

Chapter 5

CONSERVATION AND OPEN SPACE

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CONSERVATION AND OPEN SPACE

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Language identified with (LCP) is not restricted to the Coastal Zone; language which includes the (LCP) initials is part of the Local Coastal Program and applies countywide unless specifically stated that the policy, etc. is limited to the coastal zone.

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AUTHORITY AND PURPOSE

This chapter combines two closely-related and required elements of the General Plan: the Conservation Element and the Open Space Element.

The requirements for a Conservation Element are established by State Planning law (Section 65302 d) as follows:

"A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The conservation element may also cover:

- (1) The reclamation of land and waters.
- (2) Prevention and control of the pollution of streams and other waters.
- (3) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
- (4) Prevention, control, and correction of the erosion of soils, beaches, and shores.
- (5) Protection of watersheds.
- (6) The location, quantity and quality of the rock, sand and gravel resources.
- (7) Flood control."

The requirements for an Open Space Element are established by State planning law (Section 65560 b) as follows:

"Open-space land is any parcel or area of land or water which is essentially unimproved and devoted to an open-space use as defined in this section, and which is designated on a local, regional or state open-space plan as any of the following:

- (1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

- (2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
- (3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- (4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality."

SUMMARY

The goals, objectives, policies and programs of this chapter recognize the need to balance conservation and preservation of natural and cultural resources with their productive use and stewardship. Since the purposes of the Conservation and Open Space elements are so closely related and the specific programs and actions implement the objectives and policies of both elements, they have been combined and integrated into one chapter.

The chapter is divided into sections based on each particular environmental resource. The first two sections address protection of biological diversity and sensitive habitats throughout the County. These areas include, but are not limited to, riparian corridors, wetlands, lagoons, lakes, woodlands, marine resources and habitat for rare, threatened or endangered species resource protection includes limiting development or disturbance, encouraging restoration and requiring appropriate performance standards in these areas.

The second section addresses water resources protection, dividing the policies into those which protect surface water quality and quantity and those which protect groundwater quality and quantity. These policies are closely linked to the Public Facilities chapter, as well as the policies of the water supply and treatment providers of the County. The next sections address conservation policies for a variety of resources including unique geologic features and scenic resources.

The next sections address lands suitable for open space protection or resource production activities such as timber, minerals and agricultural lands. The open space section includes designated urban open space areas and policies for rural open space. The timber policies involve use of timber production zoning to maintain economically-viable timber production and timber management practices to protect soil, water and habitat values. The mineral resource policies designate valuable mineral areas and require environmentally-sound quarry operation and restoration practices. Agricultural policies establish protection for both commercial and non-commercial agricultural lands involving buffering and noticing requirements, limitations on subdivision, siting criteria and standards for developed uses and tax incentives.

The final sections of the element address protection and enhancement of Air Quality, conservation of Energy, and cultural resources (Archaeologic and Historic). The first two sections are closely linked to the land use and circulation policies of the County and the Regional Transportation Commission.

Substantial background data on the natural, cultural and open space resources of Santa Cruz County are available in the General Plan Update Background Report (1991) covering the urban area and the Technical Appendix (1991) covering water resources and the rural area, as well as various specialized studies and planning documents (see Appendix A, Sources and References for the General Plan and Local Coastal Program Land Use Plan).

Note: Chapter 5 contains a number of Resources and Constraints which are used to calculate residential densities. The policies which relate to land division and density requirements are to be used in conjunction with the Rural Density Matrix as described in section 2.3.

GOALS

The overall goals guiding the Conservation and Open Space Element are as follows:

- **Natural And Cultural Resources Protection (LCP):** To protect and restore unique, rare, threatened, endangered and other natural and cultural resources that warrant preservation because of their biological value, scarcity, scientific value, aesthetic quality or cultural significance.
- **Open Space Protection (LCP) :** To retain the scenic, wooded, open space and rural character of Santa Cruz County; to provide a natural buffer between communities; to prevent development in naturally hazardous areas; and to protect wildlife habitat and other natural resources.
- **Resource Utilization (LCP) :** To provide for the conservation and environmentally sound and orderly economic use of renewable and nonrenewable natural resources to provide employment and income in Santa Cruz County while minimizing impacts to adjoining land uses and the environment.

BIOLOGICAL RESOURCES

Objective 5.1 Biological Diversity

- (LCP) To maintain the biological diversity of the County through an integrated program of open space acquisition and protection, identification and protection of plant habitat and wildlife corridors and habitats, low-intensity and resource compatible land uses in sensitive habitats and mitigations on projects and resource extraction to reduce impacts on plant and animal life.

Policies

5.1.1 Sensitive Habitat Designation

- (LCP) Designate the following areas as sensitive habitats: (a) areas shown on the County General Plan and LCP Resources and Constraints Maps; (b) any undesignated areas which meet the criteria (policy 5.1.2) and which are identified through the biotic review process or other means; and (c) areas of biotic concern as shown on the Resources and Constraints Maps which contain concentrations of rare, endangered, threatened or unique species.

5.1.2 Definition of Sensitive Habitat

- (LCP) An area is defined as a sensitive habitat if it meets one or more of the following criteria:
- (a) Areas of special biological significance as identified by the State Water Resources Control Board.
 - (b) Areas which provide habitat for locally unique biotic species/communities, including coastal scrub, maritime chaparral, native rhododendrons and associated Elkgrass, mapped grasslands in the coastal zone and sand parkland; and Special Forests including San Andreas Live Oak Woodlands, Valley Oak, Santa Cruz Cypress, indigenous Ponderosa Pine, indigenous Monterey Pine and ancient forests.
 - (c) Areas adjacent to essential habitats of rare, endangered or threatened species as defined in (e) and (f) below.
 - (d) Areas which provide habitat for Species of Special Concern as listed by the California Department of Fish and Game in the Special Animals list, Natural Diversity Database.
 - (e) Areas which provide habitat for rare or endangered species which meet the definition of Section 15380 of the California Environmental Quality Act guidelines.
 - (f) Areas which provide habitat for rare, endangered or threatened species as designated by the State Fish and Game Commission, United States Fish and Wildlife Service or California Native Plant Society.
 - (g) Nearshore reefs, rocky intertidal areas, seacaves, islets, offshore rocks, kelp beds, marine mammal hauling grounds, sandy beaches, shorebird roosting, resting and nesting areas, cliff nesting areas and marine, wildlife or educational/research reserves.
 - (h) Dune plant habitats.
 - (i) All lakes, wetlands, estuaries, lagoons, streams and rivers.
 - (j) Riparian corridors.
- (See Appendix B for a list of specific habitats and/or species.)

5.1.3 Environmentally Sensitive Habitats

- (LCP) Designate the areas described in 5.1.2 (d) through (j) as Environmentally Sensitive Habitats per the California Coastal Act and allow only uses dependent on such resources in these habitats within the Coastal Zone unless other uses are:
- (a) consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public;
 - (b) it is determined through environmental review that any adverse impacts on the resource will be completely mitigated and that there is no feasible less-damaging alternative; and
 - (c) legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.

5.1.4 Sensitive Habitat Protection Ordinance

(LCP) Implement the protection of sensitive habitats by maintaining the existing Sensitive Habitat Protection ordinance. The ordinance identifies sensitive habitats, determines the uses which are allowed in and adjacent to sensitive habitats, and specifies required performance standards for land in or adjacent to these areas. Any amendments to this ordinance shall require a finding that sensitive habitats shall be afforded equal or greater protection by the amended language.

5.1.5 Land Division and Density Requirements in Sensitive Habitats

(LCP) Allow land divisions in sensitive habitats only when the density and design of the subdivision are compatible with protection of these resources as determined by environmental assessment and applicable County land use and zoning standards. Apply the following land division and density standards to the habitats listed:

- (a) Grasslands - Prohibit land division of native and mixed native grassland habitat mapped in the Coastal Zone unless the area to be divided is removed from the mapped grassland habitat area by General Plan-Local Coastal Program amendment. On parcels with existing mapped native and mixed native grasslands and which contain developable land outside those habitats, allow development at the lowest density of the land use designation and require that development be clustered and located outside the habitat areas. Allow one single family dwelling unit per existing parcel of record. Where property owners upgrade grasslands on their parcels, outside of mapped areas, through resource management activities, the prevailing General Plan densities shall not be reduced.
- (b) Special Forests - Prohibit land divisions within designated Special Forests unless the area to be divided is removed from the mapped special forests habitat area by General Plan-Local Coastal Plan amendment. On parcels with existing mapped special forest areas which contain developable land outside that habitat, allow development at the lowest density of the land use designation and require that development be clustered and located outside the habitat areas. Allow one single family dwelling unit per existing parcel of record. Where property owners upgrade special forest areas on their parcels, outside of mapped areas, through resource management activities, the prevailing General Plan densities shall not be reduced.

5.1.6 Development Within Sensitive Habitats

(LCP) Sensitive habitats shall be protected against any significant disruption of habitat values; and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project which cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land.

5.1.7 Site Design and Use Regulations

(LCP) Protect sensitive habitats against any significant disruption or degradation of habitat values in accordance with the Sensitive Habitat Protection ordinance. Utilize the following site design and use regulations on parcels containing these resources, excluding existing agricultural operations:

- (a) Structures shall be placed as far from the habitat as feasible.
- (b) Delineate development envelopes to specify location of development in minor land divisions and subdivisions.
- (c) Require easements, deed restrictions, or equivalent measures to protect that portion of a sensitive habitat on a project parcel which is undisturbed by a proposed development activity or to protect sensitive habitats on adjacent parcels.
- (d) Prohibit domestic animals where they threaten sensitive habitats.
- (e) Limit removal of native vegetation to the minimum amount necessary for structures, landscaping, driveways, septic systems and gardens;
- (f) Prohibit landscaping with invasive or exotic species and encourage the use of characteristic native species.

5.1.8 Chemicals Within Sensitive Habitats

(LCP) Prohibit the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when an emergency has been declared, when the habitat itself is threatened, when a substantial risk to public health and safety exists, including maintenance for flood control by Public Works, or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner.

5.1.9 Biotic Assessments

(LCP) Within the following areas, require a biotic assessment as part of normal project review to determine whether a full biotic report should be prepared by a qualified biologist:

- (a) Areas of biotic concern, mapped;
- (b) Sensitive habitats, mapped & unmapped.

5.1.10 Species Protection

(LCP) Recognize that habitat protection is only one aspect of maintaining biodiversity and that certain wildlife species, such as migratory birds, may not utilize specific habitats. Require protection of these individual rare, endangered and threatened species and continue to update policies as new information becomes available.

5.1.11 Wildlife Resources Beyond Sensitive Habitats

(LCP) For areas which may not meet the definition of sensitive habitat contained in policy 5.1.2, yet contain valuable wildlife resources (such as migration corridors or exceptional species diversity), protect these wildlife habitat values and species using the techniques outlined in policies 5.1.5 and 5.1.7 and use other mitigation measures identified through the environmental review process.

Programs

- (LCP) a. Maintain, as Appendix B, current plant and animal habitats and species lists as a reference for the General Plan/LCP. Sources for species classification include, but are not limited to: State Water Resources Control Board, Section 15380 of the California Environmental Quality Act, California State Fish and Game Commission and the Special Animals List, Natural Diversity Data Base, United States Fish and Wildlife Service and California Native Plant Society. (Responsibility: Planning Department)
- (LCP) b. Work with State Department of Fish and Game, United States Fish and Wildlife Service and other relevant agencies to ensure adequate protection of biological resources in the County. (Responsibility: Planning Department, Board of Supervisors)
- (LCP) c. Establish a mapping program to determine the boundaries of sensitive habitats based on field mapping of parcel specific conditions: including but not limited to: lakes, lagoons, wetlands, urban riparian corridors and trail routes, rare, endangered or threatened species and unique biotic communities and surrounding areas necessary to protect them. (Responsibility: Planning Department, Fish and Game Commission, Parks, Planning Commission, Board of Supervisors)
- (LCP) d. Once baseline data are computerized, periodically update County maps when biotic and environmental reports are accepted by the County on individual parcels, areas or development projects, or when updated confirmed biotic information is received from any source. (Responsibility: Planning Department, Information Services, Board of Supervisors)
- (LCP) e. Identify and seek funding sources to acquire special sensitive habitats. (Responsibility: Planning Department, Board of Supervisors)

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- (LCP) f. Maintain a Sensitive Habitat Protection ordinance which describes: habitat types, permitted and conditional uses within the habitats, and development standards, consistent with all General Plan, Local Coastal Program and California Coastal Act Sensitive Habitat protection policies. Any amendments to this ordinance shall require a finding that sensitive habitats shall be afforded equal or greater protection by the amended language. (Responsibility: Planning Department, Planning Commission, Board of Supervisors)
- (LCP) g. Determine minimum area requirements for the protection of rare, endangered and threatened species. Integrate biotic review into the timber harvest regulations. Develop a program to enforce performance standards protecting rare, endangered, threatened and unique species. Develop Memoranda of Understanding and similar agreements with state and federal agencies to assist with enforcement of performance standards. (Responsibility: Planning Department, Board of Supervisors)
- (LCP) h. Evaluate those Sensitive Habitats which are affected by agricultural activities to determine their biological importance relative to the importance of the agricultural use and develop programs to resolve conflicts between resource use and protection. (Responsibility: Planning Department, Agricultural Commissioner)
- i. Utilize a prescribed burning program or other means of removing slash to mimic the effects of natural fires in order to reduce the fire hazard to human residents and to enhance the health of biotic communities. (Responsibility: County Fire Marshal, California Department of Forestry)
- j. Prepare a countywide grassland management plan. Develop education programs, grazing management plans, or other solutions where there is evidence of over-grazing in cooperation with Soil Conservation Service, and the Santa Cruz County Resource Conservation District. Develop prescribed burning, grazing, or other measures to preserve grassland, except where an area is being replanted with native trees and a timber management plan has been approved. (Responsibility: Planning Department, Board of Supervisors)
- k. Continue to ensure survival of the endangered Santa Cruz Long-Toed Salamander (SCLTS) through County programs including:
- (1) Maintain the existing salamander protection development criteria in the Sensitive Habitat Protection ordinance.
 - (2) Support of state and federal efforts for habitat preservation at Valencia Lagoon, Ellicott Pond, Seascape Uplands, other known habitat locations, and habitat locations that may be discovered in the future through information obtained in environmental review or other professionally recognized sources.
 - (3) Seek funding for acquisition of lots and development of Habitat Conservation Plans for all known SCLTS habitats.
 - (4) Establish a procedure whereby, upon receiving a development application for an undeveloped parcel within the essential habitat, the County shall notify the California Coastal Commission, Coastal Conservancy, California Department of Fish and Game, U.S. Fish and Wildlife Service and other interested organizations. The County or other agency shall have one year to decide whether to acquire the parcel. If the County and other agencies decide not to acquire the parcel, and if development potential in the essential habitat has not been otherwise eliminated and development cannot be accommodated on the parcel outside the essential habitat, development may proceed consistent with the standards for the area adjacent to the salamander essential habitat and other LCP policies. A security deposit shall be required to ensure compliance with those standards.
 - (5) Delineate SCLTS habitat on County maps and utilize a salamander habitat combining zone district to identify parcels which contain such habitat.
 - (6) Establish inter-agency communication between Planning, Fish and Game, and Fish and Wildlife to determine the success of the current policies in protecting the SCLTS. If current policies are inadequate, implement additional actions as recommended by inter-agency consultation.
- (Responsibility: Planning Department, California Fish and Game Department, County Fish and Game Commission, Board of Supervisors)

1. Establish an education and monitoring program cooperatively with the Department of Fish and Game and other interested agencies to prevent substantial lot disturbance and removal of native vegetation on lots which are currently built out in or adjacent to essential salamander habitat. (Responsibility: Planning Department)

RESTORATION OF DAMAGED SENSITIVE HABITATS

Policies

5.1.12 Habitat Restoration With Development Approval

- (LCP) Require as a condition of development approval, restoration of any area of the subject property which is an identified degraded sensitive habitat, with the magnitude of restoration to be commensurate with the scope of the project. Such conditions may include erosion control measures, removal of non-native or invasive species, planting with characteristic native species, diversion of polluting run-off, water impoundment, and other appropriate means. The object of habitat restoration activities shall be to enhance the functional capacity and biological productivity of the habitat(s) and whenever feasible, to restore them to a condition which can be sustained by natural occurrences, such as tidal flushing of lagoons.

5.1.13 Habitats Damaged From Code Violations

- (LCP) In all cases where a sensitive habitat has been damaged as a result of a code violation, require that restoration of damaged areas be undertaken in compliance with all necessary permits and that the size of the restored area be in compliance with Department of Fish and Game requirements. Such restoration shall include monitoring over time to ensure the success of the restoration effort.

5.1.14 Removal of Invasive Plant Species

- (LCP) Encourage the removal of invasive species and their replacement with characteristic native plants, except where such invasive species provide significant habitat value and where removal of such species would severely degrade the existing habitat. In such cases, develop long-term plans for gradual conversion to native species providing equal or better habitat values.

5.1.15 Priorities for Restoration Funding

- (LCP) Use the following criteria for establishing funding priorities among restoration projects:
- (a) Biological significance of the habitat, including productivity, diversity, uniqueness of area, presence of rare, endangered or unique species, or regional importance (e.g., waterfowl resting areas, etc.).
 - (b) Degree of endangerment from development or other activities, and vulnerability to overuse or misuse.

Programs

- (LCP)
- a. Identify key restoration sites and seek funding to supplement private restoration. (Responsibility: Planning Department, Flood Control Zone 4, POSCS, Public Works)
 - b. Encourage enhancement and restoration of Sensitive Habitats on private lands by providing technical assistance and available resource information to property owners. Work to develop incentives for habitat restoration. (Responsibility: Planning Department, Board of Supervisors, Resource Conservation District)
 - c. Develop a program for control and eradication of feral pigs throughout the County. (Responsibility: Board of Supervisors, State Fish and Game, Fish and Game Commission)

- (LCP) d. Support the City of Santa Cruz and Harbor District in efforts to restore wetland habitat in Lower Arana Gulch and facilitate by encouraging and reviewing any portion of a restoration project under County jurisdiction, consistent with other applicable policies. (Responsibility: Board of Supervisors, Planning Department, Flood Control Zone 4)
- e. Cooperate with AMBAG, Monterey County, San Benito County, and State Department of Fish and Game in the implementation of the Pajaro River Corridor Management Plan and forthcoming Lagoon Management Plan for the lower Pajaro River including specific habitat restoration projects for the Pajaro River and tributaries. (Responsibility: Fish and Game Commission, Public Works, Flood Control Zone 7 and Zone 4)
- f. Work with the City of Watsonville to develop a comprehensive management plan for South County sloughs and wetlands. (Responsibility: Planning Department, Board of Supervisors)
- g. Develop a coordinated review procedure and criteria which protect sensitive habitats as well as meet standards for fire protection. (Responsibility: Fire Agencies, County Fire Marshal, California Department of Forestry, Planning Department)
- h. Encourage the attraction of private capital for purposes of restoration and stewardship of natural resources including vegetation, wildlife, water and soil resources. Assemble an ecological enhancement group to include: land owners, professionals in the fields of planning, natural resources and development for the purpose of creating a resource protection incentives program for consideration by the Board of Supervisors. Recommend to the Board of Supervisors a system of density bonuses, cost savings, or other resource protection incentives based upon:
- (1) The quality and extent of preservation and/or restoration of natural habitat; and
 - (2) Permanent measures for ongoing stewardship of natural resources.
- (Responsibility: Board of Supervisors, Planning Department, Resource Conservation District, Native Plant Society)

Objective 5.2 Riparian Corridors and Wetlands

- (LCP) To preserve, protect and restore all riparian corridors and wetlands for the protection of wildlife and aquatic habitat, water quality, erosion control, open space, aesthetic and recreational values and the conveyance and storage of flood waters.

Policies

5.2.1 Designation of Riparian Corridors and Wetlands

- (LCP) Designate and define the following areas as Riparian Corridors:
- (a) 50' from the top of a distinct channel or physical evidence of high water mark of a perennial stream;
 - (b) 30' from the top of a distinct channel or physical evidence of high water mark of an intermittent stream as designated on the General Plan maps and through field inspection of undesignated intermittent and ephemeral streams;
 - (c) 100' of the high water mark of a lake, wetland, estuary, lagoon, or natural body of standing water;
 - (d) The landward limit of a riparian woodland plant community;
 - (e) Wooded arroyos within urban areas.

Designate and define the following areas as Wetlands:

Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water periodically or permanently. Examples of wetlands are saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

The US Army Corps of Engineers, and other federal agencies utilize a "unified methodology" which defines wetlands as "those areas meeting certain criteria for hydrology, vegetation, and soils."

5.2.2 Riparian Corridor and Wetland Protection Ordinance

- (LCP) Implement the protection of Riparian Corridors and Wetlands through the Riparian Corridor and Wetland Protection ordinance to ensure no net loss of riparian corridors and riparian wetlands. The ordinance identifies and defines riparian corridors and wetlands, determines the uses which are allowed in and adjacent to these habitats, and specifies required buffer setbacks and performance standards for land in and adjacent to these areas. Any amendments to this ordinance shall require a finding that riparian corridors and wetlands shall be afforded equal or greater protection by the amended language.

5.2.3 Activities Within Riparian Corridors and Wetlands

- (LCP) Development activities, land alteration and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception is granted per the Riparian Corridor and Wetlands Protection ordinance. As a condition of riparian exception, require evidence of approval for development from the US Army Corps of Engineers, California Department of Fish and Game, and other federal or state agencies that may have regulatory authority over activities within riparian corridors and wetlands.

5.2.4 Riparian Corridor Buffer Setback

- (LCP) Require a buffer setback from riparian corridors in addition to the specified distances found in the definition of riparian corridor. This setback shall be identified in the Riparian Corridor and Wetland Protection ordinance and established based on stream characteristics, vegetation and slope. Allow reductions to the buffer setback only upon approval of a riparian exception. Require a 10 foot separation from the edge of the riparian corridor buffer to any structure.

5.2.5 Setbacks From Wetlands

(LCP) Prohibit development within the 100 foot riparian corridor of all wetlands. Allow exceptions to this setback only where consistent with the Riparian Corridor and Wetlands Protection ordinance, and in all cases, maximize distance between proposed structures and wetlands. Require measures to prevent water quality degradation from adjacent land uses, as outlined in the Water Resources section.

5.2.6 Riparian Corridors and Development Density

(LCP) Exclude land within riparian corridors in the calculation of development density or net parcel size. Grant full density credit for the portion of the property outside the riparian corridor which is within the required buffer setback, excluding areas over 30% slope, up to a maximum of 50% of the total area of the property which is outside the riparian corridor. (See policy 5.11.2.)

5.2.7 Compatible Uses With Riparian Corridors

(LCP) Allow compatible uses in and adjacent to riparian corridors that do not impair or degrade the riparian plant and animal systems, or water supply values, such as non-motorized recreation and pedestrian trails, parks, interpretive facilities and fishing facilities. Allow development in these areas only in conjunction with approval of a riparian exception.

5.2.8 Environmental Review for Riparian Corridor and Wetland Protection

(LCP) Require environmental review of all proposed development projects affecting riparian corridors or wetlands and preparation of an Environmental Impact Report or Biotic Report for projects which may have a significant effect on the corridors or wetlands.

5.2.9 Management Plans for Wetland Protection

(LCP) Require development in or adjacent to wetlands to incorporate the recommendations of a management plan which evaluates: migratory waterfowl use December 1 to April 30; compatibility of agricultural use and biotic and water quality protection; maintenance of biologic productivity and diversity; and the permanent protection of adjoining uplands.

5.2.10 Development in Wetland Drainage Basins

(LCP) Require development projects in wetland drainage basins to include drainage facilities or Best Management Practices (BMPs) which will maintain surface runoff patterns and water quality, unless a wetland management plan specifies otherwise, and minimize erosion, sedimentation, and introduction of pollutants.

5.2.11 Breaching of Lagoon, River, Stream or Creek Sandbars

(LCP) Do not permit breaching of lagoon sandbars unless the breaching is consistent with an approved management plan for that wetland, river, stream, or creek system.

Programs

(Also see programs for Maintaining Surface Water Quality in section 5.8. and programs for Biological Diversity and Restoration of Damaged Sensitive Habitats in section 5.1.)

- (LCP) a. Maintain and enforce a Riparian and Wetland Protection ordinance to protect riparian corridors, wetlands, lagoons and inland lakes by avoiding to the greatest extent allowed by law the development in these areas. Maintain a resource management program (Flood Control Zone 4 or similar) to fund protection and restoration of these areas and seek to increase riparian corridor and wetland acreage over the long-term. (Responsibility: Planning Department, Planning Commission, Board of Supervisors)
- b. Establish a program in cooperation with the California Department of Fish and Game to identify and revegetate disturbed areas in riparian corridors with appropriate native species. (Responsibility: Planning Department, Flood Control Zone 4)
- (LCP) c. Cooperate with the City of Santa Cruz and the Harbor District in the evaluation of the Arana Creek Marsh and evaluate other appropriate marsh areas for rare and endangered plants and devise a Biotic Management Plan for their preservation. Investigate ways to return the marshes to their natural state. (Responsibility: Public Works, Port Commission, Flood Control Zone 4)
- (LCP) d. In conjunction with AMBAG, the City of Watsonville, and the State Water Resources Control Board, develop and implement a coordinated resource management plan for the Watsonville Slough system and surrounding wetlands to improve water quality and biological habitat. (Responsibility: Flood Control, Public Works, AMBAG, City of Watsonville, and/or other appropriate agencies)
- (LCP) e. Follow the guidelines in the Pajaro River Corridor and Lagoon Management Plans to improve environmental quality of the riparian corridor and to reduce the risk of flooding to Watsonville and surrounding areas. (Responsibility: Pajaro River Task Force, Public Works, Flood Control Zone 7, Army Corps of Engineers, City of Watsonville, Board of Supervisors, Monterey County, and/or other appropriate agencies)
- f. Review site-specific recommendations in Urban Watersheds Study in connection with the design of drainage and other improvements and the review of development projects in or adjacent to riparian corridors within the Urban Services Line. Incorporate suggested restoration and enhancement measures where practical. Develop long-term plans to implement other suggested measures. (Responsibility: Planning Department, Public Works, Redevelopment Agency, and/or other appropriate agencies)
- (LCP) g. Prepare a map of all wetlands and wetland drainage basins in the County. Seek funding and support for development of management plans for wetlands from state and federal agencies and explore the possibility of establishing a development-funded wetland management program to prepare wetland management plans.

AQUATIC AND MARINE HABITATS

Objective 5.3 Aquatic and Marine Habitats

(LCP) To identify, preserve and restore aquatic and marine habitats; to maximize scientific research and education which emphasizes comprehensive and coordinated management consistent with the mission of the Monterey Bay National Marine Sanctuary; and to facilitate multiple use and recreation opportunities compatible with resource protection.

Policies

5.3.1 Support the Monterey Bay Sanctuary

(LCP) Support the mission of the Monterey Bay National Marine Sanctuary to facilitate the long-term management, protection, understanding and awareness of its resources and qualities.

5.3.2 Protecting Shorebird Nesting Sites

(LCP) Discourage all activities within 100 feet of shorebird nesting sites during nesting season (March-July). Prohibit dogs from beaches having nesting sites.

5.3.3 Davenport Pier, Rock Cliffs and Outcrops

(LCP) Maintain low intensity use, such as nature observation and educational instruction on and adjacent to the Davenport Pier, Rock Cliffs and rock outcrops.

5.3.4 Coastal Dunes and Strand

(LCP) Prohibit off-road vehicle use in the coastal dunes and strand, and discourage other uses with the potential to degrade dune habitat. Where trails through dunes are permitted, utilize wooden boardwalks or other techniques to minimize damage to dune habitat.

5.3.5 Anadromous Fish Streams

Require new water diversions, dams and reservoirs which are constructed on anadromous fish streams to be designed to protect fish populations and to provide adequate flow levels for successful fish production.

5.3.6 Marine Mammal Hauling Grounds

(LCP) Prevent access to the bluff top observation points likely to cause disturbance to animals. Discourage access to immediately adjacent beach areas where necessary to minimize disturbance by roping off sensitive areas and posting explanatory signs along fence lines and restricted paths. Fence where necessary to prevent marine mammals from crossing Highway One.

Programs

- (LCP) a. Support the designation of a Monterey Bay State Seashore. (Responsibility: Board of Supervisors)
- (LCP) b. Encourage creation of wildlife sanctuaries where appropriate; and pursue financing for their acquisition, including state and federal grants and private donations. (Responsibility: Planning Department, POSCS)
- (LCP) c. Discourage feeding of waterfowl in coastal lagoons through signage and public displays and develop a program to inform the public about the adverse effects of overfeeding waterfowl. (Responsibility: State Parks, POSCS)
- (LCP) d. Prevent, as much as possible, disturbance of shorebird resting and roosting sites by roping off sensitive areas, posting explanatory signs, and other means. (Responsibility: State Parks, State Fish and Game)
- (LCP) e. Close or improve trails across dunes, encourage use of alternate trails. Stabilize and restore dune environments where disturbed. (See policies, Shoreline Access section.) (Responsibility: State Parks, POSCS)
- (LCP) f. Enforce leash laws to the fullest extent possible. (Responsibility: Board of Supervisors, law enforcement agencies)
- g. Manage anadromous sport fishing so that overall productivity of the native fish population is enhanced and restored; discourage introduction of non-native species into streams. (Responsibility: State Fish and Game Department, Planning Department, Zone 4, Fish and Game Commission)
- (LCP) h. Identify and restore aquatic and marine habitats which have been damaged due to human activities. (Responsibility: State Fish and Game, Board of Supervisors.)

Objective 5.4 Monterey Bay and Coastal Water Quality

(LCP) To improve the water quality of Monterey Bay and other Santa Cruz County coastal waters by supporting and/or requiring the best management practices for the control and treatment of urban run-off and wastewater discharges in order to maintain local, state and national water quality standards, protect County residents from health hazards of water pollution, protect the County's sensitive marine habitats and prevent the degradation of the scenic character of the region.

Policies

5.4.1 Protecting the Monterey Bay National Marine Sanctuary from Adverse Impacts

(LCP) Prohibit activities which could adversely impact sensitive habitats of the Monterey Bay National Marine Sanctuary, including the discharge of wastes and hazardous materials. The main sources of concern are wastewater discharge, urban runoff, toxic agricultural drainage water, including that originating outside of Santa Cruz County, and the accidental release of oil or other hazardous material from coastal tanker traffic.

5.4.2 Definition of Wastewater

(LCP) Identify "wastewater" as all domestic and municipal sewage and other potentially toxic and/or hazardous materials or effluent resulting from industrial processes or other sources including brine from desalinization plants. Wastewater includes petrochemical compounds, "drilling mud" and associated potentially hazardous substances which may be directly or indirectly discharged into Monterey Bay or other coastal waters of Santa Cruz County as a result of exploratory or other oil drilling. Wastewater shall not include storm water runoff, unless so determined by the California Regional Water Quality Control Board.

5.4.3 Wastewater Discharges Into Coastal Waters

(LCP) Require a review of any new and/or increased wastewater discharge into the Monterey Bay or other coastal waters to address the potential marine water quality impacts and determine necessary mitigations.

5.4.4 Disclosure of Chemical and Biological Characteristics of Wastewater

(LCP) Require full disclosure of the projected chemical and biological characteristics of all proposed new and/or expansion of wastewater discharges to the Monterey Bay or other coastal waters of Santa Cruz County. Require full disclosure of the projected chemical and biological characteristics of wastewater entering treatment and pretreatment facilities connected with new and/or expansion of wastewater discharges to Monterey Bay or other coastal waters of Santa Cruz County. Particular areas of concern include toxic chemicals, toxic metals, bacteria, virus and other constituents identified as threats to the health and safety of coastal waters.

5.4.5 Levels of Wastewater Treatment

(LCP) Require complete information on levels of treatment proposed at the treatment and pretreatment facilities to remove those constituents identified or anticipated in all proposed new and/or expansion of wastewater discharges to the Monterey Bay and other coastal waters of Santa Cruz County. This information shall also include reliability and efficiency data of the proposed treatment.

5.4.6 Monitoring Wastewater Treatment

(LCP) Require a comprehensive monitoring plan for testing of wastewater at treatment and pretreatment facilities for critical constituents or indicators identified or anticipated in all proposed new and/or increased wastewater discharges into the Monterey Bay and other coastal waters.

5.4.7 Location and Methods of Wastewater Discharge

(LCP) Require oceanographic studies to determine the most suitable location and methods for wastewater discharge into the Monterey Bay or coastal waters.

5.4.8 Baseline Tests for Wastewater Discharge Sites

(LCP) Require tests of ocean waters at proposed wastewater discharge sites and surrounding waters to establish baseline or background levels of toxic chemicals, toxic metals, bacteria and other water quality constituents. These tests must be performed no more than one year prior to submittal of the proposal. Historical data may not be substituted for this requirement.

5.4.9 Toxicity Studies for Proposed Wastewater Discharges

(LCP) Require toxicity studies to determine the impacts of the proposed wastewater discharges on marine life, as well as on recreational uses of the coastal waters.

5.4.10 New and/or Increased Wastewater Discharges

(LCP) Approve new and/or increased wastewater discharges only if they will not degrade marine habitats; will not create hazardous or dangerous conditions; and will not produce levels of pollutants that exceed any applicable local, state or federal water quality standards.

5.4.11 Land Disposal of Wastewater

(LCP) Encourage land disposal of wastewater after adequate treatment to State wastewater reclamation standards to assist in recharging groundwater aquifers and maintaining higher summer stream flows.

5.4.12 Disturbances of Coastal Waters, Wetlands, Estuaries and Lakes

(LCP) Prohibit the diking, filling and dredging of open coastal waters, wetlands, estuaries, and lakes. Allow exceptions only for the following purposes and only where there is no other feasible, less environmentally damaging alternative:

- (a) Incidental public service purposes, including, but not limited to burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (b) Restoration purposes, including the protection and enhancement of existing harbors, and where the activity will maintain and enhance the functional capacity of the wetland or estuary as determined through the County environmental review process in conjunction with the California Department of Fish and Game and U.S. Army Corps of Engineers.
- (c) Nature study, aquaculture, or similar resource-dependent activities.

5.4.13 Redistribution of Dredged Materials

(LCP) Require the redistribution of dredged materials into the same littoral cell from which it was taken in an effort to continue beach replenishment as long as the materials are suitable and non-toxic and the deposition of the materials will not adversely affect marine environments or recreational uses. The deposition of such materials must be timed and located so as not to interfere with shoreline processes, longshore current systems, and public beach use.

5.4.14 Water Pollution from Urban Runoff

(LCP) Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Utilize erosion control measures, on-site detention and other appropriate storm water best management practices to reduce pollution from urban runoff.

Programs

- (LCP) a. Continue to coordinate with federal, state and other local agencies, including NOAA, California Coastal Commission, Regional Water Quality Control Board, and AMBAG to manage and protect the resources of the Monterey Bay National Marine Sanctuary. (Responsibility: Planning Department, State Parks)
- (LCP) b. Continue participation in the state and federal oil spill contingency planning process to protect the Monterey Bay National Marine Sanctuary, including the development of a local oil spill contingency plan in accordance with state and federal regulation. (Responsibility: Planning Department, Coast Guard, State Parks)
- (LCP) c. Continue to review and regulate marine water quality impacts of proposed new and/or increased wastewater discharges into Monterey Bay and the coastal waters. (Responsibility: Planning Department, Environmental Health, State Regional Water Quality Control Board, State Parks)
- (LCP) d. Continue periodically to review state and federal water quality standards associated with wastewater discharges to the ocean to determine if more stringent local standards are required. (Responsibility: Environmental Health, State Parks)
- (LCP) e. Develop a program in conjunction with the Harbor District and other concerned agencies to ensure that dredged materials from the harbor will not harm the marine environment or adversely affect public beach use. (Responsibility: Port Commission, Regional Water Quality Control Board, Environmental Health, State Parks)
- (LCP) f. Work with cities and counties in the Monterey Bay area to address upcoming federal and state regulations for stormwater pollution control and to study the technical, institutional, financial and legal aspects of implementing AMBAG's Urban Runoff Water Quality Management Plan for the Monterey Bay Region. (Responsibility: Public Works, Flood Control, AMBAG, Regional Water Quality Control Board)

WATER RESOURCES

This section is closely linked to the Parks, Recreation and Public Facilities Element sections on water supply, wastewater treatment and disposal and drainage. The policies and programs here are meant to reinforce and compliment those in the Public Facilities section. This section is organized as follows: surface water policies including water supply; water quality and in-stream flows; and groundwater policies including groundwater supply, recharge and quality.

SURFACE WATER

Objective 5.5a Watershed Protection

(LCP) To protect and manage the watersheds of existing and future surface water supplies to preserve the quality and quantity of water produced and stored in these areas to meet the needs of County residents, local industry, agriculture, and the natural environment.

Objective 5.5b San Lorenzo River Watershed Management

(LCP) To restore, manage, and protect the San Lorenzo River Watershed to maximize the quality and quantity of water resources in that basin.

Objective 5.5c Least Disturbed Watersheds

(LCP) To protect the Least Disturbed Watershed areas that support the remaining clear running streams to preserve their water supply, recreation, and wildlife support values.

Policies

5.5.1 Watershed Designations

(LCP) Designate on the General Plan and LCP Resources Maps those Water Supply Watersheds listed in Figure 5-1.