the region and are factors to be considered in future development. Structures located too close to a fault or in a liquefaction zone can be damaged during a seismic event. These events can also affect services and utilities (water, gas, power, sewer, telephone, etc.), damage bridges and roadways, limit emergency response, and endanger persons and property. The scientific understanding and assessment of seismic hazards in the region continues to evolve. Increased awareness of potential seismic impacts has lead to increased seismic safety standards in building and development codes.

Significance Standards. Seismic impacts are considered significant if implementation of the General Plan would expose people or structures to potential substantial adverse geologic effects, including the risk of loss, injury, or death involving:

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
- Strong seismic ground shaking.
- Seismic-related ground failure, including liquefaction.

There would also be a potential significant impact if implementation of the General Plan resulted in the loss of a unique geologic feature, or allowed new development on strata or soil that is unstable, or that would become unstable, and potentially result in liquefaction.

Level of Significance / Mitigation Measures. The potential impacts due to seismic events could be potentially adverse if structures or infrastructure are located too close

to existing faults, or are placed in areas susceptible to high liquefaction hazards, without adequate strengthening. In addition, seismic impacts could be potentially adverse if there was damage to infrastructure or emergency response capabilities. The General Plan includes the following policies and implementation measures to reduce impacts from seismicity and liquefaction risks:

- **Policy PS-1(a through f)** requires the City to maintain an Emergency Response plan, provide maps of evacuation routes and transportation facilities for City and neighborhood emergency response plans, train responsible staff in Standardized Emergency Management System (SEMS), review the siting and design of essential facilities and emergency response structures, ands coordinate the organization and training of Neighborhood Emergency Service Teams (NESTs).
- **Policy PS-2 (a through d, g, and h)** mandates the identification of seismic hazards, the review of geotechnical reports for new construction and substantial renovation, retrofitting of unreinforced masonry buildings, and public information and sensitization.
- **Policy OS-5 (a and b)** mandates the setbacks for open spaces, and development limitation in health and safety areas, including seismic hazard areas.
- **Implementation Measure PS-1, Neighborhood Emergency Services Teams (NEST)** as described in Chapter 3.

No unique geologic feature has been identified as being threatened by the proposed General Plan and no mitigation is necessary. The measures listed above will reduce impacts, and restrict placement of structures and people in areas with known faults and liquefaction potential, however, since the potential seismic events will be determined by underlying geologic forces, there could still be damage due to a major seismic event in the region.

Impact: Tsunami
In addition to potential surface ruptures, groundshaking and liquefaction from a seismic event, there is also a potential subsequent impact from a tsunami or seiche. A tsunami is a seismically induced sea wave and a seiche is a seismically induced wave or series of waves in a bay or other inland water body.

Analysis of Impacts. Portions of the planning area adjacent to Humboldt Bay are within a seiche or tsunami runup zone identified in the Planning Scenario (DMG 1995). A seiche or tsunami would inundate the runup zone with one or more fast moving waves, potentially affecting structures, services and utilities. Alterations of shoreline morphology can also potentially create local increases in tsunami risk.

Significance Standards. Tsunami impacts would be potentially significant if implementation of the General Plan exposed people or structures to damage, injury, or death from inundation by seiche or tsunami.

Level of Significance / Mitigation Measures. The area of mapped tsunami runup identified in the Planning Scenario is limited to an area along Humboldt Bay, between the Mad River Slough and the Arcata Marsh. This area is designated for Natural

Resource (NR) use, which does not allow residential, commercial or industrial development. The Arcata General Plan: 2020 also includes the following policies measures to reduce tsunami risks:

- **Policy PS-2 (e)** prohibits critical facilities from being located in the Bay shoreline area of tsunami runup, as described in the State of California study *Planning Scenario in Humboldt and Del Norte Counties, California, for a Great Earthquake on the Cascadia Subduction Zone*, (Special Publication 115, California Department of Conservation, Division of Mines and Geology, 1995).
- **Policy OS-5 (a and b)** mandates setbacks for open space and development limitations in health and safety areas.
- **Policy RC-4 (d)** regulates diking, dredging, filling and shorelines structures.
- **Implementation Measure PS -2 Emergency preparedness and response programs** as described in Chapter 3, and including tsunami runup zone evacuation route signage.

Implementation of the General Plan would not place additional habitable structures within the mapped tsunami runup zone, and therefore would not increase the potential for endangering property, health and life. Limiting exposure of persons to tsunami hazards would reduce impacts to a less-than-significant level Tsunami runup could, however, inundate roadways, interrupt water service and communications systems in low lying areas and could also delay emergency response in those areas.

Impact: Potential Landslides and Soil Instability
The steep slopes in the easterly portion of the planning area could become unstable, resulting in soil movement.

Analysis of Impacts. Placement of structures or other improvements in or below landslide zones, or on steep slopes, can affect slope stability and could expose persons to potential danger. Improvements in mapping technology and better soils information are helping to identify unstable areas. High rainfall can saturate soils, making them more susceptible to movement, especially during a seismic events. Removal of vegetation and grading, as part of development, can also adversely impact soil stability.

Significance Standards. There would be a potential impact if implementation of the General Plan allowed structures on, or grading of, steep slopes that substantially increased risk of loss, injury, or death involving landslides.

There would also be a potential impact if implementation of the General Plan resulted in substantial soil erosion or the loss of topsoil, or allowed new development on strata or soil that is unstable, or that would become unstable, and potentially result in on- or off-site landslide, lateral spreading, subsidence, or collapse, or allowed new development on expansive soil creating substantial risks to life or property.
Level of Significance / Mitigation Measures. Steep slopes, in certain areas where development could occur, have the potential to become unstable if disturbed. The General Plan includes the following policies and implementation measures to reduce landslide and soil instability risks:

- **Policy PS-3 (a through e)** restricts grading, vegetation removal and new construction in areas with unstable soils; establishes grading standards for erosion and sedimentation control; imposes hillside development standards and excludes slopes greater than 25% from being included in density calculations; requires that at least 50% of all hillside parcels remain undeveloped; and requires the preparation of geotechnical reports for the development of areas with unstable slopes or erosive soils.
- **Policy OS-5 (a and b)** mandates the setbacks for open spaces, and development limitation in health and safety areas, including geologic hazards and slopes greater than 15%.
- **Policy RC-2 (b and c)** mandates setbacks from stream courses and allowable uses within Streamside Protection Areas that offer protection against bank erosion and instability.
- **Implementation Measure LU -1, Planning and Land Use Code (PLUC) Amendments** as described above, specifically pertaining to updating seismic setbacks/structural requirements and hillside development standards.

These measures would help maintain soil stability and restrict placement of structures and people on steep slopes, which would reduce impacts to a less-than-significant level.

Impacts Found not to be Significant

Soils in the area are not highly expansive or erosive. Therefore, no substantial risk to life or property due to expansive or erosive soils is expected.

WATER RESOURCES AND FLOODING

Environmental Setting

The water resources section addresses the following:
- Hydrology, Drainage Patterns, Groundwater Resources
- Flooding
- Water Quality

Hydrology, Drainage Patterns, Groundwater Resources
Arcata's water resources include a number of creeks, the Mad River, numerous wetlands, tidal waters of Arcata Bay, and groundwater aquifers. These resources have been described in an Aquatic Natural Resources Report (prepared by Jason R. Rose, R. Chad Roberts and Mark Andre) included in the appendix of this EIR, and are summarized in the General Plan Resource Conservation and Management Element.

Streams. Except for small areas that drain directly into Arcata Bay or the Mad River, the city is drained by a number of small creeks which have much of their watersheds

The implementation of measures will reduce drainage and flooding impacts to a less-than-significant level

Impact: Wastewater Treatment

Analysis of Impact. Almost all of the projected increase in Arcata's population will be connected to the waste water treatment system. During recent years, the Arcata waste water treatment plant has received roughly 2 million gallons per day during dry months (when storm water infiltration and inflow to sewers are assumed negligible); this dry-weather flow is assumed to approximate actual waste water production. The projected 25% increase in population by 2020 is projected to increase the waste water production by 25%, or 0.5 million gallons per day.

Annual average waste water flows into the treatment plant have been around 2.8 to 3.0 million gallons per day in recent years. Roughly one-quarter to one-third of these inflows are due to inflow and infiltration (I/I) during wet weather. The City's current program to reduce I/I is expected to significantly reduce these inflows. Dry weather flows are expected to increase by about 25% due to projected growth and wet weather flows are expected to decrease due to I/I reductions. The influent to the treatment plant will be less diluted by storm water.

With these projected changes, the waste water treatment plant may experience fewer exceedances of its permit requirements for suspended solids and BOD removal because many of these exceedances result from high quantities of dilute inflow. The projected increases in waste water production will bring the Arcata treatment plant close to its design capacity, which is expected to cause the City to begin evaluating alternatives for expanding the capacity (e.g., by building additional marshes, expanding the conventional treatment processes, or changing operations). Because of its innovative design and the lack of information on long-term operation of marsh treatment systems, we cannot confidently predict how its performance will change with the projected increases in waste water inflow.

Significance Standards. Impacts would potentially be significant if implementation of the General Plan would cause Regional Water Quality Control Board waste discharge requirements to be violated.

Level of Significance / Mitigation Measures. The proposed General Plan includes measures to maintain adequate wastewater treatment:

- **Policy PF-2** addresses wastewater collection, treatment, and disposal. This policy would require the City to plan and budget for collection system improvements, monitor the inflow and infiltration rates and take action to ensure they "do not cause the collection system or the treatment plant to exceed capacity", and provide adequate treatment to meet regulatory standards.
- **Implementation Measure PF -2 Wastewater Collection System Maintenance Program** directs updating the City Wastewater Collection System Maintenance Program, at least every five years, to assess collection system capacity and

chemical parameters of water quality, include monitoring provided through the MOU with HSU; requires the ordinance to be updated at least every five years.

These measures, ongoing City water quality programs , and the proposed water quality ordinance will reduce impacts to a less-than-significant level.

Impacts Found not to be Significant

Impact: Municipal Water Supply
Under the 2020 General Plan, the population of Arcata is expected to grow to about 20,000 persons (the City also plans to add few new water customers that are outside the City limits). In Arcata, water use averages 150 gallons per day per person, with a maximum daily use of 184 gallons per person (City of Arcata Water System Evaluation, SHN Consulting Engineers & Geologists, Inc., 1998). The increase in population is therefore expected to increase total daily water use from its current 2.6 million gallons (serving 17,500 people, including some outside the city limits) to 3.2 million gallons (serving 21,500 people). The maximum daily use is projected to increase from the current 3.2 million gallons to 4.0 million gallons.

Municipal water supply systems are typically limited by the piping, pumping, and storage capacity to fight fires and maintain supplies during emergencies (especially earthquakes). The City of Arcata recently completed an analysis of system upgrades needed to provide fire flows and three days of storage, for a projected average daily use of 2.9 million gallons (City of Arcata Water System Evaluation, SHN Consulting Engineers & Geologists, Inc., 1998.). This analysis identified 16 projects needed to meet these objectives, with a total cost of $4,700,000. These projects include a new tie to the HBMWD water source (which may not be needed with completion of the North Arcata Groundwater Project), new storage tanks, and additional pumping capacity.

There is ample water supply for Arcata's growth under the existing water rights held by HBMWD. The potential water quality impacts of the HBMWD water supply from the Mad River have apparently not been assessed because the HBMWD water rights were granted by the state before such assessments were required. The impacts of the new Arcata ground water supply have been addressed by the City (City of Arcata Water System Evaluation, SHN Consulting Engineers & Geologists, Inc., 1998.).

While water supply is adequate to accommodate projected population increases including increased enrollment at HSU, the following General Plan policy addresses water supply and delivery:

- **Policy PF-1** requires the City to update its water master plans frequently, monitor water use and plan necessary facilities to accommodate water needs, promote water conservation, and continue to meet safe drinking water standards.

Impact: Ground Water Quality
Projected growth in Arcata is expected to have relatively little effect on ground water hydrology. Few if any new homes or businesses are expected to withdraw their water

CHAPTER 6 BIOLOGICAL RESOURCES

BIOLOGICAL HABITATS

Environmental Setting

This section addresses the following habitat types:

- Urban
- Grassland / Agricultural
- Forest
- Creeks / Riparian
- Open water / Mudflat
- Wetlands
- Beach / Dune

The City of Arcata is situated on a coastal terrace at the north edge of Arcata Bay, the northern basin of Humboldt Bay. Humboldt Bay is one of the most ecologically diverse embayments on the Pacific coast. Many of the tide lands surrounding Humboldt Bay were diked and drained in the late 1800's for pasture, and remain in agricultural use today. Eastern portions of the City contain redwood forest, an ancient and spectacular plant community unique to the Pacific north coast. West of the City lies a dune ecosystem recognized as the most complex and least disturbed of its kind on the northwest coast of North America. Numerous watercourses meander through the City and empty into Arcata Bay. Freshwater, brackish and saltwater marshes throughout the area are highly productive, sensitive habitats requiring special protection. The Planning Area's diverse habitat types support a wide variety of plant, fish and wildlife species.

In the following habitat descriptions, the types of plant communities found in the Planning Area are listed. The plant communities are referred to as "series" identified by one or more dominant plant species, following the classification system of *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Refer to the "Special Status Species and Natural Communities" for more information about sensitive plant communities in the Planning Area.

Urban

The urban habitat type contains areas of dense human habitation and activity, including residential, commercial, industrial and public facility sites within the Planning Area. Vegetation in urban habitats is generally sparse or managed as a landscape. Use of urban habitats by native wildlife species is typically low.

Grassland / Agricultural

Most of the grasslands found in the Planning Area are in agricultural use. Grasslands also occur in disturbed areas such as vacant lots. Agricultural lands include the Arcata Bottom on the north side of Arcata Bay and the Bayside Bottom on the east side of the bay. Most of these lands were once tidally inundated. Large areas of salt marsh surrounding the bay were diked and drained in the late 1800s for agricultural use. Today, uses include livestock grazing, silage and hay production, and flower bulb

people in 2020, and that HSU enrollment will increase from 7,500 in 1997 to 8,500 full-time-equivalent students in 2020. This growth, although modest, will result in an increased need for residential dwellings, public service facilities, and commercial and industrial development.

The projected increase in human habitation and activity within the City will impose pressure on natural areas in a variety of ways. Development surrounding the City limits, governed by County policies, could compound the pressure. Potentially significant impacts facing the biological habitats of Arcata over the next twenty years are summarized below, followed by a discussion of the factors contributing to each type of impact and mitigation measures provided by the General Plan.

- Overall Degradation to Natural Ecosystems
- Substantial Reduction in the Habitat of Plant, Fish or Wildlife Species
- Introduction of Non-Native Species to the Detriment of Native Species
- Interruption of Movement of Animals along Natural Corridors

Policies established by the General Plan can serve as mitigation measures by providing guidance in making future decisions that affect the environment. The long-term, regional perspective of the policies provides a good vantage for ensuring that the quality of biological resources will be protected for future generations.

As envisioned in the General Plan, growth in Arcata will be concentrated within the Urban Services Boundary, utilizing undeveloped and underdeveloped parcels. This type of development will reduce the need for outward expansion or development of areas recognized to have value as open space. Specific areas throughout the City have been designated as open space with the intention of preserving these areas for recreation and resource protection.

The General Plan acknowledges that protection, enhancement and management of the natural environment continue to be high priorities in Arcata. Furthermore, it recognizes the importance of protecting the functional value and biodiversity of native ecosystems in the Planning Area. In the "Environmental Quality and Management" Chapter of the Plan, the "Open Space Element" and the "Resource Conservation and Management Element" establish specific policies to avoid or minimize potentially significant impacts to the biological resources of Arcata. The policies established at this level allow greater consideration of cumulative impacts than at the project level. It is at the project level, however, that site-specific evaluations and decisions must be made, using these policies as guiding principles.

Impact: Overall Degradation to Natural Ecosystems

Analysis of Impact. The General Plan projects an increase in population in Arcata over the course of the planning period. A higher consumption of resources and a higher generation of waste are expected to accompany this projected increase.

will consume fuel and energy resources. These and other changes listed above have been analyzed and, to the extent feasible, mitigation measures have been proposed to reduce potential impacts to a less-than-significant level.

The General Plan will commit future generations to continued urban use. The plan will result in reduced open space and animal habitat, as parcels designated for urban use are developed. The plan projects both the beneficial effects of additional housing, employment and other urban uses, as well as the potentially significant adverse effects described in this EIR.

GROWTH INDUCEMENT

EIR's are required by CEQA to describe any growth inducing or cumulative impacts which would result from the proposed action.

> § 15126.2 (d) The Growth-Inducing Impact of the Proposed Action.
> Discuss the ways in which the 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 waste water 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. Also discuss the characteristic of some projects which 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.

General Plan policies will guide future growth in the City, through the year 2020. Implementation of the plan is not specifically intended to induce growth, but to manage and direct growth so that it maintains quality of life, and achieves other important community goals. The General Plan includes policies to maintain an Urban Services Boundary, administer annexations, provide infrastructure, and preserve open space in and around the City.

The General Plan proposes no major infrastructure or public service extensions that are typically considered growth inducing. The growth that is projected is primarily infill, taking advantage of existing infrastructure and services. The potential for growth is considered less than significant due to the lack of growth inducing infrastructure and services, and constraints on development outside the Urban Services Boundary contained in the General Plan.

CUMULATIVE IMPACTS