

CHAPTER 6
NATURAL ENVIRONMENT ELEMENT

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6.1 Authority and Purpose

The Natural Environment Element is a collaborative element that fulfills the statutory requirements of both the Conservation and Open Space Elements. The purpose and intent of this collaboration is to provide the reader with a more comprehensive and integrated view of the natural environment in the City of Colfax.

Although there are no State guidelines for a Natural Environment Element, there are individual statutory guidelines for both the Conservation and Open Space elements. Those requirements were the basis for this element, and were carefully examined and addressed in order to secure the legal viability of this element.

The Conservation and Open Space Elements are required to address certain mandatory issues. In general, the Natural Environment Element should address issues relating to the following: vegetation, wildlife, water resources, soil resources, atmospheric resources, mineral resources, and open space. The preservation, conservation and managed production of these resources is a fundamental part of the element.

It is mandated by California State Law that, "...that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (Governor's Office of Planning and Research 1.992, 24).

Once the Natural Environment Element is adopted by the City Council, it becomes law. In turn, all of the policies, programs and implementation measures cited in the element become legally enforceable. It is important that element be thoroughly reviewed before adoption so that it reflects the needs of the community once it becomes law.

In order to be effective, the guidelines set forth in this element must be implemented. It is the responsibility of local decision makers and the City staff to ensure that these guidelines are followed. Any policies and implementation measures are tools for implementation and the responsibility of the City.

The physical environment and needs of the community are constantly changing. This element should be dynamic to ensure it reflects these changes and maintains its effectiveness as a planning tool. This can be accomplished through periodic review and revision.

6.2 Vegetation

There are general vegetation types/habitats found naturally in the Colfax planning area. These vegetation types are identified in the Placer County General Plan Background Report. These include; chaparral and shrub communities, woodland communities, conifer forest communities and sierran mixed conifer forest. Under the tree canopy are scrub-oak, manzanita, deer brush, a variety of herbs and grasses.

In the surrounding area where the topography permits, the natural vegetation has been cleared and pastures, orchards and vineyards have been planted. Most of these areas are irrigated. Within the city there exists urban vegetation including landscaping, shade trees, lawns and shrub cover.

The existing native vegetation in the Colfax Planning Area provides environmentally and socially valuable resources for the community. These areas provide diverse and ecologically rich habitats for wildlife, protect the soils from erosion increase groundwater percolation, maintain water quality, and provide recreational and aesthetic resources for the public. The Community Design Element provides extensive regulation and guidelines for vegetation. If followed and implemented, they will directly reflect their effectiveness as planning tools.

6.3 Wildlife

The natural vegetation in and around the planning area support various animals and wildlife. In the various vegetation areas there are California quail, gray fox, mule deer, California thrasher, western rattlesnake, brush rabbit, dusk-footed woodrat, western gray squirrel, California ground squirrel, bobcat, raccoon, scrub jay, golden mantled ground squirrel, mountain lion, as well as numerous smaller reptile and animal species. The Placer County General Plan Background Report establishes that there are no populations of endangered species in the planning area.

The City of Colfax has approximately 664 acres of land. The majority of this land is developed or will be in the future. The wildlife in the planning area is dependent on the remaining areas of surrounding natural habitat. With proper administration of the goals, objectives, policies and implementation measures of these sections and the Vegetation section are imperative to maintenance of these populations.

It is the responsibility of the City to ensure that the guidelines of this element are enforced and that the existing wildlife is protected.

6.4 Water Resources

This section of the natural environment Element discusses issues relating to the City's water supply and quality. Currently the City's source of water is the Placer County Water Agency (PCWA). PCWA has been providing water to various County areas since 1957. It supplies water from its Colfax water treatment plant. This water is taken from the Boardman Canal and treated prior to delivery. This facility has a maximum production rating of 1.4 MGD. In August 1996 peak daily usage was reached at 913,000 GD. This reflects delivery at 65% of capacity on this peak day. Information provided June of 1997 by H. M. Lukenbill of PCWA points to the fact that there is no potential shortage of water in the Colfax area for the immediate future needs of the City. In 1993 the Placer County Water Agency had a report prepared titled "Ultimate Water Demand Study". This report supports the available water supply for this area served by the PCWA. Changes in the Land Use Element provide for residential growth due to increased density levels within the City. This growth will need to be served by the PCWA. At the current time there is sufficient water available to provide for this increase in development.

The State has Maximum Contaminant Levels for mineral and chemicals in drinking water. The State of California, Department of Health Services establishes these standards for drinking water based on the National Interim Primary Drinking Water Regulations. The quality of water delivered in the City is very high as indicated by the PCWA Water Quality Report - 1995 (Appendix B).

Some residents within the Colfax area rely on ground water for their water supply. This is referred to as the Central County in the County General Plan Background Report. The average depth of water in the Colfax area is 150'-300'. The County Health Department monitors water quality in these wells. Water in these areas depend on local aquifers. Some have high production potential and others are unpredictable. The residents utilizing wells for their water supply are too far from the available PCWA water.

The quality of water in the City of Colfax is consistently high. There have been no shortages or violations of water quality in the service area. Future supplies of water in the City depend the PCWA and its sources for water supplied through the Colfax treatment plant. The potential supply is sufficient for future development in the city. Conservation methods can cause the supply and quality of water to be extended.

6.5 Soils

The soil present in the planning area is controlled by underlying rocks, local climate conditions, local topography, and native vegetation present. The soil information available is limited to reports and soil maps prepared by the U.S. Soil conservation Service (SCS). These findings are given in the Placer County General Plan Background Report, 1994. The soils in Colfax are primarily Class VI and VII. Class VI soils are considered suitable for limited cultivation. Class VII soils are best adapted to pasture, range, woodland, or wildlife habitat.

1. Mariposa-Josephine-Sites: undulating to steep, well drained soils that are shallow to deep.
2. Maymen-Mariposa: hilly to very steep, well drained and somewhat excessively drained soils that are shallow to moderately deep over metamorphic rock.
3. Cohasset-Aiken-McCarthy: undulating to steep, well drained soils that are moderately deep to very deep over volcanic rock.
4. Dubakella-Rock outcrop: rolling to steep, well drained soils that are moderately deep over serpentine , also rock outcrop.

These soil types have limited agricultural uses and are better suited for pasture, woodland, habitat areas, and aesthetic purposes. These soils are stable and present no extreme limitations for construction if proper methods are implemented and compliance to Colfax Municipal Code requirements are followed (see Colfax Municipal Code Chapter 1 Article 19 - 20). Due to the topography and slope of land in Colfax, it is necessary to follow the Code requirements to minimize soil erosion in the area for developed land, as well as future development.

The condition of the soil directly and indirectly affects the health of associated vegetation, wildlife and aesthetic value of Colfax . Accelerated soil erosion poses many environmental hazards, including; degradation of water quality, soil sterility, increased sedimentation of local streams and safety hazards.

Proper planning and mitigation can help prevent and lessen some of the soil hazards associated with urban development. In some cases this mitigation can be as simple as seeding exposed slopes, and the result is long term protection of a valuable resource.

The purpose of the following goals, objectives , policies and implementation measures is to provide the guidelines for soil preservation and protection. Some of the policies are currently present in the Colfax Municipal Code and are incorporated into this section.

6.6 Atmospheric Resources

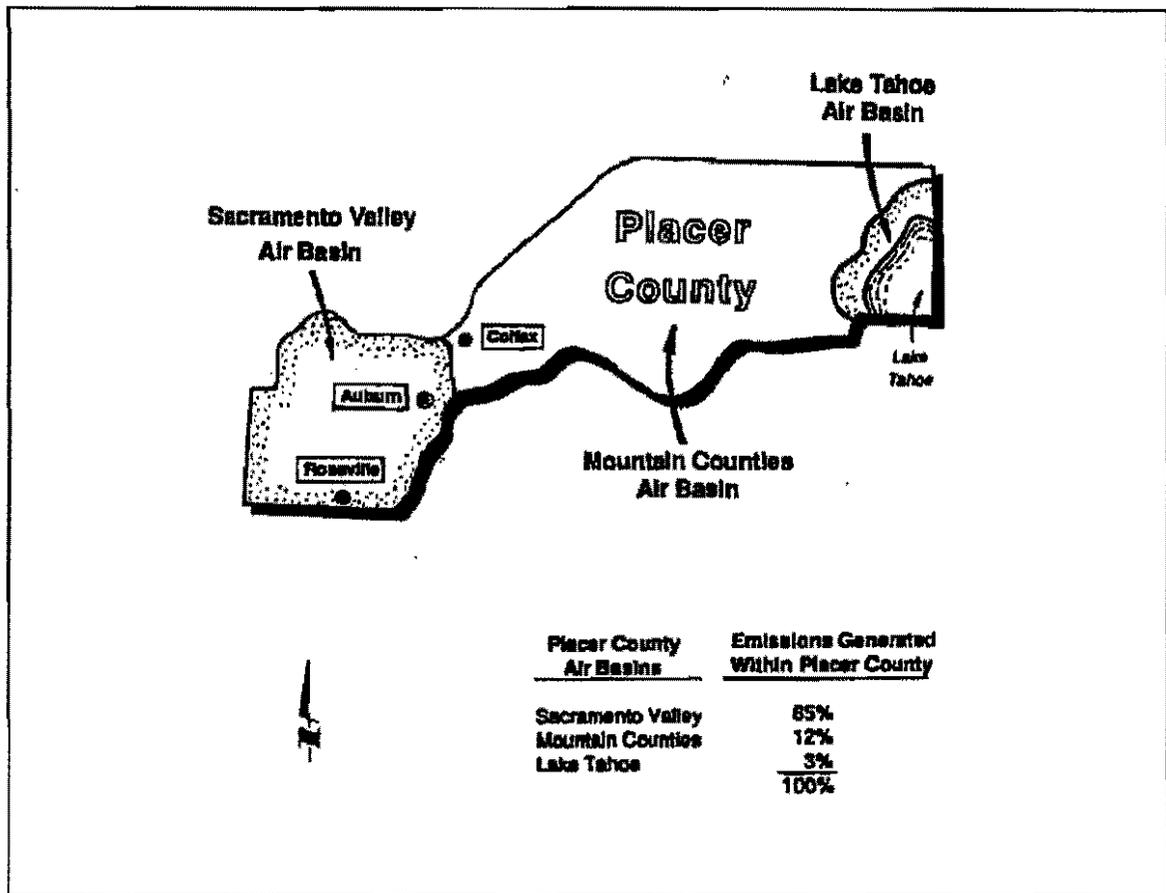
The City of Colfax is located within the Mountain Counties Air Basin. This basin includes the eastern two-thirds of Placer County (Figure 6-1). The Mountain Counties Air Basin has air pollution problems that are influenced by specific meteorological and topographic factors. The prevailing wind direction is generally funneled through the mountain valleys. These winds trap pollutants in the basin. These conditions can also be created by a combination of calm winds and the development of inversion layers. Because of its local topography, the prevailing winds circulate the air and reduce the potential of poor air quality.

The Federal Clean Air Act establishes air quality standards for several pollutants and requires areas that violate these standards to prepare and implement plans to achieve the standards by certain deadlines. Air quality standards applicable in California are shown in Table 6-1. These are designed to protect the public health, and secondary standards,

area. These changes can negatively affect air quality. It will be necessary to provide mitigation methods consistent with the PCAPCD's 1991 Air Quality Attainment Plan (AQAO) (or updated version). Any development will need to follow the Placer County Offset Mitigations-Preliminary Guidance (Appendix C) and utilize Placer County Best Available Mitigation Measures, 1996 (Appendix D) to reduce impact on the local air quality. It is not possible to control the topography and prevailing atmospheric controls in the Mountain Counties Air Basin, but by following mitigation measures consistent with the AQAP Colfax can cooperate with all other County agencies in an effort to reach attainment in Ambient Air Quality Standards (Table 6-1)

The Federal Clean Air Act establishes air quality standards for several pollutants and requires areas that violate these standards to prepare and implement plans to achieve the standards by certain deadlines. Air quality standards applicable in California are shown in Table 6-1. These are designed to protect the public health, and secondary standards, designed to prevent visibility reduction, soiling, nuisance, and other damage.

**Figure 6-1
Placer County Air Basin**



**Table 6-1
AMBIENT AIR QUALITY STANDARDS**

California ¹		National ²	
Air Pollutant	Concentration	Primary (>)	Secondary (>)
Ozone	0.09 ppm, 1-hr avg	0.12 ppm, 1-hr avg 0.08 ppm, 8-hr avg	0.12 ppm, 1-hr avg 0.08 ppm, 8-hr avg
Carbon Monoxide	9 ppm, 8-hr avg 20 ppm, 1-hr avg	9 ppm, 8-hr avg 35 ppm, 1-hr avg	9 ppm, 8-hr avg 35 ppm, 1-hr avg
Nitrogen Dioxide	0.25 ppm, 1-hr avg	0.053 ppm, annual avg	0.053 ppm, annual avg
Sulfur Dioxide	0.04 ppm, 24-hr avg 0.25 ppm, 1-hr avg	0.03 ppm, annual avg 0.14 ppm, 24-hr avg	0.50 ppm, 3-hr avg
Suspended Particulate Matter (PM ₁₀)	30 µg/m ³ annual geometric mean 50 µg/m ³ , 24-hr avg	50 µg/m ³ annual arithmetic mean 150 µg/m ³ , 24-hr avg	50 µg/m ³ annual arithmetic mean 150 µg/m ³ , 24-hr avg
Suspended Particulate Matter (PM _{2.5})	—	15 µg/m ³ annual arithmetic mean 65 µg/m ³ , 24-hr avg	15 µg/m ³ annual arithmetic mean 65 µg/m ³ , 24-hr avg
Sulfates	25 µg/m ³ , 24-hr avg	—	—
Lead	1.5 µg/m ³ , 30-day avg	1.5 µg/m ³ , calendar quarter	1.5 µg/m ³ , calendar quarter
Hydrogen Sulfide	0.03 ppm, 1-hr avg	—	—
Vinyl Chloride	0.01 ppm, 24-hr avg	—	—
Visibility Reducing Particles	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%.	—	—

¹ California standards for ozone, carbon monoxide, sulfur dioxide (1-hour), suspended particulate matter-PM₁₀ visibility reducing particles, are values that are not to be exceeded. The sulfur dioxide (24-hour), sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded.

² National standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

ppm = parts per million by volume
µg/m³ = micrograms per cubic meter

Source: California Air Resources Board 1994; U.S. Environmental Protection Agency, 1997.

Table 6-2 summarizes Placer County's state and federal attainment status for the criteria pollutants. Portions of Placer County are classified as nonattainment areas for the state and federal ozone standards, and all of Placer county is a nonattainment area for state particulates (PM₁₀) standards. Placer County is unclassified for carbon monoxide (CO) because no monitoring is conducted for CO in the county. Because of its position in the Mountain Counties air basin, Colfax is in a nonattainment area for some of the criteria pollutants.

Pollutant	California Standards	Federal Standards
Ozone	Nonattainment	Nonattainment
Carbon monoxide	Unclassified	Unclassified
Nitrogen dioxide	Attainment	Unclassified
Sulfur dioxide	Attainment	Attainment
PM10	Nonattainment	Attainment

Note: Unclassified designations indicate that sufficient monitoring data are unavailable. Unclassified areas are generally treated as attainment areas.

Source: California Air Resources Board 1989

Ozone is a public health concern because ozone is a respiratory irritant that increases human susceptibility to respiratory infections. Ozone causes substantial damage to leaf tissues of crops and natural vegetation and damages many materials by acting as a chemical oxidizing agent.

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions, involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROG) and nitrogen oxides (NO_x). The period required for ozone formation allows the reacting compounds to be spread over a large area, producing a regional pollution problem. Ozone problems are the cumulative result of regional development patterns, rather than a result of a few significant emission sources. Colfax ozone levels have been increasing in recent years because of accumulation of ozone from other locations in the region. The City will continue to cooperate with county, state and federal agencies in an attempt to lower current levels to reach an attainment level.

The state 1-hour ozone standard of 0.09 parts per million (ppm) is not to be exceeded. The federal 1-hour ozone standard of 0.12 ppm is not to be exceeded more than three times in any 3 -year period.

One of the monitoring stations for ozone in the county is in Colfax. The results of the monitoring station are shown in Table 6-3 for 1995 and 1996. This data reflects the nonattainment of both federal and state standards.

Table 6-3
Days and Hours Over Ozone Standards

	<u>1995 Days</u>		<u>1996 Days</u>		<u>1995 Hours</u>		<u>1996 Hours</u>	
	State	Federal	State	Federal	State	Federal	State	Federal
Colfax Station	16	1	4	0	44	1	11	0

Source: Placer County Air Quality Control District

State and federal CO standards have been set for both 1-hour and 8-hour averaging periods. The state 1-hour CO standard is 20 ppm by volume and the federal 1-hour standard is 35 ppm. Both state and federal standards are 9 ppm for the 8-hour averaging period. State CO standards are phrased as "values not to be exceeded" federal standards are phrased as values not to be exceeded more than once per year.

There is no monitoring station in Placer County for CO. Because of this the county has been designated as unclassified for CO (California Air Resources Board). Data secured from previous studies suggest that CO problems occur primarily near traffic arteries and areas having significant amounts of commercial development, as well as areas of congested intersections. This would apply to the rail crossing near the train station. This pollution problem is directly related to motor vehicle operation. By its location on the I-80 corridor Colfax is in an area of high potential for excessive CO.

Health concerns associated with suspended particles focus on those particles small enough to reach the lungs when inhaled. Few particles larger than 10 microns in diameter reach the lungs. Both the federal and state air quality standards for particulate matter apply only to these small particles designated PM₁₀.

State and federal PM₁₀ standards have been set for 24-hour and annual averaging periods. The state 24-hour standard is 50 micrograms per cubic meter (ug/m³). The federal 24-hour standard is 150 ug/m³. The state annual standard is 30 ug/m³ on an annual geometric mean, and the federal standard equals 50 ug/m³ on an annual arithmetic mean. Both 24-hour standards are not to be exceeded more than 1 day per year, both annual standards are not to be exceeded. The limited data for PM₁₀ reflects violations of these standards. This places Colfax in a nonattainment area.

The Placer County Air Pollution Control District (PCAPCD), headquartered in Auburn, is responsible for maintaining and improving air quality throughout Placer County. In addition other agencies involved in air pollution control including the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and the Sacramento

Area Council of Governments (SACOG).

With continued growth in the City of Colfax, as well as its location will cause a decline in air quality. Both rural and urban development can lead to this decline. The goals, objectives, policies, and implementation measures if followed can maintain and improve air quality in the City of Colfax.

6.7 Open Space

Open space is defined by the state of California as, "...any parcel or area of land or water which is essentially unimproved and devoted to an open-space use..." (Governor's Office of Planning and Research 1992, 37). There are four types of open space use recognized by the State, they include: open space for preservation of natural resources, open space used for the managed production of resources, open space for outdoor recreation, and open space for public health and safety. At the present there are 2 acres designated open space within the City (see Land Use Element).

Currently, there is an open space zoning classification in the City of Colfax Municipal Code. This district includes land for the use of parks, playgrounds, and swimming pools.

The City of Colfax has many valuable areas of open space. It is important that these areas be considered and protected while population and urbanization continues. Section 6.8, Open Space Action Program, provides specific guidelines for preservation, conservation and management of open space. This action program is required by State Law and functions as the goals, objectives, policies, and implementation measures for the open space section.

6.7.1 Open Space for the Preservation of Natural Resources

This type of open space use includes areas, "...required for the preservation of plant and animal life,...for ecologic and other scientific study purposes,...rivers, streams,...banks of river and streams, and watershed lands." (Governor's Office of Planning and Research 1992, 37).

Designating open space areas for the preservation of natural resources can have dual purpose. Quite often the preservation of natural resources, such as vegetation, soil, and air quality has a positive impact on other resources. By preserving one resource others are enhanced. It is important to identify areas of high resource value, so that they may be protected and growth can be guided into more suitable areas.

The natural environment in the City of Colfax is one of its greatest resources. The natural vegetation, wildlife, aesthetic beauty and other unique conditions create and support the quality of life that gives the City its unique character. Preservation of these resources and yet at the same time expanding and completing infill in the City can be accomplished with careful planning, monitoring, and mitigation. The end results will be a City that maintains a

high quality of life while maintaining consistent growth in population, business, jobs, and other necessary areas of community life.

6.7.2 Open Space for the Managed Production of Resources

This type of open space use includes, "...forest lands, rangeland, agricultural land,...areas required for recharge of ground water basins,...areas containing major mineral deposits." (Governor's Office of Planning and Research 1992, 37).

At the present time there are no significant areas that would fit into this category within the City. This should be considered if in the future any expansion of the City would include any of these areas.

6.7.3 Open Space for Outdoor Recreation

This type of open space use includes, "...areas of outstanding scenic value, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lake shores...river and streams; and reservations, including utility easements, banks of rivers and streams, trails.."(Governor's Office of Planning and Research 1992, 37).

In a publication entitled, Bay areas Public Lands, the Green Belt Alliance identifies the people to city owned acres ratio for all the municipalities in the Bay Area. In this report, they also present a ratio they deem adequate for city park acres per population. This ratio is 3-5, city park acres per 1,000 population (Greenbelt Alliance 1992, 8).

At the present time the City of Colfax has land set aside for recreation for park land, playgrounds and swimming pool. Future open spaces for recreation should be considered in future development. The City can secure and maintain a satisfactory ratio of land for open space by encouraging the inclusion of open space areas in new developments. This technique will alleviate the burden for the City to maintain these areas, while assuring that these areas will exist.

There are vacant parcels in the City that could meet the need of park or recreation land. These parcels include, but are not limited to two parcels on Auburn Street. These parcels have Bunch Creek flowing at the eastern edge of the property. The riparian area would be suitable for a walk way / green belt area for recreation. If the owners could be convinced to dedicate this area for that purpose in would greatly enhance the City's open space. At the present time the City has 2 acres of open space land for recreation purposes. This recreational land is supported and maintained by ½ of 1% of the general fund budget as well as ½ % of building costs at permit issuance.

Changes in the Land Use Element call for higher residential density in some areas of the City (Figure 2-2). It is necessary with continued infill in residential and commercial areas of the planning area that open space be provided. These open spaces can take the form of, but

not be limited to, greenbelts, buffer zones, parks and public recreational areas. By incorporating the creation of this type of open space in future development the City can maintain its quality of life and atmosphere in spite of growth and development.

One of the primary goals of the Natural Environment Element is to add to the existing stock of open space and recreational land with, less abundant in the primary planning areas. The success in reaching this goal will depend upon a number of factors, which include but are not limited to the following:

- A strong and committed relationship between the City of Colfax Planning Commission, City Council, Economic Development Committee and any interested parties concerned with the Parks and Recreation activities in the City.
- The will of the citizenry, and their commitment toward helping to support and create more open space and recreational lands in and around Colfax.
- The plight of the current state financial situation, its impact upon the City and local special districts, and the resulting availability of grant monies and other funding opportunities.
- The creativity and commitment of land owners and developers in designing projects that will provide needed open space, and/or will seriously contribute to the goals of increasing open space and recreational lands in an around Colfax.
- The creativity and commitment of decision makers, staff, and the citizenry in exploring and implementing land acquisition strategies and techniques well before the City approaches build out levels.

6.7.4 Open Space for Public Health and Safety

This type of open space includes, "...areas which require special management of regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, water sheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for protection and enhancement of air quality." (Governor's Office of Planning and Research 1992, 33)

The City of Colfax has this type of open space. Hillside Development Guidelines have been established in the City's Zoning Ordinance. The purpose of the Hillside Guidelines are to restrict and or modify development in unstable areas. These restrictions concentrate development in areas with the least environmental impact. They provide direction and encourage development which is sensitive to the unique characteristics common to hillside properties including land form, vegetation and scenic quality. The guidelines provide alternative approaches to flat land development practice by achieving land use patterns and density that are consistent with the natural characteristics of hillsides and sloped areas. A safe

means of ingress and egress for vehicular and pedestrian traffic to and within hillside areas, with minimum disturbance to the natural terrain. The zone although beneficial, does not always qualify as open space. According to State Law, in cases where restricted development is allowed, the areas cannot be considered open space.

6.8 Open Space Action Program

It is the intent of the Natural Environment Element to satisfy the statutory requirement of the Open Space Element of a general plan. In order to secure the legal viability of this element, it is imperative that an action program be included.

Article 10.5 of California Government Code requires that, "Every local open-space plan shall contain an action program consisting of specific programs which the legislative body intends to pursue in implementing its open-space plan." (Governor's Office of Planning and Research, 1992, 34).

The revisions and techniques presented in this action program should be implemented immediately following the adoption of the Natural Environment Element. They, in addition to the goals, objectives, policies and implementation measures presented in other sections of the element, should be actively enforced and monitored to ensure compliance. The proper administration of these programs and policies is vital to the cumulative effectiveness of the element.

6.8.1 Existing Methods for Implementation

The following sections discuss techniques currently available for the preservation of open space. The techniques used to implement the open space areas are described in the following sections.

Preservation of Natural Resources

The Colfax Municipal Code Title 9 chapters 1 and 2 contain requirements for the development of open space on lots, subdivisions, and other developments within the City. In these chapters the minimum amount of open space is limited to landscaped areas and are not defined by zoning districts. The Land Use Element addresses requirements for open space and establishes minimum areas in new developments and sites of expansion.

6.8.2 Suggested Revisions in Policy

Revision # 1: Develop a "Land Development Policy" that would incorporate minimum lot coverage standards for all zoning classifications. This will provide a more comprehensive, far reaching form of open space preservation.

Revision # 2: Develop and interpret a greenway and slope overlay zones to specific

development standards. This would provide the City Council a list of detailed standards for each of these zones, enabling them to better secure these areas in an effective manner for open space preservation.

Revision # 3: Prepare and adopt a city ordinance in accordance with the Quimby Act (Government Code Section 66477 et seq). This act provides a method by which a local government can exact either land dedication or in lieu of fees for park and recreational purposes. The details and limits to this program can be found on pages 147-150 of the 1992 Planning, Zoning, and Development Laws.

Revision # 4: Establish a development fee schedule to provide for the maintenance and acquisition of open space for recreation for the City.

Revision # 5: Establish a ratio of park acreage to population of four acres per 1,000 population.

Revision # 6: Establish a Parks and Recreation District for the purpose of administering the open space land for outdoor recreation.

6.9 Natural Environment Issues

The following issues and concerns identified by the Planning Commission need to be addressed:

- The City of Colfax's current Open Space zoning classification, as designated in the Municipal Code, provides for only three of the four types of open space: preservation of natural resources, outdoor recreation, and open space for public health and safety.
- The City has limited land dedicated under open space zoning. As the population continues to grow, so will the pressure for urban development. It is important that provisions for the preservation of natural resources and open space be made.
- The demand for existing and future recreational facilities will continue to increase. It is important that existing areas be maintained and future planning considered. It would be advantageous for the City to utilize a plan in order to guide the current maintenance and future purchase and development of these recreational facilities.
- The implementation of the Quimby Act is one way to secure future allocations of open space. This Act gives a city the power to require either dedication of an open-space area or an in-lieu of fee for all new developments. The specifics of the Act and the requirements for adopting an ordinance are provided in the General Plan Guidelines (published by the Governor's Office of Planning and Research).
- Soil is an important resource that influences, both directly and indirectly, other natural

resources. The condition of the soil directly affects the health of associated vegetation and wildlife species.

- Several possible threats which could impact groundwater quality and they include the introduction of contaminants (bacteriological, chemical, etc.), irresponsible disposal of household hazardous wastes, destruction of the natural drainage ways and significant reduction in recharge areas.
- The potential impact of growth on the City's waste water treatment plant must be evaluated in regards to excessive inflow into the plant and discharge into the local watershed. This will be evaluated in the Safety Element.

6.10 Findings

The following findings are to the above issues and concerns:

- The City has no open space set aside for the preservation of natural resources.
- Currently, the City does not have a program to implement open space for recreational uses.
- The City does not have an open space program for the public health and safety of City residents.
- The identification of the location of the Slope Overlay Zone will help provide for open space, preservation of natural resources, and public health and safety.
- The City does not have regulations for vegetation and habitat protection, i.e. tree ordinance.
- The City has excellent groundwater resources. It is the responsibility of the City to ensure that activities within its jurisdictional boundaries do not adversely affect this resource. The protection of groundwater quantity and quality will be beneficial for both the current and future residents of Colfax.
- The City is required by law (AB325) to implement a "Model Water-Efficient Landscape Ordinance."
- The potential for future problems with storm water runoff is an important issue in the Colfax area. Review of all proposed developments should have drainage plans and other materials to describe the current and future storm water runoffs of proposed projects.

6.11 Natural Environment Element Goals, Policies, and Implementation Measures

Vegetation

Goal 6.11.1 Preserve the remaining woodlands and native species of trees in the Colfax Planning Area.

Goal 6.11.2 Conserve and improve groundwater, natural habitat, mineral, aesthetic, soil and air resources in the Colfax Planning Area.

Goal 6.11.3 Protect and prevent human disruption in all areas designated as Open Space and Greenbelts by the Land Use Element.

Goal 6.11.4 Achieve and maintain a standard of no net loss of native tree species.

Goal 6.11.5 Work with the county to provide protection for Riparian areas in and around the Planning area.

Policy 6.11.1 Provide for the protection of native tree species by incorporating specific standards into all planning related decision.

Policy 6.11.2 Discourage further development in scenic areas and woodlands to preserve urban area environmental resources.

Policy 6.11.3 Discourage development that does not incorporate native physical land features into the project design.

Policy 6.11.4 Encourage planting, preservation and replacement of native trees.

Implementation Measures

6.11.1.A Prepare and adopt a tree preservation ordinance that is focused on woodland habitat and native tree preservation.

6.11.1.B Require all new developments to achieve a status of no net loss of native tree species. This is done by site design, replanting, or any other method that the City deems acceptable.

6.11.1.C Implement grading, drainage and ground cover policies to minimize disturbance of existing vegetation.

6.11.1.D Implement land development policies regarding tree cover within greenways and open areas.

Wildlife

Goal 6.11.1.a Protect remaining populations of native wildlife in the Colfax Planning Area.

Goal 6.11.2.a Preserve existing wildlife habitat areas described in the vegetation section.

Goal 6.11.3.a Prevent elimination or extinction of wildlife species in the Colfax Planning Area.

Goal 6.11.4.a Maintain, improve and where possible increase habitat areas in the Colfax Planning Area.

Policy 6.11.1.a Encourage projects that minimize the impact on habitat areas.

Policy 6.11.2.a Encourage the sharing of information regarding wildlife between the public and private developers.

Implementation Measures

6.11.2.A Provide development incentives for projects which incorporate habitat protection into project design.

6.11.2.B Require a wildlife survey for all projects located in potential habitat areas and require that the findings of the surveys be incorporated into the decision making process.

Water Resources

Goal 6.11.1.b Conserve and protect the water resources of the City of Colfax.

Goal 6.11.2.b Encourage water conservation and mitigation practices to maintain and improve water quality in the City of Colfax.

Policy 6.11.1.b Restrict development that would cause a decrease in water quality.

Policy 6.11.2.b Restrict development that would interfere with ground or surface water.

Implementation Measures

6.11.3.A Enforce and implement code and development requirements that will protect water quality.

6.11.3.B Require onsite review for any development that could have an effect on surface water or ground water within the City of Colfax.

Atmospheric Resources

Goal 6.11.1.c Protect and improve the air quality of the City of Colfax.

Goal 6.11.2.c Prevent and mitigate when possible all human induced degradation of air quality within the jurisdiction of the City of Colfax.

Policy 6.11.1.c The City shall cooperate with other agencies to develop a consistent and effective approach to air quality planning and management.

Policy 6.11.2.c The City shall impose mitigation measures to minimize stationary source and indirect source emissions.

Policy 6.11.3.c The City shall support the PCAPCD 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.

Policy 6.11.4.c The City shall encourage development to be located and designed to minimize direct and indirect air pollutants.

Policy 6.11.5.c The City shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.

Policy 6.11.6.c In reviewing project applications, the City shall consider alternatives or mitigation measures to reduce emissions of air pollutants.

Policy 6.11.7.c The City shall require new development projects that exceed APCD significance thresholds to submit an air quality analysis for review approval. Based on the analysis the City shall require appropriate mitigation measures consistent with the PCAPCD's 1991 Air Quality Attainment Plan (or updated edition).

Implementation Measures

6.11.4.A The City shall coordinate with other local, regional, and state agencies, including the PCAPCD and the California Air Resources Board (ARB), in incorporating regional and county clean air plans to City planning for project review. This includes mitigation measures consistent with PCAPCD's 1991 Air Quality attainment Plan (or updated edition). The City shall also cooperate with

the PCAPCD and ARB in the following efforts:

- a. Enforcing the provisions of the California and Federal Clean Air Acts, state and regional policies, and established standards for air quality;
- b. Establishing monitoring stations to accurately determine the status of carbon monoxide, ozone, nitrogen dioxide, hydrocarbon and PM₁₀ concentrations;
- c. Developing consistent procedures and thresholds for evaluating both project-specific and cumulative air quality impacts for proposed projects.

6.11.4.B The City shall co-operate with the PCAPCD to develop minimum project threshold sizes that would trigger requirements for air quality analysis and project mitigation. Elevated carbon monoxide concentrations are associated with congested intersections having high traffic volume. To address this problem, the PCAPCD shall require carbon monoxide modeling and intersection-specific mitigation measured for congested intersections having a level of service of D, E, or F designed to improve these levels of service.

6.11.4.C The City shall adopt by ordinance, the PCAPCD 1991 Air Quality Attainment Plan (or updated edition) as the City's Air Quality Attainment Plan.

Soils

Goal 6.11.1.d Conserve and protect the soil resources of the Colfax Planning Area.

Goal 6.11.2.d Ensure and encourage the continued aesthetic condition of the Colfax Planning Area.

Goal 6.11.3.d Conserve and improve natural habitat, soil and ground water resources in the Colfax Planning Area.

Goal 6.11.4.d Prevent and mitigate all human induced soil erosion occurring within the jurisdiction of the City of Colfax.

Policy 6.11.1.d Restrict development in areas of unstable soils.

Policy 6.11.2.d Encourage the seeding of all graded areas with a vegetation deemed acceptable by the conditions provided by staff.

Implementation Measures

- 6.11.5.A** Implement and enforce all guidelines and restrictions of the Cities Municipal Code relating to grading and drainage.

- 6.11.5.B** Require an onsite soil survey by an approved soil erosion prevention specialist for all large developments or those occurring on soils that have been proven to be prone to erosion.