

Chapter 14. Biological Resources

14.1 Introduction

This section provides background and policy on fish and wildlife and various habitats that support them. Particular attention is paid to water related areas because of their importance to virtually all wildlife. Nesting and rookery sites for key bird species are also given attention, as are the ranges of the Roosevelt Elk and migratory deer. The Water Resources chapter gives primary attention to water development and diversion policy, and more general water quality issues than are addressed here.

14.2 Background

GENERAL HABITAT TYPES

Ample precipitation in combination with the mild climate of the North Coastal Basin has provided a wealth of fish, wildlife, and scenic resources. The region is mountainous and is dominated by dense coniferous forests interspersed with grass or chaparral covered slopes. These areas provide habitat for deer, elk, bear, mountain lion, fur bearers and many upland bird and mammal species. While wildlife habitats have been significantly reduced in the more urbanized portions of the state, they remain a significant aspect of Humboldt County.

The general types of vegetation and associated wildlife which are found in the County are listed below:

Coastal Coniferous Forest
Pine-Fir Woodland
Foothill Woodland
Grasslands
Cultivated Pasture
Coastal Dunes

Chaparral
Riparian
Salt Marsh
Aquatic Habitat
Nearshore Zone
Tidal Zone

For the above mentioned habitats which occur in the coastal zone, applicable policy is provided in the County's Local Coastal Program.

SENSITIVE AND CRITICAL HABITATS

Of the above mentioned habitats, certain portions of them are particularly important, and are classified as sensitive or critical. When habitat requirements for a specific species of plant or wildlife are in short supply because either the habitat is limited to a small geographical area or is threatened by rapidly changing conditions, then the habitat is designated sensitive. A critical habitat is a type of sensitive habitat which is presently

threatened and reduction or loss would cause the extinction of a threatened, rare or endangered species.

The protection of sensitive habitats has become recognized as an important part of planning and environmental assessment for land use development. They are specifically protected by passage of the National Environmental Policy Act of 1969 (NEPA), the California Environmental Quality Act of 1970 (CEQA), and from the establishment of the Open Space and Conservation Elements as part of the General Plan, 1970 (Government Code Section 65302(d), and (e), 65560-65567).

The location of sensitive habitats is one measure considered in compiling a compatible land use designations map. When sensitive habitats are incorporated into the planning process, many of the conflicts can be eliminated or reduced. To a large extent this has been accomplished through the agriculture and timber land use designations, and through public land ownership. The densities and management of these areas are generally consistent with continued maintenance of these habitats.

Some biological resources in the inland areas of the County are shown on maps that trigger protective measures in the review of new development. Streams and other riparian and wetland areas, and unique biological resources in some community plans are protected by ordinance.

Biological resources in the coastal portions of the County rely on many of the same protection measures. Coastal Act policies also apply in the coastal zone, which add further protection.

Below are listed some of the habitats threatened by loss or reduction in the County:

**Roosevelt Elk Range
Rookery and Nest Sites
Critical Habitat Areas (e.g., Rare and Endangered Species)
Streams and Streamside Areas
Coastal Habitats**

14.3 Goals and Policies

GOAL

BR-G1 Maximize Benefits of Biological Resources. To maximize where feasible, the long-term public and economic benefits from the biological resources within the County by maintaining and restoring fish and wildlife habitats.

POLICIES

BR-P1 Maintain Important Habitats. Maintain values of significantly important habitat areas by assuring compatible adjacent land uses, where feasible.

- BR-P2 Critical Species Habitat.** Habitats for "critical species" shall be protected under provisions of NEPA and CEQA.
- BR-P3 Development in Stream Channels.** Development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to essential, non-disruptive projects as listed in Standard 6.
- BR-P4 Streamside Management Areas.** To protect sensitive fish and wildlife habitats and to minimize erosion, runoff and interference with surface water flows, the County shall maintain Streamside Management Areas (SMA's), along its blue line streams as identified on the largest scale U.S.G.S. topographic maps most recently published, and any significant drainage courses identified through the CEQA process.
- BR-P5 Development in SMA's.** Development within the Streamside Management Areas shall be permitted where mitigation measures (Standards BR-S8, S9, and S10) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard BR-S7.
- BR-P6 Biological Resource Maps.** The Biological Resource Maps shall be incorporated into the project review process in order to identify sensitive habitat concerns. These maps shall be kept up to date with the most recent information obtainable. Accommodation of new resource information on the Biological Resource Maps may require an amendment to the adopted General Plan.
- BR-P7 Agency Review.** The County should request the Department of Fish and Game, as well as other appropriate agencies and organizations to review plans for development within sensitive habitat areas or Streamside Management Areas. Recommended mitigation measures shall be considered prior to project approval.

14.4 Standards

Applicability

- BR-S1** Proposed development occurring within areas containing sensitive habitats shall be subject to conditions and requirements of this policy except for the exclusions as follows:
- A. Timber management and harvest activities under a THP or NTMP, or activities exempt from local regulation per PRC 4516(f).
 - B. Any area proposed for development which upon examination of the Biological Resource Maps and field inspection is not actually within or does not contain the indicated habitat.

- C. Forest management activities needed to improve timber productivity regulated by other agencies, where otherwise consistent with this Chapter.
- D. Agricultural operations needed to improve agricultural productivity, where otherwise consistent with this Chapter.

Note: The above exclusions in no way preempt other County regulations or those of other agencies.

BR-S2 The County will seek recommendations from the Department of Fish and Game, agencies, and organizations that are specific and cite relevant code sections and standards.

BR-S3 Critical habitats are sensitive habitats essential for a Federal or State designated endangered, threatened or rare species. This includes the portion of a critical species range which is essential to the existence of that species.

BR-S4 Sensitive habitats are defined as a unique, limited or economically important habitat type for a species whose habitat requirements, if significantly changed, would cause a threatening change to the species population and may include the following:

- A. Critical Habitat
- B. Migratory Deer Winter Range
- C. Roosevelt Elk Range
- D. Sensitive Species Rookery and Nest Sites
- E. Streams and Streamside Areas
- F. Natural ponds, springs, vernal pools, marshes, and wet meadows exhibiting standing water year long or riparian vegetation.
- G. Other sensitive habitat and communities listed in the Department of Fish and Game California Natural Diversity Data Base as amended periodically.

BR-S5 Streamside Management Areas are identified and modified as follows:

- A. Areas specifically mapped as SMA and Wetland (WR) Combining Zones, subject to verification and adjustment pursuant to site-specific biological reporting and review procedures.
- B. For areas not specifically mapped as SMA and Wetland (WR) Combining Zones and outside of Urban Development and Expansion Areas, the outer boundaries of the SMA shall be defined as:
 - 1. 100 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams.
 - 2. 50 feet, measured as the horizontal distance from the stream transition line on either side of intermittent streams.

- C. For areas not specifically mapped as SMA and Wetland (WR) Combining Zones and inside of Urban Development and Expansion Areas, the outer boundaries of the SMA shall be defined as:
 - 1. 50 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams.
 - 2. 25 feet, measured as the horizontal distance from the, stream transition line on either side of intermittent streams.
- D. Where not specifically mapped as a SMA and Wetland (WR) Combining Zone, the width of Streamside Management Areas shall be expanded as necessary to include significant areas of riparian vegetation adjacent to the buffer area, slides and areas with visible evidence of slope instability, not to exceed 200 feet measured as a horizontal distance. Where Forest Practice Rules designate wider stream buffer areas, the width of the SMA shall be expanded to be consistent with those regulations when they are applicable.
- E. The Streamside Management Area may be reduced or eliminated where the County determines, based on specific factual findings, that:
 - 1. The USGS mapping of the stream as perennial or intermittent is not accurate, and typical stream flow can be shown to be less than that required to be classified as either perennial or intermittent, or
 - 2. It will not result in a significant adverse impact to fish, wildlife, riparian habitat, or soil stability.
- F. Streamside Management Areas do not include watercourses consisting entirely of a drainage ditch, or other man-made drainage device, construction, or system.

Stream Channels

- BR-S6** Development within stream channels may be approved where consistent with Policy BR-P3 and is limited to the following projects.
- A. Fishery, wildlife, and aquaculture enhancement and restoration projects.
 - B. Road crossings consistent with Standard 9 of this section.
 - C. Flood control and drainage channels, levees, dikes and floodgates.
 - D. Mineral extraction consistent with other County regulations.
 - E. Small scale hydroelectric power plants in compliance with applicable County regulations and those of other agencies.
 - F. Agricultural diversions, wells and springboxes.

- G. New fencing, so long as it would not impede the natural drainage or would not adversely effect the stream environment or wildlife.
- H. Bank protection, provided it is the least environmentally damaging alternative.
- I. Other essential projects, including municipal groundwater pumping stations, provided they are the least environmentally damaging alternative, or necessary for the protection of the public's health and safety.

Streamside Management Areas

BR-S7 Development within Streamside Management Areas may be approved where consistent with Policy BR-P5 and shall be limited to the following uses:

- A. Development permitted within stream channels per BR-S6.
- B. Timber management and harvests not otherwise excluded by Applicability Section as well as noncommercial cutting of firewood and clearing for pasturage, provided:
 - 1) Cottonwoods are retained.
 - 2) Remaining willows and alders, as well as other unmerchantable hardwoods or shrubs should be protected from unreasonable damage.
- C. Road and bridge replacement or construction, when it can be demonstrated that it would not degrade fish and wildlife resources or water quality, and that vegetative clearing is kept to a minimum.
- D. Removal of vegetation for disease control or public safety purposes.

BR-S8 Mitigation measures for development within Streamside Management Areas shall, at a minimum, include:

- A. Retaining snags unless felling is required by CAL-OSHA, or by California Department of Forestry forest and fire protection regulations, or for public health and safety reasons, approved by the appropriate County department. Felled snags shall be left on the ground if consistent with fire protection regulations as long as they have no economic value.
- B. Retain live trees with visible evidence of use as nesting sites by hawks, owls, eagles, osprey, herons, or egrets.
- C. Replanting of disturbed areas with riparian vegetation (including such species as alders, cottonwoods, willows, sitka spruce, etc.) shall be required prior to the completion of the development project.
- D. Erosion control measures (Standard 9).

BR-S9 Erosion control measures for development within Streamside Management Areas shall include the following:

- A. During construction, land clearing and vegetation removal will be minimized.
- B. Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure revegetation.
- C. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.
- D. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversion dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels.
- E. Runoff shall be controlled to prevent erosion by on-site or off-site methods. On-site methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. On-site methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by on-site retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.
- F. Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California Fish and Game and Regional Water Quality Control Board.

Winter operations (generally October 15 thru April 15) shall employ the following special considerations:

- G. Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barley or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.
- H. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.

BR-S10 Wetlands and Other Wet Areas

For natural ponds, springs, vernal pools, marshes, wet meadows (exhibiting standing water yearlong or riparian vegetation), and wetlands as defined in the California Fish & Game Code Section 2785(g): Development shall be consistent with the standards for streamside management areas, as applicable, including recommended buffer setbacks where appropriate.

BR-S11 Other Sensitive and Critical Habitats

In addition to the preceding policies for streams, adjacent streamside areas, wetlands, and buffer areas adjacent to wetlands, several other sensitive and critical habitat areas exist within the Community Planning Area. These include:

- Habitat for listed and candidate rare, unique, threatened, and endangered species in the federal and state Endangered Species Acts.
- Sensitive Avian Species Rookery and Nest Sites (e.g., Osprey, Great Blue Heron, Egret sp.).
- Rare and endangered vascular plant communities as compiled by the California Native Plant Society.
- Other sensitive habitats and communities as listed in the Department of Fish and Game's California Natural Diversity Data Base, as amended periodically.

As part of the review of all discretionary development project applications within the Plan Area, the Planning & Building Department will consult with the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and other regional, state and federal resource and trustee agencies, as applicable to the specific project location, class of development, or natural resource involved.

14.5 Implementation Measures

- BR-IM1** **Streamside Management Area Ordinance.** (HCC 314-61.1) Provides minimum standards pertaining to lands located within streamside management areas, wetlands, and other wet areas. Review and revise to be consistent with any adopted revisions to the policies and standards of this Chapter.
- BR-IM2** **Streamside Management Areas and Wetlands (WR) Combining Zone.** (HCC 314-38.1) Utilize WR Combining Zone to assist in the application of minimum standards pertaining to lands located within streamside management areas, wetlands, and other wet areas.
- BR-IM3** **CEQA Review.** Use review required by the California Environmental Quality Act (CEQA) to assist in implementing biological resource policies and standards.

NOTE: the section below will fall out of the 'final' version of the General Plan, but will be critical to the process of review.

14.6 Staff Analysis and Alternatives

State Requirements

A conservation element (California Gov. Code § 65302(d)) is a required element of the general plan. This topical chapter addresses the portion of the conservation element that calls for the conservation, development, and utilization of natural resources including rivers and other waters, wildlife, and other natural resources associated with wetlands and other wet areas and other sensitive and critical habitats. Per § 65302(d), this chapter also addresses regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan. This chapter also addresses the requirements of the Open Space Element (§65560) as it applies to the areas mentioned above. See Chapter 12 - Conservation and Open Space Element for a more comprehensive overview of how all the requirements of the Conservation and Open Space Element are addressed. Watershed level policies are provided in the Water Element, Chapter 13.

Background

Some biological resources in the County are shown on maps that trigger protective measures in the review of new development. Streams and other riparian and wetland areas are described in the text of the Plan, and performance measures are cited to minimize impacts. These policies are now implemented through the County's Streamside Management Area Ordinance, adopted in June, 2002.

The McKinleyville and the Eureka Community Plans contain policies protective of unique biological resources in those areas. Those policies are also implemented by ordinances.

Biological resources in the coastal portions of the County are protected in many of the same ways as the inland areas. Biological resource protection measures for riparian and wetland areas in the coastal zone are also consistent with those in the inland areas. The Natural Resources land use designation in the coastal zone encourages biological resource protection above other uses. And there are combining zones that apply only in coastal areas, such as the Coastal Elk Habitat combining zone, and another one to protect offshore rocks and intertidal areas.

The County's coastal plan and zoning ordinances are subject to the review and approval of the Coastal Commission for consistency with the Coastal Act, which provides for protection of biological resources on land and in the ocean.

In addition to the biological resources protection measures described above, there are also protections from the California Environmental Quality Act (CEQA). Environmental review pursuant to CEQA requires project specific mitigation measures to protect biological resources.

Staff Recommendations

The policies of this chapter are largely based on the 1984 Framework Plan. Some updates to the text and standards have been made, as well as incorporation of coastal policies to be applied within the coastal zone. Some policy revisions are based on the recently adopted McKinleyville Community Plan, and others are a result of the adoption of the Streamside Management Area Ordinance.

Alternatives

The body text of the chapter represents Alternative B, the staff recommended proposed project.

Alternative A

Alternative A includes additional prescriptions and restrictions in defined resource areas. In wetland and wetland buffer areas, a prescribed list of uses is included. As well, streamside management areas and stream channels are more limited in allowed uses, particularly with respect to the removal of vegetation.

Alternative C

Alternative C omits some specific prescriptions for allowed uses. While CEQA review and biological report requirements implemented through the Streamside Management Area Ordinance may result in protections similar to those of Alternative B, they may provide more flexibility and require more interpretation.

Alternative D

Alternative D, the existing 1984 Framework Plan, is attached separately to show the wording and original policy set.

Plan Alternatives Comparison Chart

The “Vote” column is provided for the user to indicate a policy preference. Enter a **Retain**, **Delete** or **Modify**.

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures						
Plan Alternative		Goals & Policies			Staff Remarks	Vote: R, D, M
	B	C	D	BR-G1 Maximize Benefits of Biological Resources. To maximize where feasible, the long-term public and economic benefits from the biological resources within the County by maintaining and restoring fish and wildlife habitats.	FRWK 3430	
A				BR-G1 Maximize Benefits of Biological Resources. To maximize the long-term public and economic benefits from the biological resources within the County by maintaining and restoring fish and wildlife habitats.	Alt A revised wording	
	B	C	D	BR-P1 Maintain Important Habitats. Maintain values of significantly important habitat areas by assuring compatible adjacent land uses, where feasible.	FRWK 3431.1	
A				BR-P1 Maintain Important Habitats. Maintain values of significantly important habitat areas by assuring compatible adjacent land uses.	Alt A revised wording	
	B	C	D	BR-P2 Critical Species Habitat. Habitats for "critical species" shall be protected under provisions of NEPA and CEQA.	FRWK 3431.2	
A				BR-P2 Critical Species Habitat. Habitats for "critical species" shall be protected under provisions of NEPA, CEQA, and the provisions of this plan.	Alt A revised wording	
A	B	C	D	BR-P3 Development in Stream Channels. Development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to essential, non-disruptive projects as listed in Standard BR-S6.	FRWK 3431.3	
A	B	C	D	BR-P4 Streamside Management Areas. To protect sensitive fish and wildlife habitats and to minimize erosion, runoff and interference with surface water flows, the County shall maintain <u>Streamside Management Areas</u> (SMA's), along its blue line streams as identified on the largest scale U.S.G.S. topographic maps most recently published, and any significant drainage courses identified through the CEQA process.	FRWK 3431.4	
A	B	C	D	BR-P5 Development in SMA's. Development within the Streamside Management Areas shall be permitted where mitigation measures (Standards BR-S8, S9, and	FRWK 3431.5	

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures						
				S10) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard BR-S7.		
A	B	C	D	BR-P6 Biological Resource Maps. The Biological Resource Maps shall be incorporated into the project review process in order to identify sensitive habitat concerns. These maps shall be kept up to date with the most recent information obtainable. Accommodation of new resource information on the Biological Resource Maps may require an amendment to the adopted General Plan.	FRWK 3431.6	
A	B	C	D	BR-P7 Agency Review. The County should request the Department of Fish and Game, as well as other appropriate agencies and organizations to review plans for development within sensitive habitat areas or Streamside Management Areas. Recommended mitigation measures shall be considered prior to project approval.	FRWK 3431.7	
<i>Alternative</i>				<i>Standards</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
	B	C		<p>BR-S1 Proposed development occurring within areas containing sensitive habitats shall be subject to conditions and requirements of this policy except for the exclusions as follows:</p> <ul style="list-style-type: none"> A. Timber management and harvest activities under a THP or NTMP, or activities exempt from local regulation per PRC 4516(f). B. Any area proposed for development which upon examination of the Biological Resource Maps and field inspection is not actually within or does not contain the indicated habitat. C. Forest management activities needed to improve timber productivity regulated by other agencies, where otherwise consistent with this Chapter. D. Agricultural operations needed to improve agricultural productivity, where otherwise consistent with this Chapter. <p>Note: The above exclusions do not preempt other County regulations or those of other agencies.</p>	FRWK 3432.1 modified for clarity and grammar	

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures					
A				<p>BR-S1 Proposed development occurring within areas containing sensitive habitats shall be subject to conditions and requirements of this policy except for the exclusions as follows:</p> <p style="padding-left: 40px;">A. Timber management and harvest activities under a THP or NTMP, or activities exempt from local regulation per PRC 4516(f).</p> <p style="padding-left: 40px;">B. Any area proposed for development which upon examination of the Biological Resource Maps and field inspection is not actually within or does not contain the indicated habitat.</p> <p>Note: The above exclusions do not preempt other County regulations or those of other agencies.</p>	<p>Alt A revised wording:</p> <p>FRWK 3432.1 modified for content, clarity and grammar</p>
A	B	C		<p>BR-S2 The County will seek recommendations from the Department of Fish and Game, agencies, and organizations that are specific and cite relevant code sections and standards.</p>	<p>FRWK 3432.2 modified for clarity and grammar</p>
A	B	C	D	<p>BR-S3 Critical habitats are sensitive habitats essential for a Federal or State designated endangered, threatened or rare species. This includes the portion of a critical species range which is essential to the existence of that species.</p>	<p>FRWK 3432.3</p>
A	B	C		<p>BR-S4 Sensitive habitats are defined as a unique, limited or economically important habitat type for a species whose habitat requirements, if significantly changed, would cause a threatening change to the species population and may include the following:</p> <p style="padding-left: 40px;">A. Critical Habitat</p> <p style="padding-left: 40px;">B. Migratory Deer Winter Range</p> <p style="padding-left: 40px;">C. Roosevelt Elk Range</p> <p style="padding-left: 40px;">D. Sensitive Species Rookery and Nest Sites</p> <p style="padding-left: 40px;">E. Streams and Streamside Areas</p> <p style="padding-left: 40px;">F. Natural ponds, springs, vernal pools, marshes, and wet meadows exhibiting standing water year long or riparian vegetation.</p> <p style="padding-left: 40px;">G. Other sensitive habitat and communities listed in the Department of Fish and Game California Natural Diversity Data Base as amended periodically.</p>	<p>FRWK 3432.4 modified for update</p>

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures						
A	B			<p>BR-S5 Streamside Management Areas are identified and modified as follows:</p> <p>A. Areas specifically mapped as SMA and Wetland (WR) Combining Zones, subject to verification and adjustment pursuant to site-specific biological reporting and review procedures.</p> <p>B. For areas not specifically mapped as SMA and Wetland (WR) Combining Zones and outside of Urban Development and Expansion Areas, the outer boundaries of the SMA shall be defined as:</p> <ol style="list-style-type: none"> 1. 100 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams. 2. 50 feet, measured as the horizontal distance from the stream transition line on either side of intermittent streams. <p>C. For areas not specifically mapped as SMA and Wetland (WR) Combining Zones and inside of Urban Development and Expansion Areas, the outer boundaries of the SMA shall be defined as:</p> <ol style="list-style-type: none"> 1. 50 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams. 2. 25 feet, measured as the horizontal distance from the, stream transition line on either side of intermittent streams. <p>D. Where not specifically mapped as a SMA and Wetland (WR) Combining Zone, the width of Streamside Management Areas shall be expanded as necessary to include significant areas of riparian vegetation adjacent to the buffer area, slides and areas with visible evidence of slope instability, not to exceed 200 feet measured as a horizontal distance. Where Forest Practice Rules designate wider stream buffer areas, the width of the SMA shall be expanded to be consistent with those regulations when they are applicable.</p> <p>E. The Streamside Management Area may be</p>	FRWK 3432.4 modified for content	

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures					
			reduced or eliminated where the County determines, based on specific factual findings, that: <ol style="list-style-type: none"> 1. The USGS mapping of the stream as perennial or intermittent is not accurate, and typical stream flow can be shown to be less than that required to be classified as either perennial or intermittent, or 2. It will not result in a significant adverse impact to fish, wildlife, riparian habitat, or soil stability. <p>F. Streamside Management Areas do not include watercourses consisting entirely of a drainage ditch, or other man-made drainage device, construction, or system.</p>		
A	B		<p>BR-S6 Development within stream channels may be approved where consistent with Policy BR-P3 and is limited to the following projects.</p> <ol style="list-style-type: none"> A. Fishery, wildlife, and aquaculture enhancement and restoration projects. B. Road crossings consistent with Standard BR-S9 of this section. C. Flood control and drainage channels, levees, dikes and floodgates. D. Mineral extraction consistent with other County regulations. E. Small scale hydroelectric power plants in compliance with applicable County regulations and those of other agencies. F. Agricultural diversions, wells and springboxes. G. New fencing, so long as it would not impede the natural drainage or would not adversely effect the stream environment or wildlife. H. Bank protection, provided it is the least environmentally damaging alternative. I. Other essential projects, including municipal groundwater pumping stations, provided they are the least environmentally damaging alternative, or necessary for the protection of the public's health and safety. 	FRWK 3432.6 modified for clarity	
	B		<p>BR-S7 Development within Streamside Management Areas may be approved where consistent with Policy</p>	FRWK 3432.7 modified for	

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures					
			BR-P5 and shall be limited to the following uses: A. Development permitted within stream channels per BR-S6. B. Timber management and harvests not otherwise excluded by Applicability Section as well as noncommercial cutting of firewood and clearing for pasturage, provided: 1) Cottonwoods are retained. 2) Remaining willows and alders, as well as other unmerchantable hardwoods or shrubs should be protected from unreasonable damage. C. Road and bridge replacement or construction, when it can be demonstrated that it would not degrade fish and wildlife resources or water quality, and that vegetative clearing is kept to a minimum. D. Removal of vegetation for disease control or public safety purposes. E. Nature trails consistent with Dept. of Fish & Game recommendations.	clarity	
A			BR-S7 Development within Streamside Management Areas may be approved where consistent with Policy BR-P5 and shall be limited to the following uses: A. Development permitted within stream channels per BR-S6. B. Timber management and harvests not otherwise excluded by Applicability Section, provided: 1) At least 50% of the treecrown canopy and other vegetation are retained. 2) Cottonwoods are retained. 3) Remaining willows and alders, as well as other unmerchantable hardwoods or shrubs should be protected from unreasonable damage. C. Road and bridge replacement or construction, when it can be demonstrated that it would not degrade fish and wildlife resources or water quality, and that vegetative clearing is kept to a minimum. D. Removal of vegetation for disease control or public safety purposes.	Alt A revised wording.	

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures					
				E. Nature trails consistent with Dept. of Fish & Game recommendations.	
A	B			<p>BR-S8 Mitigation measures for development within Streamside Management Areas shall, at a minimum, include:</p> <p>A. Retaining snags unless felling is required by CAL-OSHA, or by California Department of Forestry forest and fire protection regulations, or for public health and safety reasons, approved by the appropriate County department. Felled snags shall be left on the ground if consistent with fire protection regulations as long as they have no economic value.</p> <p>B. Retain live trees with visible evidence of use as nesting sites by hawks, owls, eagles, osprey, herons, or egrets.</p> <p>C. Replanting of disturbed areas with riparian vegetation (including such species as alders, cottonwoods, willows, sitka spruce, etc.) shall be required prior to the completion of the development project.</p> <p>D. Erosion control measures (Standard BR-S9).</p>	
A	B		D	<p>BR-S9 Erosion control measures for development within Streamside Management Areas shall include the following:</p> <p>A. During construction, land clearing and vegetation removal will be minimized.</p> <p>B. Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure revegetation.</p> <p>C. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.</p> <p>D. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversion dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to</p>	

**Table 12-x. Plan Alternatives Comparison Chart:
 Goals and Policies, Standards and Implementation Measures**

			<p>the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels.</p> <p>E. Runoff shall be controlled to prevent erosion by on-site or off- site methods. On-site methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. On-site methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by on-site retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.</p> <p>F. Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California Fish and Game and Regional Water Quality Control Board.</p> <p>Winter operations (generally October 15 thru April 15) shall employ the following special considerations:</p> <p>G. Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barley or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.</p> <p>H. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.</p>		
A	B	C	<p>BR-S10 Wetlands and Other Wet Areas. For natural ponds, springs, vernal pools, marshes, and wet meadows (exhibiting standing water yearlong or riparian vegetation), and wetlands as defined in the California Fish & Game Code Section 2785(g): Development shall be consistent with the standards for streamside management areas, as applicable, including</p>		

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures					
				recommended buffer setbacks where appropriate.	
A				<p>BR-S10a Wetland Buffer Areas.</p> <ol style="list-style-type: none"> 1. A Wetland Buffer Area shall be defined as the area around a non-SMA wetland where restrictions on development are required to protect the wetland from significant impact. 2. If the entire parcel is within the Wetland Buffer Area, the buffer may be reduced to allow principally permitted uses when: <ol style="list-style-type: none"> A. The prescribed buffer would prohibit development of the parcel for the principal permitted use for which it is designated; or B. The applicant for the proposed development demonstrates that, to the satisfaction of the County and to the Department of Fish and Game, the principally permitted use will not result in significant adverse impacts to the wetland habitat and will be compatible with the continuance of such habitats. Any such buffer reduction may require mitigation measures, in addition to those specified below, to ensure new development does not adversely affect the wetland habitat values. <p><i>Development Within Wetland Buffer Areas</i></p> <ol style="list-style-type: none"> 3. To prevent land uses or development which may degrade adjacent wetlands, all development within the wetland buffer shall include the following mitigation measures: <ol style="list-style-type: none"> A. No more than 25% of the lot surface shall be made effectively impervious by development activities. B. The release rate of storm runoff to adjacent natural wetlands, in any size storm, shall not exceed the natural rate of storm runoff for a 50 year storm of 10 minute duration. C. Stormwater outfalls, culverts, gutters, and other similar facilities, shall be dissipated. D. Septic systems or alternative waste disposal systems must meet standards of the 	Alt A, revised from McKCP.

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures						
				<p>Humboldt-Del Norte Health Department and the Regional Water Quality Control Board.</p> <p>E. Areas disturbed during construction, grading, or related activities within 100 feet of the boundary of the wetland in areas outside of the Urban Development Area, and 50 feet of the boundary of the wetland in areas within the Urban Development Area, shall be restored to original contours and sufficiently and promptly replanted with vegetation naturally occurring in the immediate area.</p> <p>F. Development and construction shall minimize cut and fill operations and erosion and sedimentation potentials through construction of temporary and permanent sediment basins, seeding or planting bare soil, diversion of run-off away from graded areas and areas heavily used during construction, and avoidance of grading in the buffer areas during the rainy season (November to April).</p> <p>19. No land use or development shall be permitted in Wetland Buffer Areas which degrade the wetland or detract from the natural resource value.</p> <p>20. The County shall request the Department of Fish and Game to review plans for development within 200 feet of the boundary of the wetland.</p>		
A	B	C		<p>BR-S11 Other Sensitive and Critical Habitats. In addition to the preceding policies for streams, adjacent streamside areas, wetlands, and buffer areas adjacent to wetlands, several other sensitive and critical habitat areas exist within the Community Planning Area. These include:</p> <ul style="list-style-type: none"> • Habitat for listed and candidate rare, unique, threatened, and endangered species in the federal and state Endangered Species Acts. • Sensitive Avian Species Rookery and Nest Sites (e.g., Osprey, Great Blue Heron, Egret sp.). • Rare and endangered vascular plant communities as compiled by the California Native Plant Society. 		

Table 12-x. Plan Alternatives Comparison Chart: Goals and Policies, Standards and Implementation Measures						
				<ul style="list-style-type: none"> Other sensitive habitats and communities as listed in the Department of Fish and Game’s California Natural Diversity Data Base, as amended periodically. As part of the review of all discretionary development project applications within the Plan Area, the Planning & Building Department will consult with the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and other regional, state and federal resource and trustee agencies, as applicable to the specific project location, class of development, or natural resource involved.		
<i>Alternative</i>				<i>Implementation Measures</i>	<i>Staff Remarks</i>	<i>Vote: R, D, M</i>
A	B	C	D	BR-IM1. Streamside Management Area Ordinance. (HCC 314-61.1) Provides minimum standards pertaining to lands located within streamside management areas, wetlands, and other wet areas. Review and revise to be consistent with any adopted revisions to the policies and standards of this Chapter.	Directed revisions of the ordinance will differ among alternatives.	
A	B	C	D	BR-IM2. Streamside Management Areas and Wetlands (WR) Combining Zone. (HCC 314-38.1) Utilize WR Combining Zone to assist in the application of minimum standards pertaining to lands located within streamside management areas, wetlands, and other wet areas.	This is an implementation of Frwk policy 3431.6 adopted as part of the 2002 McKCP	
A	B	C	D	BR-IM3. CEQA Review. Use review required by the California Environmental Quality Act (CEQA) to assist in implementing biological resource policies and standards.		

Preliminary Environmental Impact Analysis

Setting

A number of biological communities characterize Humboldt County. These communities include mixed evergreen forest, oak woodlands, douglas fir forest, old growth and coast redwood forest, grassland, coastal beach-dune vegetation, northern coastal scrub, chaparral,

salt marsh, riparian, and freshwater marsh. The Framework Plan, community plans, coastal plans and the Natural Resources and Hazards Report contain detailed descriptions of each of these habitats.

On State, Federal, and most Native American owned lands, which compose more than 28% of the land area of the County, State, Federal and tribal habitat protection measures apply; the County has very little influence over these lands. Likewise, in areas zoned for timber production (which make up 52% of the land area of the County) where timber harvesting occurs pursuant to a Timber Harvest Plan, the County has almost no influence over potential environmental impacts of those land use decisions.

The County often has some discretionary authority for all other land uses on privately held property in unincorporated areas. The Framework Plan, community plans and coastal plans guide the County in these decisions. These plans include policies for the protection and preservation of our biologically diverse county.

The most critical and widespread sensitive habitat types the Framework Plan protects are streams and riparian corridors. The Framework Plan includes "Streamside Management Area" policies which protect these important biological resources.

Streamside Management Areas (SMA's) are delineated on a case by case basis using the definitions set forth in the Plan. The Plan contains policies which are applied during discretionary and ministerial review of all development in order to ensure maximum habitat protection in these streamside areas. Development proposals that may impact these protected areas must submit an environmental assessment along with development plans showing how the project's potential impacts will be mitigated to less than significant levels. If it is not possible to mitigate the project's potential impacts to less than significant levels, preparation of an EIR will be required. Policies and implementation measures for SMAs protect stream resources, preserve existing and native vegetation, and protect and enhance fish and wildlife habitats.

Within the coastal zone, the Natural Resources zone designation and a set of combining zones which are applied to other base zone designations protect environmentally sensitive areas. An overlay to the zoning district designates the Coastal Wetland, Coastal Resource Dependent, Riparian and Stream Corridor, Offshore Rocks, Coastal Elk Habitat, and Beach and Dune Area. The zoning overlay requires specific development review standards in accordance with the coastal plan policies in order to ensure maximum habitat protection in these coastal areas. Development proposals within the coastal zone that may impact the mapped sensitive habitat areas must submit an environmental assessment as part of their development application.

The California Department of Fish & Game (CDFG) has developed a list of "special status species." Plant or animal species may be identified as "special status species" even if they are not officially listed as threatened or endangered. "Special Status" species fall under one or more of the following categories:

1. Officially listed or proposed for listing under the State of California and/or the Federal Endangered Species Acts;
2. State of California or Federal candidate species for possible listing;
3. A California Department of Fish and Game Species of Special Concern;
4. Species that may be considered endangered or rare under Section 15380(d) of CEQA guidelines;
5. A Bureau of Land Management, U.S. Fish and Wildlife Service or U.S. Forest Service Sensitive Species;
6. Species listed in the California Native Plants Society's Inventory of Rare and Endangered Vascular Plants of California;
7. Species that are biologically rare, very restricted in distribution, or declining throughout their range but not currently threatened with extinction;
8. Population(s) of species in California that may be peripheral to the major portion of a species' range but are threatened with extinction in Humboldt or California;
9. Species closely associated with a habitat that is declining in California at an alarming rate (e.g. wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, valley shrub land habitats, vernal pools, etc.).

A number of "special status species" exist in Humboldt County. The California Department of Fish and Game (CDFG) has also identified a number of Significant Natural Areas (SNAs). SNAs are designated sites that support extremely rare communities or species, populations of several special-status species, high-quality examples of special biological communities, or high species diversity. In addition to the specific sites identified as SNAs, other biological communities in the County require special protection.

Potential Impacts, Mitigations & Findings

The project has a number of potential impacts on biological resources:

- The project may have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species
- The project may have a substantial adverse effect on riparian habitat or other sensitive natural community.
- The project may have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means.
- The project may interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- The project may conflict with local policies or ordinances protecting biological resources

Alteration of the natural habitat may occur when undeveloped land is converted to residential, commercial, or industrial uses. Changes in the diversity of plant and animal species will occur during development due to removal of vegetation. And although most of the impacts from this project will likely occur in urban areas, which tend to have less diversity of plant and animal species than rural areas, the indirect impacts of this project may still be significant.

Due to the general nature of a Program EIR on a general plan document and proposed zoning ordinance changes, it is not possible to accurately project the amount of habitat that could be impacted by the proposed programs. It is known, however, that for properties outside the coastal zone and SMA areas, very few policies, programs, standards or regulations address potential impacts on species diversity from new construction, such as clearing trees and vegetation to prepare a building site. The indirect impacts of the proposed project on the diversity of plants and animals may constitute a significant impact where sensitive habitat areas lack regulatory protection.

Mitigation Measures

Numerous policies in the Framework Plan, community plans and coastal plans aim at avoiding any alteration of the diversity of species in sensitive biological communities. These include the Streamside Management Areas, and Coastal Zoning designations. Existing policies directed toward Streamside Management Areas protect valuable riparian and inland wetland habitat, while coastal zoning designations serve to protect sensitive habitat areas near the coast, bays, sloughs and lagoons. Protection of the riparian habitat will also indirectly result in reducing impacts to water quality from erosion, pollutants and stormwater run-off.

Effectuation of the policies, programs, and standards in the Framework Plan, community plans, coastal plans and zoning ordinance will reduce the potential impacts of this project. The County has mapped sensitive habitat areas, riparian areas and wetlands, and the building permit review process for new construction references these maps to avoid significant impacts on biological resources, and to ensure new construction does not conflict with policies or ordinances protecting biological resources.

Conclusion

The County assesses impacts of development on species diversity in coastal areas and in SMA's as part of the review process for new construction. Tentatively, depending on various related decisions, the above factors render biological resources impacts less than significant.

Glossary and Definitions

[to be added]