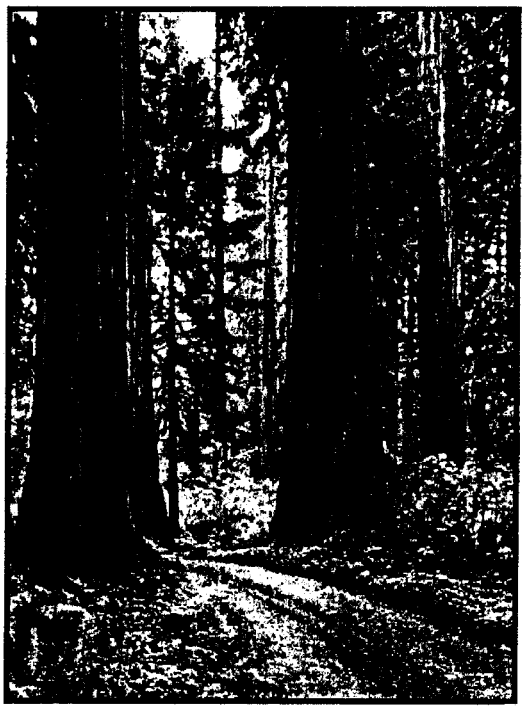
VOLUME 1

This is Volume 1 of the Final General Plan for Humboldt Redwoods State Park. It contains the Summary of Existing Conditions; Goals and Guidelines for park development and use; Environmental Analysis (in compliance with Article 9 and Article 11 Section 15166 of the California Environmental Quality Act); and Maps, Figures, and Charts relating to the General Plan. Volume 2 of the Final General Plan contains the Project Description, Comments and Responses (comments received during public review of the General Plan and DPR response to those comments); and the Notice of Determination (as filed with the State Office of Planning and Research), documenting the completion of the CEQA compliance requirements for this project. Together, these two volumes constitute the Final General Plan for Humboldt Redwoods State Park.



GENERAL PLANNING INFORMATION

If you would like more information about the general planning process used by the Department or have questions about specific general plans, contact:

General Planning Section
Department of Parks and Recreation
Northern Service Center
Post Office Box 942896
Sacramento, CA 94296-0001

ADDITIONAL COPIES OF THE PLAN

To obtain copies of this general plan contact:

North Coast Redwoods District
3431 Fort Avenue
Eureka, CA 95503
(707) 445-6547

Credits for art and photographs:

- *Sketches on pages 15, 57, and Appendix I, page 2, by Bob Hare*
- *Photographs on pages 24, 34, 35, 39, 40, 54, 55, 61, 71, 74, 90, 91, 92, and 96, as well as the Introduction and Appendix dividers and two photos in the upper left side of the Park Summary divider and lower half of the Plan Section dividers by Kim Cabrera*
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- *Photograph on pages 78 (upper right) and the inside front cover by Howard King, courtesy of the Save-the-Redwoods League*
- *Photographs on pages 3, 5, 26, 67, 94 are from the Department of Parks and Recreation photo files*

State of California • The Resources Agency
Gray Davis, *Governor*
DEPARTMENT OF PARKS AND RECREATION
Rusty Areias, *Director*
STATE PARK AND RECREATION COMMISSION
P. O. Box 942896
Sacramento, California 94296-0001
(916) 653-0524 FAX: (916) 654-6374

Resolution 31-01
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka
October 26, 2001

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed General Plan for Humboldt Redwoods State Park; and

WHEREAS, this document reflects long-range development plans to provide for optimum use and enjoyment of the unit as well as the protection of its quality, resources and diversity;

NOW, THEREFORE, BE IT RESOLVED that the California State Park and Recreation Commission hereby approves the Department of Parks and Recreation's Humboldt Redwoods State Park Preliminary General Plan, dated June 2001, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement the provisions of said plan.

State of California • The Resources Agency
Gray Davis, *Governor*
DEPARTMENT OF PARKS AND RECREATION
Rusty Areias, *Director*
STATE PARK AND RECREATION COMMISSION
P. O. Box 942896
Sacramento, California 94296-0001
(916) 653-0524 FAX: (916) 654-6374

Resolution 32-01
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka
October 26, 2001

WHEREAS, the Director of the Department of Parks and Recreation has proposed a State Wilderness be established within Humboldt Redwoods State Park to provide for the recognition and protection of the outstanding and undeveloped natural resources of the park; and

WHEREAS, the proposed State Wilderness of approximately 10,450 acres is located generally south of the Mattole Road, west of the South Fork Eel River, east of Grasshopper Road and north of the southern park boundary, including major portions of the Rockefeller Forest, Bull Creek and Canoe Creek watersheds; and

WHEREAS, the proposed State Wilderness would contain some of the largest remaining old-growth redwood forests, magnificent prairies, critical habitat for endangered species, and vast areas of roadless recreational opportunities; and

WHEREAS, the Lolangkok Sinkyone Indian people - who first inhabited the region - associated the name "Lolangkok" with the Bull Creek basin, where later a town would be named "Bull Creek", and where today the name Bull Creek remains associated with the region as a significant watershed tributary to the Eel River;

NOW THEREFORE, BE IT RESOLVED pursuant to Section 5019.50 of the Public Resources Code, and after proceedings in accordance with the Administrative Procedures Act, that the California State Park and Recreation Commission hereby classifies the above identified portion of Humboldt Redwoods State Park as a State Wilderness with the name Bull Creek State Wilderness.

State of California • The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
STATE PARK AND RECREATION COMMISSION
P. O. Box 942896
Sacramento, California 94296-0001
(916) 653-0524 FAX: (916) 654-6374

Gray Davis, *Governor*
Rusty Areias, *Director*

Resolution 33-01
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka
October 26, 2001

WHEREAS, the Director of the Department of Parks and Recreation has proposed a Natural Preserve be established within Humboldt Redwoods State Park to provide for the recognition and protection of the outstanding and undeveloped natural resources of the park; and

WHEREAS, the proposed Natural Preserve of approximately 3, 520 acres is located generally north of the Mattole Road, west of the South Fork Eel River, east of Peavine Road and south of the northern park boundary, including portions of the Rockefeller Forest, as well as Cabin Creek, Cow Creek and Calf Creek drainages, all tributaries to Bull Creek; and

WHEREAS, the proposed Natural Preserve would contain portions of the Rockefeller Forest and some of the most pristine redwood forest habitat still in existence, remaining to this day largely untouched by human hand; and

WHEREAS, preservation of these magnificent park resources has been a task undertaken by succeeding generations of park professionals, including the late Carl "A" Anderson whose distinguished career included assignments as manager of Humboldt Redwoods State Park, Deputy State Park Director, Save-the-Redwoods League Counselor, and Humboldt Redwoods Interpretive Association Board Member, and whose dedication to the spirit of public service was unsurpassed;

NOW THEREFORE, BE IT RESOLVED pursuant to Section 5019.50 of the Public Resources Code, and after proceedings in accordance with the Administrative Procedures Act, that the California State Park and Recreation Commission hereby classifies the above identified portion of Humboldt Redwoods State Park as a Natural Preserve with the name Carl "A" Anderson Redwoods Natural Preserve.

State of California • The Resources Agency
Gray Davis, *Governor*
DEPARTMENT OF PARKS AND RECREATION
Rusty Areias, *Director*
STATE PARK AND RECREATION COMMISSION
P. O. Box 942896
Sacramento, California 94296-0001
(916) 653-0524 FAX: (916) 654-6374

Resolution 34-01
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka
October 26, 2001

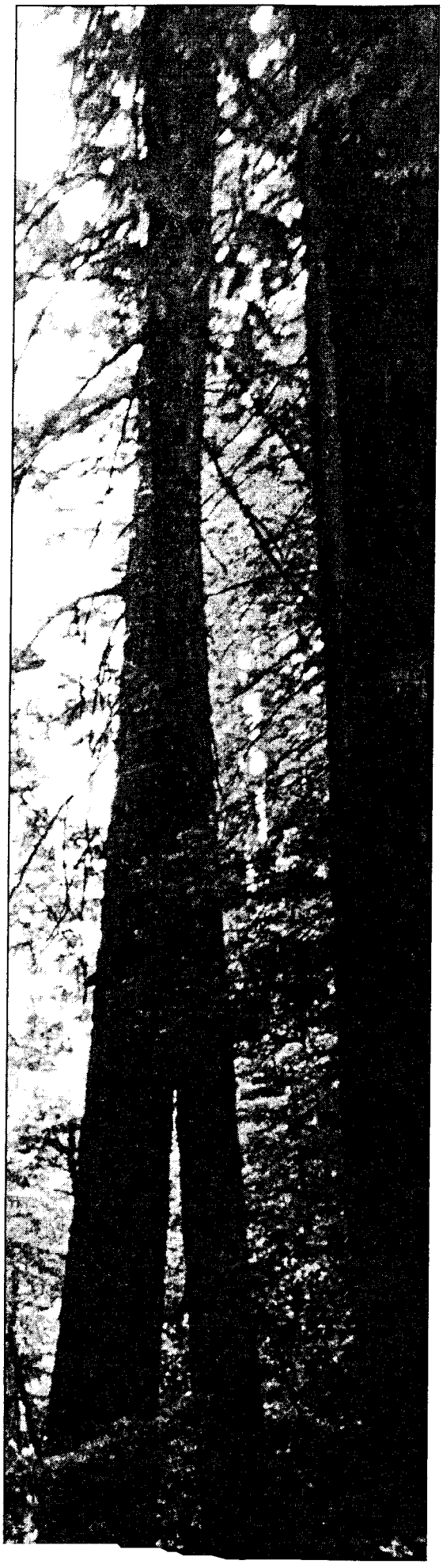
WHEREAS, the Director of the Department of Parks and Recreation has proposed a State Reserve be established comprised of state-owned lands currently part of Humboldt Redwoods State Park near the communities of Redway and Garberville in Humboldt County; and

WHEREAS, the proposed State Reserve of approximately 578 acres would contain significant old-growth redwoods in the Whittemore and Holbrook Groves together with their associated ecological components representing flora and fauna of the highest quality; and

WHEREAS, the preservation of this area including magnificent stands of ancient redwoods along the banks of the South Fork Eel River in Lower Redway were made possible through the vision, foresight and energy of former Save-the-Redwoods League Secretary and Executive Director John B. Dewitt; and

WHEREAS, John B. Dewitt is a name synonymous with the highest quality contribution to redwood park preservation over a distinguished career of pubic and private/non-profit service from 1960 until his death in 1996, helping to secure more than $65 million in donations used to acquire 30,000 acres of park lands in Northern and Central California;

NOW THEREFORE, BE IT RESOLVED pursuant to Section 5019.50 of the Public Resources Code, and after proceedings in accordance with the Administrative Procedures Act, that the California State Park and Recreation Commission hereby classi



HUMBOLDT REDWOODS STATE PARK GENERAL PLAN

Approved
October 26, 2001

GRAY DAVIS
Governor

MARY D. NICHOLS
Secretary of Resources

RUTH G. COLEMAN
Acting Director
Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

HUMBOLDT REDWOODS STATE PARK GENERAL PLAN

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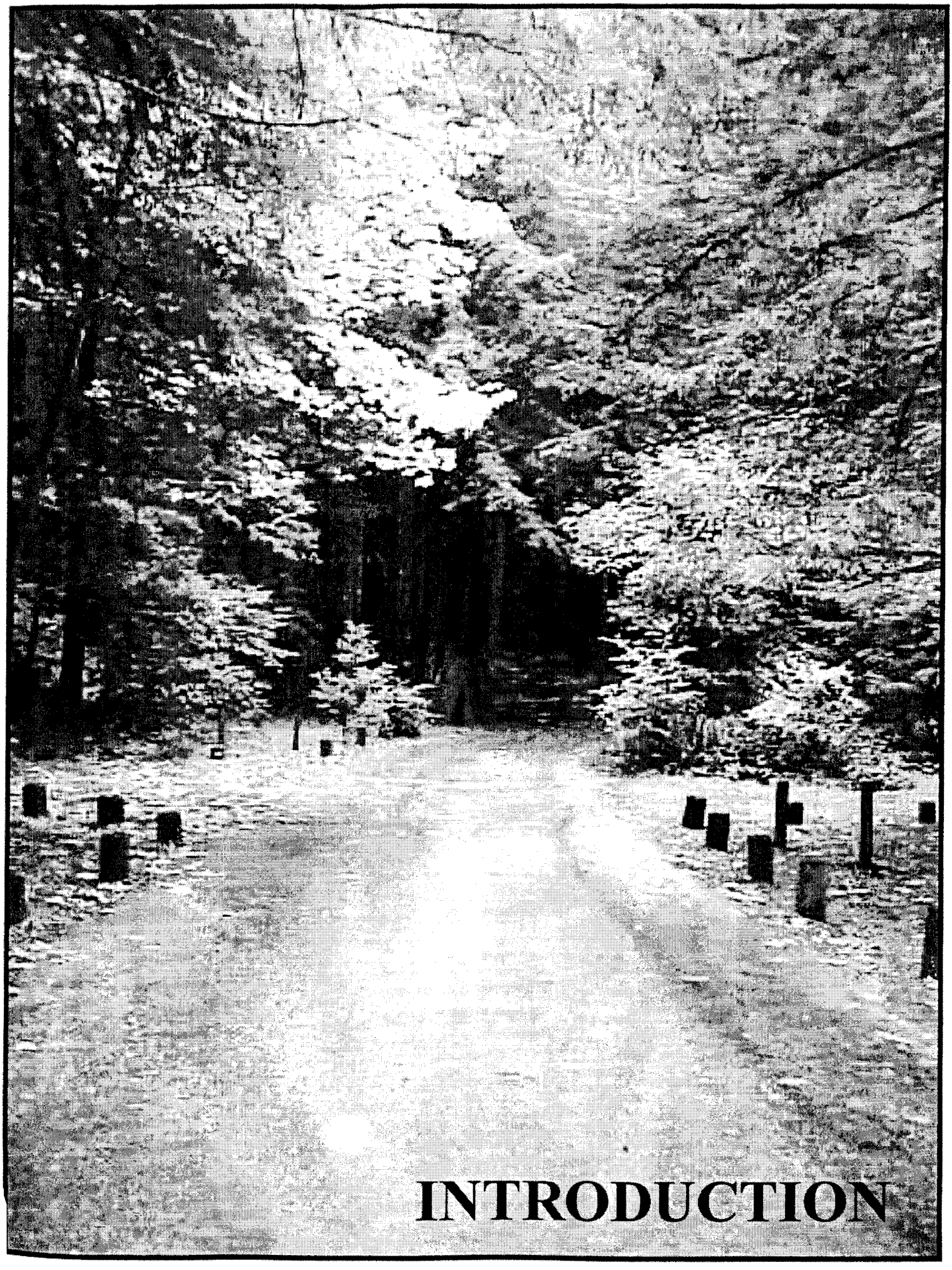
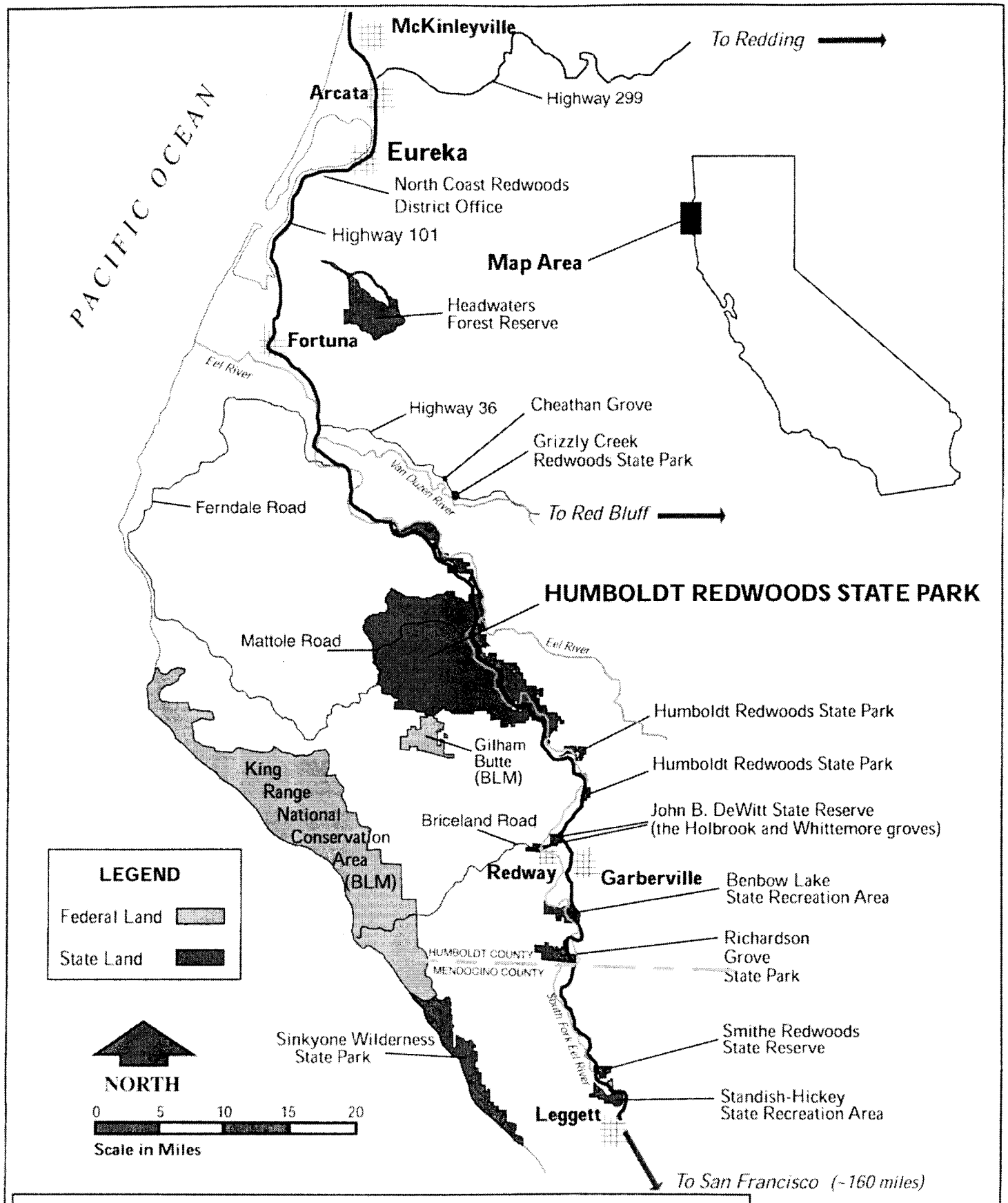


INTRODUCTION



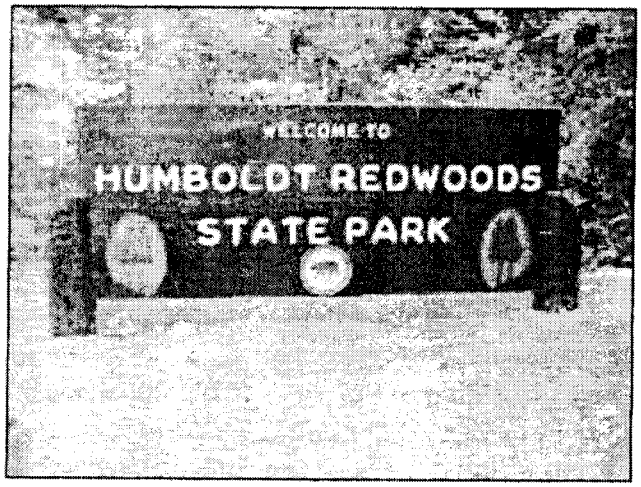
HUMBOLDT REDWOODS STATE PARK GENERAL PLAN

Park Location and Vicinity

Map #1

February 2002

HUMBOLDT REDWOODS STATE PARK GENERAL PLAN



INTRODUCTION

Humboldt Redwoods State Park lies in the coastal mountains of southern Humboldt County. Its approximately 53,000 acres protect one of the world's largest remaining contiguous stands of ancient coast redwoods. The park is renowned both nationally and internationally, attracting visitors from around the world. In addition to its ancient redwoods, the park contains a diverse mix of open prairies, riparian vegetation along its miles of creeks and rivers, large stands of second growth redwood forest, and ancient Douglas fir and hardwood forests. Included in the park are several noncontiguous parcels of land, which lie along the Eel River and its South Fork, which contain many ancient redwood groves.

Humboldt Redwoods State Park is situated approximately 40 miles south of Eureka, eight miles north of Garberville, and 240 miles north of San Francisco. Highway 101 is a moderately traveled rural freeway that traverses the park near its eastern boundary. The highway generally parallels the South Fork of the Eel River, which flows through the park's eastern edge and joins the main stem of the Eel River near the former site of the town of Dyerville.

Intertwined with the river and freeway is the old highway, officially designated State Route 254, but better known as the Avenue of the Giants. The Avenue and Mattole Road, the other main circulation route in the park, provide close looks at many of the park's beautiful ancient redwood groves, as well as views and vistas of forested lands surrounding the park. Mattole Road winds west through the park from the Dyerville townsite, providing access to the rural mountain communities between the park and the Pacific Ocean.

The steep and rugged Coast Range shelters the park's redwood forests from the direct influence of the marine environment. The Bull Creek watershed, which empties into the Eel River near its confluence with the South Fork, drains much of the park.

Visitor-serving facilities in Humboldt Redwoods State Park are within a short distance of Highway 101. The Visitor Center and Park Headquarters, as well as two campgrounds, group facilities, and dozens of major and minor trailheads, are accessible from the Avenue of the Giants, which connects at several points with the freeway. A third campground, the equestrian group campground, and additional trailheads can be reached from Mattole Road. Numerous trails and a few historic roads reach deep into the rugged mountains and the otherwise nearly impenetrable redwood forests.

PURPOSE ACQUIRED

Construction of the Redwood Highway during World War I allowed preservation-minded residents of the San Francisco Bay Area easy access to the great northern redwood forests for the first time. Their weekend excursions and longer vacations in the area permitted them to witness clear-cut logging practices in California's northwest. In response, they joined with concerned citizens of Humboldt County to form the Save-the-Redwoods League in 1918. The League's efforts resulted in the State of California funding acquisition of the park's first 2,000 acres in 1921.

This initial purchase played a pivotal role in the genesis of the state and national redwoods preservation movement, whose leaders advocated the immediate purchase of the magnificent ancient forests in Dyerville and Bull Creek Flats. These early acquisitions predated and were instrumental in bringing about the establishment of the California State Park System in the late 1920s. Subsequent acquisitions also included ancient forest and wisely began to include previously logged upper watersheds, most notably in Bull Creek. Coupled with well-managed reforestation practices, chiefly along the South Fork and main stem of the Eel River, these recovering lands have added significant protection for ancient forests within the park.

The redwoods' canopy is often more than a hundred feet above the ground, and the great bare trunks appear to be sturdy pillars.

SPIRIT OF PLACE

Silence.
A misty veil.
Silky webs support the glistening dew.
Splintered shafts of light pierce the shadowed forest floor.
Two thousand-year-old living monuments of nature tower mightily over verdant carpets of redwood sorrel and ferns.
Deer graze warily at a meadow's edge, a mountain lion watches, a hawk feasts upon a squirrel's missed vigilance, a banana slug's glistening trail marks its silent passage.
Rain cascades downward, collecting, merging, gorging itself on grains of sand and ancient stones, its collective power swelling into a powerful, carving torrent.

Humboldt Redwoods State Park embraces a landscape of contrasts. Quiet, sunny meadows serve as entryways into the shadowed world beneath a 300-foot tall, light-absorbing canopy of green. Rivers that ensure life for migrating steelhead and salmon can be the demise of age-old giant redwoods, while carving deeply into mountains, scattering their ancient sediments miles downstream.

Roadways slip past ancient redwoods, quickly whisking passersby and their accompanying noise through the park. Beyond these sounds, the hush of centuries masks the bustle of the modern world, and the backcountry silence is broken only by the quiet, soothing sounds of nature. Listen carefully and hear a migrating steelhead breaking the water's surface; the squawk of a Steller's jay drawing attention to the ongoing life that has thrived here unmolested and little-changed.

For thousands of years, humanity's footsteps trod lightly upon this ancient land, but for the past two centuries the passage of human footprints has multiplied ever more quickly, creating two distinct trails; the first of profound change and the latter of revered preservation. It is the former trail that we acknowledge and for which we must assume responsibility. It is the latter trail that gives us hope that humanity's footsteps can continue among these great redwoods, not as opportunistic visitors, but as proud stewards of our natural heritage.

The primeval redwood forests that nature slowly removed from throughout most of the world's temperate climatic zones over millions of years, human hands have nearly eliminated from the earth in two short centuries. Today, ancient coast redwoods inhabit only small, vestige pockets of their original eighteenth century world. Humboldt Redwoods State Park preserves and protects that which nature has determined is worthy of survival and that which escaped the axes and saws of earlier generations. For us, the second and later trail, that of revered preservation, indeed offers its own rewards, but not of a monetary nature. Instead, we depart our short visits to this park where we stood and wandered among these giants with an inspiration previously unknown and with a more complete understanding of our pivotal role in nature.

by Ken McKowen

PURPOSE OF GENERAL PLANS

General plans are broad policy documents that set the direction park development and management will take for twenty years or more. Although it is almost 80 years old, Humboldt Redwoods State Park has never had a general plan. The development that now exists occurred prior to the implementation of today's more restrictive legal requirements. Nevertheless, the park has functioned well, partly because visitation has not yet outstripped its facilities, and because the facilities were originally well located in relationship to access and transportation routes.

Many circumstances have combined to spur preparation of this general plan. These include increasing pressures on sensitive plant and animal species at the park, the need to identify and properly protect cultural resources, and the realization that human impacts will continue to grow in the future at the park. Between 1980 and 2000, California's population increased from 24 million to 34 million people. Adding to the population pressure are today's demographic and economic realities. While much of the state prospers, allowing for more leisure time and rising incomes to support increased travel and outdoor recreation, the communities near the park have yet to fully share in these benefits. Many factors contribute: the downturn in the logging industry; near elimination of the fishing industry; the Eel River's catastrophic flooding that wiped out entire towns; and construction of the freeway, which diverted the main traffic route away from the local communities.

General planning provides an opportunity to assess a park's resource stewardship, its facilities development, and its interpretation to the public. It provides guidelines for future land use management within the park, including land acquisitions and the facilities required to accommodate an expected increased visitation. The Humboldt Redwoods State Park General Plan also addresses issues that are particularly germane at this time: the Department of Parks and Recreation's association with other public land management agencies in the park's vicinity, such as Bureau of Land Management, and ways that park management can forge stronger and more effective links with the local citizenry.

When completed and approved, the general plan will provide vision and direction for the next two decades or more for the park's management and development. Because it will be in effect for a long time, the plan must remain consistent in its vision for the park's future, general in its scope, and flexible in its proposals for solving future management problems and issues that are certain to arise.

While general plans define an overall framework for a park's future resource stewardship, visitor use and services, and interpretation, more focused planning must follow to address the details that a general plan cannot. Management plans identify more definite objectives and methods and/or designs for attaining the goals set in general plans. The degree of specificity at this second level of planning is shaped by the complexity of the issues being addressed, regulatory and legal requirements, and departmental standards.

Management plans are prepared as funding and staffing are available and as opportunities or urgencies dictate to carry a specific management program or project forward. Unlike general plans, individual management plans are more specialized and can be adapted as necessary to serve a park's management needs. Some examples of management plans are resource management plans and

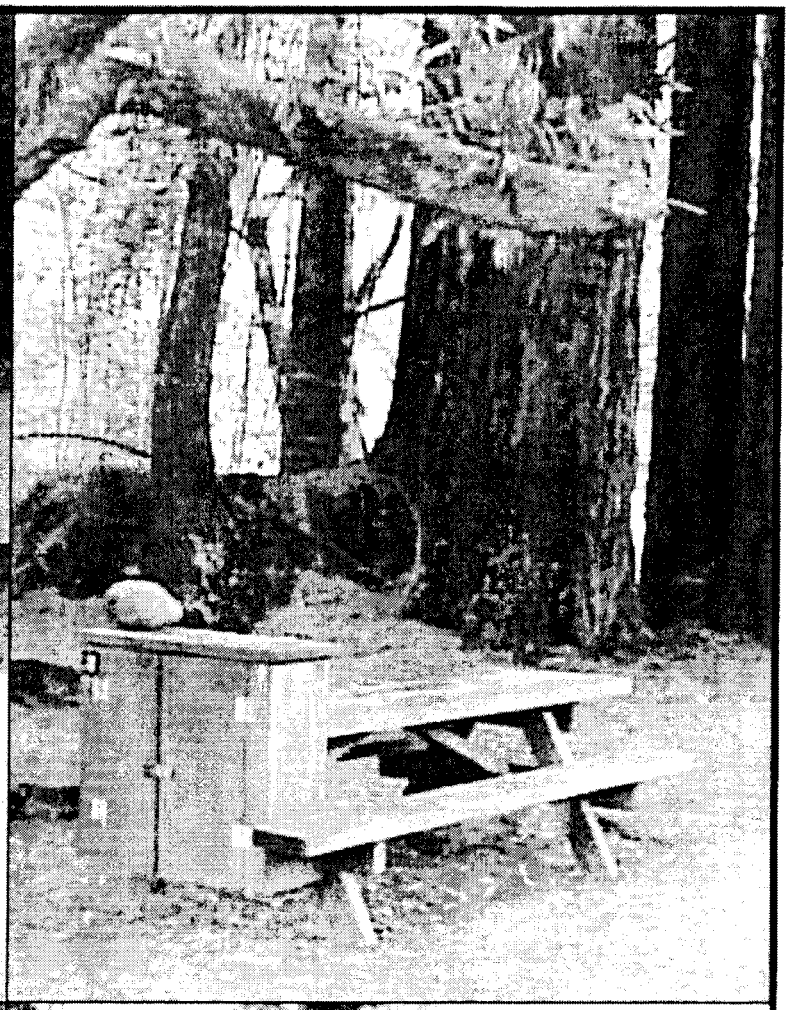
surveys, development plans for circulation and facilities, operation plans, interpretive plans, and concession plans.

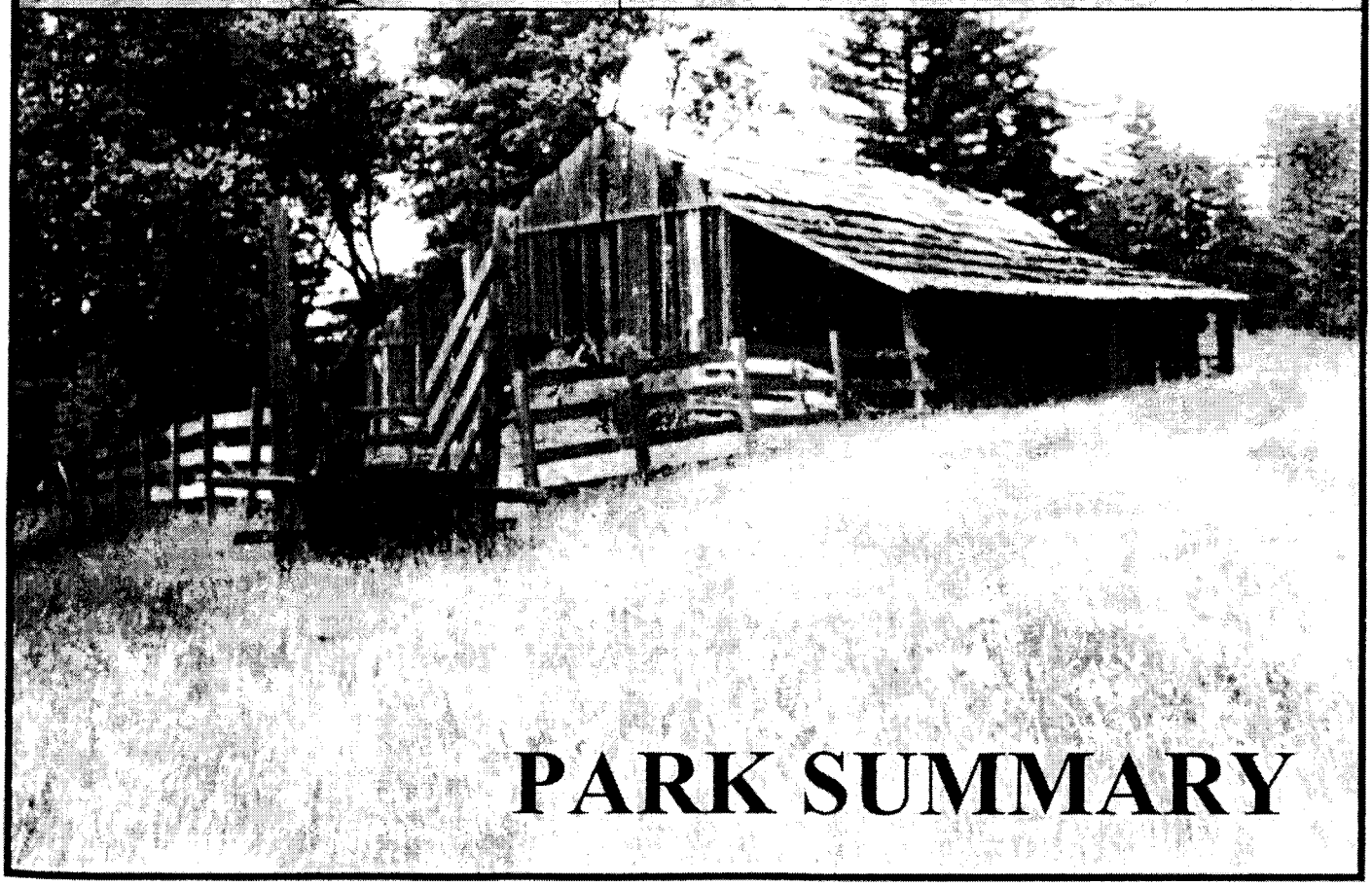
Management plans are usually prepared by the staff of the local district and may incorporate a process that involves public comment and review. Additional environmental review consistent with the level of detail is also an essential part of the management planning phase. Likewise, coordination with other agencies is often initiated.

ORGANIZATION OF THIS GENERAL PLAN

The general plan is divided into two main parts, the Park Summary and the Plan Section. The Park Summary is an overview of the park's attributes. It describes existing land uses, natural and cultural resource values, current recreational and interpretive facilities and activities, and external influences that affect planning for the park. The last section of the summary is the Issues Analysis, which lays out the planning issues identified at the beginning of the general planning process, as well as those that were clarified through public involvement.

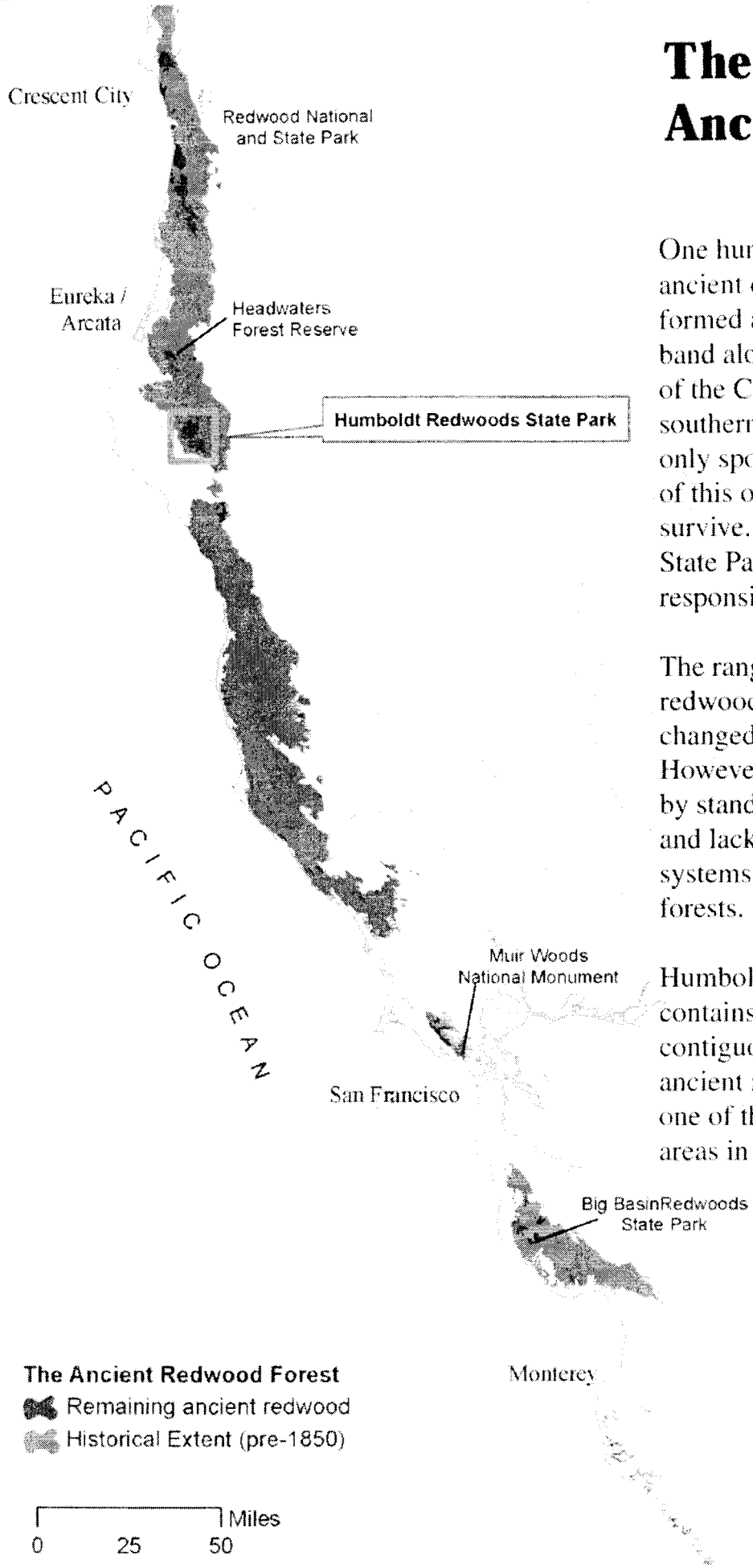
The Plan Section begins with the Department's Mission, and the park's Declaration of Purpose, which provide the context for dealing with the planning issues. The section goes on to enumerate the goals and guidelines that were developed to address or resolve the issues during the planning process. Some goals and guidelines apply park-wide, while others relate specifically to management zones that the planning team created to distinguish various land areas at the park. The last part of the general plan is the Environmental Analysis, required by the California Environmental Quality Act, which evaluates the potential impacts and environmental soundness of the general plan.





PARK SUMMARY

The Disappearing Ancient Redwood Forest



One hundred and fifty years ago, ancient coastal redwood forests formed an almost continuous band along the coast from just north of the California-Oregon border to southern Monterey County. Today, only spotty remnants, roughly 4%, of this once thriving forest still survive. Of this 4%, the California State Parks Department has the responsiblility of managing 55%.

The range within which coast redwood trees can reproduce has not changed appreciably over the years. However, it is now mostly occupied by stands of even-aged young trees and lacks the rich and diverse eco-systems of the ancient redwood forests.

Humboldt Redwoods State Park contains one of the world's largest contiguous areas of the original ancient redwood forest, making it one of the most important forest areas in the world today.

Source: Peter Morrison

PARK SUMMARY

EXISTING LAND USE

There are a wide variety of land uses within the park's boundaries, owing to its size, diverse terrain, and different areas' proximity to or distance from transportation routes. Only a small percentage of the park's land is developed for public use, as much of it is too steep, rugged, and inaccessible to all but the most determined visitors.

BACKCOUNTRY AREAS

Humboldt Redwoods State Park includes the largest backcountry area found in any of California's redwood state parks. This area is generally comprised of two distinct, yet linked ecosystems: land that has been previously logged, often containing second growth redwoods, and land containing largely untouched ancient redwood forests. Only a few backcountry areas still contain unimpacted vegetation.

BACKCOUNTRY WITH TRAILS

The western half of the backcountry consists of mostly steep and rugged terrain, much of which was logged earlier in the twentieth century prior to being acquired for the park. Some of the land is in need of significant rehabilitation in order to return to natural conditions. This part of the park contains many old roads and trails, most affording public access to the backcountry. Public motor vehicle access is prohibited, although bicycles are permitted on most backcountry roads. Visitation to this area of the park is for the hearty and adventurous. Although trails commence close to transportation corridors, visitors need to allow more than a single day and expend significant physical effort to access the more remote areas of the park's backcountry.

ANCIENT REDWOOD FOREST

Throughout much of its eastern central core, the park largely consists of untouched ancient coast redwood forest spared from past logging activities. However, to the west during the 1950s and 1960s, very large amounts of rainwater running unimpeded down slopes that had been clear-cut and later acquired by the Department caused severe flooding. The resultant erosion brought down some of the park's ancient redwood trees.

The challenging nature of visitor access to forested lands in the remote areas of the park has resulted in negligible or nonexistent public use impacts on some ancient redwood forests. On the other hand, human impacts are apparent in other areas where public use and facilities development has had detrimental effects. For example, Highway 101 and the Avenue of the Giants have significantly impacted the ancient redwood forests, both during their construction and at present.

DEVELOPED AREAS

Facilities development has primarily occurred near the park's two primary internal transportation corridors, the Avenue of the Giants and Mattole Road. Development includes facilities for overnight camping and day use, trailheads, scenic overlooks, river access points, a visitor center, and the park's administrative headquarters and operational service areas.

TRANSPORTATION CORRIDORS

Humboldt Redwoods State Park lies adjacent to California's primary north-south coastal mountain transportation corridor. Highway 101 is a high-speed freeway curving through the redwood groves that flourish along the Eel River and its tributaries. The freeway was constructed during the late 1950s and early 60s, providing a faster travel option than the twisting and narrow two-lane Avenue of the Giants. The freeway's construction required removal of numerous ancient redwoods but made traveling through the area faster and safer for those not interested in visiting the redwoods. Motorists wishing to enjoy a slower-paced driving experience on the Avenue, with its meandering path through the park, are now free to enjoy the scenery at a more leisurely pace. Mattole Road is even narrower and more winding than the Avenue.

Most of the park's visitors arrive by way of one of these corridors in a motorized vehicle. Some adventuresome people ride to the park on bicycles, mostly on the Avenue of the Giants. There is currently no public transportation to the park.

OPEN SPACE WITH DEVELOPMENT POTENTIAL

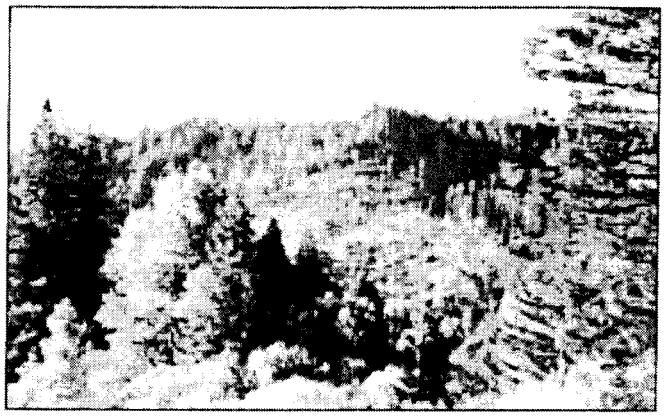
A continuous narrow band of land that lies alongside the park's two main transportation corridors serves as a buffer between heavily used developed facilities and the park's undeveloped backcountry areas. This buffer zone contains numerous trails that meet the heavy visitor demand for short hikes into the redwoods and riparian fringes. These lands, though possessing many important high quality resource and aesthetic values that need to be respected, provide the most likely alternatives for any future park-supporting development. Their nearness to the park's existing transportation routes reduces the need for extending additional intrusive access routes for new facilities.

ADJACENT LAND USES

Humboldt Redwoods State Park has been pieced together from lands originally owned primarily by private lumber companies. The U.S. Bureau of Land Management recently acquired land containing ancient Douglas fir forest around Gilham Butte on the south side of the park. There are also a few privately held smaller parcels in this vicinity. However, much of the rest of the land surrounding the park belongs to logging companies. Most of this is currently managed by the Pacific Lumber Company.

Other adjacent land uses vary, some causing undesirable impacts and some not. These include agriculture and ranching, resource extraction, activities on private lands that generate aesthetic or resource impacts, and highway maintenance. As such uses continue, resource impacts that could adversely affect the park remain a significant concern. With road work and the potential for clear-

cutting occurring so near the park's boundary, erosion, wind damage, elimination of wildlife corridors, loss of scenic beauty, and reduction of quality habitat for plants and animals remain issues that must be monitored. Adequate buffering or other mitigation measures must be utilized as potential remedies for adverse impacts to the park's prime resources.



More clear-cuts, such as this one near the park, could adversely impact park resources and aesthetics.

Possible future approaches that may be necessary to assure compatible adjacent land uses include agreements with neighboring landowners, conservation easements, or acquisition of lands from willing sellers. Conservation easements involve the purchase of development rights or other means of securing appropriate land uses, while also allowing landowners to maintain title to their property.

SIGNIFICANT RESOURCE VALUES

Time and nature have created the beauty and grandeur that Humboldt Redwoods State Park embraces and protects. Identifying and understanding natural and cultural resource interdependencies is imperative for properly managing the park.

NATURAL RESOURCES OVERVIEW

METEOROLOGY

The climate of California's north coast is characterized as "humid mesothermal," popularly known as a Mediterranean climate. Heavy precipitation occurs in the winter months, primarily from October through April. Annual rainfall totals vary with elevation, ranging from about 115 inches along the southwestern rim of the Bull Creek watershed to less than 70 inches in the lowest elevations of the park. Average precipitation at park headquarters for the years 1950 to 1991 was 65.21 inches. Summers are dry, although the park frequently experiences summer fog in the Eel River drainage during the night and early mornings. The fog contributes to the relatively high humidity of the area and provides valuable summer moisture to the park's vegetation through fog drip. However, fog forms less frequently in the Bull Creek drainage than in the South Fork of the Eel River valley.

Temperatures are moderate year-round due to the influence of the Pacific Ocean, 22 miles to the west. The area's mean annual temperature is about 55 degrees F (13 degrees C). The park's mean low temperature is about 38 degrees F, but drops into the 20s are not uncommon during December and January. The mean high temperature is about 62 degrees F, although periodic daily highs can reach over 90 degrees F anytime during May through September. In general, the farther from the ocean, the greater the variation in daily and seasonal temperatures. The southern end of the park is warmer in summer than its northern portions. Winter temperatures are affected more by elevation differences than by proximity to the ocean.

GEOLOGY

Humboldt Redwoods State Park is located within the Coast Ranges, a generally northwest-trending chain of coastal mountains. They were primarily formed from remnants of the Pacific tectonic plate that were scraped off and uplifted as it collided with and dove below the North American plate, which it continues to do. Over millions of years, the movement from this ongoing tectonic plate collision, along with periodic changes in the ocean's level, has left behind the coastal mountains.

About ten miles from the park, the much smaller Gorda tectonic plate collides with the North American and Pacific plates to form the Mendocino Triple Junction (MTJ), the most seismically active area in the continental United States. This zone is capable of magnitude 9 earthquakes. Numerous other active faults (exhibiting movement within the last 11,000 years), including the northern segment of the San Andreas Fault, could produce strong groundshaking in the park. Depending on site-specific characteristics, potential seismic hazards in the park include liquefaction, landsliding, and strong to violent, possibly amplified, groundshaking.

This seismic activity and the and area's deeply weathered marine sedimentary rocks have created slopes within the park that are steep and at or near the threshold of stability. These slopes were destabilized by intensive land use practices in the upper Bull Creek watershed and other watersheds within the park that continue at some locations outside of the park. Sediment and debris from these destabilized slopes have exacerbated flooding and impacted fisheries, ancient redwoods, riparian vegetation, and structures. The park watersheds are in varying stages of continued decay and recovery from this earlier intensive land use. Recovery within the Bull Creek watershed is currently being promoted by landform rehabilitation efforts. (See Appendix B for a more detailed description of the park's geology.)

TOPOGRAPHY

Steep slopes and a high rate of natural erosion characterize the park's landforms. Slopes commonly exceed 50% in headwater areas and can be greater than 70% in a few locations. This relief, coupled with heavy winter rains, is capable of producing extensive flooding events with large volumes of transported sediments. More gentle gradients of less than 10% occur on lower slopes or alluvial flats along the larger park streams. Elevation ranges from about 80 feet above sea level along the Eel River near the town of Stafford to the 3,379-foot summit of Grasshopper Peak. The park encompasses lands drained primarily by the South Fork of the Eel River and its tributaries. Although a small portion of the park is drained by the main fork of the Eel River downstream from its confluence with the South Fork, about half of the current park acreage lies within the Bull Creek watershed. Bull Creek is a major tributary to the South Fork of the Eel River.

HYDROLOGY

That portion of Humboldt Redwoods State Park extending north from the confluence of the main Eel River and South Fork Eel River at Dyerville is within the Scotia Hydrologic Subarea (HSA) of the Lower Eel River Hydrologic Area (HA), as defined by the Department of Water Resources. Most of the park lies within the Weott and Benbow HSA's of the South Eel River HA. Both HA's are within the Eel River Hydrologic Unit (HU) of the North Coast Hydrologic Basin (HB).

The greater Eel River watershed covers about 1,992,320 acres. Approximately 52,000 acres (2.6%) of this total are in Humboldt Redwoods State Park, draining almost the entire unit through a network

of 170 miles of streams. The South Fork Eel River and its numerous tributaries provide drainage for most of the park, extending from the Whittemore and Holbrook Groves north to its confluence with the main Eel River at Dyerville. Several tributaries of the South Fork are entirely within park boundaries, the largest being Bull Creek and Canoe Creek. Other significant watersheds or sub-watersheds wholly within the park include Squaw, Cuneo, Mill, Cow, Cabin, and Decker Creeks.

Many low-lying areas of the park are subject to seasonal flooding and bank erosion, which is exacerbated by the tremendous quantities of sediment generated by decades of human land uses, primarily logging and related road-building. The logged slopes of the upper Bull Creek watershed are especially vulnerable. Large floods in 1955 and 1964 caused the loss of hundreds of large diameter ancient redwood trees along the lower reach of the creek. Numerous landslides, both natural and human induced, are evidence of the inherently unstable geologic formations and steep slopes in the park. On the other hand, there are a few watersheds, such as Cabin and Decker Creeks, that are in a largely unspoiled condition.

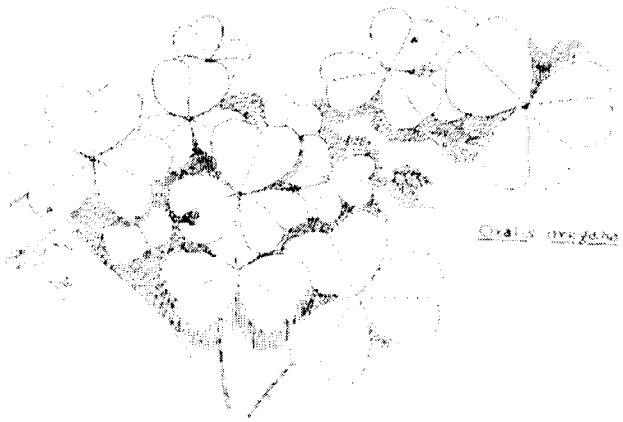
Old haul roads and skid trails can have more subtle effects upon a watershed's hydrology, as well. Some can divert surface and groundwater from natural watercourses and flow paths and conduct concentrated flows to potentially unstable sites. Flows from roads can also increase flood peaks in nearby channels. Roads may compact the earth so that vegetation growth is retarded and surface flow cannot percolate downward. Because groundwater is colder, surface flow can raise the temperature of water reaching the watershed's creeks, which in turn impacts cooler water aquatic species.

PLANT LIFE

Vegetation Types

Researchers have mapped seven different vegetation types, or series, within the park, as defined in the California Native Plant Society's (CNPS) classification, *A Manual of California Vegetation*, by John O. Sawyer and Todd Keeler-Wolf (1995). At least one series, the Mixed Hardwood Series as described by Sawyer and Keeler-Wolf, does not fit well with this classification methodology. It appears to be most like the Tanoak Series described below. The vegetation type series mapped in the park include:

- Redwood Series
- Douglas fir – Tanoak Series
- Tanoak Series
- Black Cottonwood Series
- Red Alder Series
- Eastwood Manzanita Series
- California Annual Grassland Series



Some of these series (e.g. Redwood Series) have been further subdivided into vegetation types, termed associations.

Redwood Series

The Redwood Series is by far the most extensive in the park, comprising greater than 60% of the total acreage. It has been further differentiated into four associations. All of these associations are dominated by redwood *(Sequoia sempervirens)* in the canopy.

Sequoia sempervirens/Oxalis oregana Association (Ancient Forest) – This ancient forest vegetation type is restricted to alluvial flats on mostly deep, silty soils. Redwood is the dominant tree species, although in some locations tanoak *(Lithocarpus densiflorus)* is a minor component in the subcanopy. Many areas have pure or nearly pure stands of redwood. The understory is primarily composed of a herbaceous layer, with redwood sorrel *(Oxalis oregana)* the most prevalent species. A shrub layer is typically absent from this vegetation type. This association is best exemplified by the flats along the lower reaches of Bull Creek. These flats support the most extensive and, many believe, the most impressive ancient redwood forest existing in the world today.

Sequoia sempervirens-Pseudotsuga menziesii/Gaultheria shallon Association – This vegetation is most frequently found along valley bottoms and lower mountain slopes. Occasionally it can be found at higher elevation locations, such as on Peavine Ridge. Redwood and Douglas fir *(Pseudotsuga menziesii)* are co-dominant in the canopy in a proportion of about 2:1. Tanoak is the most prevalent species in the subcanopy. The shrub layer is usually dominated by salal *(Gaultheria shallon)*, with California huckleberry *(Vaccinium ovatum)* and red huckleberry *(Vaccinium parvifolium)* commonly present. A diverse herbaceous layer is frequently composed of redwood violet *(Viola sempervirens)*, starflower *(Trientalis latifolia)*, redwood ivy *(Vancouveria planipetala)*, and western trillium *(Trillium ovatum)*.

Sequoia sempervirens-Pseudotsuga menziesii/Vaccinium ovatum Association – This is the most prevalent vegetation in the park and is similar to the preceding type. Redwood and Douglas fir are predominant in the canopy, and the shrub layer is well developed. California huckleberry is the dominant species in the shrub layer. The herbaceous layer is generally absent.

Sequoia sempervirens-Pseudotsuga menziesii/Arbutus menziesii Association – Generally found on moderately steep to steep slopes, this vegetation is dominated by redwood and Douglas fir in the canopy. Madrone is the dominant species in the subcanopy. California huckleberry and salal are the primary species in the shrub layer. An herbaceous layer is typically absent.

Douglas Fir – Tanoak Series

Pseudotsuga menziesii/Lithocarpus densiflorus-Arbutus menziesii Association – This vegetation type occurs on steep upper slopes, mostly on the east side of Grasshopper Peak. Douglas fir dominates the canopy, with a mix of tanoak and Pacific madrone *(Arbutus menziesii)* in the subcanopy. A weakly developed shrub layer is typically composed of California huckleberry and salal. An herbaceous layer is generally absent.

Tanoak Series

This vegetation type has been mapped in the park as a *Lithocarpus densiflorus-Arbutus menziesii* Series, which is basically equivalent to the Douglas fir-Tanoak Series. It occurs on steep upper slopes and ridges. Tanoak and madrone are the dominant species in the canopy in a nearly 2:1 ratio, respectively. Both the shrub and herbaceous layers usually are not present in this type.

Lithocarpus densiflorus-Arbutus menziesii-Quercus chrysolepis Association – This association is recognized as an identifiable subtype of the *Lithocarpus densiflorus-Arbutus menziesii* Series described above. Its distribution is limited to a few locations on upper slopes and ridges at higher elevations. Tanoak and Pacific madrone dominate the canopy, with canyon live oak *(Quercus chrysolepis)* occurring as a subdominant canopy species.

Black Cottonwood Series
This vegetation type, although frequently occurring, has not been previously described for Humboldt Redwoods (though it has been typically included within a general description for riparian vegetation). Providing valuable wildlife habitat, it occurs along the banks of the South Fork and main stem of the Eel River, but not the smaller streams in the park. Black cottonwood *(Populus balsamifera ssp. trichocarpa)* is the dominant canopy species. Co-dominants in the subcanopy are red alder *(Alnus rubra)* and several species of willow, including shining willow *(Salix lucida ssp. lasiandra)* and Scouleris willow *(Salix scouleriana)*.

Red Alder Series and White Alder Series
These two series are found along intermediate to small perennial streams, such as Bull Creek and Canoe Creek. They are functionally equivalent and nearly synonymous in species composition, with the exception of the dominant species. Red Alder Series is dominated by red alder and occurs alongside more coastally influenced streams, generally downstream from the Dyerville area. White alder *(Alnus rhombifolia)* dominates the White Alder Series and occupies drier, more inland locations, such as the Bull Creek drainage. A few different species of willow *(Salix sp.)* are common canopy or subcanopy components in both series.

Eastwood Manzanita Series
This shrubby vegetation type is found in a few small patches near the top of Grasshopper Peak. It is predominantly composed of Eastwood manzanita *(Arctostaphylos glandulosa ssp. glandulosa)*. There is little or no herbaceous understory.

California Annual Grassland Series
Grassland vegetation occurs on slopes and ridges where conditions are not typically suitable for establishment of shrubs or trees. In places, steep, unstable slopes preclude long-term survival of woody plants to the benefit of herbaceous species. Many of the grasslands and prairies in the park are dominated by non-native grasses and forbs, with a less extensive native component. Frequently found non-native species include European hairgrass *(Aira caryophyllea)*, dogtail grass *(Cynosurus echinatus)*, soft chess *(Bromus hordaceous)*, ripgut grass *(Bromus diandrus)*, slender wild oats *(Avena barbata)*, barley *(Hordeum murinum ssp. leporinum)*, six-weeks fescue *(Vulpia bromoides)*, and hairy cats-ear *(Hypochaeris radicata)*. Native species include blue wildrye *(Elymus glaucus)*, bracken fern *(Pteridium aquilinum var. pubescens)*, and miniature lupine *(Lupinus bicolor)*.

Special Plants
Special plants are listed annually on the California Department of Fish and Game's Special Plant List. Those species listed by the U.S. Fish and Wildlife Service and the CNPS as rare, threatened, or endangered are a subset of the Special Plant List.

Currently, five sensitive plant species are known to occur in the park (see Table 1A). Historic populations of a few other species were located and collected from either current park properties or on adjacent private property (see Table 1B). All of these collections were recorded in 1938 or earlier. Recent field searches have failed to relocate these populations, and undoubtedly some of the occurrences have been negatively impacted by certain land uses since 1938. About two dozen other special plant species have the potential to occur in the park, based on available suitable habitat. Those species that occur, or for which suitable habitat exists within Humboldt Redwoods State Park, are listed in Appendix C. All of the species in Tables 1A and 1B, below, appear in the CNPS Inventory of Rare and Endangered Vascular Plants of California (1994, Fifth Edition).

Table 1A
Special Plant Species Currently Known to Occur within Humboldt Redwoods State Park

Common Name	Scientific Name	CNPS List*
California pinefoot	*Pityopus californicus*	4
Heart-leaved twayblade	*Listera cordata*	4
Humboldt County fuchsia	*Epilobium septentrionale*	4
Redwood lily	*Lilium rubescens*	4
White-flowered rein orchid	*Piperia candida*	4

Table 1B
Special Plant Species Reported to Occur within Humboldt Redwoods State Park or on Adjacent Property , 1938 or Earlier

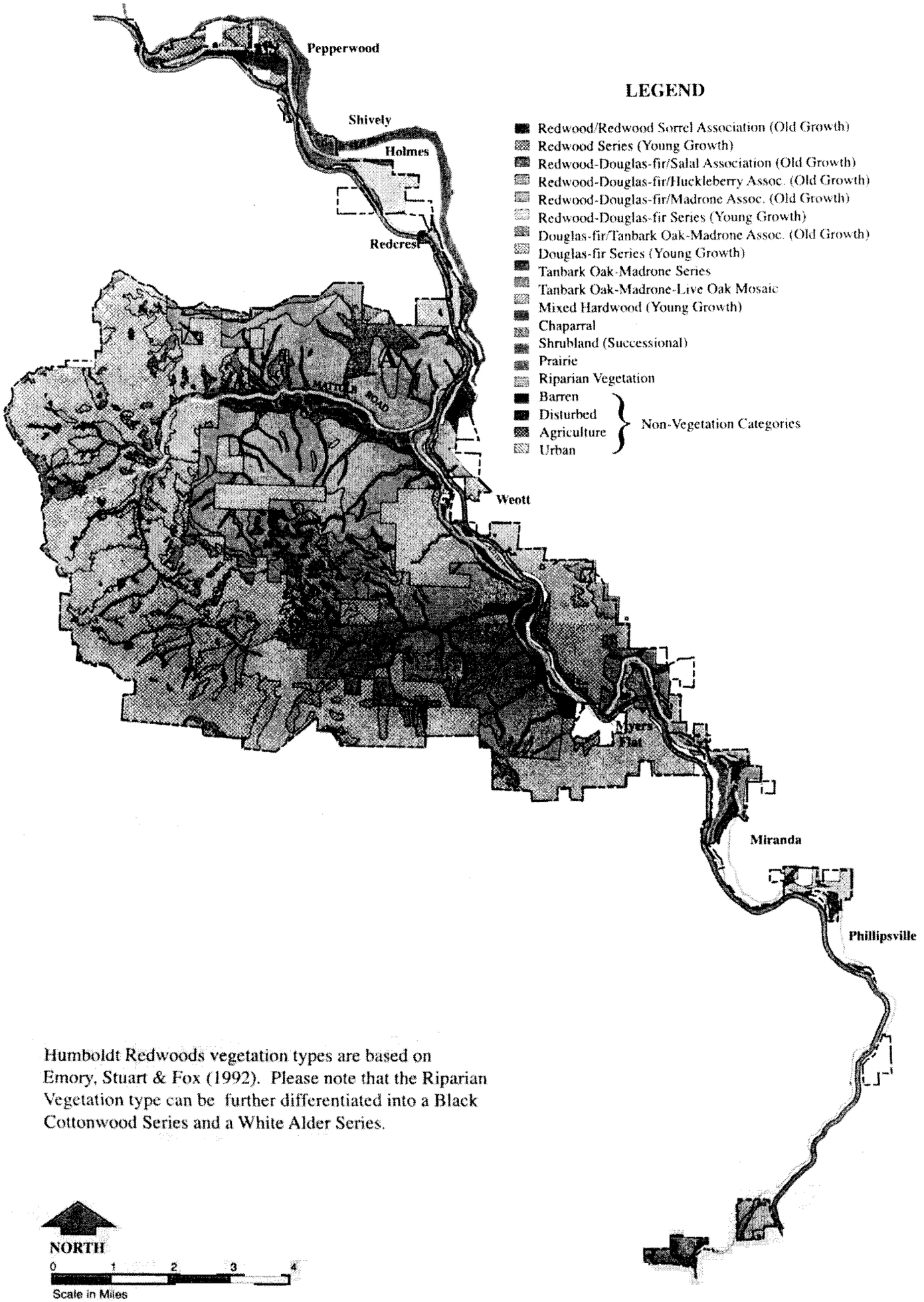
Common Name	Scientific Name	CNPS List*
Howell's montia	*Montia howellii*	2
Maple-leaved checkerbloom	*Sidalcea malachroides*	1B
Robust monardella	*Monardella villosa ssp. globosa*	1B

*Listing status codes: CNPS List 1B = Rare, threatened, or endangered in California and elsewhere; CNPS List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; CNPS List 4 = Plants of limited distribution, a watch list.

Exotic Plants
Infestations of exotic plants are primarily localized in areas of the park affected by some form of ongoing or previous disturbance. The most common disturbance factors are periodic flooding, roads and trail development and maintenance, and former homesteads (e.g. the Logan-Holmgren property) and logging mill sites. Species of most concern are those that are particularly invasive and capable of spreading. These include Scotch broom (*Cytisus scoparius*), French broom (*Genista monspessulana*), and periwinkle (*Vinca major*).

ANIMAL LIFE

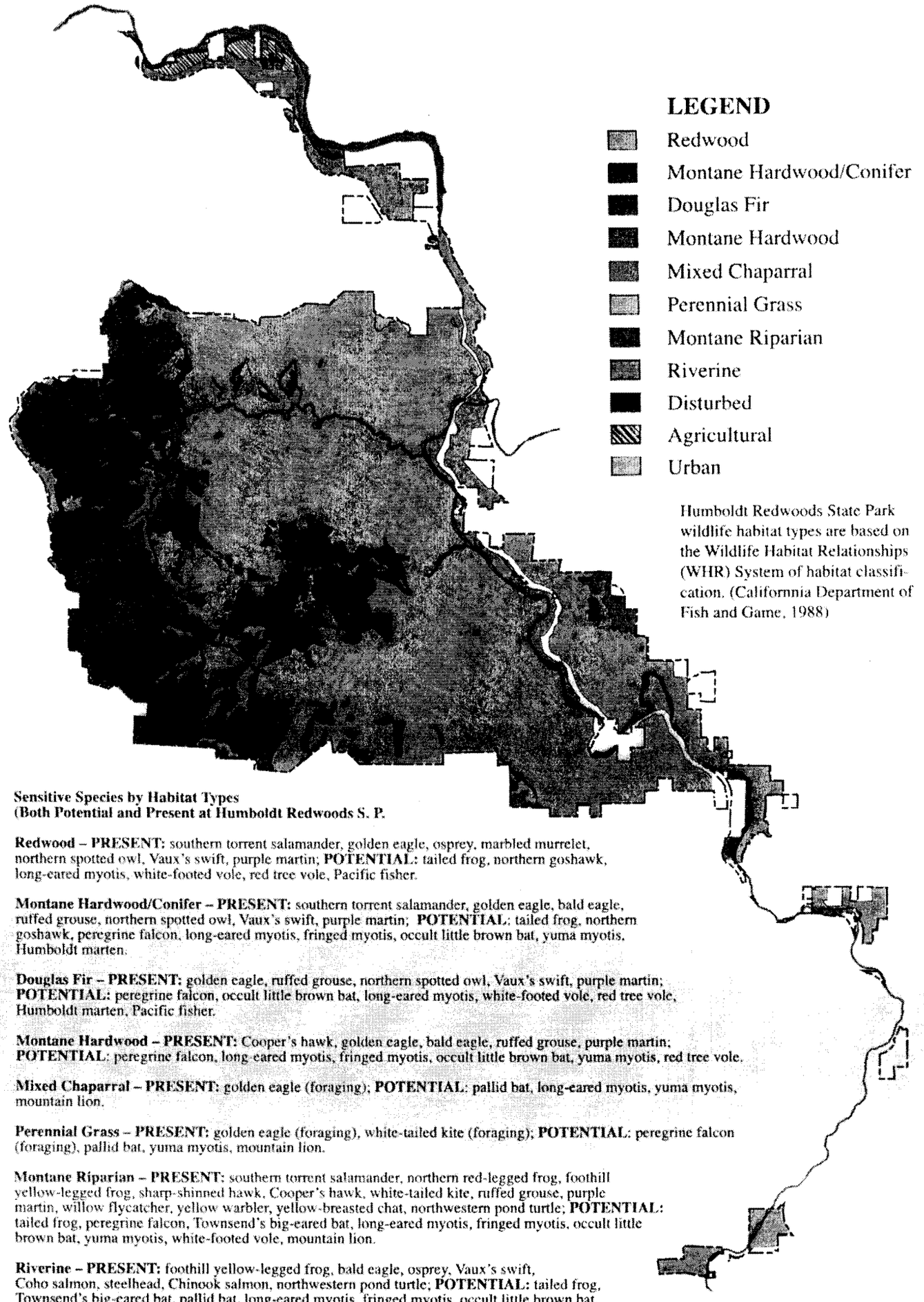
The diversity of vegetation types and habitats at Humboldt Redwoods State Park supports the existence of a variety of animal species. The park is home to large stands of late-successional, large diameter ancient redwood that provide unique habitat for several vertebrate and numerous



Humboldt Redwoods vegetation types are based on Emory, Stuart & Fox (1992). Please note that the Riparian Vegetation type can be further differentiated into a Black Cottonwood Series and a White Alder Series.

HUMBOLDT REDWOODS STATE PARK
GENERAL PLAN
Vegetation

Map #2
June 2001



Humboldt Redwoods State Park wildlife habitat types are based on the Wildlife Habitat Relationships (WHR) System of habitat classification. (California Department of Fish and Game, 1988)

Sensitive Species by Habitat Types
(Both Potential and Present at Humboldt Redwoods S. P.

Redwood – PRESENT: southern torrent salamander, golden eagle, osprey, marbled murrelet, northern spotted owl, Vaux's swift, purple martin; **POTENTIAL:** tailed frog, northern goshawk, long-eared myotis, white-footed vole, red tree vole, Pacific fisher.

Montane Hardwood/Conifer – PRESENT: southern torrent salamander, golden eagle, bald eagle, ruffed grouse, northern spotted owl, Vaux's swift, purple martin; **POTENTIAL:** tailed frog, northern goshawk, peregrine falcon, long-eared myotis, fringed myotis, occult little brown bat, yuma myotis, Humboldt marten.

Douglas Fir – PRESENT: golden eagle, ruffed grouse, northern spotted owl, Vaux's swift, purple martin; **POTENTIAL:** peregrine falcon, occult little brown bat, long-eared myotis, white-footed vole, red tree vole, Humboldt marten, Pacific fisher.

Montane Hardwood – PRESENT: Cooper's hawk, golden eagle, bald eagle, ruffed grouse, purple martin; **POTENTIAL:** peregrine falcon, long-eared myotis, fringed myotis, occult little brown bat, yuma myotis, red tree vole.

Mixed Chaparral – PRESENT: golden eagle (foraging); **POTENTIAL:** pallid bat, long-eared myotis, yuma myotis, mountain lion.

Perennial Grass – PRESENT: golden eagle (foraging), white-tailed kite (foraging); **POTENTIAL:** peregrine falcon (foraging), pallid bat, yuma myotis, mountain lion.

Montane Riparian – PRESENT: southern torrent salamander, northern red-legged frog, foothill yellow-legged frog, sharp-shinned hawk, Cooper's hawk, white-tailed kite, ruffed grouse, purple martin, willow flycatcher, yellow warbler, yellow-breasted chat, northwestern pond turtle; **POTENTIAL:** tailed frog, peregrine falcon, Townsend's big-eared bat, long-eared myotis, fringed myotis, occult little brown bat, yuma myotis, white-footed vole, mountain lion.

Riverine – PRESENT: foothill yellow-legged frog, bald eagle, osprey, Vaux's swift, Coho salmon, steelhead, Chinook salmon, northwestern pond turtle; **POTENTIAL:** tailed frog, Townsend's big-eared bat, pallid bat, long-eared myotis, fringed myotis, occult little brown bat, yuma myotis (foraging for all 6 bat species).

Agricultural – POTENTIAL: white-tailed kite (foraging).

Urban – PRESENT: Vaux's swift, yellow warbler; **POTENTIAL:** peregrine falcon, Townsend's big-eared bat, pallid bat, yuma myotis.

HUMBOLDT REDWOODS STATE PARK
GENERAL PLAN
Wildlife Habitat Types

Map #3
June 2001

invertebrate species. Some of the vertebrate species occurring within the park are considered threatened, endangered, or Species of Special Concern by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game. However, most of the wildlife species are more frequently occurring and are equally important components of the ecosystem.

Sensitive Animal Populations

Mammals

Mammals, ranging from abundant wood rats to the more elusive mountain lion, can be found in Humboldt Redwoods State Park. The California Natural Diversity Data Base (CNDDB) has documented the presence of the Pacific fisher *(Martes pennanti pacifica)*, a California mammal Species of Special Concern at the park. In addition, there may be nine other special status mammal species in the vicinity of the park, including six species of bats and two species of voles. Although these species have not been documented within the park (as of 1999), suitable habitat exists to support their existence (see Appendix D). The Humboldt marten *(Martes americana humboltensis)* may have inhabited the park and/or adjacent areas at some time in the past, but it is now suspected that it has been extirpated from southern Humboldt County.

Birds

Humboldt Redwoods State Park provides habitat for a diverse assortment of birds. Of the twelve special status species documented as using the park, three are on the federal Threatened list: the northern spotted owl *(Strix occidentalis caurina)*, marbled murrelet *(Brachyramphus marmoratus)*, and bald eagle *(Haliaeetus leucocephalus)*. These species are also on the California Endangered Species list. Northern spotted owls and marbled murrelets nest within the park and are locally common, whereas bald eagles are rare visitors, primarily in winter.

Humboldt Redwoods State Park contains one of the largest remaining blocks of marbled murrelet nesting habitat in this part of the state. To the north, the Headwaters Reserve and Redwood National and State Parks also provide large areas of nesting habitat. To the south, the next sizeable block of nesting habitat is 300 miles away in San Mateo and Santa Cruz counties *(U.S. Fish and Wildlife Service Technical Assistance, 2000)*.

One species, the white tailed kite (*Elanus leucurus*), documented in the park is listed as California Fully Protected and eight (including sharp-shinned and Cooper's hawks, northern goshawk, golden eagle, osprey, ruffed grouse) are listed as California Species of Special Concern and/or federal Species of Special Concern. Suitable habitat exists in the park for two additional bird species that have special status, although they have not been documented there as of 1999 (see Appendix D).

Reptiles

There is one special status reptile, the northwestern pond turtle *(Clemmys marmorata marmorata)*, that might occur in the park. The CNDDB has a record of this species in the park's vicinity, and suitable habitat is available within park boundaries. The northwestern pond turtle is a federal Species of Special Concern and California Species of Special Concern.

Amphibians

Four special status amphibians, the southern torrent salamander *(Rhyacotriton variegatus)*, the tailed frog *(Ascaphus truei)*, the northern red-legged frog *(Rana aurora aurora)* and foothill yellow-legged frog *(Rana boylii)*, are documented as occurring or potentially occurring in the park. The southern torrent salamander, and northern red-legged frog are federal Species of Special Concern and California Species of Special Concern. The foothill-yellow-legged frog is a California Species of Special Concern.

Yellow-legged frog

In all, 21 wildlife species with some level of sensitivity have been documented as utilizing the habitats and resources at Humboldt Redwoods State Park. In addition, suitable habitat exists in the park to support 14 other sensitive animal species (see Appendix D).

Aquatic Life

Humboldt Redwoods State Park contains more miles of permanent and seasonal streams than any other unit of the State Park System – approximately 170 miles. This network of creeks and the Eel River, to which they are tributaries, provides habitat for three sensitive fish species. These are the coho salmon *(Oncorhynchus kisutch)*, the steelhead *(Oncorhynchus mykiss)*, and the chinook salmon *(Oncorhynchus tshawytscha)*. These three species are all anadromous fish, linking the park to the ocean. As adults, these fish travel from the ocean upstream into the waters of Humboldt Redwoods State Park to lay their eggs in the places where they hatched years before. All three are listed as threatened under the federal Endangered Species Act. The coho salmon is also a California Species of Special Concern; the Southern Oregon/Northern California Evolutionarily Significant Unit (ESU) is currently a candidate for listing as State endangered (see Appendix D). A variety of other fish have been documented in the park, including the Pacific lamprey (*Lampetra tridentatus*).

Though many streams in Humboldt Redwoods State Park could be considered undamaged, decades of watershed disturbance have degraded some important waterways. Logging, road building, and land conversion to grazing and agriculture have significantly damaged aquatic habitat. Slope and streambank destabilization and erosion have caused excessive sedimentation of streams. Ongoing resource extraction on adjacent lands, state highway and county road maintenance, and removal of large, woody debris cover continue to impact waterways. Degradation of spawning habitat, which includes the choking of gravels with fine sediments and loss of riparian and debris cover, has combined with fishing pressures to greatly reduce stocks of anadromous fish within the park and region-wide.

CULTURAL RESOURCES OVERVIEW

The information contained in this overview is to provide a general summary of cultural resources. More details about the park's cultural resources can be found on the Matrix of Resource Values and Constraints, Management Approaches, and Goals (see page 81) and the Cultural Resources Map (Map #4). Owing to its vast size and the fact that surveys of the park's cultural resources are incomplete, there is still much to be learned about the human history and prehistory of Humboldt Redwoods State Park. This body of information will grow as future survey work is completed.

The General Planning Team owes much to Jerry and Gisela Rhode, upon whose book, *Humboldt Redwoods State Park, The Complete Guide*, portions of the following overview have been based.

PREHISTORY

Most of what is known about the Lolangkok Sinkyone came from the late George Burt, who was one of the few surviving members of this tribe and one of the last to live and work in the area. In 1922, Burt provided linguist C. Hart Merriam with tribal place names, stories, and other information about Sinkyone culture.

Lolangkok Sinkyone people inhabited the lower reaches of the South Fork of the Eel River. They spoke one of the many Native American Athabascan languages. Prior to Euroamerican contact, as many as 2,000 Lolangkoks lived in approximately 15 independent villages along the South Fork of the Eel River and another located near the confluence of Bull and Cuneo creeks. The Sinkyone had political loyalty only to their own village and were linked to others in the watershed of the South Fork solely by their dialect.

The Lolangkok Sinkyone who occupied the Bull Creek watershed moved seasonally, following food supplies similar to those of other northwestern California tribes. They were primarily dependent on the acorn, with tanoak being their favorite. In the summer they dwelt on open mountainsides and various hillside prairies where they successfully hunted small game such as rabbits, gophers, other rodents, and birds more commonly than deer or elk. They probably snared or drove deer with dogs rather than shooting them with arrows. Vegetable food consisted of bulbs and grass seeds from the open prairies and berries, which they picked all summer.

After the first rains caused the South Fork to begin rising, they came down to fish. The smaller streams were better for taking salmon, which they caught with nets and harpoons, because the water was usually too high on the South Fork. They constructed dugout vessels from single logs to use on large streams, similar to the canoes used by the indigenous peoples of British Columbia and Alaska. The South Fork was the farthest south that this type of craft was used. They spent most of the winter at permanent home villages on Bull Creek.

Similar to most tribes of northwestern California, wealth was a very important part of the culture and had many purposes. The Sinkyone used dentalia shells for their standard currency.

HISTORY

The first Europeans to see the South Fork and Bull Creek Flats were members of an exploration party led by Josiah Gregg seeking a direct route to San Francisco from the Eureka area in 1849. Following the Gregg party reports, settlers began arriving on the northern California coast in 1850. The incoming Euroamericans viewed the Native Americans as impediments to their "manifest destiny." This created a serious conflict between resident Native Americans and the land-hungry settlers.

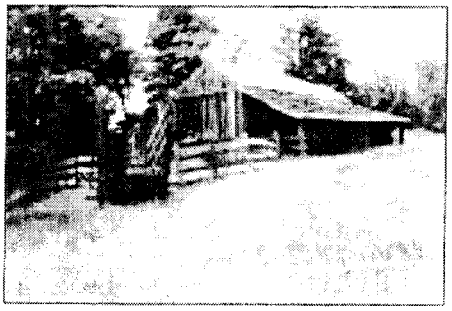
The Sinkyone were not prepared for dealing with these unfamiliar aggressors. The traditional Sinkyone manner of settling disputes through ceremony and payment could not match the deadly intent of the settlers. So alien were the immigrants to the Indians' experience that the Indians did not even consider the new arrivals human, but referred to them as "Kyoi," which means "spirit."

In 1851, the United States Government sent Redick McKee, newly appointed Indian commissioner, to Humboldt County. He arrived with a military escort empowered to remove Native Americans from lands desired by the settlers. The ensuing war was comprised mainly of settler raids on Indian lands and Native American raids on remote homesteads. In 1852, an Army post was established at Fort Humboldt in Eureka to protect new settlements. By the 1860s, the indigenous cultures in the South Fork Eel River region had been virtually destroyed. The surviving Sinkyone people were forced to move onto reservations or rancherias at Hoopa and Round Valley. In 1910, only 100 Lolangkok Sinkyone were estimated still to be living, and by the 1920s, their numbers were so few that a census was not possible.

George Burt was a fortunate survivor. He was born in a Sinkyone village on Bull Creek around 1850. While still a child, he was taken from his birthplace to the Smith River Reservation in Del Norte County and later moved to the reservation in Hoopa. By 1905, he had returned to his homeland, having obtained a homestead on Cuneo Creek near his birthplace. In the 1920s, he shared knowledge of his heritage with C. Hart Merriam.

Euroamerican settlers came to the South Fork area in greater numbers during the 1860s as the Homestead Act of 1862 offered farmers and ranchers the opportunity to acquire inexpensive property. The settlers generally established small agricultural communities. They avoided the tall redwood trees, seeking the natural clearings and meadows they could easily cultivate. One of the first settlers was Jesse Whitlow, who acquired a homestead in the mid-1860s near the confluence of the South Fork and the main stem of the Eel River. A few years later, Elias and Sarah Myers settled onto a farm south of Dyerville. They started an orchard and eventually founded the town of Myers Flat.

By 1870, almost 300 new settlers resided in the southeastern part of Humboldt County. Early arrivals included John W. Logan and his family, who settled in the 1870s near land that later became Miranda. Tosaldo and Addie Johnson arrived at around the same time and established a homestead above Bull Creek. Another early settler was James Carothers, who was granted a homestead patent in the late 1870s near the current park headquarters. By the 1890s, most of the region was homesteaded. Early farmers raised hogs, sheep, and cattle and harvested apples, pears, plums, and nuts from their orchards. They shipped their produce from Dyerville to the mouth of the Eel River and then down the coast to San Francisco.



The Logan barn

Logging occurred in the South Fork and Bull Creek watersheds from the time of first settlement. Settlers cleared land for agriculture, cut trees for railroad ties, grapestakes, fence posts, and shingle bolts. They stripped tanbark oak trees of their bark to extract tannin for leather curing. However, logging did not become important in the region's economy until after improvements in transportation, such as the completion of the Northwest Pacific Railroad and the Redwood Highway, during World War I. The Redwood Highway replaced an earlier wagon road along the South Fork around 1915.

The Redwood Highway made Humboldt County much more accessible to the motoring public. It also contributed to the preservation of ancient redwood trees by making it possible for many tourists to see the beautiful groves and become aware of threats to them. In 1917, a group of biologists and businessmen set out from San Francisco in search of an impressive grove of redwoods they had heard about. In the area of Bull Creek Flats, they saw widespread logging and discovered that not one tree was owned and protected by either the state or federal government.

For the next two years, they worked to obtain state government protection for the Bull Creek area with little success. They enlisted the help of other well-known conservationists and, in 1918, organized the Save-the-Redwoods League. The group also secured aid from the Humboldt Chamber of Commerce, which launched a funding drive for a proposed redwood park. At the same time, a group of Humboldt County women formed their own local Save-the-Redwoods League.

In 1921, the State Legislature passed a $300,000 appropriation to purchase redwoods in Humboldt County. That same year, the Save-the-Redwoods League purchased 2,000 acres of redwoods along the South Fork of the Eel River, the first step in the formation of Humboldt Redwoods State Park. Also in 1921, the park's first memorial grove, Bolling Grove, was dedicated. The money to buy the grove was donated by the family of Colonel Raynel C. Bolling, the first American officer of high rank to be killed in World War I.

Following this early success, the Save-the-Redwoods League began enrolling members and collecting donations. Humboldt County contributed $55,000, which was matched by a state subsidy. Additional ancient redwood groves were acquired along the Redwood Highway, and on June 16, 1922, Humboldt Redwoods State Park opened to the public.

From this beginning, the League next turned its efforts to acquiring the great groves of redwoods on the Dyerville and Bull Creek flats. Laura Mahan, president of the Humboldt Women's Save-the-Redwoods League, and her husband, James, were instrumental in accomplishing this feat. In 1924, the Mahans heard that Pacific Lumber Company was logging in Dyerville Flats. Their efforts enlisted the public support from throughout Humboldt County, the state of California, and the nation that was needed to preserve the ancient redwood trees.

In the years that followed, major funding for purchase of groves came from the National Federation of Women's Clubs and prominent San Francisco bankers. In 1926, John D. Rockefeller, Jr. donated $1,000,000 to the Save-the-Redwoods League, initially requiring that his gift remain confidential. Following passage of the 1928 State Park Bond Act, he offered another $1,000,000 if it could be matched. In 1931, the Dyerville Flats and Bull Creek Flats redwoods were successfully acquired with these funds, creating what became the heart of Humboldt Redwoods State Park.

The Civilian Conservation Corps (CCC) provided the muscle and expertise behind the early development of the park. Their first camp was established at Dyerville in 1933. The CCC worked throughout the park constructing buildings, campgrounds, day use picnic facilities, roads, trails, parking areas, restrooms, washhouses, and water supply systems. In December, 1937, a flood washed out most of the land upon which the Dyerville camp stood. The camp subsequently was moved to Burlington. However, park headquarters remained at Dyerville until after the devastating flood of

1955, when it, too, was relocated to Burlington. The CCC program officially came to an end in 1942, after many of its members joined the armed forces when the United States entered World War II.

During the late 1950s and early 1960s, the original two-lane Redwood Highway was bypassed by Highway 101 through the eastern part of the park. The old segment of the Redwood Highway that passed through much of the park was officially designated as State Route 254. It became the park's main transportation artery and has been better known to the public as the Avenue of the Giants.

Flooding has had a major impact on the natural and cultural histories and on the economic development of the South Fork and Bull Creek watersheds. Major flood events in 1937, 1955, and the most catastrophic in 1964, reshaped the region's topography, destroyed residences and towns, and caused park facilities to be abandoned, rebuilt, or relocated. The Bull Creek watershed was the last major acquisition for the park in 1962. Just two years later, the park's largest single flood event occurred. The water rose 30 feet above ground level at the town of Weott. Most of the communities along the South Fork were virtually destroyed and have never fully recovered. The extensive commercial logging that had occurred in the upper Bull Creek watershed following World War II exacerbated the problems. Denuded slopes dumped sediments into both Bull Creek and the Eel River. Logs broke free from lumber millponds and created river logjams that raised water levels even higher. Now that the Bull Creek watershed is protected within the park, efforts to rehabilitate damage due to earlier erosion are in progress.

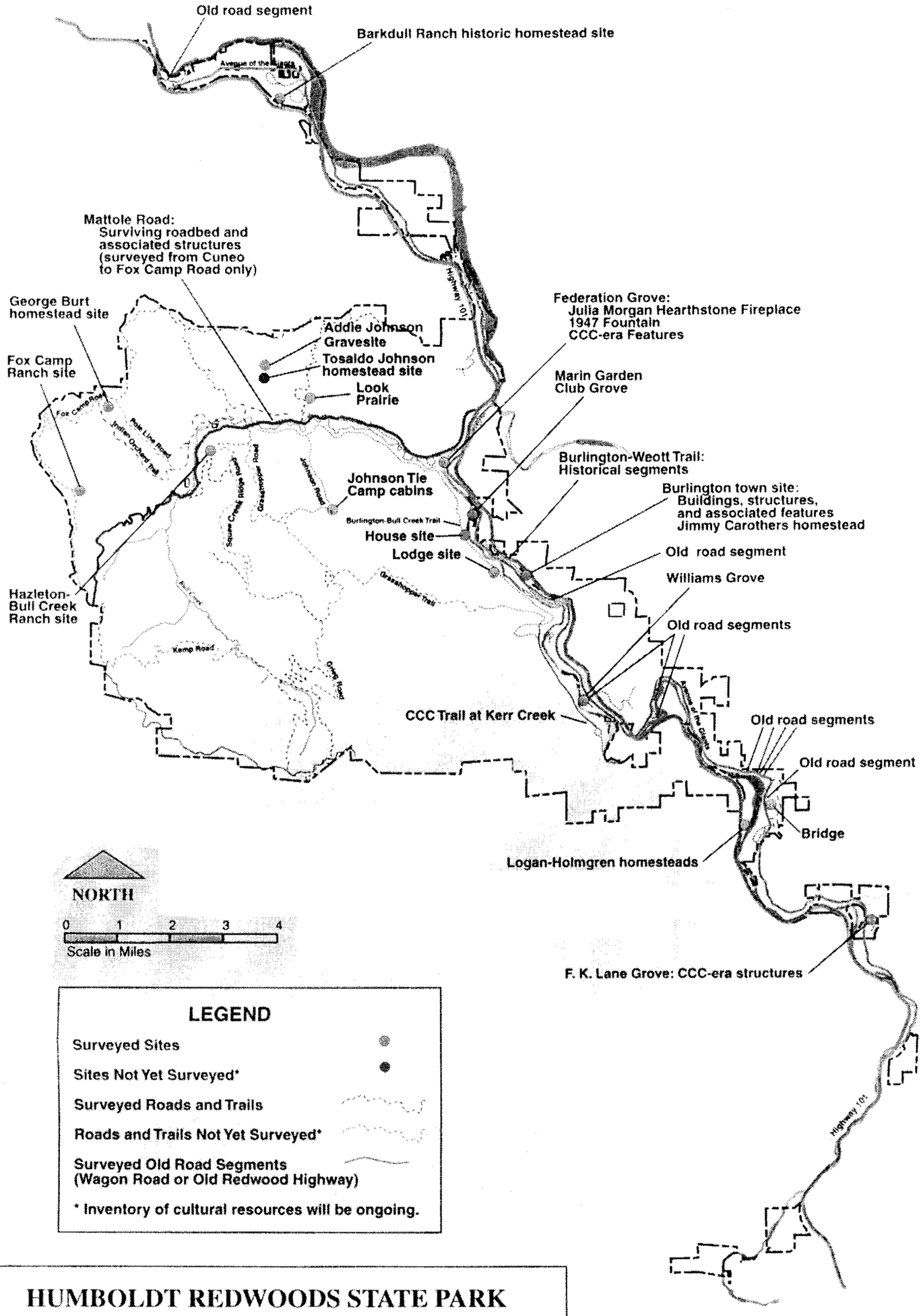
Today, between federal and state ownership, over 250,000 acres of coast redwood land is protected in California. However, the vast majority of redwood acreage, including a few remaining uncut stands of ancient forest, still belongs to large timber companies.

PREHISTORIC ARCHEOLOGICAL SITES

Flooding may have washed away or deeply buried the remains of Lolangkok Sinkyone villages located along the South Fork and Bull Creek. However, some prehistoric sites have been identified in and around the park, and isolated artifacts have been found. Owing to its size, the majority of Humboldt Redwoods State Park has not been surveyed for cultural resources. Additional surveys will be necessary.

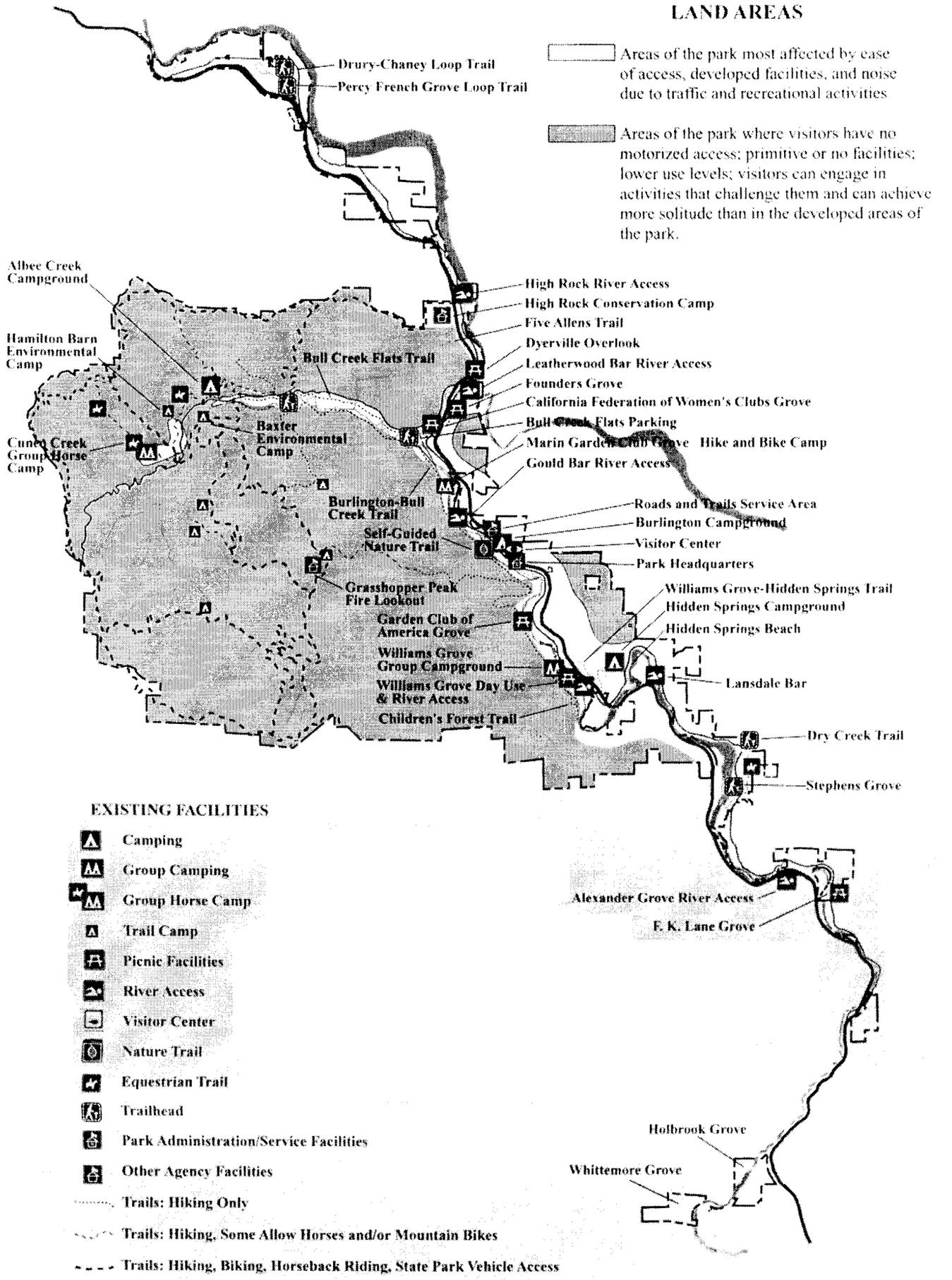
HISTORIC FEATURES

Hundreds of historic sites, including homesteads, historic orchards, roads, trails, and barely discernable foundations exist within the park. As with prehistoric resources, more investigation is needed to identify all of the historic resources in the unit.



HUMBOLDT REDWOODS STATE PARK
GENERAL PLAN
Cultural Resources

Map #4
June, 2001



HUMBOLDT REDWOODS STATE PARK GENERAL PLAN
Existing Land Use and Facilities

NORTH

Map #5
June 2001

0 1 2 3 4
Scale in Miles

EXISTING RECREATIONAL AND INTERPRETIVE FACILITIES

TRAFFIC CIRCULATION

Traffic circulation at Humboldt Redwoods State Park is confined to the two main corridors described earlier: the north-south intertwining of Highway 101 and its older, slower-speed counterpart, the Avenue of the Giants, and east-west running Mattole Road. Nearby waterways (the Eel River, its South Fork, and Bull Creek), dense forests, and steep unstable slopes have generally confined facilities development to the edges of these roads.

Highway 101 is the primary conduit for public access to the park, as well as this part of the state. In the area of the park, Annual Average Daily Traffic volume is approximately 6,300 vehicles in either direction (see Appendix E) *(Caltrans Traffic Volume data, 2000).* Between the heavily populated San Francisco Bay Area to the south and more rural and less populated Eureka to the north, many primary and secondary highways connect with Highway 101. These include a number of freeways in the Bay Area, Highway 20, which carries traffic east and west from Highway 1 and the Central Valley's Interstate 5, and Highway 299, which connects Interstate 5 with Eureka. In turn, Highway 101 affords access to the Avenue of the Giants at several locations and connects with Mattole Road at the Dyerville-South Fork exit.

The most frequently used exit for Highway 101 traffic accessing the Avenue of the Giants is the northbound off-ramp at the southern (Phillipsville) end of the Avenue. The next most commonly used ramp leads to Miranda, which mixes regional high school and junior high school-related traffic with park traffic, resulting in generally higher traffic counts than found elsewhere along the Avenue. Northbound motorists also enter the Avenue at Myers Flat, Dyerville, Weott, and Redcrest, though in smaller numbers. The pattern reverses for southbound traffic, with higher numbers exiting the freeway at Jordan Road (the northern terminus of the Avenue) and fewer at Myers Flat, Weott, Redcrest, and Miranda in descending order. Annual Average Daily Traffic volume on the Avenue northbound is 755 vehicles, while it is only 562 vehicles southbound *(Caltrans Traffic Volume data, 2000).*

The Avenue of the Giants and Mattole Road carry local community traffic in addition to that of park visitors. Both are two-lane roads with occasional sharp turns. Sight distances are poor in some locations. Many turnouts have been constructed along the Avenue to accommodate its heavy load of tourists. Mattole Road has few of these opportunities. The juxtaposition of higher speed local traffic with generally low-speed tourist vehicles can occasionally create conflicts. This is especially true on Mattole Road, the narrower and more twisty of the two.

Except for the first 5.3 miles of Mattole Road running west from Highway 101, the Department maintains no major public roadways in the park. The California Department of Transportation (Caltrans) owns and maintains the Avenue of the Giants, while Humboldt County owns Mattole Road. The Department coordinates with both agencies for ongoing road management.

Too much information

The park has no defined entrance point where visitors must stop to pay fees and are able to obtain park brochures. Only minimal orientation is available from some Highway 101 signs, while others are confusing. This often makes destinations difficult to find. Along the Avenue, eight paved pullouts have been developed with interpretive and orientation signs/panels. The Visitor Center, located at about the midway point along the Avenue of the Giants, offers both written and in-person park information.

CONSTRAINTS ON FACILITIES CONSTRUCTION

The Avenue and Mattole Road are in areas with highly significant resources, including many of the park's memorial groves. Planning for future developments must account for these values. Also, large redwood trees and forest vegetation grow to the edges of both roads. Widening or straightening either would involve destruction of the very resources the park is intended to protect, diminishing the intimacy with nature that even visitors who seldom leave their vehicles can now experience.

The likelihood that the Eel River and Bull Creek will flood again also acts as a constraint upon construction of facilities within their flood plains. Past flooding has inundated park developments along these streams. The park's earliest campground at Stephens Grove, built in the mid-1920s alongside the South Fork, was damaged by the 1955 flood and destroyed by the torrent of 1964. It was never replaced. Other facilities within reach of the river, such as Burlington Campground and the Visitor Center, have suffered less devastating damage, even though they were flooded in 1964.

OVERNIGHT FACILITIES

The park offers a variety of overnight accommodations, including developed family campgrounds, equestrian and group campgrounds, and environmental and trail camps. As the nation's population ages, an increasing percentage of overnight visitors desire more shelter than tents can provide. Many visitors come to the park in motorhomes or pulling trailers. Some parking spurs in the family campgrounds can accommodate moderate-sized self-contained vehicles. There are currently no hook-ups in any of the park's campgrounds, although there are private RV parks nearby.

BURLINGTON CAMPGROUND

This is the oldest existing campground in the park and is located beside the Avenue of the Giants. Construction of the campground began in 1948 in a stand of second growth and residual ancient redwoods near the site of the former Civilian Conservation Corps Camp, adjacent to the Park Headquarters and the Visitor Center. Its 57 campsites are very popular with tourists.

The campground's high summer occupancy rate and the fact that it is the park's only year-round campground have contributed to severe soil compaction beneath its grove of redwoods. Within the last few years, several areas between campsites have been fenced and are recovering. Vegetation is returning, and a layer of protective forest-floor duff and litter is beginning to accumulate. Many large stumps within the campground recall the area's logging history.

HIDDEN SPRINGS CAMPGROUND

Located across the Avenue of the Giants from Myers Flat, this 154-space campground dates from the late 1950s. It replaced the camping capacity lost when the flooding in 1964 destroyed the Stephens Grove Campground. Laid out on a hillside studded with tanoak, madrone, manzanita, and redwood groves, its campsites are carefully designed to fit into the sloping terrain. Many campsites are set back or situated uphill or downhill from their parking spurs, offering more privacy than is attainable in the park's other campgrounds. The campground is located on an old landslide, portions of which remain classified as active. A study is underway to determine the campground's long-term stability.

ALBEE CREEK CAMPGROUND

Some of Albee Creek's 45 campsites lie under the shade of second-growth redwoods, while others are in more open locations on a gentle rise above an adjacent meadow. Built in the late 1960s, the campground is just off Mattole Road, five miles west of Highway 101 and the Avenue of the Giants. Albee Creek is the quietest of the park's campgrounds and the most favored by local residents.

CUNEO CREEK GROUP HORSE CAMP

Cuneo Creek Group Horse Camp

The equestrian campground has access from Mattole Road, west of Albee Creek Campground. The camp was built in the 1970s and occupies part of an old ranch that contains remnant historic orchards and homesites. The camp can accommodate up to 75 horses and their riders in both individual and group sites. It has a shower, toilets, drinking water, corrals, and access to many miles of fire roads and trails open to horseback riding. The five individual equestrian campsites are adjacent to the group camp. The camp has had many improvements, and riders often cite it as one of the best overnight equestrian facilities they have ever experienced.

WILLIAMS GROVE GROUP CAMPGROUND

This campground is located between the Avenue of the Giants and the South Fork of the Eel River, under the ancient redwoods of the Williams Grove. Constructed in the late 1950s and early 1960s, it is able to serve two groups of 60 and 40 persons, respectively. Camping areas are not strictly delineated, so it can also accommodate a single group of 100. Years of heavy public use have contributed to sparse understory vegetation, resulted in tight compaction of the soil beneath the trees, and caused riverbank erosion.

MARIN GARDEN CLUB GROVE HIKE AND BIKE CAMPGROUND

This is a rustic, low-key campground serving relatively small user groups. It is located off of the Avenue of the Giants in Weott, near the shore of the South Fork.

BAXTER AND HAMILTON BARN ENVIRONMENTAL CAMPS

These are two small walk-in campgrounds, one with two sites and one with three sites, in the Bull Creek Flats area and accessible from Mattole Road. Their construction was a result of the Department's efforts during the 1980s to provide more isolated and rustic environmental camping experiences for park visitors.

Table 2

HUMBOLDT REDWOODS STATE PARK GENERAL PLAN FACILITIES CHART

Name	Number of Facilities	Year(s) Constructed
Burlington Campground	58 sites	Begun 1948-1960s
Hidden Springs Campground	154 sites	Late 1950s-1960s
Albee Creek Campground	39 sites	1965-66
Cuneo Creek Group Horse Campground	50 people + horses	1970s
Williams Grove Group Campground	100 people (1 or 2 groups)	1958-1965
Marin Garden Club Grove Hike and Bike Campground	N/A	1970-71
Baxter Environmental Camp	2 sites	1980
Hamilton Barn Environmental Camp	3 sites	1980
Johnson Trail Camp	8 people max	1983
Grasshopper Trail Camp	8 people max	1983
Bull Creek Trail Camp	8 people max	1983
Whiskey Flats Trail Camp	8 people max	1983
Hanson Ridge Trail Camp	8 people max	1983
Indian Orchard Trail Camp	8 people max	1983
Williams Grove Picnic Area	25 tables with stoves	1958
Williams Grove Group Picnic Area	2 groups: 30 & 60 persons	Late 1950s-1970s
F. K. Lane Grove Picnic Area	2 tables	1972
Garden Club Grove Picnic Area	3 tables	1958
Park Headquarters	4 tables	1992
Dyerville Overlook	4 tables	1995
Federation of Women's Clubs Grove Day Use Area	6 tables with stoves	1930s-66
Founders Grove	Trails & interpretation only	1961-67
Big Trees Area	2 tables	1960s
Look Prairie Road Parking Area	4 tables	1995
Cuneo Horse Camp Family Picnic Facilities	3 tables with stoves	1994-95

Sources: California Department of Parks and Recreation records: Humboldt Redwoods State Park Facilities Inventory; Humboldt Redwoods State Park staff

TRAIL CAMPS

The park's five trail camps, including Johnson, Whiskey Flat, Hanson Ridge, Bull Creek, and Grasshopper camps, are situated along backcountry trails and offer the park's most primitive overnight camping facilities. They are linked to the park's trail system for hike-in use. All were constructed in 1983. Piped drinking water and toilets are located near the campsites.

NEARBY OVERNIGHT ACCOMMODATIONS

The Dean Creek Resort at Redway provides camping close to the park. There are also two private RV parks nearby, the Giant Redwoods RV and Camp in Myers Flat and the Stafford RV Park in Scotia. In addition, several inns and motels are located along the Avenue of the Giants, and more new facilities are being planned.

DAY USE FACILITIES

PICNIC FACILITIES

The park has picnic facilities in several locations. Williams Grove, the Garden Club of America Grove, and the Federation of Women's Clubs Grove are the most developed of the day use facilities. Picnic tables are also available at the F. K. Lane Grove, on the Park Headquarters lawn, at the Dyerville Overlook, and several other less visited locations (see Table 2).

These sites offer visitors a variety of outstanding settings. Williams Grove, the Garden Club of America Grove, and the Federation Grove facilities are located in stands of ancient redwoods near the edge of the South Fork or Bull Creek. In addition, the Federation Grove features a four-sided outdoor fireplace designed by renowned architect Julia Morgan, who designed many California landmark structures, including Hearst Castle. The F.K. Lane Grove provides picnic facilities in conjunction with trails and interpretive panels. The Dyerville Overlook takes advantage of the spectacular view of the Eel River and its forest-clad east shore, at its confluence with the South Fork. Picnic facilities at Park Headquarters are next to the park Visitor Center, with its interpretive nature trail and many exhibits, and are easily accessible from the nearby parking lot.

RIVER ACCESS

The park provides river access for swimming, fishing, canoeing, kayaking, and rafting. Numerous access points are located on park property along the Avenue of the Giants. There are also other river access points exist on private property in the vicinity of the park.

PARK TRAILS

The park has continued to expand its trail system over the years. Today, there are over 50 miles of roads and 60 miles of trails that provide access to various sections of the park. Some of the oldest hiking trails are located along the Avenue of the Giants, the South Fork, and Bull Creek. As land was added to the park, some of the previously existing ranch and logging roads came to be used for administrative access or established as trail routes. Most of the park's trail and road system skirts the three large ancient redwood areas, and little access is provided to these practically untouched portions of the park.

EXISTING PARK INTERPRETATION

The primary areas for engaging the public with park interpretation are generally located adjacent to well-traveled automobile routes and are readily accessible to motorists. This is especially true along the Avenue of the Giants, where most of the park's public facilities have been situated.

PARK VISITOR CENTER

The park's Visitor Center is located between the Park Headquarters and the campground at Burlington. The Visitor Center is very popular with park visitors, as well as with casual motorists traveling the Avenue of the Giants. During the late 1990s, the building was enlarged to provide additional space for exhibits, sales, and staff. Currently, there are exhibits on the plants and animals of the area, and on the local history. The Kellogg Travel Log exhibit and the video presentations about the park and the area's past flooding attract most visitors' interest. The Visitor Center also features an interpretive garden and outdoor exhibits, as well as a nearby self-guided interpretive nature trail. Additionally, the Visitor Center serves as the park's volunteer headquarters and provides space for staff meetings and educational seminars.

The park's Visitor Center alongside the Avenue of the Giants

HUMBOLDT REDWOODS INTERPRETIVE ASSOCIATION

Established in 1980, the Humboldt Redwoods Interpretive Association (HRIA) is a non-profit organization whose mission is to support preservation of the park's natural resources and cultural history and to provide education to the public. HRIA assists with the operation of the Visitor Center and its store, offering various publications on such topics as park trails and canoeing and horseback riding in the park. The association also has a website with park information. It funds several additional programs, including an auto tour brochure for motorists traveling the Avenue of the Giants. The auto tour consists of stopping points spread out along the approximately 32-mile route. A companion brochure is available at the Visitor Center and at both ends of the Avenue.

INTERPRETIVE EXHIBITS THROUGHOUT THE PARK

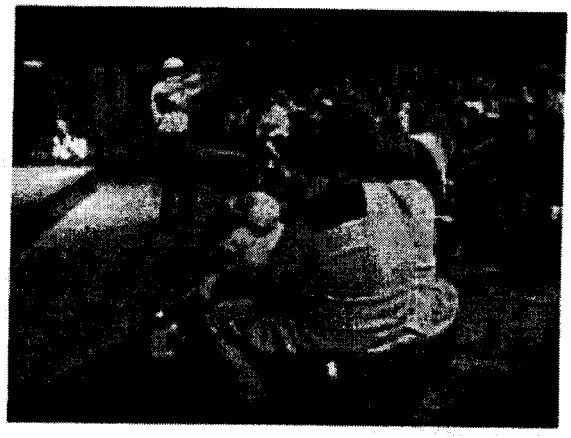
Numerous other easily accessible locations along the Avenue of the Giants offer interpretation to the park's many casual visitors. They include the Dyerville Overlook, as well as day use facilities at Williams Grove, the F.K. Lane Grove, and the Founders Grove. On the Avenue north of the "Humboldt Redwoods State Park" sign at Pepperwood, there is a turn-out with a panel offering site-specific information and orientation to the park. A similar exhibit is located on a freeway turn-out just before the north-bound exit ramp at Phillipsville. Many day use trails have panels that interpret various aspects of the park's natural and cultural history.

INTERPRETIVE PROGRAMS

The emphasis is on quality interpretive programs for the public at Humboldt Redwoods State Park. The Visitor Center offers a variety of interpretive programs, serving as the point of origin for many

of the guided walks that can include such topics as photography and mycology, redwood ecology, flora and fauna, and historical events.

Summer campfire programs are held in three of park's four campgrounds, each of which has its own campfire center. Subjects vary according to the specialties and interests of the staff presenting them. Some are traditional slide shows that interpret local natural or cultural history, while others focus on subjects as varied as cooking and wood splitting. Junior Ranger programs are very popular for children 7 -12 years of age and occur on most days during the summer. A "junior" Junior Ranger program designed specifically for children younger than age seven is also held three to four days a week during the summer months.



"... and the green grass grew all around ..."

Volunteers provide invaluable assistance by conducting frequent interpretive programs, with the exception of campfire programs, which are conducted by staff. Many volunteers receive special training to become docents, enabling them to lead many of the park's guided walks. Guided nature walks are held five times a week during the summer and less often during the off-season. Roving interpretation is a program completely run by docents. This involves impromptu appearances at particularly popular destinations, such as the Founders Grove or the Rockefeller Forest trailhead, where docents share information with visitors and answer questions.

Fewer interpretive programs are offered during the off-season, although programs aimed specifically at school children continue throughout the year.

INTERPRETIVE COLLECTIONS

The Department acquires and maintains collections for several reasons. The first is to preserve elements of the natural and cultural environment original to the park. Second, collections document the natural features and people who have interacted with the plant and animal resources in the park area. Third, collections support the interpretation of themes that are important to the park.

Museum collections play an important role at Humboldt Redwoods State Park. Though the park's collection is relatively small, most of it is on display at the Visitor Center, helping to make that facility one of the park's most universally visited and appreciated sites.

Both the Department and the Interpretive Association own and maintain collections. The collections consist primarily of natural history specimens (mammals and birds) and cultural artifacts that relate to the history of the park. These include Native American artifacts from the Tolowa, Hupa, Mattole, Wailaki, Yurok, Sinkyone/Mattole and Wiyot tribes, as well as artifacts and photographs of early settlers, including the Kellogg Travel Log, and a historic logging equipment collection. The Department's objects have been curated and documented, while those of the association have not.

PLANNING INFLUENCES

SYSTEM-WIDE PLANNING INFLUENCES

Planning for state parks frequently deals with issues that cross park and regional boundaries. Often federal, county, or other state agencies are responsible for providing oversight for various planning related policies and laws such as the National Environmental Protection Act (NEPA), California Environmental Quality Act (CEQA), the National Wild and Scenic Rivers Program, the Clean Water Act, Section 404, and the Americans with Disabilities Act of 1990. Additionally, numerous Department Resource Management Directives help guide planning processes. (See Appendix F for a complete listing of system-wide planning influences.)

DEMOGRAPHICS

The Communities

Many local residents have lived near the park for decades and value it as a recreational destination. Some local residents have requested more interpretive outreach. The park's large volunteer interpretive association benefits from the expertise and enthusiasm of local residents.

Some of the towns along the Avenue have been devastated by past flooding. In addition, their economic bases were impacted by reduced logging activities and by significantly lower traffic volumes when Highway 101 was completed in the early 1960s. Many of these small towns need an economic boost, and many look to improvements at the park to bring that about.

Part of California's growing population.

The Visitors

While local residents frequently use the park, the majority of visitors come from the San Francisco Bay Area and central California, with lesser numbers from southern California, other western states and around the world. (See Table 3)

Statistics from the Department's annual records reveal that there has been a slight downward trend in visitation per year at the park since 1994-95 when total attendance was 658,000. Attendance reached a low of 517,000 in 1997-98, perhaps because of the unusually long rainy season, and rebounded to 570,000 the next year, 1998-99. Campgrounds continue to be nearly empty following Labor Day (mid-September) almost until Memorial Day (mid-May) and often fill only on summer weekends. See Appendix G for further information on visitor statistics.

A survey of park visitors conducted by the Department in 1997 indicated that more than three-quarters of the respondents came to the park by automobile, while approximately one-fifth (21%) drove RVs or motorhomes. The largest numbers of comments on any one subject (10%) concerned desired improvements in facilities for motorhomes, such as adding hook-ups, a dump station, and electricity.

Table 3

HUMBOLDT REDWOODS STATE PARK GENERAL PLAN VISITATION BY AREA

Area	No. of Responses
San Francisco Bay Area	29
Central Valley	8
Eureka	7
Central coast (Salinas)	1
Oxnard	3
Los Angeles Area	10
San Diego	5
California desert (Mojave)	1
Other Western U.S.	18
Southeastern U.S.	8
Midwest and Northeastern U.S.	7
Foreign	2
Total:	99

Northern Calif. = 45

Southern Calif. = 19

Other United States = 33

Source: Summer, 1997, Visitor Survey of 100 park visitors conducted by the park staff for the general plan

It is anticipated that, as California's population grows, assuming no major national or statewide economic issues, such as higher gasoline prices, use of the park will also continue to increase. State Department of Finance projections indicate that Humboldt County's population will grow by 9.8% from 2000 to 2020. The Humboldt County General Plan states that the "chief growth areas of the County are around the communities of McKinleyville and Garberville and the cities of Arcata and Fortuna." Garberville and Fortuna are the closest large communities south and north of the park. While Humboldt County's population will increase only 9.8%, the overall California population will rise by 32% during this same 20-year period, from 34 million to approximately 45 million. The Central Valley, which has been a moderate contributor to park visitation in the past, will see significant population increases, with Sacramento County's population expected to rise 36% by 2020. There will be lesser increases in some of the Los Angeles area counties where the park traditionally draws a significant percentage of its visitation. *(Population statistics: State of California, Department of Finance, County Population Projections with Age, Sex, and Race/Ethnic Detail. Sacramento, California. December, 1998)*

The population of Americans aged 55 or older is expected to be the fastest growing demographic group during the coming decade. In 2000, this group numbered 58.8 million, or 21.4% of the total U.S. population. By 2010, this population is projected to reach 75.1 million. Older Americans will then represent 25.1% of the total U.S. population, an increase of 3.7% from 2000. This is significant for the future of Humboldt Redwoods State Park, as older Americans generally have more leisure time and the ability to buy expensive recreational equipment, such as motorhomes. *(Statistics taken from the "National Population Projections (2000), United States Census Bureau")*

VISITOR ACTIVITIES

Visitors' activities range from organized bus tours and motorists desiring a "windshield tour" of the park's beautiful groves to picnicking, viewing wildlife, taking photographs, camping, hiking, biking, riding horseback, rafting or canoeing, viewing interpretive exhibits, taking tours, or seeking out and visiting special groves or other particular features. The park also attracts visitors who enjoy the extra effort required to gain access to the backcountry, as well as those who may want only to read, rest, and contemplate nature. Steelhead fishing, once a popular winter pastime, is no longer a major factor due to the decline of this fishery.

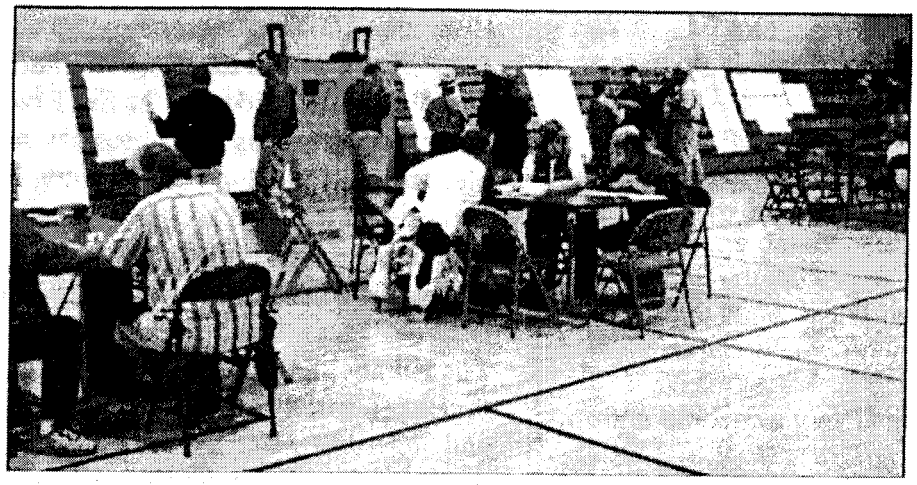
In the 1997 visitor survey, the most frequent activity reported by visitors was viewing redwoods, while seeing the Visitor Center ranked second. Neither of these is surprising considering the quality of the redwood groves along the Avenue of the Giants and the Visitor Center's high visibility and its ease of access.

PUBLIC COMMENTS

Public input, which included comments made at public meetings, letters, workbooks, and phone calls, included many suggestions regarding park management. Those attending public meetings also expressed gratitude for the opportunity to share their views and offered compliments on the draft general plan's proposals.

Some local citizens expressed concerns that the park's growth has negatively affected the surrounding communities. Their apprehension related to three primary areas: 1) reduction of the county's tax base; 2) loss of economic opportunities for future town expansion due to the park's

newer acquisitions; and 3) loss of the rural agrarian character that has characterized the region since the mid-to-late nineteenth century.



Public workshops included the opportunity for one-on-one discussions with General Planning Team members and district and park staff.

Many spoke of the need for improved planning for trails in the park, especially for access to the backcountry and equestrian and mountain bike use. The Avenue Trail Committee presented its concept for a multi-use trail along the Avenue at the first public meeting. Local merchants asked for more communication and cooperation with the park. Some residents supported expanding the existing agreement between the Department and the California Department of Forestry and Fire Protection to provide year-round fire protection and emergency services in and around the park.

Some expressed concerns regarding additional protection for park resources, including prairies and homesteads. Suggestions for facilities included making improvements to existing campgrounds, providing more recreational diversity, and adding more restrooms along the Avenue. Other suggestions included expanding interpretation and providing a larger or more modern interpretive facility. The Visitor Center was expanded subsequent to the meeting at which those particular comments were aired.

At a meeting for campers, park visitors suggested services they would like to see in towns near the park. These included a "good restaurant," bicycle and canoe rentals, and guided tours of the park led by local experts. Visitors also asked for additional educational opportunities, including seminars and programs geared to adults.

Supplementing comments received at the campers' meeting are the results of a survey of park visitors conducted by the General Planning Team and park staff in 1997. The survey consisted of 100 questionnaires, with a return of 99. The outcome of the survey has been a useful source of information during the preparation of the general plan.

In addition to park visitors, local residents, county government officials, and past and present state park employees, several independent groups have had an interest in the outcome of the general plan.

Some comments from the 1997 visitor survey:

- Lower the speed limit through the groves.
- More informational signs
- Hook-ups for some sites
- It's a very beautiful drive.
- Continue to increase environmental education to protect the ecosystem.
- Trails need better signs.
- Keep as non-commercial as possible.
- Everything is very awesome and inspiring.
- Sign on northbound 101 before Miranda is confusing.
- Hard to tell if you are in or out of the park
- Most beautiful spot I've seen. A superior state park.

The Arcata Economic Development Corporation is a private, non-profit organization. Prior to work beginning on the Humboldt Redwoods General Plan, it had initiated a community action planning effort for the towns along the Avenue of the Giants with funding provided by the Six Rivers National Forest as part of its aim to fund community action plans throughout Humboldt County. The corporation worked cooperatively with the county on a county general plan update to address planning issues related to the Avenue of the Giants area.

The Humboldt County Trails Coalition brings together a variety of interest groups, businesses, and government agencies to support the development of trail networks within the county and region. It has provided organizational assistance to the local Avenue Trails Committee for the promotion of a multi-use trail along the Avenue of the Giants during the park's general planning process.

Several community services and water districts from the towns participating in the community action planning effort were concerned with the degree that the Humboldt Redwoods State Park General Plan might affect their interests.

In addition, numerous letters from individuals and interest groups around the country articulated support for continuing protection of the redwood forest and its ecosystem, as well as the park's cultural resources.

CARRYING CAPACITY

Public Resources Code Sections 5001.96 and 5019.5 provide basic direction for ensuring that carrying capacities are considered as part of any park facility development. Since the code does not define "carrying capacity," it is understood here to mean a land's inherent ability to sustain both the integrity of its natural systems and the land uses dependent upon them over time. It implies that there is a point in any system after which the ability to regenerate is exceeded by demands on the system, and a cumulative net loss results.

An ideal carrying capacity would result in no cumulative net losses in any of the resource values (natural, cultural, aesthetic, or recreational) of a unit due to human use (activities or facility development). However, many seemingly insignificant effects tend to be permanent and cumulative, and the legislative intent (in the Public Resources Code) is to avoid long-term degradation of a resource-based park system. Significant resource damage can occur instantly due one individual's actions or, over a long period of time, it may be brought about by many people. Changing demographic types and patterns of recreational uses may also contribute to impacts upon the visitor experience over time.

Impacts can be reduced or avoided by taking management actions and initiating proper mitigation measures. Capacity limits, use regulations and enforcement, education and interpretation, site investigations and monitoring, planning and proper design, and staff presence all contribute to minimizing the impacts visitors have on park values. The first step of guiding future public access or use of a park is to determine the location and significance of the park's resource values.

Establishing land-based carrying capacities, quantified in terms of visitor attendance levels, will be addressed through inventorying and monitoring in subsequent management planning efforts. When site-specific proposals for land uses or facilities are to be prepared, various resource maps of the proposed project location will be checked for resource constraints and sensitivities during the project's preliminary planning phases. Site-specific investigations may also be necessary.

ISSUES ANALYSIS

The North Coast Redwoods District requested that the Department prepare a general plan for Humboldt Redwoods State Park primarily to help guide future management in a number of arenas. Among these were resource management, acquisition policy, recreation planning, interpretation, and ongoing coordination with other agencies in the vicinity of the park. As the general planning process proceeded, additional issues were identified and incorporated into the planning process. The most significant of those additional issues included:

1) Improvements to the park's trail system
2) Management of agricultural lands following their acquisition by parks
3) Future of the Whittemore and Holbrook groves

The issue statements in this section summarize the issues that the General Planning Team identified through the planning process. Discussion of goals and guidelines relating to the issues follows in The Plan Section.

OPTIMAL RESOURCE PROTECTION AND PRESERVATION

Although Humboldt Redwoods State Park encompasses thousands of acres of pristine redwood forest, one of the most critical and long-standing resource issues to be addressed in this general planning effort is the ongoing threat to some areas of the park's redwood ecosystem.

Some ancient forests within the park historically have suffered major negative impacts, particularly erosion from devastating floods. Prior to becoming a part of the park, much of the land in the Bull Creek watershed was severely altered by extensive timber harvesting. Although rehabilitation efforts are underway, miles of untreated haul roads and associated skid trails from the logging period continue to contribute unnaturally large amounts of sediment, rock, and other less visible damage to a very impacted watershed, especially in its upper reaches. District watershed management efforts continue to address the impacts of this past timber harvest activity through ongoing restoration efforts, but years of work lie ahead before natural forest ecosystems can be renewed.

Providing public use facilities has, in some cases, adversely impacted the redwood forest ecosystem and its sensitive species. The campground development that occurred during the 1950s and 1960s

placed public overnight use facilities within ancient and large second growth redwood groves at Williams Grove, Burlington, and Albee Creek. Years of concentrated use, especially at the Williams Grove Group Camp and at Burlington, have resulted in extreme soil compaction and the total loss of duff in many places.

Invasive non-native plant species have the potential to impact park resources by decreasing biodiversity, creating abnormal competition with native species, and providing poorer quality habitat for wildlife. Unintended introduction of pathogenic organisms, such as sudden oak death syndrome, could decimate native park vegetation. Park management will make every effort to develop programs and measures needed to minimize introduction of non-native species and pathogens.

Within the Rockefeller Forest, there are portions of the redwood ecosystem that are so untouched by the human presence that they remain one of the most perfect ancient coast redwood ecosystems in the world. However, continued elimination of corridors connecting with other wildlands, primarily from commercial timber harvesting on adjacent public and private lands, coupled with land conversions to housing and other uses could conceivably result in the park becoming biologically isolated. Plant and animal species that depend on the park for habitat could find their natural ranges reduced, further hindering the mixing of genetic materials and resulting in less biodiversity both inside and outside the park. The general plan's goals and guidelines recognize the value of sustaining genetic diversity.

Additional impacts on natural and cultural resources could originate from outside park boundaries when adjacent lands are managed in ways that are incompatible with the protection of park resources. Typical examples include removal of vegetation and destabilization of soils in upper watersheds and loss of trees near the tops of the windward sides of ridgelines.

Traditionally, cultural resources within the park have often been overlooked as management's efforts have centered on the park's magnificent prime resource, the coast redwoods. Humboldt Redwoods State Park would benefit from heightened identification and preservation of the park's cultural resources and interpretation of cultural stories within the context of the natural setting.

FUTURE LAND ACQUISITION FOR HUMBOLDT REDWOODS STATE PARK

Though the park protects several large areas of unrivaled redwood forest ecosystems, the present and future size of the park concerns county government and a segment of the local public. The Humboldt County General Plan, which is currently undergoing revision, has proposed language that may attempt to impose stipulations or identify the county's ideal limits for the Department's future acquisitions.

The Department considers land acquisition from willing sellers as one of several possible alternative methods for preserving resources or for resolving specific park management issues. Acquisition from willing sellers may continue as appropriate to meet the goals as outlined in this document.

Most of the park's land has been first acquired by the Save-the-Redwoods League through purchase at fair-market value from willing sellers and then conveyed to the state for permanent protection. Since its foundation in 1918, the League has worked to preserve America's ancient redwood forest –

of which Humboldt Redwoods State Park is considered by many to be the most magnificent example. The Department continues to work with the League and with neighboring landowners to further the protection of the park's prime resources through land acquisition, forest restoration, and public education.

OPPORTUNITIES FOR HIGH QUALITY RECREATION AND INTERPRETATION

Although the park is popular for its recreational diversity, from developed facilities to the remote backcountry, investigation of its recreational facilities' capacities and future opportunities were established as an important issue for this general plan.

Like many parks, much of Humboldt Redwood's trail system utilizes roads, utility easements, and trails that existed prior to the land coming into park ownership. Most of these routes had been poorly designed, constructed, and maintained. Even though many of them represented threats to the park's resources, they nevertheless were a quick and easy solution for providing public access. In recent years, the North Coast Redwoods District either has removed, re-engineered, or rerouted many of these inappropriate roads and trails, and new ones are now being designed and constructed to reduce resource impacts and provide long-term sustainability.

In addition to the existing trail system, there has been sustained public interest in developing a new trail that would parallel the Avenue of the Giants, as well as requests from the public for more bicycle connections between park facilities. Proposals for such new elements reveal a need for a comprehensive planning effort to examine the park's entire road and trail circulation in depth.

Besides the Rockefeller Forest, the park also contains thousands of acres of ancient redwood forest, where limited recreational access exists side by side with management efforts aimed at preservation and restoration of the park's prime resource. Managing remote ancient redwood forests to accommodate additional compatible recreational activities could raise their profile and draw more visitors who enjoy backpacking and an experience of relative isolation.

Overnight use of the park is currently limited to camping with or without a self-contained shelter (tent or RV) in facilities that range from developed to primitive. Additional types of shelters, such as wood stove-heated tent cabins, could be incorporated into the park. These could encourage increased park use before and after the current busy season when spring and fall rains discourage all but the hardiest campers.

Although the park's visitation has remained flat or declined during the past decade, it is likely that demand for its recreational facilities will increase in the future, given the overall population growth in the region and in the state. Land that would be suitable for facilities development is rare in the park. Increasing certain types of high-use facilities within the Bull Creek watershed may be problematic, primarily because of natural resource constraints but also because of the limitations posed by Mattole Road. The steep terrain and the river running next to much of the Avenue of the Giants further limit development possibilities.

Public comments expressed apprehension that the Department might increase recreational capacities as a matter of course over the years. The general plan proposes an approach that will address the

concerns of the adjacent communities, while accommodating increases in recreational opportunities, but only to levels that will not unduly impact the park's natural and cultural resources.

The park's interpretation, whether campfire programs, guided walks, or the auto tour, is enthusiastically received. Those attending both the general plan campers' meeting and the public involvement meetings requested more interpretation, especially more educational opportunities for adults. Campers asked for more guided walks, lectures, and seminars, while local residents requested more interpretive outreach programs for the communities. The general plan proposes goals and guidelines that will make these kinds of programs available, as well as more interpretive opportunities for children.

Comments from representatives of the disabled community expressed the desire that the Department make it a priority that significant features at Humboldt Redwoods State Park be accessible to people with disabilities. In some cases, providing an equivalent experience may be necessary because the topography of large areas of this park might otherwise prevent visitors with disabilities from access to popular destinations.

MAINTAINING A CLEAR PATTERN OF CIRCULATION

Humboldt Redwoods State Park lacks a clear identity, both along the Highway 101 corridor and the Avenue of the Giants. Existing signage on Highway 101 refers to the park simply as "Redwood Parks" in several instances. Some areas of the park are better known by the names of the areas that particular freeway exits serve, such as Burlington or Founders Grove, rather than as parts of Humboldt Redwoods State Park. Often visitors exit the freeway searching for a particular park destination and are confused because of the lack of an identifiable entrance where they can obtain park orientation literature. Many opportunities exist for improvements.

The Avenue of the Giants is a critical transportation link that allows the outside world to experience the park. The roadway also serves as a circulation route for park staff traveling between facilities. Nevertheless, because the Avenue passes through towns and occasionally crosses or parallels the freeway, it lacks a "park" ambiance along its complete length. Motorists are often confused about whether or not they are even in the park. Private recreational facilities along the highway sometimes are mistaken for park operated facilities. This general plan offers methods for more clearly identifying the Avenue as a link within the park, as well as recognizing its historical qualities.

A segment of the Avenue of the Giants affording an intimate glimpse of the redwood forest.

INCREASING OPPORTUNITIES FOR INTERACTING WITH COMMUNITIES

The park has the potential for playing a larger role in improving the economies of the neighboring communities. Historically, the economy of the local communities has been integrally linked with the prosperity of the logging and fishing industries and, to a somewhat lesser extent, with the agricultural interests in the area. With continued reductions in logging activities and limited employment opportunities in fishing and agriculture, Humboldt Redwoods State Park offers a means to enhance the flow of tourism dollars into the local economy. There should be both an awareness of this possibility and the ability for the park and local communities to work together to better meet visitor needs.

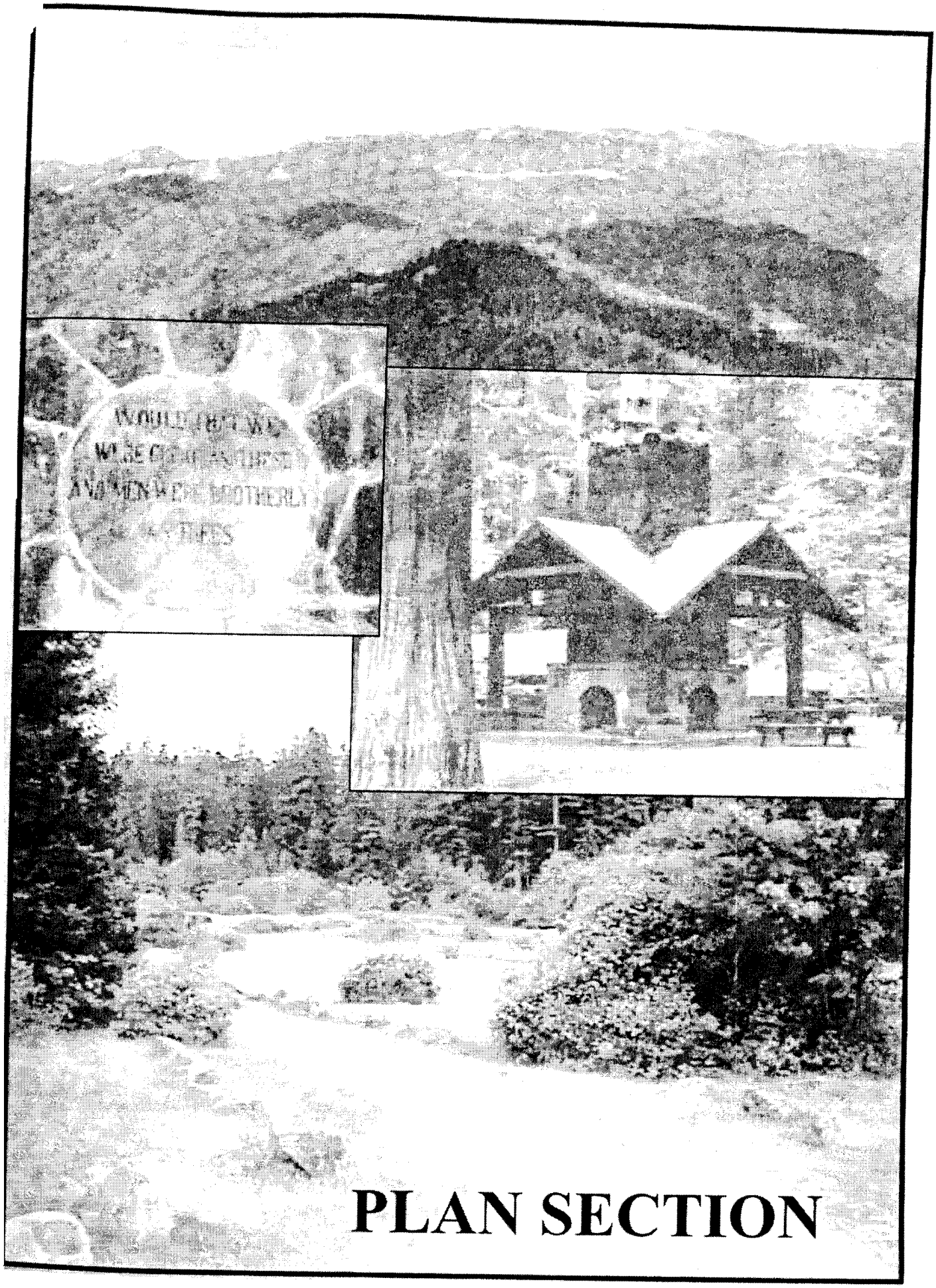
The park and several adjacent communities share a transportation corridor (the Avenue). Enhancements to create a more enjoyable visitor driving experience could have benefits for the communities.

PRESERVATION OF RURAL AGRICULTURE WITHIN THE PARK

Public input indicated a desire that Humboldt Redwoods State Park and the Department play more active roles in preserving the agricultural history of southern Humboldt County. This included requests by some local residents and the Farm Bureau that newly acquired agricultural lands within the park, rather than being converted to other (park) uses, be allowed to continue in historical farming use through a lease-back program to local farmers. Departmental policies and practices, deed restrictions, and other constraints related to acquisition of designated agricultural lands, and the effects of continued agricultural use on the park's operational and resource management needs, are directly related issues.

THE FUTURE OF THE WHITTEMORE AND HOLBROOK GROVES

The Whittemore and Holbrook groves in Redway are the most distant of Humboldt Redwood's detached properties and the only ones not bordering on the Avenue of the Giants. The groves have little connection with Humboldt Redwoods as a whole. They are more closely associated with the communities of Garberville and Redway, which are near them. Both groves contain stands of ancient redwood forest, but the landscape surrounding them is dominated by grasslands and oaks rather than the mixed evergreen forests that are found throughout and around most of the remainder of the park. The groves' discontinuity with the rest of Humboldt Redwoods State Park, coupled with their closeness to the District's Piercy Sector, dictate that they be operated through that sector, perhaps as an independent redwood reserve. Administrative needs, coupled with the groves' overall resource management requirements, are part of this general plan's recommendations for management goals.



PLAN SECTION

THE PLAN SECTION

The Plan Section establishes the long-range purpose and vision for the future of Humboldt Redwoods State Park. Specific goals and supporting guidelines further clarify this purpose and vision. These are designed to rectify the issues and problems described in the last section, while providing a solid foundation for continued resource protection, preservation, and rehabilitation, as well as development and interpretation at the park. The goals and guidelines also serve as design and implementation guideposts for required subsequent management and development plans.

The general plan is, by necessity, visionary in nature, although much of its content is driven by current issues. A general plan cannot predict the future. Therefore, it is designed as a dynamic document that allows managers the opportunity to incorporate newly emerging technologies and improved management concepts for resolving current issues, along with the ability to provide adequate direction for resolving those that may arise in the future.

DECLARATION OF PURPOSE

The impetus for the establishment of Humboldt Redwoods State Park was to preserve those exceptional stands of ancient redwood forest in the Eel River Basin that were under the immediate threat of logging. Subsequent additions included land containing ancient redwood, Douglas fir, and oak forests and their supporting ecosystems, cut-over land that had been forested, and land containing cultural resources. Additions also included land to ensure adequate protection of alluvial flat redwood stands susceptible to flooding exacerbated by human activities.

The Declaration of Purpose describes the purpose of the park and is the broadest statement of management goals designed to fulfill the vision for the park. A Declaration of Purpose is required by the Public Resources Code, Section 5002.2(b), "setting forth specific long-range management objectives for the park consistent with the park's classification . . ."

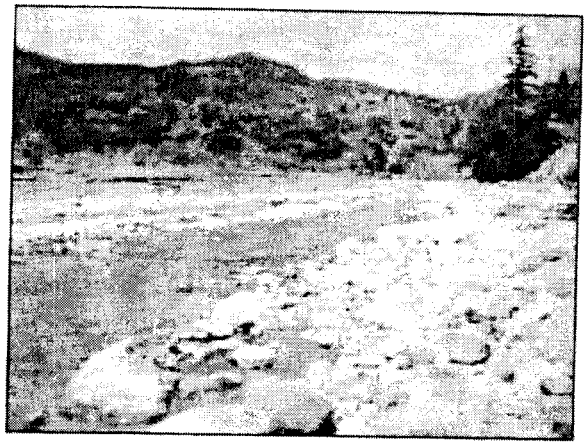
The Declaration of Purpose is as follows:

> *The purpose of Humboldt Redwoods State Park is to protect, preserve, and perpetuate the outstanding natural and aesthetic values of the ancient redwood forests and their associated ecosystems found in the lower Eel River watershed. Through careful stewardship, the solitude and grandeur of the park's cathedral-like forests, its inherent wilderness values, and significant cultural features shall remain unimpaired for the enjoyment of current and future generations.*
>
> *These purposes will be accomplished through appropriate resource management programs that promote the Department's mission to protect and preserve significant natural and cultural resources. Interpretive programs for visitors shall instill an appreciation for the park's special features, the change in philosophy toward the redwoods over past decades, and an ethic for conservation. The park's features, programs, and services will provide for a high-quality visitor experience.*

PARK VISION

The park vision provides guiding images of what the park should be like in the future, following implementation of the general plan:

The park is a mosaic of towering ancient and second growth redwood forests, prairies, and shrublands, largely untouched by humans. It stretches from valley bottoms to ridge tops and is bisected by cool, clear streams, which support a host of aquatic life, with native fish returning to spawn in great numbers.



The park stretches from valley bottoms to ridge tops and is bisected by cool, clear streams.

Natural processes and resource management promote healthy ecosystems, thereby providing habitats that support a wealth of both frequently occurring and rare species of flora and fauna. As the heart of one of the largest remaining ancient redwood forests, the park serves as a significant and critical natural area that is connected to other natural areas by a network of habitat linkages that allow for free movement and interaction of plants and animals.

Interpretive programs and facilities provide visitors with a heightened awareness of the significance of the expansive forests that once occupied the redwood region and the priceless value of the remaining ancient redwood ecosystem. Interpretation can promote a strong conservation ethic.

Significant cultural sites and features, representing the historic spectrum of human interaction with this redwood ecosystem, are preserved, protected, maintained, and interpreted. Interpretation evokes an appreciation of the park's indigenous inhabitants and establishes a connection with and reflection upon the pioneering spirit of later arrivals.

Developed facilities harmonize with the surrounding natural grandeur and complement the significant cultural areas that represent earlier periods. Visitors searching for more tranquility are accommodated by trails that lead to increasingly remote locations. These trails provide solitude in unspoiled natural areas where human problems and concerns may be forgotten.

Visitors are attracted in all seasons to the exceptional recreational experiences, aesthetic qualities, and the support facilities provided by the park and in nearby communities. They and their succeeding generations return, again and again, passing on forever this priceless legacy.

GENERAL PLAN MANAGEMENT GOALS AND GUIDELINES

DEPARTMENT MISSION

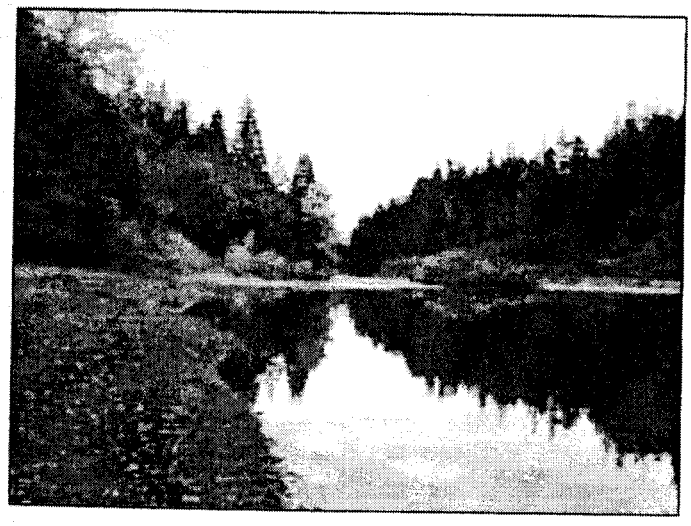
Management of Humboldt Redwoods State Park is directed by a hierarchy of mandates. The most general is the Department's Mission, which is to:

> *Provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.*

CLASSIFICATION

Further refining the responsibilities of the Department in its operation of the park is the unit's classification as a state park. A partial definition from the Public Resources Code, Section 5019.53, follows. See Appendix I for the complete text from the code.

> *State parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora . . . .*
>
> *Each state park shall be managed as a composite whole in order to restore, protect, and maintain its native environmental complexes to the extent compatible with the primary purpose for which the park was established.*



The Eel River and other streams are popular park destinations

PARK-WIDE MANAGEMENT GOALS AND GUIDELINES

This section presents the goals and guidelines that apply park-wide for resource management and planning facilities for public access, recreation, interpretation, and park administration in a setting where many resources are rare and sensitive. It addresses planning issues that apply to all geographic areas of the park. These goals and guidelines, as well as those for specific areas of the park, are driven by the Declaration of Purpose and Park Vision.

PARK-WIDE GOALS AND GUIDELINES FOR NATURAL RESOURCES

The Department's Mission mandates efforts to "preserve the state's extraordinary biological diversity, protecting its most valued natural resources." Additionally, the park's Declaration of Purpose aims to achieve the goal to "protect, preserve, and perpetuate the outstanding natural and aesthetic values of the ancient redwood forests and associated ecosystems ... through careful stewardship..." in order to progress toward the ideal image of the park described in the Park Vision.

A general plan does not provide specific inventory and monitoring protocols to assist in the protection of special species. A large number of protocols are already established and in use by other agencies, groups, and individuals. Additionally, the Department has an Inventory, Monitoring, and Assessment Program (IMAP) that has established inventory and monitoring protocols for state parks statewide for vegetation and wildlife. These protocols are the same as those used by other agencies and organizations, in most cases. For most special animals, there are species-specific protocols that will be provided/recommended by the California Department of Fish and Game and/or the U.S. Fish and Wildlife Service.

Goal

Preserve, maintain, interpret and, where necessary, manage and rehabilitate the park's numerous interdependent ecosystems, especially its ancient redwood forests, in order to protect physical features and perpetuate the natural and sustainable functions of plant and animal life.

Guidelines

- Provide special protection for federally and state listed species, as well as for other exceptional natural resources, including Species of Special Concern as designated by the Department of Fish and Game and protected by federal law.

- Using resource specialists, inventory and monitor the park's natural resources to document their distribution and health. Scientific research should be conducted with as little manipulation and/or disturbance as possible, with the intent of gaining a better understanding of methods for conserving rare species and ecosystems.

PLANT LIFE MANAGEMENT

Redwood Forests

Since its inception, the State Park System has acquired 55% of the ancient redwood forest remaining in the state and has gained the expertise to manage this precious resource. Initial facility development at the park placed day use picnic areas and campgrounds in ancient redwood groves located near the original Redwood Highway. Over many decades, cumulative visitor impacts have severely compacted soils and caused the loss of ground layer vegetation. Soil compaction is detrimental to plant root systems, especially the shallow-rooted redwoods. Compacted soils have reduced pore space, resulting in poor water-holding capacity and increased runoff and erosion.

At Burlington Campground, fenced enclosures have been erected to protect and promote regeneration of ground vegetation. Shrub and herbaceous species have been re-established in these protected areas. Comparison of soil compaction measurements between the enclosures and the adjacent public use areas at Burlington reveal marked differences. Soils in the enclosures are about half as compacted as in the public access areas.

Goal

Protect the ecological integrity of the redwood forests within the park.

Guidelines

- Identify those developed locations in ancient redwood forests most heavily impacted by visitor use and design and implement vegetation rehabilitation and soil compaction reduction programs, consistent with the need to provide visitor services. The program may include such measures as fenced enclosures and temporary or permanent relocation of visitor use areas. Sites devoid of ground cover and a duff/litter layer are of high management priority.

- Manage second growth redwood forest to encourage ancient forest characteristics, where appropriate. Consider creating connections to ancient redwood forest by utilizing sufficiently large areas of high quality second growth redwoods and associated species as protection, where feasible.

- Maintain a park-wide Redwood Reforestation Program that includes standards for seedling reproduction and planting.

- Monitor and take appropriate actions to protect ancient redwoods from possible impacts caused by development and reutilization of adjacent or nearby private property.

Vegetation Management

Preservation and perpetuation of representative examples of natural plant communities are statewide mandates for the Department. In addition, key goals for natural area management in the State Park System are to restore, protect, and maintain native ecosystems and indigenous flora and fauna.

Past management practices, including logging, agricultural production, and fire suppression have changed the ecological conditions under which native plant communities originally flourished within Humboldt Redwoods State Park. These changes have created shifts in species composition, alterations in the structure of plant communities, and a change in the pattern of communities at a landscape level. Concurrently, dependent wildlife populations have declined in some locations.

The California Department of Fish and Game Natural Diversity Data Base classifies two native plant communities within the park as rare, the Redwood Series (the subtype found on alluvial flats) and the Black Cottonwood Series. These rare plant communities are essential habitat for both rare and locally important wildlife species.

Goal

Protect, perpetuate, and where possible, rehabilitate the native vegetation complexes of Humboldt Redwoods State Park through active resource management programs.

Guidelines

- Prepare a Vegetation Management Plan that addresses re-establishing the natural ecological processes essential for the development and maintenance of native plant communities, including prairies, ancient redwood forests, and riparian woodlands. It should include specific goals and guidelines for rehabilitation of natural vegetative processes, including redwood reforestation, general revegetation, exotic plant management, and prescribed fire.

- Assess factors affecting the health of the redwood forest ecosystem through monitoring identified key measures and important indicator species for ancient and recovering redwood communities. If monitoring shows a decline in health, natural resource specialists will attempt to determine the cause and take action to reverse the decline, where possible.

- Control and/or eradicate non-native species on a long-term basis to prevent their establishment and spread. Priority for control efforts should be given to those species that are most invasive, ecologically detrimental, and/or conspicuous in the park, such as broom, periwinkle, and Himalayan blackberry.

- Use only non-native species that are incapable of naturalizing and spreading into other areas of the park for interpretive purposes or for recreating cultural landscapes. Species used should not require permanent irrigation systems, with the exception of non-native species planted in areas adjacent to employee housing. Native vegetation employed in developed recreational areas may be irrigated until established. Those areas not identified as culturally significant will be rehabilitated to natural conditions according to district management plans.

- Use only species that are appropriate to the site and that are obtained from native plant species within park boundaries or from nearby areas with similar ecological conditions in habitat rehabilitation projects. This includes transplanted cuttings and rootstocks or seedlings and saplings grown from collected seed that are genetically compatible. Ensure that all mulches are free of foreign seed.

- Avoid fragmenting intact, unspoiled ecosystems when constructing new facilities, such as roads.

- Take measures to prevent the spread of tanoak disease and other potentially problematic plant diseases.

- Consider acquiring land or conservation easements from willing sources that would act as a protective buffer for critical resources or that are essential for completion of park resource management program goals.

Special Plants

Special plants are those listed annually on the California Department of Fish and Game's Special Plant List. Species listed by the U.S. Fish and Wildlife Service, California Department of Fish and Game, and CNPS as rare, threatened, or endangered are a subset of the Special Plant List. Species that are proposed for listing by the federal government and state candidates for listing are legally protected as if they were listed. Species listed by CNPS on their 1A and 1B lists meet the criteria for listing and are protected as such. Other species that are appear on lists 1A, 1B, and 2 likely meet the criteria for listing and should be protected as such. Some species on CNPS lists 3 and 4 may also meet the criteria for listing and thus warrant protection. Many species on list 4 are locally significant, which means they occur at the edge of their range, occur in areas where the species are especially uncommon, exhibit unusual morphology, or occur on unusual substrates and should also be protected.

Humboldt Redwoods State Park supports known populations of Humboldt County fuchsia, heart-leaved twayblade, California pinefoot, redwood lily, and white-flowered rein orchid. There is also suitable habitat for other special plant species suspected to exist in the park, including Tracy's tarplant, and maple-leaved checkerbloom.

Goal

Protect special plants (rare, threatened, endangered, endemic, or locally significant populations) within the park to manage for their perpetuation in accordance with state law.

Guideline

- Protect all special plants to the degree necessary to maintain or enhance populations. Establish a monitoring program for known special plant locations on a long-term basis to assess the health of populations and take corrective management actions when necessary.

- Ongoing efforts should occur to perform inventories to contribute to an updated comprehensive plant list for the park and to identify special plants, to monitor the condition of special plant populations, to develop partnerships with other research entities, and to provide public education to park visitors about respecting plant resources. The specific methods for implementing these programs will be developed in the future Vegetation Management Plan.

ANIMAL LIFE MANAGEMENT

Changes in land use that have altered local vegetative complexes within the park have also impacted native wildlife populations. The protection and perpetuation of these populations is contingent upon the successful rehabilitation and continuance of native plant and aquatic communities, combined with the removal of exotic plant and animal species.

Goal

Rehabilitate, protect, and ensure the perpetuation of native wildlife species populations at Humboldt Redwoods State Park.

Guidelines

- Protect all sensitive native wildlife species and their habitats. Specific programs, using sound ecological principles and professionally accepted methods, are necessary to protect and rehabilitate sensitive animal populations and their habitats. Include all species that are locally important (including endemic species), whether or not they appear on any endangerment list, as well as those protected by federal and/or state law. A comprehensive list of species requiring special management attention should be prepared and regularly updated.

- Rehabilitate degraded wildlife habitat in those areas where it will not recover in a reasonable time if left untreated.

- Avoid ecological imbalances resulting from human activities. If it is necessary to regulate animal populations, use methods based on sound principles of ecosystem management that are consistent with Department Resource Management Directives.

- Where appropriate and possible, develop a monitoring and control plan with surrounding property owners and government jurisdictions to reduce the numbers of non-native animals, such as feral cats, that enter the park. Initiate a program for educating park visitors and the general public about the negative effects of releasing and feeding any animals in the park.

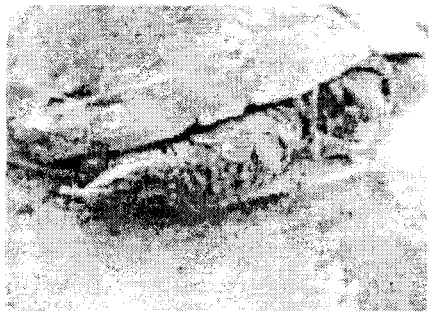
- Inventorying and monitoring of special animals and other species is desirable to identify population trends of these sensitive ancient coniferous forest species. When feasible, the Department should support scientific research studies within the park that provide mapping, establish monitoring programs, and furnish data and analysis about the distribution and condition of natural resources. For the successful long-term management of wildlife populations, establishment and maintenance of a process to track and analyze species presence and population health within and movement through the park is recommended.

- Consider reintroduction of eradicated species only if historical documentation exists to confirm the past presence of the species of interest within the area and if suitable habitat exists within the park and the region to support its survival. Reintroduction of a species will be conducted using sound ecological methods. Animals to be reintroduced will come from local populations or the closest, most genetically similar populations.

- Reduce and, where possible, eliminate wildlife access to human food and garbage by using wildlife-proof trash containers throughout the park, including administration and residence areas. Educate the public about the detrimental effects that supplanting wildlife food sources with human food can have on the ecological balance of the park and surrounding regions.

- Restrict vehicular access to the river, where necessary, to protect sensitive amphibian and aquatic wildlife, as well as water quality. Inventory and monitor river access points to determine the extent of public use impacts.

- Avoid impacts and disturbance to critical wildlife habitat areas, such as riparian zones, during the breeding season; riparian understory should be retained as a dense and structured vegetation layer. Activities, such as mowing in redwood reforestation plots, should be done after the breeding season to avoid disturbance of ground nesting birds.



The northwestern pond turtle is the northern subspecies of the western pond turtle and is found in the aquatic habitats at the park. It is one of the park's animals requiring special consideration when planning for public use.

Special Animals

Many native wildlife species have declined considerably in the past century, both in California and worldwide. Preservation and perpetuation of sustainable populations of native wildlife species are statewide goals for the Department. The State Park System's goal to rehabilitate, protect, and maintain native ecosystems and indigenous flora and fauna is especially important in Humboldt Redwoods State Park because of the unique ancient forest ecosystems and diverse collection of wildlife dependent on these habitats.

Shifts in plant species composition have caused shifts in habitats that have increased some populations of sensitive species and decreased populations of others. Increased levels of corvids, such as ravens and Steller's jays, are often associated with areas of concentrated human presence and can have detrimental effects on other native species, such as the marbled murrelet.

Several wildlife species present in the park are classified as Species of Special Concern, threatened, or endangered by the state and/or federal governments (see Appendix D). These sensitive species play an essential role in the functioning of the ecosystems of the redwood region and are dependent on the protection and perpetuation of their habitat. Some wildlife are dependent on the ancient redwood and associated forests, such as the marbled murrelet and northern spotted owl. Others, such as the chinook salmon, steelhead, and foothill yellow-legged frog, depend on the South Fork of the Eel River, Bull Creek, and their tributaries.

Goal

Protect and where appropriate restore special animals (California species of concern, threatened, endangered) within Humboldt Redwoods State Park and manage for their perpetuation in accordance with state and federal laws.

Guidelines

- Minimize trails in marbled murrelet and spotted owl nesting habitat. Trail building and maintenance activities in these areas, including the hazard tree removal program, should be minimized during the breeding season and shall comply with the Endangered Species Act and applicable federal and state regulations.

- Factor the needs of sensitive aquatic species into the timing and implementation of any work that results in streambed alteration or riparian disturbance to avoid adverse impacts to these species.

- Ensure that culverts placed beneath park roads and trails are properly sized and are designed for optimum stream velocity to accommodate the safe passage of anadromous fish. Drainage patterns of placed culverts should follow the natural grade of the streams as closely as possible to avoid preventing or severely impeding fish passage. Culverts used to facilitate stream flow across roads and trails should be installed using the most current best management practices to ensure the protection of park resources. This issue should be addressed in a future management plan.

- Inspect buildings for sensitive species, particularly for bat populations, and establish protection measures for any species identified prior to major maintenance, construction, or structure demolition.

- Implement a program of field surveys to record locations of nests and map the distribution of sensitive species about which little is known. These studies may include the northern spotted owl, bald eagle, peregrine falcon, Humboldt marten, Pacific fisher, and other Species of Special Concern. Once their distribution is more fully understood and documented, this data will be included in resource planning and management activities. These activities shall include protection of special habitat elements, such as snags and hollowed-out trees.

HABITAT LINKAGES

Habitat linkages are lands held and managed primarily for their natural resource values with the purpose of making a connection between two or more larger land areas. Together, these lands form a habitat suitable for facilitating the movement of animals and dispersal of plant seed. Protecting linkages within the park, as well as between the park and other wildland areas, is imperative to maintaining ecosystem health and supporting regional conservation. Because of the importance that large-diameter, ancient coastal coniferous forests have for federal- and state-listed species and because of the decline of these habitat types outside park boundaries, priority for corridors should be given to those lands that functionally connect such forest ecosystems.

Goal

Preserve, rehabilitate and, as appropriate, establish new effective habitat linkages between the park and other protected lands in order to maintain or increase species abundance and diversity within ancient forest ecosystems, riparian areas, streams, and other significant wildlife habitat core areas.

Guidelines

- Establish a program to collect baseline information for monitoring the health and function of core areas and habitat linkages as a high management priority. The effects of human uses and impacts, as well as natural processes such as erosion and weather, on the integrity of the park's ecosystems should be measured and, where necessary, mitigated or remedied.

- Monitor medium-sized and large mammals, as well as selected reptiles, amphibians, and birds, as necessary, to gauge the effectiveness of habitat linkages, identify wildlife population trends, and ascertain potential future habitat linkage needs.

- Maintain working relationships with other land owners, such as the Bureau of Land Management, to coordinate efforts to identify and preserve habitat linkages.

- Based on soundly justified environmental needs, consider establishing new linkages with habitats on other protected lands through acquisition or appropriate conservation easements from willing sources, subject to the availability of support funds.

BUFFERS

Buffers, such as dedicated open space, standing timber, and agricultural lands, are areas that lie between the park's boundary and adjacent developments and serve to protect the park's natural and cultural resources. Land uses outside park boundaries can negatively impact parklands with visual and audible intrusions, exotic plant infestations, excessive and destructive winds, chemical pollution, competition and predation from domestic pets, wildfire, artificial light, noise, and loss of foraging or nesting habitat. Buffers may be necessary where activities on neighboring lands create adverse impacts, such as erosion and sedimentation on existing park watersheds and wind throw on ridgetop areas.

Goal

Establish, maintain, and preserve buffers around existing significant park resources as protection against adverse environmental impacts.

Guidelines

- Perform studies to assess possible adverse impacts to prime park resources from such conditions as wind throw on ridgetops and degraded quality of watersheds.

- Establish and maintain cooperative working relationships with local jurisdictions responsible for zoning and land use management.

- Seek cooperative agreements with adjacent landowners, neighbors, and local jurisdictions to provide for needed buffers adjacent to existing park resources.

- Consider acquiring neighboring properties or conservation easements from willing sources to serve as buffers against such impacts as wind throw and upper watershed impacts, where studies document an adverse or potentially adverse impact to the park's prime resources.

WATERSHED MANAGEMENT

Historic land uses, such as logging and road construction, have altered many of the natural processes in the park's watersheds that are tributaries to the Eel River. Problems resulting from these uses include massive soil erosion and stream sedimentation, scouring of creek banks, loss of streamside vegetation (including numerous large-diameter redwood trees), and loss of aquatic habitat. In 1998, under the federal Clean Water Act (Section [303]), the State of California listed the South Fork of the Eel River as "water quality limited" due to sediment and temperature concerns, requiring a TMDL (Total Maximum Daily Load) analysis. The U.S. Environmental Protection Agency (EPA) is charged with establishing TMDLs at levels that will meet state water quality standards for sediment and temperature. An implementation plan is to be prepared by the North Coast Regional Water

Quality Board and the State Water Resources Control Board to achieve compliance with established TMDL levels.

District staff are engaged in managing waterways within the park to improve the current degradation from sediments according to requirements in the Clean Water Act and to maintain their recreational values. Recreation and other uses will be permitted to the extent that the natural and ecological characteristics of the streams are not degraded. According to the provisions of the Wild and Scenic Rivers Act, the Department intends to protect the free-flowing conditions and natural character of the Eel River.

Goal

Rehabilitate watershed functions, thereby significantly reducing or eliminating unnatural soil erosion and stream sedimentation within the park's watersheds.

Guidelines

- Develop watershed management plans for the park's primary watersheds.

- Cooperate with regulatory agencies to address and remedy sediment discharge issues affecting the park, especially its ancient redwood forests. The Department should work in concert with these agencies to develop a plan for specific management actions intended to achieve watershed management goals. While developing this management plan, issues such as potential conflicts between park management activities and aquatic resources will be studied and addressed. After studying conflicts and potential solutions, measures to avoid or minimize adverse impacts to aquatic resources, and ultimately improve them, will be proposed. The plan would include such considerations as vegetation management, cultural resource impacts, geomorphic features, soil stability, and facilities development. Attempts should be made to reduce the net area of hardened surfaces (foundations, paving etc.).

- Work with universities, colleges, and other researchers to increase the scientific knowledge base that could benefit park watershed management without negatively impacting the park's resources.

- Continue ongoing efforts to rehabilitate watersheds within the park. Design and maintain a watershed database to monitor and determine the location, size, and causes of all erosion and sediment problems that might affect resources within the park's prime resource areas.

- Recognize that flooding and bank erosion are natural ecological processes. As sediment loads decrease in the future as a result of watershed rehabilitation, development or maintenance of channelized streams and hardened stream banks should be minimized or eliminated except where necessary to protect existing critical infrastructure.

- Manage the upper Bull Creek watershed to re-establish geologic stability and ecological balance. Manage lower Bull Creek to sustain the integrity of existing intact ancient groves until the channel achieves dynamic equilibrium. Provisions will be made for fish habitat during this transition period.

- Acquire additional lands or conservation easements from willing sources, where necessary, to maintain the physical integrity of ecological units, such as upper watersheds.

GEOLOGIC CONCERNS

The park is underlain by unstable marine sedimentary rocks and their resulting soils, most of which are highly erodible and are subject to massive landslides. Steep slopes throughout much of the park, combined with the high annual rainfall, contribute to high rates of erosion. The many geologic faults in the region hold the potential for seismic impacts throughout the park.

Goal

Identify potential management actions to minimize the negative impacts of the park's geological make-up.

Guidelines

- Monitor and document the seismic and geologic processes affecting the park and its resources.

- Include professional evaluations for the siting and design of permanent structures to mitigate potential damage from seismic groundshaking. Detailed site investigations and soil testing shall be conducted before the construction of major public projects.

- Redesign existing structures requiring major structural modification or change of use to withstand anticipated groundshaking without significant risk to people or resources. Structures built during the life of the general plan should be able to endure likely groundshaking, as well.

- Retrofit historic structures that do not meet current seismic design criteria in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, to ensure the retention of significant architectural or historical values.

- Perform slope stability and soils studies in public use areas, including monitoring geomorphic change where appropriate and feasible. The intent is to understand the seismic and geologic processes affecting sites receiving public use and where resources might be at risk. Employ management actions that minimize erosion to reduce the risk of geologic hazards to people and resources.

WILDFIRE MANAGEMENT

Wildfires can be a threat to human life and property and can also severely damage State Park System resources. The prescribed use of fire can simulate the natural fire regime of the southern Humboldt County area and reduce the risk of catastrophic fires. In addition, prescribed fires create the added benefit of favorable conditions for the expansion of native plant communities.

Planning for wildland fires can considerably reduce damage to natural and cultural resources, not only from the fire itself but also from the activities of active fire suppression. For example, adverse impacts can be caused by the arbitrary construction of fire-control lines with bulldozers. Such lines have the potential to remove roots and upper organic soil horizons, thereby increasing erosion and slowing the re-establishment of vegetation. Damage to resources, especially aquatic systems, can also occur from improper applications of chemical fire retardant.

Goal
Anticipate wildfires, plan strategies to preserve sensitive park resources, ensure human safety, and protect property.

Guideline
- Coordinate with appropriate fire suppression agencies, such as the California Department of Forestry and Fire Protection (CDF) and county and volunteer fire departments, to maintain and update the Wildfire Management Plan for the park. The plan should address all aspects of wildfire planning, including prevention, pre-suppression, and suppression. It should identify modified fire suppression methods and ways to protect sensitive park resources. Wildfire protection and suppression activities will be accomplished in accordance with an MOU between the Department and CDF.

PRESCRIBED FIRES
Since the early 1900s, fire suppression practices have effectively decreased the occurrence of wildfires in southern Humboldt County. However, this significant reduction in the number of wildfires has stressed the native ecological balance, thereby causing shifts in plant composition and density, including the spread of non-native plant pest species. Fire suppression has also created an increased build-up of dry fuels that, when ignited, can result in large-scale, catastrophic fires.

Goal
Rehabilitate the role of fire in the natural ecological processes of Humboldt Redwoods State Park.

Guideline
- Work with appropriate agencies to develop a Prescribed Fire Management Program for the park in order to achieve ecosystem and cultural landscape management goals. Ensure that the U.S. Fish and Wildlife Service is consulted on issues such as burning in northern spotted owl and marbled murrelet habitat. This program will be periodically upgraded to reflect ongoing accomplishments, refinements, additional resource inventory information, changes in prescribed fire science and technology, and changes in state and federal regulations.

PARK-WIDE GOALS AND GUIDELINES FOR CULTURAL RESOURCES

Cultural resources referred to in this general plan consist of significant and potentially significant prehistoric and ethnographic sites, historic and ethnohistoric resources, and cultural landscapes. These include but are not limited to such features as archeological sites, homesteads, CCC-era structures, mill sites, historic roads and trails, and memorial and honor redwood groves. They tell the multitude of stories of several thousand years of human presence upon this land. Protecting and interpreting cultural resources will help future generations better understand the widely differing philosophies about the redwood forests held by Native Americans, early-arriving European and American settlers, the lumber industry, and today's preservationists and recreationists.

Goal
Ensure the highest level of appropriate protection, stabilization, preservation, and interpretation of the park's cultural resources, focusing in areas of exceptional archeological and historical significance.

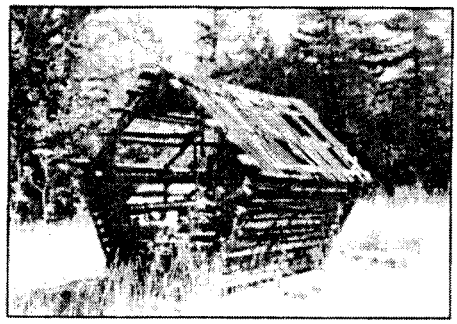
Guidelines

- Develop an inventory, mapping, and database for those cultural resources within the park that may be eligible for inclusion in the National Register of Historic Places and/or the California Register of Historic Resources.

- Prepare a park-wide Cultural Resources Management Plan (CRMP) that establishes an ongoing management process to record and develop findings of significance for cultural resources in the park that are historically or archeologically important. Consistent with other park goals, including the protection of the prime resource (ancient redwoods), develop a long-range management strategy that includes preservation, stabilization, rehabilitation, or reconstruction for the park's significant cultural resources.

- The park-wide Cultural Resources Management Plan should also identify and evaluate potential cultural landscapes within the park. Cultural landscapes are defined, in part, as landscapes that evolved through use by peoples whose activities or occupancy shaped them. They can be comprised of aggregates of such cultural resources as agricultural communities, homestead sites, ethnographic or ethnohistoric landscapes, trails, old roads, cemeteries, orchard remnants and homestead sites, as well as natural resources, topography, and their associated features. Potential cultural landscapes at the park that need additional investigation, research, and evaluation include Cuneo Creek, Hamilton Barn, the Bull Creek townsite, the original Weott townsite, the Logan and Holmgren Homesteads, the Avenue of the Giants, and other historic transportation systems. Caltrans cultural resource specialists should be involved in assessing possible cultural landscapes along the Avenue of the Giants.

- If a finding of significance for cultural resources has not been made, consult with cultural resource specialists to determine significance prior to undertaking programs for development or rehabilitation of an area to natural conditions. Any plan for restoration, remodeling, adaptive reuse, or non-use must comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and will require careful consideration to ensure the widest public benefit, until such time as the more comprehensive Cultural Resources Management Plan can be completed.



Corn crib on the Logan-Holmgren property

- Establish a program to protect all significant cultural resources from adverse effects resulting from park use, development of facilities, resource management programs, or natural processes, such as erosion.

- Develop a research program that will address past lifeways of the Lolangkok Sinkyone within the park. Research topics should address settlement patterns, subsistence technology, trade and exchange, and sociopolitical functions.

- Consult regularly with interested Native American tribes and groups who have traditional ties to resources within the park to ensure productive, collaborative working relationships, especially

when considering management practices, such as the Department's gathering policy, and interpretation involving the park's natural and cultural resources of interest and concern to them.

- Consider acquisition of additional land or conservation easements from willing sources, if necessary, that will provide a buffer for the protection of especially significant park historic, prehistoric, and archaeological sites or properties of concern to Native Americans.

PARK-WIDE GOALS AND GUIDELINES FOR MANAGING VISITOR IMPACTS ON THE PARK'S RESOURCES

The Department recognizes the importance of the public need for recreation opportunities but also acknowledges that any recreational use produces at least some impacts. There is a need to manage visitor impacts in conjunction with providing and maintaining the diversity of resource values and conditions of the park.

Goal

Apply professional processes and methods for identifying, analyzing, and managing visitor activities in order to minimize resource impacts, while maintaining appropriate types and levels of visitor use.

Guidelines

- Survey and review areas of potential impacts, employing appropriate personnel and responsible agencies, in accordance with the California Environmental Quality Act (CEQA), prior to site-specific development or preparation of management plans.

- Use the established Humboldt Redwoods State Park General Plan Management Zones (see Map #6) as the guide for allowing and managing appropriate types and levels of public use of park resources. Establish specific criteria for desired resource conditions for each management zone.

- Periodically appraise prime natural and significant cultural resources with respect to possible damage from recreational use. Where degradation is occurring, design and implement appropriate actions to manage public and Department operational impacts while assuring maintenance of acceptable resource conditions. (See the section on Carrying Capacity, page 44.)

PARK-WIDE VISITOR USE AND OPPORTUNITIES

Establishing or maintaining access for public use is paramount to the successful management of Humboldt Redwoods State Park. Changing demographics and use patterns will require ongoing periodic evaluations of park operations and resource management programs.

PARK-WIDE GOALS AND GUIDELINES FOR CIRCULATION

The Avenue of the Giants and Mattole Road are narrow, curving, two-lane roads that provide access to the majority of the park's visitor facilities. Highway 101 passes through the eastern side of the park and has several off ramps that connect with the Avenue. Local traffic also uses these two roads, which are primarily maintained by Caltrans and Humboldt County.

Goal

Establish a pattern of circulation that allows for clear choices for visitor arrival, departure, and travel throughout the park, while creating a sense of expectation and conveying the park image.

Guidelines

- Evaluate signage along the highway and other public roads within the park to determine whether or not they are adequate to orient and focus visitors arriving at the park. Make changes where necessary to create continuity of siting and design, concentrating visitors' attention on the park identity, destinations, and park attractions, and to provide appropriate warnings of potential hazards (e.g., pedestrian or bicycle crossing points).

- Coordinate with Caltrans and the county to assure that alterations and maintenance of roadways within the park will result in easy and enjoyable driving experiences for motorists, consistent with resource management goals and guidelines.

- Provide the maximum accessibility possible at major park attractions where resources will not be compromised.

PARK-WIDE GOALS AND GUIDELINES FOR RECREATION

The park provides many opportunities for recreational activities that are appropriate for a redwood state park. As California's population continues to increase and diversify, the demands for outdoor recreational opportunities are also certain to grow, both in the numbers of people desiring an outdoor experience and in the types of recreational activities they desire.

Goal

Provide a variety of recreational opportunities that will allow California's diverse population to visit, enjoy, and better understand the significance of an ancient redwood forest, while maintaining the highest levels of natural and cultural resource management.

Guidelines

- Plan recreational opportunities within a regional context. Provide for activities at the park that take advantage of its size, varied terrain, and expansive ancient redwood forests, including hiking, backpacking, biking, horseback riding, backcountry camping, nature study, and the enjoyment of solitude.

- Maintain at least the current capacities of the following kinds of facilities for a quality visitor experience, while embracing facility upgrades to make current programs accessible to all the general public. These include family day use facilities; group day use facilities; family

campgrounds; group camping; equestrian camping; trail camps; environmental camps; and camping for hikers and bikers.

- Prepare management plans as a first phase of major development projects, including trails. These management plans should include project area resource surveys and monitoring. They should take into account potential impacts of facilities and visitation increases on the resource base, as well as potential impacts from changes in the composition of the park's user groups. Also important are the relationship of the new facility(ies) to those already existing, access and traffic loads on feeder roads and roads within the park, and accessibility, where feasible.

- Balance the need for new public facilities, including trails, with their potential negative impacts to plant and wildlife species and cultural resources. In particular, avoid adverse impacts to critical resource areas where possible and follow all applicable protocols.

- Design future group camps to accommodate different sized groups, allowing maximum potential for use by a single large group or by more than one smaller group at a time.

- If recreation trends and visitor desires indicate interest in kinds of facilities that would be new to the park, such as a lodge or a shuttle transportation hub, complete feasibility studies prior to their development.

- Continue to provide public access to the park's waterways, balancing public recreation needs with resource management goals for resource protection.

- Explore strategies to provide maximum feasible accessibility to campsites, trails, vistas and overlooks, and historical resources.

- Prepare a Trails Management Plan to evaluate the park's entire trail system and guide the placement and use of future trails and trail camps. Emphasis should be placed on creating opportunities for visitors to enjoy the diverse topography, biotic communities, and scenic views at the park, as well as possible regional connections. The actual location, distance, and use of future trails should be guided by the trails plan. (Suggested trail plan objectives are listed in Appendix H.)

- Consider acquisition of additional properties from willing sellers to provide appropriate sites for future recreational facilities, including trail connections, if suitable locations are not available within the park.

PARK-WIDE GOALS AND GUIDELINES FOR INTERPRETATION

The Department's primary opportunity for imparting the benefits and value of preserving ancient redwoods, other sensitive habitats, and related cultural resources to the public is through the park's interpretation. Interpretation can significantly enhance visitors' park experiences while also helping to mitigate the negative effects of public use. Casual visitors too often have few opportunities for achieving sufficient understanding of natural and cultural resources prior to their visits and can unknowingly harm park resources.

Examining a slice of time outside the Visitor Center

Goal

Provide opportunities to increase visitors' knowledge and appreciation of the significant natural and cultural resources at the park and to expand their understanding of ecological relationships. Heighten their awareness of and sensitivity to human impacts on these resources without compromising the integrity of the park's exceptional natural resources.

General Guidelines

- Provide interpretive opportunities that afford all visitors desiring information about the park a variety of interpretive programs from a mix of presenters and facilities using diverse media. Develop additional interpretive opportunities in the future.

- Include outreach efforts in the park's interpretive opportunities to gain broader involvement from the community.

- Strive to include maximum feasible access to educational programs for the state's diverse population, including people with disabilities.

INTERPRETIVE THEMES

Park Unifying Theme

The Coastal Redwood Forest Transcends Time. It has been an object of awe, inspiration, and mystery, a commodity, and a living monument to preserve for all generations. The ancient redwood forest is a community of giants, their roots entwined in primordial time and their lofty canopy reaching for the future.

Primary Theme

Humboldt Redwoods State Park is a living laboratory where natural processes have created the ancient redwood forest and its interdependent mosaic of flora, fauna, and geological processes.

Guidelines

- Provide opportunities for visitors to gain an understanding about the park's significant natural resources, including the components and functions of its many interrelated ecosystems, and the importance of these on a park-wide, regional, and global scale.

- Continue to interpret and educate visitors about the significance of the ancient redwood forest and the importance of conservation of this rare ecosystem. Emphasize the function of habitat linkages, especially for species dependent upon the park, including threatened and endangered species, such as marbled murrelets and spotted owls.

- Interpret the park's watersheds, as well as the aquatic life that depends on them, including the decline and near elimination of native fish species as a result of stream sedimentation.

- Interpret ongoing landscape rehabilitation efforts at the park, including such topics as watershed rehabilitation, exotic species removal, fire ecology, and tree planting.

- Interpret significant geologic phenomena in the vicinity of the park, such as the Mendocino Triple Junction.

Primary Theme
The Lolangkok Sinkyone Indians were the region's earliest known human inhabitants.

Guidelines

- Interpret the Lolangkok Sinkyone Indian history of the park area, highlighting George Burt.

- Enhance visitors' understanding of Native American cultures.

- Involve Native American tribes and groups when researching interpretive programs regarding Native American cultural values and the enhancement of public appreciation of those values.

Primary Theme
Euroamerican settlement and economic development in the South Fork of the Eel River and Bull Creek watersheds were based on timber and agriculture.

Guidelines

- Interpret the changes brought to the park area by Euroamerican homesteaders who established farms and created a once-thriving agricultural community. Identify and provide information about the historic homesteads, roads, trails, and other significant cultural resources within the park. Interpret historically significant landscapes, such as orchards, to help enhance visitors' understanding of historic agricultural practices.

- Interpret the history of logging and the logging technology that was employed over time, as well as the economic and environmental impacts of logging, in the vicinity of the South Fork Eel River and Bull Creek watersheds.

- Continue to interpret the impacts of flooding on local communities and on the park.

Primary Theme
The park's initial establishment and continuing development is founded in the redwood preservation movement.

Guidelines

- Continue to interpret the Save-the-Redwoods League, the memorial groves, and the roles they played in the redwood preservation movement and the development of the park. Interpret the Bolling Grove as the first memorial grove at the park.

- Continue to interpret historic park facilities, such as the Julia Morgan Hearthstone Fireplace at the Women's Federation Grove, the Charles Kellogg Travel Log, and artifacts reflecting the many contributions from individuals that have gone into creating the park.

- Continue to interpret the contributions of the CCC to the development of the park.

INTERPRETIVE COLLECTIONS

Interpretive collections are key both for understanding a park's cultural and natural histories and for interpreting that information to the public. It is equally important that the park have a formal program that provides guidelines regarding the types, acquisition, maintenance, qualities, and quantities of artifacts in the interpretive collection.

Goal
Standardize the selection, acquisition, and future treatment of the park's collections.

Guidelines

- Consider future collection of artifacts for Humboldt Redwoods State Park only as they:
  - Fulfill the criteria to preserve elements of the natural and cultural environment original to the park;
  - Document the natural features and people who have interacted with the plant and animal resources in the park area; and
  - Support the interpretation of themes that are important to the park.

- Acquire and maintain collections obtained or housed at the park as directed by the Department's Collections Management Standards.

- Subsequent to the selection of major themes, topics, and periods for interpretation at the park, prepare a Scope of Collections Statement according to the Department's *Guidelines for Writing a Scope of Collections Statement (May, 2000)* for the park and the Humboldt Redwoods Interpretive Association's collections.

PARK-WIDE GOALS AND GUIDELINES FOR AESTHETICS

All landscapes are dynamic and have definable, multi-dimensional characteristics. Light, visual patterns and textures, temperature, scent, sound, expanding vistas or focused views blend together to create distinguishing aesthetic qualities, often referred to by planners as a "Spirit of Place." Humboldt Redwoods State Park has a landscape characterized by primal forests, precipitous

mountains, streams, wildlife, and seasonal phenomena, such as summer flowers and fog, fall color, and winter rains, that all harmonize to evoke a positive emotional response to this special place of great beauty.

Human perception is based primarily on what is seen and heard. Therefore, the visual and audible effects of human activities are of great importance in determining how a society relates to a landscape.

To sustain the aesthetic qualities unique to the park, both in-park and surrounding land management practices are critical. Preserving the highest aesthetic standards for Humboldt Redwoods State Park is a responsibility that should be shared. State Park planners, park managers, and staff, as well as representatives from other responsible agencies and neighboring landowners, must work cooperatively to create and sustain an aesthetic ambiance befitting the stature of the world's largest unspoiled ancient redwood forest.

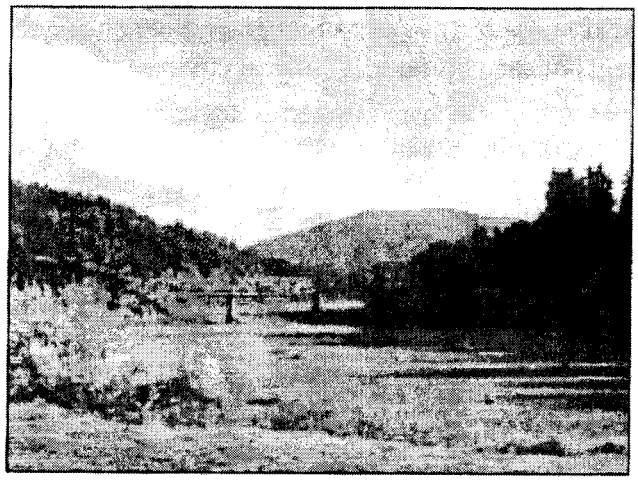
Goal

Identify, preserve, and perpetuate the distinctive landscape qualities that give Humboldt Redwoods State Park its special "spirit of place."

Guidelines

- Define the aesthetic characteristics of the park and surrounding landscapes.

- Develop aesthetic quality objectives for the park's visual and audible resources.



One of the park's grand views, the confluence of the South Fork and the main stem of the Eel River from the Dyerville Overlook.

- Work with public agencies and private landowners to establish a cooperative Aesthetic Resource Management Plan for all properties identified as having a visual and/or audible significance to Humboldt Redwoods State Park.

- Ensure that visual and audible standards contained in guiding documents, such as the county general plan and Aesthetic Resource Management Plan, are followed both in the park and on surrounding lands identified as having significant aesthetic impacts on the park.

- Establish aesthetic design standards for new and renovated park facilities.

- Develop maintenance standards for existing facilities that are integrated with the aesthetic design standards established for new and renovated park facilities.

PARK-WIDE GOALS AND GUIDELINES FOR COMMUNITY RELATIONS

Maintaining strong community relations is essential for enhancing park visitors' experiences. Formal and informal partnerships and the ongoing exchange of information provide park management and local community leaders the best opportunities to meet the economic, social, and recreational needs of the local public and park visitors.

Goal

Continue the ongoing liaison and communication between the park and local communities to maximize the potential benefits and opportunities each might bring to the other.

Guidelines

- Conduct surveys to determine additional services that could be supported by park visitors. Based on survey analysis and trend identification, and if appropriate and economically feasible, encourage concessions and work with nearby communities to provide visitor services that might include but not be limited to:
  - Horse rentals in areas where there would be no negative impacts upon resources
  - Bicycle rentals
  - Rentals of canoes, kayaks, rafts, innertubes
  - Pack trips
  - More RV camps
  - "High-end" accommodations, such as a lodge
  - A store similar to the former general store in Weott
  - A theater that would be available for drama companies to stage plays for local and visiting audiences
  - A hostel along the Avenue of the Giants
  - Interpretive developments at the Holmgren property

- Work with community, county, and state groups to provide a unified delivery of services in response to structural and public safety emergencies, utilizing the training and expertise of all personnel.

- Ensure that concessionaires and others providing services to park visitors emphasize universal access for visitors with disabilities and others with special needs, such as the elderly, mothers with baby strollers, etc.

PARK MANAGEMENT APPROACHES

Although natural resource preservation was the impetus behind the majority of the acquisitions for the park, the Department's charge to protect significant cultural resources and provide for public recreation and education have also been important in determining management approaches at the park. Some of the park's resources are rare or in need of special protection and require further refinement of the management methods employed in particular areas within the park. The approaches to management employed at the park are described as follows.

NATURAL RESOURCE MANAGEMENT

Nature is recognized as a dynamic system with complex, interdependent relationships among processes and interactions. Under this approach, natural processes are allowed to occur without interference. Where they have been altered or interrupted by human influence, attempts are made to rehabilitate processes to a natural condition. Rehabilitation activities will be directed toward self-maintaining levels, where possible. This management approach is especially critical with regard to the areas within the park where natural processes have been disrupted.

CULTURAL RESOURCE MANAGEMENT

Preservation and interpretation of significant cultural features receive high priority where this type of management would not be in conflict with the natural resource management approach for protecting the park's prime resource. This type of management is appropriate in areas of primary historical or archaeological significance. Potentially significant historic areas, historic landscapes, and settings will be managed according to this approach. The park's significant CCC-era structures and facilities, as well as other significant park buildings, also fall within the scope of the cultural resource management approach.

RECREATION/INTERPRETATION ENHANCEMENT MANAGEMENT

Balancing recreational, interpretive, and resource management objectives remains an important and ongoing consideration at the park. For example, management of natural vegetation in campgrounds may be based on ecological knowledge, but vegetation would be controlled to promote visitor safety and facility maintenance. Increasing visitor appreciation of natural and cultural resources through the creation of an improved trail system or providing for additional interpretive opportunities are examples of this management approach.

SPECIAL PROTECTION MANAGEMENT

Giving special management priority to a specific element or condition within a State Park System unit is sometimes required by law or to provide the degree of protection a resource requires. Archaeological site protection, scenic viewshed protection, noise reduction or elimination, rare, sted, or sensitive species or rare habitat management, and management for a specific successional age are all examples of special protection.

ADMINISTRATION AND OPERATIONS MANAGEMENT

Providing adequate facilities, including offices, trails, roads, and utilities, is critical for properly managing the park for resource protection and visitor safety and enjoyment. A number of small areas within the park are dedicated to the operation and maintenance of its land and facilities, as well as to those of other agencies. In some cases, the resources within these areas have been highly modified from their original conditions to accommodate administrative and maintenance facilities, storage, staff housing, or other needed uses.

PARK LAND USE AND MANAGEMENT ZONING

Management zones represent parts of a park that have many characteristics in common and will be managed similarly.

Management zones were developed as a guide for systematizing land use and resource management in state parks. The zones represent parts of a park that have many characteristics in common and will be managed similarly. They are illustrated on Map #6. Some zones may contain many sensitive resources, while others may not; some consist of a continuous land area, while others are small or discontinuous. Park management consists of applying a variety of the management approaches described above as needed in a zone. For areas where two or more management approaches apply in the same zone, the Matrix of Resource Values, Management Approaches, and Goals for the Management Zones (page 81) identifies the priority of approaches to be employed. The Matrix of Proposed Land Uses (page 85) summarizes the presence and condition of resources, desired level of development, and visitor experience preferred within each zone.

MANAGEMENT ZONES: GOALS AND GUIDELINES

Goals and guidelines for each zone are either site-specific or pertain to conditions and activities that occur chiefly within that zone. The preceding park-wide goals and guidelines also apply within all of the zones. Protection and preservation of natural ecosystem elements and processes, including protection for listed and special status species, and significant cultural features will be integral components of the management of all of the zones.

PRIMITIVE ZONE

Statement Of Management Intent

The Primitive Zone includes the most unspoiled area of the park, including most of the land between Highway 101 and Thornton Road north of Mattole Road, the northern part of the Rockefeller Forest.

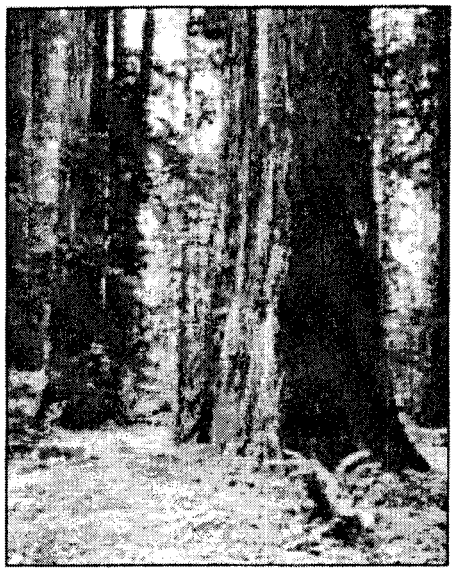
Goal

Preserve this land in its high quality condition in perpetuity. Protection and preservation of natural ecosystem elements and processes will be the primary focus of resource management.

Guidelines

- Maintain the ancient redwood forest within the Primitive Zone in its pristine state in perpetuity by establishing special protection and designation for its highly significant ecosystems and their complement of rare and frequently found species and habitats. It is within this zone that the degree of protection and preservation of the ancient redwood forest ecosystem can be attained as described in the Declaration of Purpose.

- Manage the land within the zone for protection and preservation of its significant natural resources and promotion of natural processes. This can best be accomplished by establishing a Natural Preserve subclassification for approximately 3,520 acres of the Calf, Cow, and Cabin creek drainages.

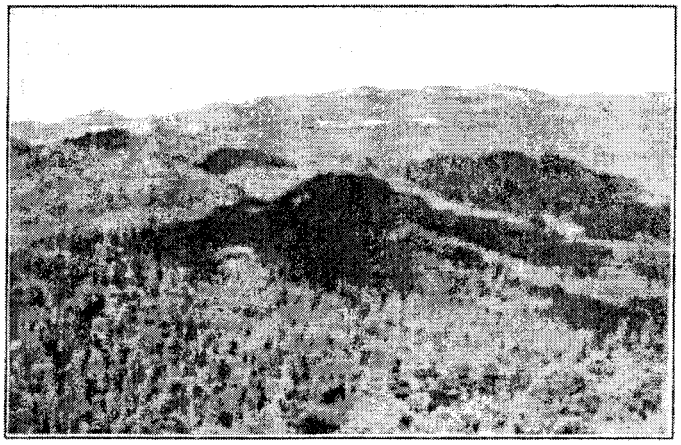


The Rockefeller Forest, the park's most perfect ancient redwood forest

- Provide no new recreational developments within the Primitive Zone.

- Provide no interpretive developments within the Primitive Zone. Interpret its important resource values and the purpose of natural preserve subclassification in other locations.

BACKCOUNTRY (NON-MECHANIZED) ZONE



The Bull Creek watershed and Grasshopper Peak, with the valley of the South Fork of the Eel River beyond.

Statement Of Management Intent

This zone occupies most of the portion of the park south of Mattole Road, west of the Avenue of the Giants and east of the Backcountry (Mechanized) Zone. Many of the park's most exceptional natural resources are located in this zone, ranging from redwood forests to native prairies and specimen-sized stands of live oak. It contains outstanding ancient redwood forest, with some formerly logged land in need of rehabilitation on its fringes.

Goal

Balance the need for protection, preservation and, where necessary, rehabilitation of natural ecosystem elements and processes, with an enjoyable and educational visitor experience.

KEY TO MANAGEMENT ZONES

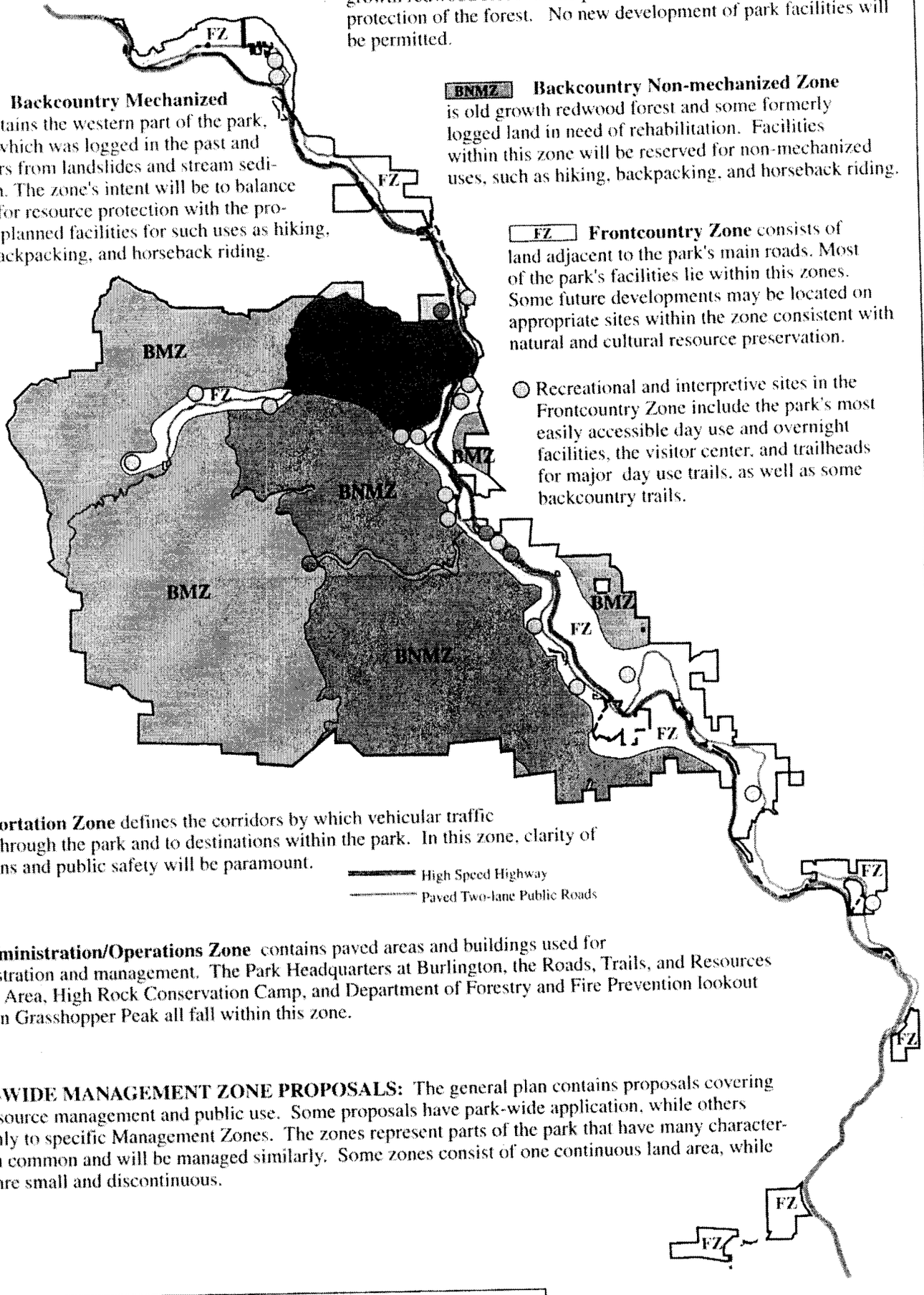
Primitive Zone encompasses the most pristine old growth redwood forest in the park. It will be managed for maximum protection of the forest. No new development of park facilities will be permitted.

BMZ **Backcountry Mechanized Zone** contains the western part of the park, much of which was logged in the past and still suffers from landslides and stream sedimentation. The zone's intent will be to balance the need for resource protection with the provision of planned facilities for such uses as hiking, biking, backpacking, and horseback riding.

BNMZ **Backcountry Non-mechanized Zone** is old growth redwood forest and some formerly logged land in need of rehabilitation. Facilities within this zone will be reserved for non-mechanized uses, such as hiking, backpacking, and horseback riding.

FZ **Frontcountry Zone** consists of land adjacent to the park's main roads. Most of the park's facilities lie within this zones. Some future developments may be located on appropriate sites within the zone consistent with natural and cultural resource preservation.

○ Recreational and interpretive sites in the Frontcountry Zone include the park's most easily accessible day use and overnight facilities, the visitor center, and trailheads for major day use trails, as well as some backcountry trails.



Transportation Zone defines the corridors by which vehicular traffic passes through the park and to destinations within the park. In this zone, clarity of directions and public safety will be paramount.

High Speed Highway

Paved Two-lane Public Roads

● **Administration/Operations Zone** contains paved areas and buildings used for administration and management. The Park Headquarters at Burlington, the Roads, Trails, and Resources Service Area, High Rock Conservation Camp, and Department of Forestry and Fire Prevention lookout tower on Grasshopper Peak all fall within this zone.

PARK-WIDE MANAGEMENT ZONE PROPOSALS: The general plan contains proposals covering park resource management and public use. Some proposals have park-wide application, while others refer only to specific Management Zones. The zones represent parts of the park that have many characteristics in common and will be managed similarly. Some zones consist of one continuous land area, while others are small and discontinuous.

HUMBOLDT REDWOODS STATE PARK GENERAL PLAN

Proposed Management Zones

NORTH

0 1 2 3 4

Scale in Miles

Map #6

June, 2001

Matrix 1
HUMBOLDT REDWOODS STATE PARK GENERAL PLAN
RESOURCE VALUES, MANAGEMENT APPROACHES, AND GOALS
FOR THE MANAGEMENT ZONES

Significant Natural and Cultural Values	Resource Management Approaches (Prioritized)	Resource Management Goals	Zones
Natural: Old growth redwood forest; old growth Douglas fir forest; riparian ecosystems; prairies; marbled murrelet and northern spotted owl nesting habitat in old growth forests; habitat for golden eagle, bald eagle, sharp-shinned hawk, and Cooper's hawk; Vaux's swift and purple martin habitat; foraging habitat for white-tailed kite; stream breeding habitat for foothill yellow-legged frog; coho and chinook salmon and steelhead habitat; riparian habitat for southern torrent salamander; potential northern goshawk and peregrine falcon foraging habitat; potential tailed frog, northern red-legged frog and northwestern pond turtle habitat; potential foraging and roosting habitat for Townsend's big-eared bat, pallid bat, long-eared myotis, fringed myotis, occult little brown bat, and Yuma myotis; potential habitat for white-footed vole, red tree vole, Pacific fisher, mountain lion, and possibly the Humboldt marten. **Cultural:** Potential for ethnographic sites, including village and camp sites (potential subsurface prehistoric and historic archeological materials); possibility of yet undiscovered potentially significant historic resources. **Aesthetic:** Expansive views and scenery of ridges, canyons, pristine old growth redwood, Douglas fir, and hardwood forests that create a sense of wilderness and solitude.	• Special Protection (Natural Preserve) • Natural Process and Cultural Resource Management	• Protect, preserve, rehabilitate, and research natural ecosystem processes and elements; • Protect listed and special status species and their habitats; • Protect riparian and stream/river habitat, springs, and seeps; • Identify, record, protect, and preserve aesthetic resources; and • Manage any potentially significant cultural resources that may be found in the future according to guidelines in the Cultural Resources Management Plan.	**PRIMITIVE ZONE**
Natural: Old growth redwood forest; stands of specimen-sized live oaks; riparian ecosystems; prairies; habitats for northern spotted owl, golden eagle, bald eagle, sharp-shinned hawk, Cooper's hawk, Vaux's swift and purple martin; foraging habitat for white-tailed kite; stream breeding habitat for foothill yellow-legged frog; riparian habitat for southern torrent salamander, tailed frog, northern red-legged frog and northwestern pond turtle; coho and chinook salmon and steelhead habitat;marbled murrelet nesting habitat; habitat potential for white-footed vole, red tree vole, Pacific fisher, and possibly Humboldt marten; potential foraging and roosting habitat for Townsend's big-eared bat, pallid bat, long-eared myotis, fringed myotis, occult little brown bat, and Yuma myotis; potential habitat for northern goshawk, mountain lion; faults related to Garberville Fault Zone, Mendocino Triple Junction. **Cultural:** Potential for ethnographic sites, including village and camp sites (potential subsurface prehistoric and historic archeological materials). Potentially significant historic homestead sites and associated features (barns, privies, foundations, orchards, trash concentrations): Addie Johnson Grave and Johnson Homestead Site, Forest Lodge, George Burt Homestead Site, Johnson Cabins (historic tie camp); historic trails and roads: Johnson Tie Camp Road, and Burlington-Bull Creek Trail; and cultural landscapes. **Aesthetic:** Expansive views; scenery of ridges, canyons, old growth redwood, Douglas fir, and hardwood forests that create a sense of wilderness and solitude.	• Special Protection (Wilderness) • Natural Process and Cultural Resource Management • Recreation Emphasis (Primitive facilities in Wilderness)	• Protect, preserve, and rehabilitate natural ecosystem processes and elements; • Protect listed and special status species and their habitats; • Protect riparian and stream/river habitat, springs, and seeps; • Minimize impacts of trail design and maintenance activities on natural and cultural resources; • Identify, record, protect, and preserve aesthetic resources • Protect and preserve significant prehistoric features; • Manage significant historic homestead sites and other historic features (gravesites, remnant orchards, Forest Lodge, cabins, landscapes, and surviving segments of historic roads and trails) according to guidelines in the Cultural Resources Management Plan, as well as other state policies governing the protection of significant cultural resources; and • Interpret and educate visitors about significant natural and cultural resources at locations outside of the wilderness boundaries.	**BACKCOUNTRY (NON-MECHANIZED) ZONE**

Significant Natural and Cultural Values	Resource Management Approaches (Prioritized)	Resource Management Goals	Zones
Natural: Old growth redwood forest, stands of specimen-sized live oaks; prairies; foothill yellow-legged frog; potential for tailed frog and southern seep salamander; potential marbled murrelet and northern spotted owl nesting habitat; Cooper's hawk, sharp-shinned hawk, ruffed grouse, Vaux's swift and purple martin habitat; potential spawning habitat for coho salmon, steelhead, and chinook salmon; potential foraging and roosting habitat for Townsend's big-eared bat, pallid bat, long-eared myotis, fringed myotis, occult little brown bat, and Yuma myotis; potential habitat for white-footed vole, red tree vole, Pacific fisher, and mountain lion. **Cultural:** Potential for ethnographic sites, including village and camp sites (potential subsurface prehistoric and historic archeological materials). Potentially significant historic road segments, including Fox Camp, Grasshopper, Squaw Creek Ridge, Kemp, and Grieg roads; historic homestead sites (barns, privies, foundations, orchards, trash concentrations, and other associated features): Look Prairie, Hazleton-Bull Creek Ranch, Fox Camp Ranch and Gould Barn site and potential homestead sites along Pole Line, Grasshopper, Squaw Creek Ridge, Kemp, and Grieg roads; Indian Orchard Trail; potentially significant historic landscapes. **Aesthetic:** Expansive views from ridge roads; views of redwood, Douglas fir, and hardwood forests.	• Natural Process and Cultural Resource Management • Recreation Emphasis	• Protect, preserve, rehabilitate, and research natural ecosystem processes and elements; • Protect listed and special status species and their habitats; • Protect riparian and stream/river habitat, springs, and seeps; • Minimize impacts of road design and maintenance activities on natural and cultural resources; • Identify, record, protect, and preserve aesthetic resources; • Prevent/control erosion related to trails and roads; • Manage surviving significant prehistoric and historic resources (roads and associated features, homesteads, ranch sites, and remnant orchards, etc.) according to guidelines in the Cultural Resources Management Plan. and • Interpret and educate visitors about significant natural and cultural resources.	BACKCOUNTRY (MECHANIZED) ZONE
Natural: Old growth redwood forest; black cottonwood riparian forest; prairies; marbled murrelet and northern spotted owl nesting habitat; riverine spawning habitat for coho salmon, steelhead, and chinook salmon; stream breeding habitat for foothill yellow-legged frog; riparian habitat for southern torrent salamander, migrant willow flycatcher, yellow warbler, and yellow-breasted chat; osprey nesting habitat; Cooper's hawk, sharp-shinned hawk, ruffed grouse, Vaux's swift and purple martin habitat; potential tailed frog, northern red-legged frog, and northwestern pond turtle habitat; potential foraging and roosting habitat for Townsend's big-eared bat, pallid bat, long-eared myotis, fringed myotis, occult little brown bat, and Yuma myotis; potential habitat for white-footed vole, red tree vole, and Pacific fisher. **Cultural:** Potential for ethnographic sites, including village and camp sites (possible subsurface prehistoric and historic archeological materials). Potentially significant surviving roadbed and structures from the South Fork Eel River wagon road and the original Redwood Highway (hand-hewn redwood bridge near Stephens Grove, Dyerville bridge site, Robert H. Madsen Memorial Bridge at Jordan Creek, Nelson Road redwood cribbing, guard rail remnants, and cement monument); house sites, homestead sites and orchards adjacent to the Avenue of the Giants (Gould house site); potential historic trails and roads: Burlington-Weott trail; Weott and Pepperwood town sites; the Logan-Holmgren homestead sites, and potentially significant cultural landscapes. Burlington Area: Some Burlington Campground structures (incl. 1947 park office); Williams Grove: possible CCC-era structures (culvert support structures); F.K. Lane Grove: possible CCC-era structures (stone fountain, water tank). Bull Creek townsite, including: Albee Creek Campground (a diablo stove, historic homestead site, orchard, and associated features), Cuneo Creek Horse Camp (historic homestead sites, orchards, and associated features), Hamilton Barn and Baxter environmental camps: roads, historic homesteads, orchards, Wheeler Mill site, and associated features. Potential for subsurface prehistoric and historic archeological materials at Hidden Springs Campground, Albee Creek Campground, Cuneo Creek Horse Camp, and Logan-Holmgren homesteads areas. Federation Grove: Julia Morgan hearthstone fireplace, 1947 fountain, original Redwood Highway segment, and associated stone work culvert headwall; Blair Grove: fountain; Barkdull Ranch; Marin Garden Club Grove: possible CCC-era picnic table; potential cultural landscapes in connection with the Avenue of the Giants and park developments. **Aesthetic:** Views of prime old growth redwood groves and Rockefeller Forest; views of Bull Creek and South Fork Eel River.	• Natural Process and Cultural Resource Management • Recreation Emphasis	• Protect, preserve, and rehabilitate significant natural resources and ecosystem processes and elements, including old growth forest and riparian, and riverine habitats; • Protect listed and special status species and their habitats; • Identify, record, protect, and preserve aesthetic resources; • Control exotic plant species; • Close and rehabilitate some river access points; • Avoid any disturbance or alteration of the riparian habitat at the Holmgren property; • Provide recreation improvements compatible with resource sensitivities; • Develop no new facilities (except for trails) in marbled murrelet breeding habitat; • Minimize impacts of trail design and maintenance activities on natural and cultural resources; • Prevent/control human-induced erosion along waterways; • Eliminate availability of human food and garbage to wildlife; • Manage surviving significant prehistoric and historic resources according to DPR policies and guidelines in the Cultural Resources Management Plan. These include archeological sites, surviving historic roadbeds and trails and associated features, as well as significant CCC-era features and other structures of historical significance, such as town sites, homestead sites, orchards, mill sites, and potentially significant cultural landscapes to be identified in the future; • Prevent visitor use and management activities from detracting from potentially significant historic rural settings or landscapes by managing these not to visually impact their historic character; and • Interpret and educate visitors about significant natural and cultural resources.	FRONTCOUNTRY ZONE

Significant Natural and Cultural Values	Resource Management Approaches (Prioritized)	Resource Management Goals	Zones
Natural: Potential habitat (roosting sites) for Townsend's big-eared bat, pallid bat, and Yuma myotis. **Cultural:** Potential for ethnographic sites, including village and campsites (possible subsurface archeological materials). Burlington area: Park Headquarters, early twentieth century buildings, possible CCC-era buildings and structures, Jimmy Carothers historic homestead site, and orchard adjacent to campground; High Rock Conservation Camp. Grasshopper Peak 1957 CDF lookout tower. **Aesthetic:** Scenic viewshed from Grasshopper Peak.	• Administration and Operations • Natural Process and Cultural Resource Management	• Control of exotic plant species; • Protect listed and special status species; • Identify, record, protect, and preserve aesthetic resources; • Replace hardened surfaces with stable permeable surfaces, where possible; • Eliminate availability of human food and garbage to wildlife; • Manage surviving significant prehistoric and historic resources according to guidelines in the Cultural Resources Management Plan; and • Interpret and educate visitors about significant natural and cultural resources through literature available at Park Headquarters.	ADMINISTRATION AND OPERATIONS ZONE
Natural: Old growth redwood forest; potential for marbled murrelet, northern spotted owl, osprey, and long-eared myotis in trees and habitats along road shoulders; riverine (stream crossings) coho and chinook salmon and steelhead habitat. **Cultural:** Potential for subsurface historic and prehistoric archeological materials; Dyerville Bridge site; surviving roadbed and structures of the original Redwood Highway along the current Avenue of the Giants: 1915 cement culvert, redwood cribbing, support walls beneath the Myers Flat side hill viaduct, possible CCC-era bridges; cultural features in turnouts (a stone fountain at milepost 8.96 and redwood trough at milepost 11.5); surviving roadbed and associated structures of historic Mattole Road within the state park boundaries: bridge remnants and parts of the original Bull Creek-Mattole wagon road between Cuneo Creek Horse Camp Road and Fox Camp Road; potential for rural cultural landscapes and associated features. **Aesthetic:** Views of prime old growth redwood forest, Douglas fir, and hardwood forests; views of Bull Creek, the South Fork Eel River and main stem Eel River. Narrow roads provide close-up views of large trees. Potential for future improvements to increase scenic component of the visitor experience along the Avenue Parkway.	• Recreation Emphasis • Natural Process and Cultural Resource Management	• Protect and preserve natural ecosystem processes and elements; • Coordinate with Caltrans and Humboldt County to minimize impacts of road design and maintenance activities on natural and cultural resources; • Protect listed and special status species and their habitats; • Identify, record, protect, and preserve aesthetic resources; • Develop hazardous spill monitoring and a response system for sensitive locations alongside road rights-of-way; • Provide resource-compatible parking and trailhead access; • Eliminate availability of human food and garbage to wildlife; • Manage surviving significant prehistoric and historic resources, including archeological sites; surviving roadbed and associated structures, such as troughs and fountains, of the original Redwood Highway and historic Mattole Road, and potentially significant cultural landscape associated with the Avenue of the Giants that may be identified in the future, according to guidelines in the Cultural Resources Management Plan; and • Interpret and educate visitors about significant natural and cultural resources at selected roadside locations.	TRANSPORTATION ZONE

Matrix 2
HUMBOLDT REDWOODS STATE PARK GENERAL PLAN
PROPOSED LAND USES

Appropriate Facilities and Activities	Resource Condition or Character	Visitor Experience	Zones
• No development proposed in this zone. • Management limited to actions needed to protect human health and safety. Onsite management and restrictions should not be visually obtrusive. • All of this zone is proposed for Natural Preserve classification, which carries restrictions to protect the pristine quality of the forest.	• This zone contains the finest quality old growth redwood forest in the park. • It also contains habitat for various sensitive species, including state- and federal-listed species. • This is the most natural of all the zones. It has areas with pristine conditions and dense vegetation that are very difficult to enter or move through without trails. • Potentially significant cultural features may also be present.	• Visitors will encounter a rugged, primitive, and undeveloped landscape. • Access to this zone is extremely difficult.	PRIMITIVE ZONE
• No motorized vehicles allowed in this zone because of the steep terrain and lack of safe or designated roads except as necessary to protect human health and safety. • The zone contains designated hiking and equestrian trails. • Heavy equipment may be temporarily needed to restore natural conditions in the damaged areas encompassed by this zone. • Parts of the zone are proposed for wilderness classification	• The zone contains natural areas with pristine conditions, as well as some land that has experienced landslides and erosion. • It contains habitat for various sensitive species, including state- and federal-listed species. • Potentially significant cultural features are also present. • Resource modification for visitor use is low. • Degradation from visitor use is also low because relatively few people take the time and effort to visit and stay in this zone. • A low noise level in the interior of this zone is one of its defining characteristics.	• For visitors to experience this zone involves a time commitment and exertion because it is remote, steep, rugged land. • Visitors are immersed in a large, intact old growth redwood forest ecosystem environment. Traces of past logging and erosion will eventually be rehabilitated, consistent with protection of significant resources. • Encounters with others are very few. Visitors can have a strong sense of isolation and discovery. • Visitors are distant from comforts and conveniences. Outdoor skills are required; the experience poses challenges. • In some places, noise from all human activities and inventions, except for airplanes, is totally absent.	BACKCOUNTRY (NON-MECHANIZED) ZONE
• This zone has unpaved restricted access roads for park operational use that also serve as trails; it also encompasses other roads that provide access to private properties. • Motor vehicle use by visitors is prohibited, although mechanized recreation, such as bicycles, is permitted. • The zone contains walk-in facilities, including some of the park's trail camps.	• Some areas in this zone are natural with generally pristine conditions. The zone also contains previously disturbed areas that have been or will be rehabilitated. • Potentially significant cultural features are also present.	• Experiencing this zone may involve a time commitment of more than a day and an overnight stay. • Visitors can experience a heightened sense of isolation in this zone, though occasionally hearing the sound of a motor. • Visitors will have a strong impression of being immersed in a natural landscape and may have a sense of discovery. • Visitors are distant from comforts, conveniences, and facilities. • The chance of encountering other visitors is low.	BACKCOUNTRY (MECHANIZED) ZONE

Appropriate Facilities and Activities	Resource Condition or Character	Visitor Experience	Zones
• This zone takes in the park's day use trail network, which includes many hard-surfaced or otherwise high-standard, high-use trails, as well as trails accessible by persons with disabilities and more remote and natural trails. • This zone also encompassess the park's most accessible and intensively used recreational facilities, including campgrounds, day use areas, and parking lots for trails. • Interpretive facilities are also present, including campfire centers, the visitor center, and interpretive shelters, exhibit panels, signs, nature trails, and trails used for guided walks. • The zone encompasses many of the park's memorial groves. • Most river access points fall within this zone. • This zone also includes land or potential sites where conditions might be suitable for future facilities development, consistent with the protection of sensitive natural and cultural resources. • Restricted access private roads are mostly located within this zone, as well as roads for park and commercial use.	• Natural resources predominate in this zone, mostly high quality, with many prime examples of old growth redwood forest. • The zone contains state endangered and federal threatened marbled murrelet nesting habitat, potential federal threatened northern spotted owl nesting habitat, federal threatened Coho and Chinook salmon, and federal candidate steelhead riverine spawning habitat. • Potentially significant cultural sites and landscapes are present. • Some river access points show impacts from public use. • Hydrologic and geologic hazards (slides, erosion) are present in some locations. • Natural features frame recreational activities with an attractive setting; visitor use may be impacting resources (soil compaction, etc.). • Some park developments may constitute potentially significant cultural features or landscapes. • Visitor use is managed intensively to reduce the likelihood of adverse impacts to resources. • Recreational sites are managed intensively to ensure visitor safety and efficient circulation, and to assist with operational needs.	• Recreational and interpretive facilities are easily accessible, and opportunities for social interaction are many. • Many trails provide visitors with a more isolated day use experience outside of developed areas, although the probability of encountering other visitors is seasonally high; the more remote the trail, the greater the isolation. • Visitors can enjoy the natural setting, as well as the facilities that make their proximity to the resources easy and comfortable. • Noise levels are high near more developed areas and transportation routes and lessen as visitors move toward more primitive parts of the park. • The sights and sounds of other visitors and facilities are generally apparent. • Visitors have the opportunity to learn about listed species and significant natural and cultural resources through various interpretive facilities. • Visitor' experiences are more structured in developed areas, where various activities and interpretation are easily available on-site. • Visitors with disabilities are able to experience the park with few restrictions to their mobility in developed areas.	FRONTCOUNTRY ZONE
• Paving and structures predominate; The zone includes: Park Headquarters, other offices, shops & storage, the staff housing complex, and the roads and trails service area; the High Rock Conservation Camp; and the Grasshopper Peak CDF fire lookout. • Administrative uses occur at all sites; visitor orientation at Park Headquarters.	• Natural/cultural resources intensively managed and are generally altered to provide services to visitors, for user safety, and for operational needs. • Many structures are associated with potentially significant cultural sites or landscapes. • Resources are protected by law. • These areas are as small as possible to accommodate the facilities they serve, and they are discontinuous.	• Visitors experience the official presence of the Department at Headquarters, are informed about park rules, and given a better sense of what there is at the park. • Visitors need to expend only minimal effort in this zone and are not required to have outdoor skills.	ADMINISTRATION AND OPERATIONS ZONE

Appropriate Facilities and Activities	Resource Condition or Character	Visitor Experience	Zones
• This zone includes the park's largest road, Highway 101, other major paved roads (the Avenue of the Giants and Mattole Road), important other roads (Dyerville Loop Road), and their associated shoulders and parking areas, signs, barriers, traffic control devices, safety pullouts, other misc. turnouts, and public utility corridors. • Recreational activities include driving, sightseeing; trailheads, and parking to support recreational access; bicycling is accommodated within public safety and other constraints regulated by law. • Management of Highway 101 and the Avenue is by Caltrans; Mattole Road by the Department and the county. Activities include maintenance and repair of the roadways and associated structures, as well as law enforcement and other restrictions upon visitor use.	• Resource modification is necessary to varying degrees for provision of access, public safety; some modification and impacts are unavoidable because of the need for maintenance and repair. • Natural resource issues include impacts to individual trees, runoff, and erosion. • Potentially significant cultural sites and landscapes are present and may be subject to impacts from roadway maintenance and repair. • Within specified distances, adjacent resources are protected by law. The importance of protection of old growth redwood forest is recognized, and negative ecological and visual impacts avoided. • These roads are no wider than necessary to accommodate their uses.	• Noise impacts the landscape for a considerable distance, depending on topography, around this zone. • Motorists moving through the park at speed on a well-maintained roadway have a pleasant visual experience of the park's world-class resource. Many people experience the park solely in this manner. • Visitors have varying degrees of awareness of attractions and roadside services, depending on traffic speed, signs and other means of conveying information, and the clarity of access to them. • The highway provides clear and efficient circulation to and through the park, as well as access via exit ramps to more intimate park experiences. • Visitors and facilities are intensively managed for public safety. • Bicyclists must remain aware of traffic for safety concerns. • The benefits of interpretation are more easily available to visitors on the two-lane roads than on Highway 101. • Solitude and a quiet park experience are not available within the zone.	TRANSPORTATION ZONE

Guidelines

- Maintain the remoteness and quiet of the primeval ancient forest areas. Trails within this zone will be reserved for non-mechanized uses only, such as hiking and horseback riding.

- Ensure the integrity of the primitive nature of this zone and provide visitors with opportunities for solitude and a true wildlands experience through subclassifying appropriate portions of the zone as State Wilderness.

- After rehabilitation of natural resources and re-establishment of natural processes in formerly logged areas, consider inclusion of these lands within the State Wilderness.

- Manage this zone as a wildland where natural processes can occur without human interference and where preservation and protection of resources in their natural condition is paramount.

- Monitor whether or not public use is damaging resources within the zone. If so, minimize or eliminate human-induced adverse impacts.

- To the extent possible, remove unnatural elements, such as toxic materials, from the zone. Consult with cultural resource specialists prior to removing or altering potentially culturally significant elements.

- Maintain all features within this zone in as unspoiled a condition as possible. Conduct landform rehabilitation to minimize impacts upon visitor activities and in a manner compatible with natural and cultural resource management plans.

- Establish and maintain a minimum of support facilities in the Backcountry (Non-Mechanized) Zone that will provide for such limited recreational activities as high quality hiking and equestrian trails and a limited amount of primitive camping.

- Construct trails to afford access to the parts of the zone that will create the least impact on wildlife habitats and ecosystems, cultural resources, slope stability, unique soils, or geologic formations. Off-trail travel is especially difficult within this zone due to dense vegetation and generally steep terrain.

- Study the appropriateness of establishing backcountry camps with facilities to enhance equestrian use, such as corrals for livestock. Consider the impacts on natural and historic resources.

- Protect and, as appropriate, preserve currently known significant cultural resources and any that may be discovered in the future within the zone, including remnant historic roads and trails.

- Interpret ancient forest ecosystems and other significant resource values within this zone at trailside locations just outside the boundaries of the proposed wilderness.

BACKCOUNTRY (MECHANIZED) ZONE

The Backcountry (Mechanized) Zone is accessible via many of the park's roads.

Statement Of Management Intent
This zone covers the western portion of the park and contains the unpaved roads that provide access to its interior. A few of these roads are used by private individuals, mostly local property owners. Most are accessible only to park staff for patrol or emergencies. Unless otherwise restricted, visitor access on these roads is available by foot, horseback, or bicycle. Much of this area was logged before it came to the Department, and soil stability and drainage patterns are still adversely affected in many locations.

Goal
Rehabilitate damaged ecosystems and protect and preserve historic sites and structures, while allowing appropriate levels and types of public recreation access.

Guidelines
- Rehabilitate disrupted drainage patterns and provide for the recovery of natural cover to promote soil stability.

- Where possible, manage second-growth redwood forest areas to promote ancient forest characteristics.

- Protect and preserve any significant cultural resources, including archeological sites, homestead and ranch sites, remnant orchards, and historic road and trail segments, that currently are known to exist or that might be identified in the future within this zone.

- Develop a Historic Road/Trail Management Plan (in conjunction with the unit-wide Trails Plan) that will evaluate for preservation of known surviving historical roadbeds and associated features, as well as those that might be identified within this zone in the future.

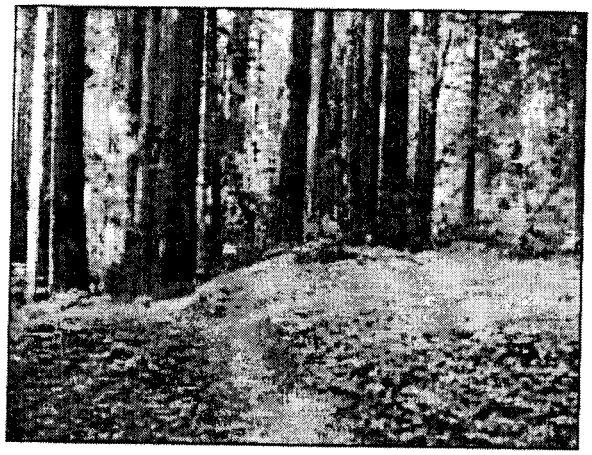
- If geologically feasible, maintain roads and trails in a condition reflecting their historic appearance, while remaining as unobtrusive as possible to the surrounding natural areas. Take measures to mitigate or eliminate the detrimental impacts of road use and maintenance on natural resources. A qualified archeologist should be consulted when developing prescriptions for historic road and trail repairs and maintenance.

- Employ durable, low-maintenance, accessible exhibits to provide location maps and visitor orientation and to interpret such topics as significant resource values and sites, visible remnants of environmental disruption from earlier human uses of the land, and the Department's ongoing efforts to manage the watershed toward recovery from these impacts.

- Promote expansive views within the Bull Creek watershed from ridge roads and views of redwood, Douglas fir, and hardwood forests where natural vegetation patterns permit.

FRONTCOUNTRY ZONE

Statement Of Management Intent
Outstanding natural and cultural features, including prime ancient redwood forest, are the chief attractions in this zone. The Frontcountry Zone surrounds the major roads in the park except for a portion of Mattole Road. Thus, it includes the park's most accessible areas. It also encompasses the park's major recreational and interpretive facilities and day use trails, as well as land that could be suitable for some future facilities development.



Trails through prime examples of ancient redwood forest are well-known features of the Frontcountry Zone.

Goal
Balance public access and facility development with the primary need for protection and preservation of natural ecosystem elements and significant cultural resources.

Guidelines

- Minimize disturbances including, but not limited to, use of loud, motorized equipment, roadwork, and commercial filming along roadways, especially during the marbled murrelet breeding season.

- Ensure, where appropriate, adequate protection for and preservation of all currently identified significant historic sites within this zone and those that might be identified in the future. This includes, but is not limited to, archaeological sites, surviving significant roadbed remnants and historical trail segments, homestead and house sites, CCC-era structures, and other associated cultural features.

- As appropriate, provide visitor services that would not involve adverse resource impacts in this zone. These may include day use and overnight facilities in one or more location(s), day use trails, trailheads, equestrian day use and support facilities at staging areas outside prime resource areas, and facilities to provide interpretive and educational experiences.

- Where excessive resource impacts have occurred, consider relocating existing facilities to more suitable sites within the Frontcountry Zone. The Williams Grove Group Camp is an example of a facility that should be removed to another, more acceptable, location.

- Consider installing a small walk-in camp within the Bull Creek watershed.

- Consider the development of an environmental education center to conduct programs primarily for school children, with additional opportunities for adults.

- Evaluate the possibility of developing improvements in the historic core at the Logan-Holmgren property to accommodate living history programs. Any improvements and/or programs should be compatible with protections afforded to natural and cultural resources within the park. Avoid any disturbance or alteration of the riparian habitat.

- Promote views of prime ancient redwood groves, the Rockefeller Forest, Bull Creek, and the South Fork of the Eel River while maintaining ecological integrity and resource protection.

RECREATIONAL AND INTERPRETIVE FACILITIES WITHIN THE FRONTCOUNTRY ZONE

Happy campers at Humboldt Redwoods

Within the Frontcounty Zone, some recreational and interpretive facilities are compatible with primary resource preservation objectives, particularly those facilities that are easily accessible by automobiles or bicycle from the park's main roads. These include developed day use and overnight areas, the park's Visitor Center, and trailheads for major day use trails. Additional guidelines have been provided for developed areas, which include existing facilities that are compatible with the goals and management intent for the Frontcountry Zone.

Goal

Provide safe, convenient, and comfortable recreational and interpretive opportunities for visitors in the Frontcountry Zone, consistent with appropriate protections for natural and cultural resources.

Guidelines

- Avoid, to the extent possible, any disturbance or alteration of natural or cultural resources when developing facilities within the Frontcountry Zone.

- Take appropriate measures at the Cuneo Creek Horse Campground and other equestrian facilities to control impacts from horse manure. These impacts include run-off into creeks and riparian areas and fostering populations of brown-headed cowbirds.

- Minimize the use of hardened surfaces or reduce their impacts in the floodplain to avoid downstream and local flood effects.

- Provide adequate study and analysis during planning for facility improvements and new developments, such as campgrounds, day use areas, and interpretive or visitor orientation facilities identified in this general plan. Also, identify and integrate discussion of potential impacts to natural and cultural resources as part of the decision-making process for small-scale improvements to visitor-serving facilities within the Frontcountry Zone.

- Continue high quality interpretive programs at campgrounds, day use areas, and the Visitor Center, augmenting them when more funding, staff, and volunteer assistance are available.

- Where possible and appropriate, fabricate structures, park furnishings, fences, etc., out of materials consistent with the adopted aesthetic standards for the park.

TRANSPORTATION ZONE

The northern end of the Avenue of the Giants

Statement of Management Intent
This zone defines the major transportation corridors passing through the park that accommodate vehicular circulation. These corridors include Highway 101, the Avenue of the Giants, and Mattole Road. The Avenue and Mattole Road serve low-to moderate-speed vehicle travel and provide visitors and park staff direct access to most of the park's features and facilities, as well as local services.

Goal
Provide an enjoyable visual experience and safe and clear vehicular circulation for motorists within the park while minimizing impacts to natural, cultural, and aesthetic resources and preventing erosion caused by poor road design or maintenance activities.

Guidelines

- Consider creation of a parkway experience for visitors on the Avenue of the Giants within the core area of the park between Miranda and Redcrest, each of which has easy access to the freeway. The parkway could encourage a reduced driving speed, which could promote a more leisurely drive and increase the safety of motorists using roadside parking and turnouts, as well as improving the experiences of bicyclists and others sharing the roadway. It could also enhance the motorists' abilities to appreciate those portions of the park that can be seen from the road.

- As a companion to a southern interpretive facility proposed for the Logan-Holmgren property (see the next guideline), consider augmentation of the interpretive exhibits at the Dyerville Overlook with the purpose of attracting motorists off Highway 101 and the Avenue of the Giants by informing them about park resources and recreational opportunities and orienting them to the Avenue Parkway.

- Evaluate the possibility of creating an interpretive facility at the Logan-Holmgren property to complement the proposed northern interpretive facility at the Dyerville Overlook. Part of its purpose would be to provide freeway motorists with visitor orientation to the Avenue Parkway.

- Evaluate the possibility of creating additional scenic viewpoints and associated interpretive exhibits along the park's highway corridors to encourage appreciation of its cultural sites, natural beauty, and the varieties of vegetation types visible from these roads. Development should also be compatible with any cultural landscape values that may be identified in the future.

- Work with timber companies and the California Department of Forestry and Fire Protection to protect aesthetic values visible from the park's roads and trails.

- Provide wayside orientation and natural and cultural history interpretation at appropriate locations along the park's roadways and at historic sites accessible by vehicles in order to make this information readily available to the maximum numbers of passing motorists.

- Coordinate with Caltrans to install large, easy to read park entrance signs for north- and southbound motorists on the freeway at locations that maximize potential visitors' opportunities to learn about and visit Humboldt Redwoods State Park.

- Coordinate with the local Caltrans office and Humboldt County to identify adverse impacts associated with road design and maintenance activities and minimize their effects on natural, cultural, and aesthetic resources in the park. Maintenance activities should adhere to research into the best erosion management practices.

ADMINISTRATION/OPERATIONS ZONE

Statement Of Management Intent

This zone contains the facilities that support the administration and management of the park, as well as land containing other agencies' facilities within the park. Park Headquarters and the Roads, Trails and Resources Service Area at Burlington, High Rock Conservation Camp, and the Department of Forestry and Fire Prevention lookout tower on Grasshopper Peak fall within this zone.

The park's administrative complex at Burlington.

Goal

Continue meeting the park's administrative needs, while reducing the visual and physical impacts of facilities on the park's resources, both bordering and within the zone.

Guidelines

- Furnish clear signage and pathways for safe and easy circulation for visitors desiring information in the Park Headquarters area.

- Ensure that plant materials used for landscaping are non-invading if exotic and, if native, are genetically compatible with native plant communities.

- Protect and preserve historically significant sites, homesteads, buildings and other structures, remnant orchards, archeological deposits, and associated features.

- Maintain connections with local communities by making opportunities to volunteer at the park available and keeping communications open with individuals, businesses, and interested Native Americans.

SPECIAL CLASSIFICATIONS

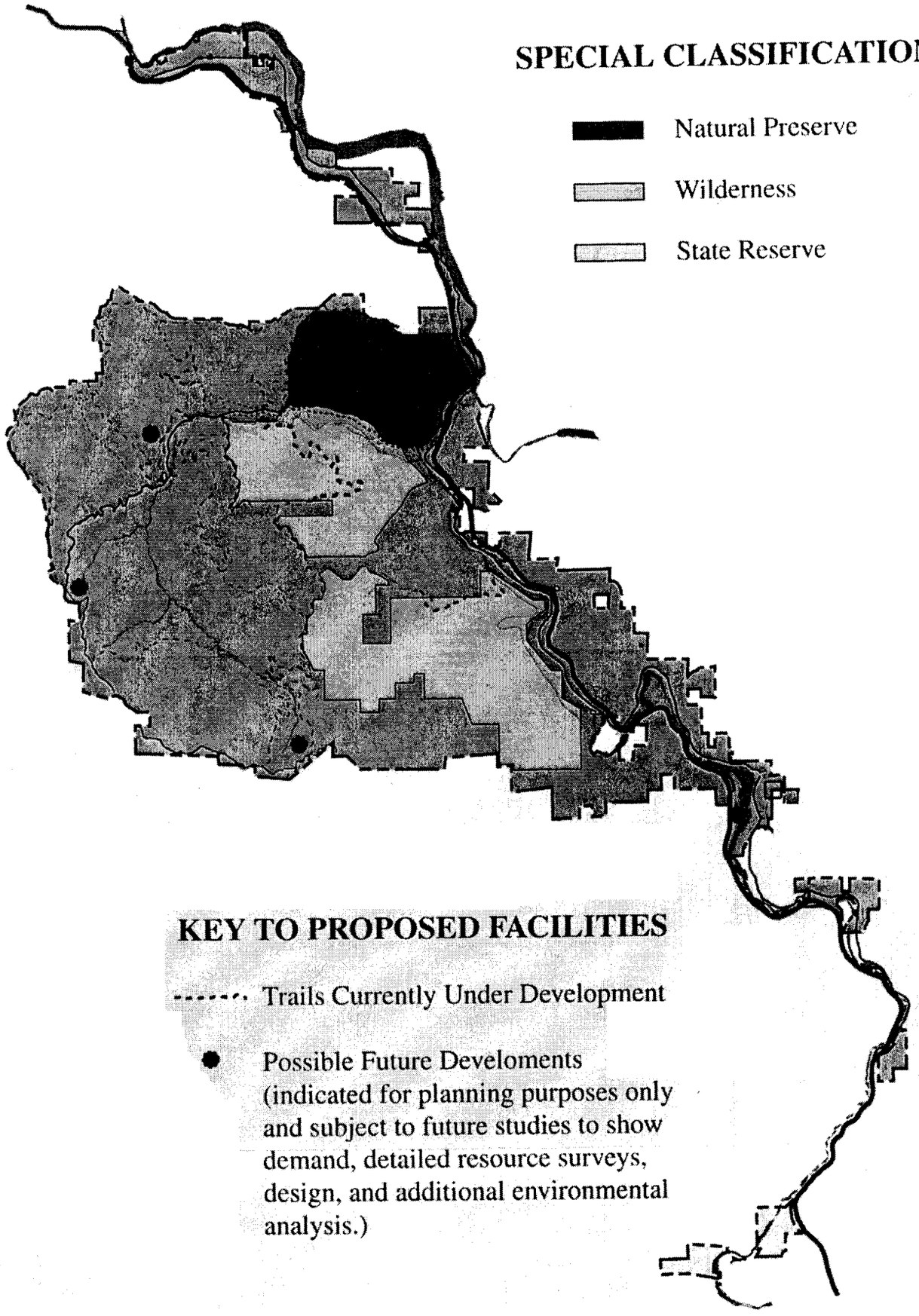
Natural Preserve Subclassification

The south-facing slopes above Bull Creek, drained by Calf, Cow, and Cabin creeks exhibit the nearly perfect condition that was characteristic of the Eel River watershed prior to the settlement period. Within this approximately 3,520-acre portion of the Rockefeller Forest are healthy, functioning ecosystems that sustain a multitude of both prevalent and rare species. These include several listed and/or sensitive bird, mammal, fish, and amphibian species. This ancient redwood forest habitat provides an excellent location for research and comparison with more degraded habitats elsewhere in the area. For these reasons, special protection as a natural preserve is proposed (see Map #7).

Wilderness Subclassification

In 1977, following public hearings and additional comment and review from state departments and county governments, the Secretary of the Resources Agency recommended the addition of 35 roadless areas to the California Wilderness Preservation System. To date, seven of these areas have been named and classified by the California Park and Recreation Commission.

Some of the land in Humboldt Redwoods State Park, identified as potential wilderness in 1977, possesses outstanding qualities. This land consists of two unconnected tracts, separated by a narrow corridor surrounding a dirt road not suitable as wilderness and better managed for more intensive public use. These parcels contain stands of virgin forest within several watersheds. The northern area includes approximately 3,935 acres of land east of Grasshopper Peak and south of Bull Creek that support stands of ancient redwood and Douglas fir. These trees are intermixed with unlogged hardwoods on moderate to steep slopes. The southern area encompasses a 6,515-acre portion of the Canoe Creek drainage, including stands of ancient redwoods growing on alluvial flats. These areas would be excellent additions to the California Wilderness Preservation System. Hence, this general plan recommends that they be classified as state wilderness (see Map #7).



HUMBOLDT REDWOODS STATE PARK
GENERAL PLAN
Proposed Classifications and Facilities

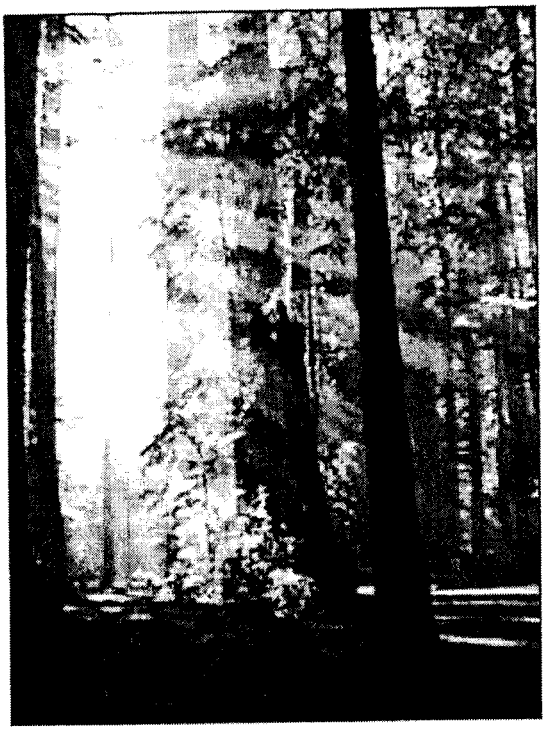
NORTH

0 1 2 3 4

Scale in Miles

Map #7
June 2001

State Reserve Classification: Whittemore and Holbrook Groves



The Whittemore and Holbrook groves are excellent examples of ancient redwood forest that are easily accessible from nearby Highway 101.

State reserves are units of the State Park System with outstanding natural or scenic characteristics, the purpose of which is to preserve native ecological associations, unique fauna or flora, geological features, and scenic qualities in a state of undisturbed integrity. In some instances, day use and interpretive developments may be installed at state reserves to provide for the enjoyment and education of the public. Classification of the Whittemore and Holbrook groves as a state reserve will underscore their importance as containing ancient redwoods of statewide significance. No longer distant satellites of Humboldt Redwoods State Park, their changed classification should generate more interest and visitation and increase their potential to educate the public about redwoods and their ecosystems (see Map #7).

Goal

Create a higher status for the Whittemore and Holbrook groves, thus increasing their ability to furnish public education, and provide for their most efficient management.

Guidelines

- Classify the groves as a state reserve separate from Humboldt Redwood State Park.
- Initiate a separate general planning effort to assess the possibilities for augmenting day use and interpretive opportunities at the groves and to establish long-term management goals and guidelines.

(See Appendix I for the Public Resources Code definitions of natural preserves, state wildernesses, and state reserves.)