UNIT 105

HUMBOLDT LAGOONS STATE PARK

GENERAL PLAN (*)

June 1983

(*) Note: This unit's General Plan is contained within the joint general plan document for Humboldt Lagoons SP and Harry A. Merlo SRA
RESOLUTION 42-83
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka on
June 10, 1983

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

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

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's General Plan for Dry Lagoon State Park preliminary, dated June, 1983, to provide a State Park, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement carrying out the provisions and objectives of said plan.

Now HARRY A MERLO STATE RECREATION AREA
RESOLUTION 43-83
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Eureka on
June 10, 1983

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed preliminary General Plan for Harry A. Merlo State Recreation Area; and

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

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's preliminary General Plan for Harry A. Merlo State Recreation Area, dated June, 1983, to provide a State Recreation Area, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement carrying out the provisions and objectives of said plan.
DRY LAGOON STATE PARK AND
HARRY A. MERLO STATE RECREATION AREA

PRELIMINARY GENERAL PLAN

June 1983

George Deukmejian
Governor

Gordon K. Van Vleck
Secretary for Resources

Carol Hallett
Director

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
P.O. Box 2390
Sacramento, CA  95811

Note: The Park and Recreation Commission approved this Preliminary General Plan in 
JUNE 1983.

A Final General Plan was printed dated  JULY 1986
WITH  "HUMBOLDT LAGOONS STATE PARK".
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY OF PROPOSALS</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>4</td>
</tr>
<tr>
<td>Unit Descriptions</td>
<td>4</td>
</tr>
<tr>
<td>History of Park Ownership</td>
<td>4</td>
</tr>
<tr>
<td>Outline of General Plan</td>
<td>5</td>
</tr>
<tr>
<td>The General Plan Process</td>
<td>6</td>
</tr>
<tr>
<td>RESOURCE ELEMENT</td>
<td>9</td>
</tr>
<tr>
<td>Summary of Resources</td>
<td>10</td>
</tr>
<tr>
<td>Resource Policy Formation: Classifications, Declarations of Purpose,</td>
<td>23</td>
</tr>
<tr>
<td>Interest</td>
<td></td>
</tr>
<tr>
<td>Natural Resource Management Policies</td>
<td>27</td>
</tr>
<tr>
<td>Cultural Resource Management Policies</td>
<td>35</td>
</tr>
<tr>
<td>Allowable Use Intensity</td>
<td>38</td>
</tr>
<tr>
<td>LAND USE AND FACILITIES ELEMENT</td>
<td>40</td>
</tr>
<tr>
<td>Existing Land Use - Dry Lagoon State Park</td>
<td>40</td>
</tr>
<tr>
<td>Adjacent Land Use - Dry Lagoon State Park</td>
<td>41</td>
</tr>
<tr>
<td>Existing Land Use - Harry A. Merlo SRA</td>
<td>43</td>
</tr>
<tr>
<td>Adjacent Land Use - Harry A. Merlo SRA</td>
<td>44</td>
</tr>
<tr>
<td>Public Use and Concerns</td>
<td>45</td>
</tr>
<tr>
<td>Public Involvement Program</td>
<td>46</td>
</tr>
<tr>
<td>Proposed Land Use</td>
<td>47</td>
</tr>
<tr>
<td>Land Use Concept</td>
<td>47</td>
</tr>
<tr>
<td>Proposed Facilities</td>
<td>48</td>
</tr>
<tr>
<td>Utilities</td>
<td>58</td>
</tr>
<tr>
<td>Transportation</td>
<td>58</td>
</tr>
<tr>
<td>Capacity of Facilities</td>
<td>59</td>
</tr>
<tr>
<td>Recommended Sequence of Implementation</td>
<td>60</td>
</tr>
<tr>
<td>Future Coordination with Government Agencies</td>
<td>60</td>
</tr>
<tr>
<td>Conformance to Local Coastal Plan</td>
<td>61</td>
</tr>
<tr>
<td>Appropriate Future Land Acquisition</td>
<td>63</td>
</tr>
<tr>
<td>OPERATIONS ELEMENT</td>
<td>64</td>
</tr>
<tr>
<td>Operational Requirements</td>
<td>64</td>
</tr>
<tr>
<td>Land Use Management</td>
<td>64</td>
</tr>
<tr>
<td>Interpretation Needs</td>
<td>66</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>INTERPRETIVE ELEMENT</td>
<td>67</td>
</tr>
<tr>
<td>Environmental Influences</td>
<td>67</td>
</tr>
<tr>
<td>Interpretive Themes</td>
<td>67</td>
</tr>
<tr>
<td>Visitor Activities</td>
<td>68</td>
</tr>
<tr>
<td>Interpretive Facilities</td>
<td>69</td>
</tr>
<tr>
<td>CONCESSIONS ELEMENT</td>
<td>72</td>
</tr>
<tr>
<td>ENVIRONMENTAL IMPACT REPORT</td>
<td>73</td>
</tr>
<tr>
<td>SELECTED REFERENCES</td>
<td>77</td>
</tr>
</tbody>
</table>
SUMMARY OF PROPOSALS

As contiguous park units with essentially similar characteristics, Dry Lagoon State Park and Harry A. Merlo State Recreation Area have been considered together in the planning process and in this general plan.

The proposals contained in this general plan can be summarized in four areas: Resource Management; Land Use, Facilities, and Interpretation; Operations, and Classification.

Resource Management Proposals

- Protect the lagoons' natural processes.
- Eliminate vehicle use on beaches to protect coastal strand habitat.
- Reintroduce fire to its natural role in the ecosystem.
- Control alien (non-native) plant populations.
- Manage Azalea Hill to maintain the vigor of the western azalea.
- Develop a management plan for the Big Lagoon Roosevelt elk herd.
- Study the feasibility of establishing a Roosevelt elk herd on the Stone Lagoon Peninsula.
- Monitor waterfowl hunting on Stone Lagoon to determine its compatibility with traditional state park uses.
- Monitor and improve the Stone Lagoon fishery.
- Stabilize and protect all archeological sites from erosion and vandalism.

Land Use, Facilities, and Interpretation Proposals

Stone Lagoon Primitive Campground

- Retain as primitive campground.
- Develop 10 additional campsites within existing boundaries.
- Upgrade comfort stations and access road.

Stone Lagoon Overlook

- Construct five-space highway pull-off.
- Install interpretive panels and scenic overlook.
Stone Lagoon Day-Use Area

- Construct Visitors Center (to interpret lagoons area).
- Construct 40-space parking lot (including boat ramp).
- Rehabilitate site to enhance view.
- Provide picnic facilities.
- Develop trail to Redwood National Park.
- Develop staff housing and maintenance center (minor).

Stone Lagoon Peninsula

- Develop 10 boat-in campsites.
- Develop 5-10 hike-in campsites.

Dry Lagoon Area

- Retain existing parking lot (upgrade facilities).
- Develop 10-unit walk-in campground.
- Construct 20 parking spaces.
- Provide picnic facilities.
- Install entrance station.

Big Lagoon Overlook

- Develop overlook point.
- Construct 20-space parking lot.
- Provide picnic facilities.

Big Lagoon Group Use Area

- Provide group picnic area (for both day-use and overnight use).
- Construct cooking shelter.
- Construct 15-space parking lot.

Big Lagoon Marsh Day-Use Area

- Construct 20-space parking lot.
Trails
- Provide section of Pacific Coastal Trail.
- Develop interpretive trails.

All-Access Program
- Provide facilities which are accessible to the disabled.

Underwater Recreation Area
- Designate Big Lagoon an Underwater State Recreation Area.

Operations Proposals
- Eliminate off-highway vehicle use on Stone Lagoon barrier beach.

Classification Proposals
- Designate three natural preserves within Harry A. Merlo State Recreation Area to protect the old-growth redwood grove.
INTRODUCTION
INTRODUCTION

Unit Descriptions

Dry Lagoon State Park and Harry A. Merlo State Recreation Area are located along coastal Highway 101 about 30 miles north of Eureka. Nearby communities are Trinidad, 8 miles to the south, and Orick, 6 miles to the north. The nearest state parks are Prairie Creek Redwoods State Park, 12 miles to the north, and Patrick's Point State Park, 3 miles to the south.

The most prominent features of these units are two lagoons which the units partially surround. Both Stone Lagoon (521 acres) and Big Lagoon (1,470 acres) essentially retain their natural character. Neither is within state park ownership. The State Lands Commission has jurisdiction over Stone Lagoon, while Big Lagoon is managed by the State Department of Fish and Game under a lease with the State Lands Commission.

Dry Lagoon State Park fronts seven miles of the Pacific Ocean and climbs to an elevation of 700 feet. The most significant features of its 1,036 acres are: the one-mile long barrier beach separating Stone Lagoon from the ocean, the three-mile long shoreline on Stone Lagoon (out of the 5-1/2 mile total), Dry Lagoon, which is actually a freshwater marsh, and the 3-1/2 mile barrier beach that separates Big Lagoon from the ocean. Many parts of Dry Lagoon State Park have a natural, almost primitive character.

Harry A. Merlo State Recreation Area covers 750 acres along the eastern shore of Big Lagoon, abutting Dry Lagoon State Park about midway between Big Lagoon and Dry Lagoon. The 3.5-mile shoreline along Big Lagoon, an old-growth redwood forest, and Big Lagoon Marsh, are the unit's most significant resources. Like Dry Lagoon State Park, Harry A. Merlo SRA is relatively undeveloped.

History of Park Ownership

Dry Lagoon State Park was created in 1931 with an initial acquisition of 763 acres. Since then, through a number of separate acquisitions, the park has expanded to its present size. Big Lagoon barrier beach (163 acres) was added in 1935 through a U.S. patent issued to the state. Additional lands were acquired in 1960 and 1964.

In the 1970s, the department began the Humboldt Lagoons Acquisition Project. In Phase I of that project, 403 more acres were added to Dry Lagoon State Park, including the Little Red Hen Motor Court, margins of McDonald Creek pastureland, and one mile of additional shoreline around Stone Lagoon. In Phase II, the department (with the assistance of The Save-the-Redwoods League), acquired 750 acres along the shoreline of Big Lagoon and around Big Lagoon Marsh.

A stipulation to this latter purchase from the Louisiana Pacific Corporation was that the unit be named in honor of Harry A. Merlo, chief executive of the company. In addition, the State Department of Fish and Game stressed the importance of continued hunting on Big Lagoon. Taking these two
considerations into account, on October 8, 1982 the State Park and Recreation Commission classified the Phase II acquisition as Harry A. Merlo State Recreation Area. (A "state recreation area" allows hunting; a "state park" classification does not.)

Outline of General Plan

Purpose of this Document

This plan provides guidelines for management and development of Dry Lagoon State Park and Harry A. Merlo State Recreation Area through the next 20 years. The plan contains recommendations which, if implemented, will lead to the most desired situation.

A general plan is not meant to propose a program of detailed site development. Rather, it legally provides opportunities for future resource management programs and public use facilities. Detailed site plans will be prepared when specific recommendations are funded. Overnight and day-use parking lot capacities indicated in this general plan are approximate and may vary at the time site plans are developed.

Plan Elements

The following descriptions of the elements of this plan reflect the department's responsibility to fulfill certain goals:

RESOURCE ELEMENT

- Summarizes the units' natural and cultural resources.
- Establishes policies for restoration and protection of natural and cultural resources.

LAND USE AND FACILITIES ELEMENT

- Determines land use and visitor facilities that are consistent with the character of the units.
- Describes ways to enhance the public's recreational experience and provides for new recreational opportunities where appropriate.
- Establishes a sequence of park development.

OPERATIONS ELEMENT

- Outlines an operational program to satisfy the unique management requirements of these units.

INTERPRETIVE ELEMENT

- Establishes themes and methods for interpreting the natural and cultural resources within and near the units.
CONCESSIONS ELEMENT

- Summarizes concessions opportunities for existing and proposed park facilities.

ENVIRONMENTAL ELEMENT

- Determines potential cultural and environmental impacts of land use proposals.

In its entirety, the plan acts as an informative document for the public, the Legislature, department personnel, and other government agencies.

The General Plan Process

A general plan must consider many factors, including public and governmental concerns, existing land uses, and legal constraints. The following factors have guided the creation of this plan:

Natural Resources - Before completion of this plan, detailed resource inventories were compiled for Dry Lagoon State Park and Harry A. Merlo State Recreation Area. These inventories (on file with the department) discuss a variety of factors relating to the parks' natural resources, including climate, topography, vegetation, and geology. Through the inventories, significant resource concerns were identified. The plan's Resource Element summarizes the units' natural resources and establishes resource management policies. (Please refer to this element for information on how the natural resources have specifically shaped this plan.)

Cultural Resources - The inventories of features includes information on cultural resource survey methodology, areas covered, specific site locations and full site descriptions. This information is summarized in the Resource Element. Problems and policies related to the management of cultural resources are presented separately in the Resource Element.

Park Operation - Consideration has been given to how the units are now being operated and what alterations may be needed. Issues addressed in this plan include operations requirements and land use management. (The Operations Element has a detailed discussion of proposals relating to specific operation of the units. Also refer to the Interpretive Element for a summary of proposed interpretive programs.)

Interaction With Other Government Agencies - The following six government agencies have their own concerns, which the plan has considered.

- National Park Service - Redwood National Park and Dry Lagoon State Park share boundaries north of Stone Lagoon along the coast. A narrow strip of privately owned property separates the two parks east of Stone Lagoon at the 700-foot elevation. Since Redwood National Park is a neighboring provider of public recreation and resource protection, both its existing and future plans have shaped this plan. The Adjacent Land Use and Facilities Element has a detailed discussion of existing land use and future plans for Redwood National Park.
State Department of Transportation (Caltrans) - With Highway 101 passing directly through both Dry Lagoon State Park and Harry A. Merlo SRA, interaction with Caltrans becomes significant to future development plans. The general plan has been shaped according to 1) existing traffic levels, 2) Caltrans future plans, and 3) required intersection improvements. These topics are discussed in the Transportation section of the Land Use and Facilities Element.

State Department of Fish and Game - In 1973, Fish and Game entered into a 10-year lease with the State Lands Commission in order to have jurisdiction over Big Lagoon and part of Big Lagoon Marsh. Their major concerns are for the continuation of waterfowl hunting on Big Lagoon and the Marsh, which they consider regionally significant, and for protection of wildlife habitat. The Harry A. Merlo project was classified as a state recreation area for the express purpose of allowing hunting to continue. Limited numbers of hunters also utilize Stone Lagoon. Fish and Game is also interested in perpetuating waterfowl hunting on Stone Lagoon.

Fish and Game is also involved in restoring riparian vegetation along McDonald Creek to improve the fishery. This project lies in the McDonald Creek pastureland, off state property.

The State Lands Commission - The State Lands Commission has jurisdiction over sovereign lands (those lands which underlie navigable waterways or lie between high tide and mean low tide) within the State of California. In the lagoon area, this includes Stone Lagoon, Big Lagoon (currently leased to Fish and Game), and the wave slopes of Stone Lagoon barrier beach, Dry Lagoon Beach, and Big Lagoon barrier beach. Any proposal made in this plan to alter existing use and/or jurisdiction of these areas must be reviewed and approved by the State Lands Commission.

Humboldt County Parks Department - Big Lagoon County Park lies at the southern end of Big Lagoon barrier beach. Facilities there helped determine the type of visitor-serving facilities recommended in this plan. (Please refer to the Adjacent Land Use section for a detailed discussion of the facilities available at Big Lagoon County Park.)

Humboldt County Planning Department - The planning department is in charge of preparing the county's Local Coastal Plan (LCP). The Northcoast Area Plan (part of the county's LCP) includes policy statements which, to a certain extent, will guide future development at Dry Lagoon State Park and Harry A. Merlo SRA. The Conformance to LCP section of the Land Use and Facilities Element discusses how the general plan relates to the LCP.

Utilities - Preliminary site investigations have determined the feasibility of proposed telephone and electric hookups. Water availability and sewage disposal capabilities were primarily determined through investigations of the natural resources. The Utilities Section contains an analysis of the utilities required as part of this plan.
Public Involvement - The public involvement process played a key role in shaping the plan. The process involved: 1) investigating the extent of existing and future public use, and 2) determining local resident and visitor concerns. The public involvement process and its results are outlined in the Public Use and Concerns section of the Land Use and Facilities Element.

Design Criteria - Certain design principles also have shaped the plan. These principles relate, for example, to: 1) the relationship between facilities, 2) visitor experience, and 3) the preservation of unit character. Design principles permeate the discussion of proposed facilities throughout the Land Use and Facilities Element.
RESOURCE ELEMENT

The purpose of this Resource Element is to establish the specific long-range resource management objectives and policies necessary to protect and perpetuate the resource values of these State Park System units. This element identifies specific resources, their values and sensitivities, and establishes the department's guidelines for acceptable levels of development and use. Resource management policies in this section identify major programs that need to be developed to protect and perpetuate the unit's natural and cultural resources. However, specific means of implementing these programs are to be formulated after further, more in-depth study.

This element has been prepared in accordance with requirements of Section 5002.2 of the Public Resources Code and Section 4332 of the Administrative Code. It deals with current lands in the units. If additional lands are acquired, no development shall be permitted until amendments to the inventories of features and this general plan have been prepared for those lands by staff members and general plan changes have been adopted by the State Park and Recreation Commission.

Harry A. Merlo State Recreation Area, lying along the east shoreline of Big Lagoon. Photo by David Swanlund, courtesy of Save-the-Redwoods League.
Summary of Resources

Topography

Dry Lagoon State Park and Harry A. Merlo State Recreation Area are located on the western edge of the Coast Ranges within the Coastal Strip Landscape Province. The dominant features of the general area are coastal lagoons: Big Lagoon and Stone Lagoon. Each lagoon is separated from the Pacific Ocean by a barrier beach. The lagoon surfaces are not part of the State Park System, but are state-controlled, administered by the California State Lands Commission. Fifty-nine percent of Stone Lagoon's 5.45-mile (8.7-km) shoreline and 90 percent of Big Lagoon's 8.9-mile (14.3-km) shoreline belong to the State Park System. The sandy barrier beach separating Big Lagoon from the Pacific Ocean is part of Dry Lagoon State Park. The eastern shoreline of Big Lagoon is part of Harry A. Merlo SRA.

Between Big Lagoon and Stone Lagoon and within Dry Lagoon State Park is Dry Lagoon, actually not a lagoon but a 280-acre (112-hectare) freshwater marsh.

Harry A. Merlo SRA includes 163 acres (67 hectares) of the semiterrestrial marshland, known as Big Lagoon Marsh, at the mouth of Maple Creek.

Elevations of the units range from sea level to 700 feet (180 meters). Slopes are highly variable, ranging from nearly level to over 50 percent. Slope aspect is generally westward but is highly variable.

Climate

The climate of both units is Mediterranean, dominated by the marine weather patterns of the Pacific Ocean. High humidity prevails throughout the year. Monthly mean temperatures along the coast vary only 10°F (5°C) from summer to winter. Minimum temperatures of 32°F (0°C) or lower are experienced throughout the area. Maximum readings for the year rarely exceed 80°F (26°C).

Average annual precipitation is about 55 inches (138 cm) per year, principally as rainfall during the winter in association with large storm systems. Snowfall is infrequent; seasonal totals are usually less than an inch or two. Summer thunderstorms occasionally occur and produce some rainfall.

Winds are predominately from the north or northwest during the dry summer season. During the wet winter season, winds are usually from the south or southwest.

Fog and low cloudiness are common during the summer along the coast, usually clearing by late morning.

Hydrology

Big Lagoon is the dominant hydrologic feature of Harry A. Merlo SRA while both Big Lagoon and Stone Lagoon are the dominant features of Dry Lagoon State Park. Their size, relatively undisturbed pristine character, and the active
1931 aerial photo of Stone Lagoon peninsula, showing agricultural fields.

Stone Lagoon peninsula today.
and dramatic hydrologic process of the lagoons' annual breaching of the barrier beaches that separate them from the sea make them important examples of California coastal lagoons.

The surface area of Big Lagoon is 1,470 acres (588 hectares). The barrier beach is 3.2 miles long (5.1 km) and 700 feet (210 meters) wide. The watershed of Big Lagoon is 53.7 square miles (13,782 hectares). The major drainage is Maple Creek.

The surface area of Stone Lagoon is 521 acres (208 hectares). The barrier beach is 1 mile (1.6 km) long and 600 feet (180 meters) wide. The watershed is 8 square miles (2,050 hectares).

The surface elevation of the lagoons vary during the year, depending on the quantity of freshwater inputs and the breaching of the barrier beaches. Summer water levels are fairly stable, with freshwater runoff into the lagoons roughly equaling the water lost through evaporation and percolation through the barrier beaches. During the winter, when a heavy rainstorm moves across the watersheds, the water levels rise until the barrier beaches are overtopped. The overflowing water erodes away the sand, and breaching occurs. When this happens, the water level of the lagoons can drop dramatically, as much as 5 feet (1.8 meters) in the first hour. The lagoons will remain open to the sea for a period ranging from a few days to several weeks, with lagoon levels varying with ocean tides. Littoral sand movement eventually closes up the lagoons, and the cycle begins again.

The two lagoons are completely independent of one another. Breaching of their barrier beaches occurs at different times and frequencies. Big Lagoon usually breaches two to five times per year between November and March. Stone Lagoon's watershed is smaller than Big Lagoon's, so Stone Lagoon breaches less often during the same period.

Water temperatures in the lagoons range between 46°F (8°C) and 72°F (22°C), with lows during periods of high precipitation between December and March and highs during the summer months of July and August.

Geology

The bedrock geology of both units is Franciscan. The two major lithologic units in Dry Lagoon State Park are Redwood Creek schist and Franciscan melange. The major lithologic unit of Harry A. Merlo SRA is Franciscan melange. Redwood Creek schist is dark sandstone containing feldspars and rock fragments that readily split into parallel layers. Franciscan melange is a heterogeneous mixture of blocks of rock that "float" in a granulated matrix of clay soil-like materials. The lagoon barrier beaches contain gold-bearing black sand deposits.

Coastal erosion and slope movement are active processes in the general area. Between Dry Lagoon Marsh and Big Lagoon is a zone of unstable Franciscan melange materials known as the Truittman Sink, a large, slow-moving landslide that is continually pushing material out into the surf zone. Portions of the shoreline at Truittman Sink have retreated 30 to 125 feet in the last 50 years.
North coastal California is seismically active, with 20 earthquakes of a 6.0 or greater magnitude having occurred since 1871. The most recent was a 7.0 magnitude event on November 8, 1980, which destroyed a Highway 101 overpass near Humboldt Bay, cracked chimneys and broke window glass at the Big Lagoon subdivision, and caused liquefaction on Big Lagoon barrier beach.

Tsunamis (seismic sea waves), which can be generated by earthquakes nearby or at great distances, may have an impact on the coast of Dry Lagoon State Park.

Soils

There are six soil series in Dry Lagoon State Park: Kerr, Atwell, Masterson, Melbourne, Orick, and Usal. The five soil series in Harry A. Merlo SRA are Empire, Hely, Larabee, Toniti, and Usal. Each has its own distinctive characteristics and properties. The erosion hazard of many of these soils is high and slope stability is a problem in most steep areas. Permeability is generally good. Most of these soils are upland forest soils, highly productive for the growth of coniferous forest.

Soils information for both units is not detailed. No comprehensive soils survey and interpretations have been conducted by the U.S. Soil Conservation Service. Detailed site analysis will be required before construction.

Plant Life

Dry Lagoon State Park contains eight categories of vegetation: Sitka spruce (Picea sitchensis) forest, red alder (Alnus rubra) forest, scrub, coastal strand, salt marsh, freshwater marsh, agricultural grassland, and prairie bals. The dominant vegetation is red alder forest.

Harry A. Merlo SRA contains five categories of vegetation: coast redwood (Sequoia sempervirens) forest, Sitka spruce forest, deciduous forest, scrub, and salt marsh. The dominant vegetation is coast redwood forest.

The coast redwood forest includes individual trees over 10 feet (3 meters) in diameter and over 200 feet (60 meters) tall. Within the coast redwood forest is an outstanding and unusual old-growth association of coast redwood, Sitka spruce, and grand-fir (Abies grandis). This association is rare in California. Within this unit, the association is restricted to a narrow strip of land about 1,200 feet (300 meters) wide, and 1.6 miles (2.5 km) long along the eastern shore of Big Lagoon.

The deciduous forests include extensive stands of red alder on land capable of supporting coniferous forest and red alder and willows (Salix spp.) in riparian areas. These species characteristically grow in wet areas and on sites which have been logged, burned, or undergone any activity which allows direct overhead light and bares mineral soil. The dominant status of red alder within Dry Lagoon State Park is a result of clearing, for grazing and logging by early settlers. The process of plant succession will eventually convert much of the red alder forest to climax coniferous species.
Scrub vegetation occurs primarily on the west-facing slopes above the north end of Big Lagoon and on the Stone Lagoon Peninsula. Common species include coyote bush (Baccharis pilularis), blue blossom ceanothus (Ceanothus thrysiflorus), wax myrtle (Myrica californica), scotch broom (Cytisus scoparius), and western azalea (Rhododendron occidentale). Scrub is a transitional community on some sites capable of supporting coniferous forest. On steep south and west-facing slopes, the scrub is the climax community.

Sitka spruce forest dominates the area southwest of the Big Lagoon marsh, on the north end of Big Lagoon, and in isolated pockets on the Stone Lagoon Peninsula. This species is tolerant of salt ocean spray and is able to thrive in sites adjacent to the ocean where other coniferous species do not do well. Western hemlock (Tsuga heterophylla), grand fir, and douglas-fir (Pseudosuga menziesii) also occur as overstory plants within the Sitka spruce forest.

Coastal strand vegetation occurs on the barrier beaches which separate Big Lagoon, Stone Lagoon, and Dry Lagoon marsh from the Pacific Ocean. Vegetation on the barrier beaches is sparse. Many areas of the strand are typified by bare sand and driftwood. Along the lagoon shorelines, some pickleweed (Salicornia spp.) is present and salt grass (Distichlis spicata), dune tansey (Tanacetum camphoratum), sand verbina (Abronia latifolia), sand strawberry (Fragaria chamaissonis), and beach pea (Lathyrus latifolius) occurs on higher ground. Sea rocket (Cakile maritima) also occurs on the strand.

Salt marsh vegetation occurs in the creek delta area where Maple Creek and Tom Creek enter Big Lagoon, where McDonald Creek enters Stone Lagoon, and along the lagoon shorelines in a narrow band. The dominant marsh plant species is common tule (Scriptus acutus). Spike rush (Eleocharis spp.), salt grass, silverweed (Potentilla anserina), and arrow grass (Trichoclin maritima) are also common.

Freshwater marsh occurs at Dry Lagoon where common tule, cattail (Typha latifolia), skunk cabbage (Lysichitum americanum), and sedges (Carex spp.) occur. This area floods during the winter but is almost dry in the summer.

Agricultural grasslands occur adjacent to McDonald Creek south of Stone Lagoon and on the hillside east of Stone Lagoon. These areas are grazed by domestic livestock. The grazing activity has altered the native vegetation and promoted alien plant species. Common species in these areas include thistle (Cirsium spp.), plantain (Plantago spp.), ox-eye daisy (Chrysanthemum leucanthemum), dandelion (Agroscleria spp.), and velvet grass (Holcus lanatus spp.). One native species, bog rush, is not palatable to livestock and is thriving in those areas where the water table is close to the surface. If livestock grazing were to be ended on these lands and no other management practices instituted, plant succession would probably convert those areas to red alder forest.

Prairie balds are small areas of herbaceous vegetation which occur within Dry Lagoon State Park on the Stone Lagoon Peninsula. The prairies are dominated by annual and perennial grasses interspersed with douglas-iris (Iris douglasiana) and bracken fern (Pteris aquilina). Clumps of Pacific reed grass (Calamagrostis nutkaensis) may reach a height of 5 feet (1.5 meters) within these prairies.
One endangered plant occurs in Dry Lagoon State Park, according to the California Native Plant Society. It is the Humboldt Bay owl's clover (Orthocarpus castillejoides var. humboldtiensis). Its habitat in the unit is restricted to the salt marshes.

The western azalea (Rhododendron occidentale) thrives in and adjacent to both parks in an area known as Azalea Hill (Stagecoach Hill). There is an unusually wide variation in the characteristic color, size, and shape of the blooms at this location.

Vegetation in both units has been affected by fire and non-native plants. It is believed that the Yurok Indians regularly burned the vegetation in this area. Fire suppression over the last 50 years has altered vegetative composition. Several exotic plant species occur here and have the potential to displace native plant species. They include pampas grass, scotch broom, and European dune grass in Dry Lagoon State Park, and pampas grass, scotch broom, and eucalyptus at Harry A. Merlo SRA.

**Animal Life**

Animal life in both units is closely tied to the influences of lagoon and ocean environments. Both units are located in the Pacific Coastal Wildlife Region.

Eight biotic communities have been identified in or adjacent to Dry Lagoon State Park: coastal prairie, coastal strand, coastal marsh, northern coastal scrub, coniferous forest, coastal hardwood forest, open water, and agricultural grassland.

Six biotic communities have been identified in or adjacent to Harry A. Merlo SRA: coastal marsh, northern coastal scrub, coniferous forest, coastal hardwood forest, open water, and grassland.

Over 200 bird species have been identified in or near the units. Big Lagoon and Stone Lagoon are on the Pacific Flyway and attract a wide variety of water birds.

Three endangered bird species, the California brown pelican, bald eagle, and American peregrine falcon, have been observed in both units, but none nest there.

Other animal species of special interest include osprey, snowy plover, black bear, bobcat, and Roosevelt elk. A herd of about 55 elk can usually be found in Harry A. Merlo SRA near Big Lagoon Marsh.

**Marine Life**

Silver salmon, coastal cutthroat trout, and steelhead trout, all anadromous fish that enter Stone and Big Lagoons when the barrier beaches are breached, spawn in the lagoons' tributary streams, Tom, McDonald, and Maple Creeks. Juvenile and adult cutthroat and steelhead may be found in the lagoons depending on the condition of the barrier beaches.
Mature fish in the lagoons provide fishing opportunities. A total of 30 fish species have been identified in Big Lagoon. Most of these species probably occur in Stone Lagoon.

The ocean frontage of Dry Lagoon State Park provides sandy beach and rocky shore habitat for marine life. Common species of ocean fish in the beach areas include redtail, silver and walleye surfperch, starry flounder, day smelt, and night smelt.

_Cultural Resources – Dry Lagoon State Park_

(Please refer to the Inventory of Features for detailed information on prehistoric and historic sites and their locations.)

_Native American Resources_

Two Yurok villages were located on lands that are now in Dry Lagoon State Park: Tsotskwi on Dry Lagoon itself, recorded as archeological site Hum-120, and Tsahpekw on Stone Lagoon, recorded as Hum-129. Both sites are highly significant for 1) their scientific values in contributing to an understanding of northwest coast Native American life, and 2) their social value as heritage sites to contemporary Coast Yurok people.

Both village sites have suffered moderately due to vandalism from relic collectors. Hum-129 lies on a moderately steep slope that is subject to slumping and erosion from rain, water runoff, and direct wave attack. Hum-129 has been mostly stabilized for the present time by a soil movement and revegetation project in 1976-78 that included recovery and preservation of archeological information.

_Euroamerican Resources_

Physical remains of early Euroamerican settlement at Dry Lagoon State Park are extremely meager. While the area experienced settlement by farmers and dairymen in the early 1870s, little evidence remains. A few ruinous structures remain near Dry Lagoon, probably part of what was known as the Gillis Ranch at the time the State Park System began acquiring property for the creation of the unit. These structures, a one-room roofless cabin and several collapsed outbuildings, reveal no sign of being earlier than 1900 and are probably of a later date, say the 1920s.

On the east side of Stone Lagoon there exists the former motor court and cafe-store known as the Little Red Hen. The Little Red Hen came into existence in 1927-1928 as a garage-service station, with camping ground and 10 one-room cabins to rent. Within a year of construction, ownership of the motor court had passed into the hands of Paul Graziolli. For 40 years the Little Red Hen was a focal point for various types of recreational activities at Stone Lagoon and the surrounding vicinity. From time to time, additions and alterations have been made to the complex to modernize its facilities. In recent times, many of the original buildings and cabins have been removed.
Across the road from the Little Red Hen is a barn which probably dates no earlier than the 1920s. The barn is what remains of an earlier farm (dairy ranch). This dairy ranch was known as the Alderson or Hendrickson Ranch, around the turn of the century. Only the barn remains to mark the approximate location of this agricultural occupation site, which probably dates to as early as the mid-1870s and has been owned over the years by a number of different people.

Near the southern end of Stone Lagoon sand spit are the remains of three cabins known as the Johnny Skirt place. These features are located on the site of Tshapekw, Hum-129, which is addressed in the Native American Resources section.

Here and there at Dry Lagoon, there exist the remains of land ownership boundaries, i.e., fences and indications of agricultural use. Tradition indicates other spots where a cabin once stood, or where a barn protected cattle or stored hay. These sites have been difficult to locate. Furthermore, all of the sand spits were subject to mining from at least 1875. There is no evidence of this activity to be seen on the sand barriers today.

While all of the above add to the interpretive story of the Euroamerican pattern of settlement and attempts to exploit the natural resources of the area of Dry Lagoon State Park, the various Euroamerican locations and sites have marginal statewide historic significance.

Cultural Resources - Harry A. Merlo SRA

(Please refer to the Inventory of Features for detailed information on prehistoric and historic sites and their locations.)

Native American Resources

Four Native American village sites are known to have existed in what is now Harry A. Merlo SRA. Of these only one has survived and it has been badly disturbed.

The site of the Yurok village named Ke'ixkem has been vandalized repeatedly by relic collectors. This disturbance is in addition to one excavation by the University of California in 1948. At least four depressions were observed in the midden in 1982 including one in which recent digging was obvious. The depressions may be the remains of previous excavations, or of the "four houses and a sweathouse" recorded by Waterman in 1920, or both.

Euroamerican Resources

Physical remains of early Euroamerican settlement within the boundaries of Harry A. Merlo SRA are extremely rare. Early settlers often appear to be frontmen for eastern lumber companies, though a few did patent the land for agriculture. Evidence of this use is scarce except for occasional existing fence lines or forest clearings that do not appear to be natural.
The site of the attack upon a Yurok village has been indicated as being at the north end of the highway bridge that crosses the lagoon. Euroamerican records are very confused concerning the exact location of this attack by gold seekers upon an unsuspecting Yurok village. Yurok oral traditions are very definite that this is the site.

Midway along the Big Lagoon shoreline there exists the former site of the Hammond Lumber Company summer cottage. This cottage was originally built for the use of the company's president but in later years was used as an employee residence. Construction dates are vague, but the structure and its outbuildings seem to have been constructed sometime between 1924 and 1928. The cottage burned in 1950 and the site was used for 30 years by the Humboldt Yacht Club for camping, picnicking, and boat launching. Only the improvements of the yacht club, the wreckage of a small one-room cabin, and the shell of a corrugated metal garage remain.

Except for the village of Mahatch, identified as the ambush site, there are no known Euroamerican sites of importance located within the unit.

Area Historical Sketch

Limited archeology in northwestern California has indicated a relative lateness to human occupation with all but one site dated to within the last 1,050 years. A chipped stone workshop found at the lower levels of the Point Saint George site in Del Norte County is the earliest known site in northwestern California with a radiocarbon date of 2260 ± 210 B.P. or 310 B.C.

The material culture of these early inhabitants of California's north coast closely resembles that of the more recent ethnographic peoples. The linguistic diversity of these people has not been manifest in the early technology or subsistence patterns.

Cultural elements of the northwest coast Indians included redwood dugout boats; plank houses with gabled roofs; woodworking tools such as adzes, mauls, and wedges; twined basketry for several uses; steatite bowls and pipes; and fishnets and harpoons. Coastal villages were located on a lagoon or at the mouth of a stream. Interior villages were along a river. The diet of coastal dwellers included sea mammals, surf fish, mollusks, and waterfowl, while that of the interior peoples were more dependent on eating salmon and acorns. The cultural pattern included rigid codes of conduct, a lack of political organization, and an emphasis on property rights and the accumulation of wealth, especially dance regalia and dentalium shells.

The Yurok people at Trinidad (Tsurai) were using a few iron objects prior to contact with the Spanish in 1775. The Yuroks acquired Euroamerican beads and knives, probably through intertribal trade, after Hudson’s Bay Company personnel passed near the area in 1829. Many Indians became wage-laborers in the gold mines after 1851. Some worked in related areas such as ferrying argonauts across major rivers. Since then traditional material, social, and ideational culture have continued to evolve and adapt to Anglo-American society. All known Yurok villages near the Humboldt Lagoons were occupied into Euroamerican times. Most Yurok people continue to live in their traditional tribal area on privately owned lands.
Material Relevant to Dry Lagoon State Park

The gold strikes of 1848 and the ensuing strikes of 1849 on the Klamath, Trinity, and Salmon Rivers brought the first known Euroamericans to the immediate area of Stone Lagoon and Dry Lagoon. Earlier sea-borne Europeans visited Big Lagoon and Tsurai (located at present-day Trinidad), but there is no evidence that they saw the Stone-Dry Lagoon area. Attempts to locate coastal depots for interior traffic of miners and supplies caused the founding of Trinidad and a short-lived village near the mouth of the Klamath River. Traffic between the two points, adopting existing Coast Yurok trails, brought miners and would-be merchants to and beyond the lagoons. None seemed to tarry; all who left records mentioned the long weary trek along the sand spits or how hard soft sand could be when used as a mattress.

In 1860 or 1861, a William Stone may have tried to settle at Stone Lagoon. Whether he was a miner, drawn by the fine gold in the black sand of the barrier beaches, or a farmer is unknown. He quickly passed into obscurity leaving only his name to mark a place.

By the early 1870s, Euroamerican settlers returned to lay claim under federal homestead laws to parcels situated in the fertile region south and southwest of Stone Lagoon. Positive dating is difficult due to the dispersion of Klamath County records when that county was abolished in 1875. The Stone Lagoon area became part of Humboldt County, and it is primarily through their records that an image of early use can be recreated. Agriculture was the primary activity and was subdivided into any type which would produce an income. In comparison to other areas of settlement, land values per acre or per farm were quite high.

The farmers were family men; they developed a community and formed a school district, built a school, and hired teachers. Some families stayed for decades; others moved in on a lease or gambled their savings to buy. The land was fertile but markets were far away and the journey hampered by the deplorable conditions found along the main road which connected Trinidad and Crescent City. A few of the farms added hotels, where at least the traveler or teamster could find a dry floor for his bedroll and a home-cooked breakfast in the morning.

One additional activity that was part of the economic story of the Dry Lagoon area found local farmers and newcomers both involved: gold mining. The black sands of the barrier beaches contain fine scale gold. The gold is difficult to mine but this did not stop commercial companies and the lonely local farmers who turned miner. While gold was recognized as being part of the black sands of the sand spits, it was not until 1874 that a company relocated from the Gold Bluffs area and opened operations as the Stone Lagoon Mining Company.

From 1874 until the 1930s, and possibly until more recently, one group or another was scattered along the beaches, attempting to extract the elusive mineral. Some individuals occasionally harvested a minor bonanza, others made meager daily wages, but the vast majority failed. One company at the end of
the 19th century even planned to suction-dredge the bottoms of the lagoons but after several years of testing and brave promises, the company quietly faded from view.

In the mid-to-late 1920s, Highway 1, a modern paved road, replaced the dirt wagon track, and a bridge spanned the Klamath River. The new road, coupled with the American urge to travel with the horizon-expanding automobile, brought more tourists traveling along the Crescent City-Eureka route. Several new camping resorts appeared north of Trinidad, and in 1927 Chester and Doris Dulley approached the owner of property fronting Stone Lagoon with a business deal. They wanted to open a service station and motor court. They called the complex the Little Red Hen. Interestingly, 25 years before, a family named Hendrickson had tried to establish a hotel on almost the same site. In 1929, Paul Grazioli bought up the Little Red Hen and he, and later his family, operated it for nearly half a century. From time to time, the Grazioli or the Zubers (Paul Grazioli's married sister) added improvements to keep the Little Red Hen up to the demands of the tourist trade.

Agriculture in the lagoon area continued, along with growing demands for recreational facilities and access. In 1927, the State Park Commission was established to direct the administration of lands donated to the state and to acquire new lands. Voters approved a multi-million dollar bond issue in 1928 which allowed the commission to begin a search for suitable lands. In 1929, members of the commission visited Eureka and traveled the north coast highway reviewing suggested parcels. In 1931, the first parcel, the Gillis Ranch or Stone Lagoon Ranch, was acquired and named Dry Lagoon State Park. Since 1931, the Department of Parks and Recreation has acquired additions to the unit.

Material Relevant to Harry A. Merlo SRA

The isolated Northern California gold fields produced a clamor for easy routes of passage and supply. These demands translated into a need for coastal depots. Expeditions from San Francisco searched the north coast for harbors. Out of these expeditions came the locating of the town of Trinidad, among others, and from Trinidad a search for trails leading inland. One of these trails roughly followed the old county road north from Trinidad to Big Lagoon. Here, mid-way along the eastern flank of Big Lagoon, the trail turned inland to the Trinity mines.

Within weeks of the argonauts' adoption of Yurok trails to the north (toward the mouth of the Klamath River) and into the interior, violence flared between the Yurok and the white gold seekers. In April 1850 whites, claiming they had been robbed, attacked an unsuspecting village of Yuroks on the southeastern edge of Big Lagoon. Approximately eight Indians died while the attackers lost one. While this attack on the Yurok appears to be the only major clash reported in the lagoons area, historical accounts over the next 20 years would give a picture that includes other incidents of murder affecting the relationship of the two different cultures. Furthermore, white settlers were identified as engaging in the taking of Indian women for slaves.
In 1875, Klamath County was abolished and the various land portions divided among neighboring counties. The Big Lagoon portion passed into Humboldt County. The public lands were surveyed and opened by the federal government for homestead or for sale. In 1876-1877, settlers began to file patents on parcels bordering the shore of Big Lagoon. Before this survey, there were a few settlers living inland of the southern edge of Big Lagoon. Three or four ranches can be identified with settlement occurring as early as 1866. One settler, Alexander Montgomery, put in a hotel as part of his ranch. This hotel was located approximately at the south end of the millpond in what was known as Big Lagoon prairie, outside the unit's present boundary.

The land quickly passed into the hands of speculators representing large eastern holding companies, which used the word lumber somewhere in their name. There was, however, no logging due to the lack of transport facilities. In fact, no commercial logging took place in the hills immediately east of Big Lagoon until a decade after World War II. The mill located just beyond the state's boundary was put in by the Hammond Lumber Company just after World War II.

The primary use of the land was agricultural - small farms and the grazing of livestock. Ownership is marked by a bewildering array of absentee landlords, banks, trust and lumber companies. Inhabitants were often leasees struggling to make a living.

As the road system developed from a narrow footpath into a wagon road, Big Lagoon attracted sportmen from Eureka and Arcata. The tourist traffic, beginning in 1880, encouraged better roads and more accommodations. However, these remained extremely primitive and often seasonal due to the effects of weather. The major issue for growth and prosperity of the area remained the deplorable conditions of the main road and the effects its condition had on ending the isolation of the region. Road construction in the 1910s and especially in the early 1920s, which created Highway 1, coupled with the rapidity offered by the developing automobile, opened the area to even greater demands for recreational use.

In the early 1930s, several units of the State Park System were created in the area north of Trinidad. Patrick's Point State Park was located south of Big Lagoon while Dry Lagoon State Park was located to the north. Over the years, additions in the Lagoons area have been made to Dry Lagoon State Park. In 1981, a large parcel along the east shore of Big Lagoon was acquired by the Save-the-Redwoods League from the Louisiana Pacific Corporation, the successor to several large lumber companies which had once held title to the land. The Department of Parks and Recreation acquired the parcel in early 1982 and classified it as Harry A. Merlo SRA later that year.

**Esthetic Resources**

Both units have tremendous scenic values. At Dry Lagoon State Park, hundreds of large pieces of driftwood are scattered on the beach. Dry Lagoon Marsh is profuse with colors that change with the seasons as water levels and the vigor of vegetation changes. To the north, Sharp Point provides a prominent, rugged focal point. Big Lagoon barrier beach, a nearly straight sand strip running 3.2 miles (5.1 km.) long, offers a unique natural scene.
Spring and summer blooms of the western azalea, blue blossom, scotch broom, douglas-iris, and a variety of other wildflowers on a backdrop of dense green vegetation are scenes of striking beauty.

Stone Lagoon, surrounded by dense vegetation and often shrouded in fog, offers an almost mystical scene.

Harry A. Merlo SRA has many highly scenic portions enjoyed mostly by persons traveling on Highway 101, which cuts through the unit. The presence of the highway greatly affects the scenic quality of the undeveloped natural areas.

The principal views seen from the highway are of Big Lagoon, Maple Creek Marsh, the redwood forest, Roosevelt elk within the marsh, wildflowers, and Big Lagoon barrier beach. The expansive views of Big Lagoon, ocean, beach, and marsh are in sharp contrast to the scenery in the redwood forest, where views are limited to a few hundred yards. Coastal fog, common to this unit, has different scenic effects.

The fog often blocks distant views of Big Lagoon, while it can enhance the forest scene when it creeps through the treetops.

**Recreation Resources**

Dry Lagoon State Park offers a variety of recreational opportunities. Picnicking, beachcombing, surf fishing, and general beach play occur on the ocean beaches. Stone Lagoon Peninsula and the barrier beaches hold opportunities for hiking and exploration, although no designated trails currently exist. However, there are six boat-in campsites.

Activities on Stone Lagoon include exploration of the lagoon shoreline by canoe or powerboat, fishing, and waterfowl hunting. Camping occurs in a 30-unit primitive campground at the north end of Stone Lagoon barrier beach.

Boat access to Stone Lagoon is available via a launch ramp in Dry Lagoon State Park along the eastern shoreline. Access to Big Lagoon is available from Big Lagoon County Park on the southwest shore, where boat launching, picnicking, and camping facilities are located. Most boats are launched there.

Wading birds, waterfowl, and a variety of other animal life, as well as a variety of plants and geologic features, make Dry Lagoon State Park an excellent area for nature study.

Harry A. Merlo SRA is currently providing only limited recreational use. It is mostly enjoyed as a scenic section of Highway 101. Water-oriented activities are the primary form of recreation in the unit, including sailing, motorboating, fishing, scuba diving, and waterfowl hunting. Sailing is more popular than motorboating, and waterskiing is infrequent. Some swimming may occur in the lagoon as the water temperature rises to near 22°C (70°F) during the summer.
Fishing is occasionally popular, but not extremely productive. Waterfowl hunting has been a popular activity for many years. The hunting season is from mid-October to mid-January each year. Most hunting occurs in the Maple Creek Delta marshlands at the southeast corner of Big Lagoon.

Potential new recreation activities at Harry A. Merlo SRA are hiking on trails, group camping, hike-in camping, and interpretation.
Resource Policy Formation

Classification of Dry Lagoon State Park

The classification of a State Park System unit as a state park dictates how a unit will be managed. Portions of the Public Resources Code definition of a state park which are pertinent to general planning efforts are as follows:

Section 5019.53. 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.

Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, sightseeing, nature study, hiking, and horseback riding, so long as such improvements involve no major modification of lands, forests, or waters. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public in a reasonable distance outside the park, shall not be undertaken within state parks.

State parks may be established in either the terrestrial or underwater environments of the state.

Declaration of Purpose for Dry Lagoon State Park

The State Park and Recreation Commission approved the following declaration of purpose for Dry Lagoon State Park on January 28, 1965.

Dry Lagoon State Park is established to assure perpetual public enjoyment of the lagoon region of Humboldt County, in an essentially natural condition, extending from the sand spit of Big Lagoon northward to Stone Lagoon; including all related scenic, natural, historical, and recreational resources of the area.

The function of the Division of Beaches and Parks at Dry Lagoon State Park is so to manage the varied interdependent resources of the area as to insure their perpetuation; to interpret them effectively; and to provide such facilities and services, consistent with the declared purpose of the park, as are necessary for the full enjoyment of the unit by the people.
The new declaration of purpose for Dry Lagoon State Park is as follows:

The purpose of Dry Lagoon State Park is to protect, preserve, and make available to visitors the scenic, natural, historical, archeological, and recreational resources of the lagoons region of Humboldt County.

The function of the Department of Parks and Recreation at Dry Lagoon State Park is to ecologically manage the unit's varied interdependent natural resources so as to ensure their perpetuation; to manage the significant archeological sites as nonrenewable resources; to interpret all the resources effectively; and to provide such facilities and services, consistent with perpetuation of park resources, as are necessary for the full enjoyment of the unit by the people.

Dry Lagoon.
Classification of Harry A. Merlo SRA

Harry A. Merlo SRA was acquired by the department, with financial assistance from the Save-the-Redwoods League, primarily to provide for protection and public enjoyment of the unit's natural values. The unit was acquired on December 23, 1981 by the Save-the-Redwoods League from Louisiana-Pacific Corporation. The League transferred ownership to the state on February 1, 1982.

The unit was named and classified on October 8, 1982 by the State Park and Recreation Commission, meeting in Garberville. It was named in honor of Harry A. Merlo, president and chairman of the board of Louisiana-Pacific Corporation, in compliance with a requirement of the land sale agreement between the corporation and the league.

The state recreation area classification was made because waterfowl hunting has and continues to be a relatively popular recreation activity at this location. A state recreation area is the only State Park System unit where hunting may be permitted. The Save-the-Redwoods League supported this classification but also urged that this unit should be managed primarily to protect natural values.

The Public Resources Code (Section 5019.56) defines a State Recreation Area as a type of State Recreation Unit:

State recreation units consist of areas selected, developed, and operated to provide outdoor recreational opportunities. Such units shall be designated by the commission by naming, in accordance with the provisions of Article 1 (commencing with Section 5001) and this article relating to classification.

In the planning of improvements to be undertaken within State recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.

State recreation units may be established in the terrestrial or underwater environments of the state and shall be further classified as one of the following types:

(a) State recreation areas, consisting of areas selected and developed to provide multiple recreational opportunities to meet other than purely local needs. Such areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large population centers, major routes of travel, or proven recreational resources such as man-made or natural bodies of water. Areas containing ecological, geological, scenic, or cultural resources of significant value shall be preserved within state wilderness, state reserves, state parks, or natural or cultural preserves.
Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, swimming, hiking, bicycling, horseback riding, boating, waterskiing, diving, winter sports, fishing, and hunting.

Natural Preserves at Harry A. Merlo SRA

Harry A. Merlo SRA, despite its classification, contains significant natural features, including some 193 acres of old-growth forest. In keeping with Public Resources Code Section 5019.56, the old-growth forest should be protected within a natural preserve, a subunit of the state recreation area. Public Resources Code Section 5019.71 defines a natural preserve as follows:

Natural Preserves. Natural preserves consist of distinct areas of outstanding natural or scientific significance established within the boundaries of other State Park System units. The purpose of natural preserves shall be to preserve such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of plant or animal communities existing in California prior to the impact of civilization, geological features illustrative of cultural or economic interest, or topographic features, illustrative of representative or unique biogeographical patterns. Areas set aside as natural preserves shall be of sufficient size to allow, where possible, the natural dynamics of ecological interaction to continue without interference, and to provide, in all cases, a practicable management unit. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations which constitute the basis for the establishment of the natural preserve.

The proposed natural preserves contain the best known example of an unusual old-growth forest association of coast redwood, grand fir, and Sitka spruce. However, this forest association is bisected by Highway 101 and an overhead powerline. The department's Resource Management Directive Number 9 states that "vehicle access and parking are not appropriate" in natural preserves. In keeping with this directive, it is necessary to divide the old-growth forest into three natural preserves to avoid including the highway and the powerline.

It is recommended that three natural preserves be designated within Harry A. Merlo SRA to protect the old-growth forest. The three proposed natural preserves are 80, 51, and 62 acres in size, a total of 193 acres. The approximate boundaries of the proposed preserves are shown on the Proposed Land Use and Facilities Map.
Declaration of Purpose for Harry A. Merlo SRA

The purpose of Harry A. Merlo SRA is to make available to the public the recreational opportunities of the unit and the adjacent lagoon and to perpetuate forever an area of natural beauty that includes old-growth forest, lagoon shoreline, and marshlands. Recreation activities will be allowed and facilities provided only to the extent they do not have significant detrimental affects on natural and cultural resources.

The function of the Department of Parks and Recreation at Harry A. Merlo SRA is to ecologically manage the varied interdependent resources of the unit so as to ensure the perpetuation of the diverse native environmental complexes; to interpret them effectively; and to provide such facilities and services, consistent with perpetuation of park resources, as are necessary for the full enjoyment of the unit by the public. The department recognizes that this unit does not contain terrain capable of withstanding extensive human impact.

The purpose of the proposed natural preserves is to protect the old-growth forest and its supporting ecosystem.

Zones of Primary Interest

A zone of primary interest is that area in which the department would like to influence development and use so that park resources are not seriously jeopardized or degraded.

For Dry Lagoon State Park, this zone includes all land next to park boundaries, adjacent offshore areas, Stone Lagoon and Big Lagoon, and the watersheds of the lagoons, where activities can have an impact on the lagoons.

At Harry A. Merlo SRA, the department is concerned about all lands adjacent to the unit where any new development or land use change could jeopardize or degrade the resources of the unit or of Big Lagoon.

Natural Resource Management Policies

The management of natural resources in the State Park System is governed by statutes, policies, and directives. Section 5019.53 of the Public Resources Code is particularly applicable to the management of natural resources.

The specific policies from the department's Resource Management Directives that pertain particularly to the natural resources of Dry Lagoon State Park are 5, 18, 28, 33, 34, 35, 43, and 47.

For Harry A. Merlo SRA, the directives are 9, 13, 15, 16, 33, 34, 35, 43, and 47.

The following natural resource management policies have been prepared in compliance with the above regulations.
Policy: Geologically hazardous areas shall be avoided, or the hazard shall be reduced, to ensure that the public can use these areas in reasonable safety and that the investment in facilities is reasonably secure. Decisions on reducing natural hazards shall be made by department employees whose professional competence in geologic hazard mitigation has been recognized by the director.

Geologists shall be consulted on the siting and designing of any development. The potential for earthquake shaking, ground rupture, and liquefaction will be considered in association with a possible 7.0 magnitude seismic event in the units. Development, other than expendable trails, should not be permitted on unstable slopes, notably in the vicinity of the Truttman Sink. Rates of coastal bluff erosion should be taken into account when developments are considered in coastal areas. Setbacks shall be established, after consultation with the department's geologist. Areas below 6 meters (20 feet) in elevation are potentially subject to flooding, and/or ocean wave attack. Developments below this elevation should be expendable, movable, or capable of withstanding these natural forces.

Erosion Control

The erosion of coastal bluffs and the downslope movement of unstable geologic materials are ongoing natural processes in these units. These processes are a threat to public use and facilities when facility design or siting ignores these natural processes.

Policy: All facilities shall be carefully designed and sited so that facilities will not be endangered by future movement of geologic materials and rates of coastal erosion. The emphasis in design and siting of facilities shall be to recognize the constraints these natural hazards impose rather than attempting to arrest or stop the natural process. When impervious materials are used in construction, the potential for increased runoff shall be recognized, and the hazards of accelerated erosion shall be mitigated.

Rare and Endangered Plant Protection

Rare or endangered plants can be destroyed by development or by concentrated visitor use, especially when their exact locations, habitat requirements, and tolerances are not known.
Policy: All rare and endangered plants in both units shall be protected and managed for their perpetuation. A program shall be initiated to locate and accurately map their distribution. The autecological needs of each will be investigated and appropriate management actions taken to perpetuate or enhance their niches.

Wetland Protection

The wetlands in and adjacent to Dry Lagoon State Park and Harry A. Merlo SRA provide important wildlife habitat for a variety of water birds. Development has destroyed many wetland areas in California, making preservation of remaining areas essential for the continued existence of wetland-dependent wildlife.

Policy: No wetland area in Dry Lagoon State Park and Harry A. Merlo SRA shall be filled in, developed, modified, or encroached upon by any activity that will have a significant detrimental effect on wildlife.

Ecological Burning

Fire is a natural process in the evolution of plant species and the maintenance and distribution of native plant communities. Wildfires are now rare in these units, but Native Americans used fire to manage the vegetative composition for thousands of years. Fire can be effectively used to manage vegetative resources so that the vegetative composition closely resembles its pristine state before the influence of non-native people. The controlled use of fire in both units could have the following beneficial effects:

1) Vegetative composition of the units could be maintained and/or diversified by renewing the process of plant succession.

2) Prairie bald habitats in Dry Lagoon State Park could be improved, maintained, and expanded.

3) The hazard of a destructive wildfire could be reduced as fuel loads are reduced and controlled.

4) Fire could be used to improve the park's esthetic resources by improving and creating viewscapes and increasing visual diversity.

5) Wildlife habitat could be improved by increasing the productive and diverse "edge" areas (ecotones) between various plant communities.

6) Some alien plants could be controlled.

Prescribed (controlled) burning of small parcels based on ecological principles can improve the vegetative resources of both units. Total fire exclusion creates unnatural vegetative patterns.
Policy: An ecological burning program shall be initiated, and a prescribed fire management plan shall be prepared for Dry Lagoon State Park and Harry A. Merlo SRA. If the feasibility of such a program is confirmed, these parks shall be included in the department's prescribed fire management program.

Non-Native Plant Control

Non-native plants are a threat to native plant communities. Of particular concern are those alien plants which become naturalized, reproduce, and spread. Non-native plants of particular concern at Dry Lagoon State Park include pampas grass (Cortaderia selloana), scotch broom (Cytisus scoparius), and European dune grass (Ammophila arenaria). In Harry A. Merlo SRA, pampas grass, scotch broom, and blue gum (Eucalyptus spp.) occur.

Pampas grass grows on the beaches in Dry Lagoon State Park. The logged, private land east of Big Lagoon is heavily infested with pampas grass which provides a continual seed source to both units, making control of this species difficult.

Scotch broom is well established on the Highway 101 road cut between Dry Lagoon and Big Lagoon.

European dune grass is established in Dry Lagoon State Park on one site on the Stone Lagoon barrier beach. No plants or animals are known to be associated with solid stands of this aggressive invader.

Policy: No non-native plants shall be planted in the units. Alien plants on the barrier beaches shall be eradicated. A scotch broom control program should be implemented. Other alien plants shall be removed if they conflict with cultural or natural resource interpretation, management, or protection.

Azalea Hill

Western azaleas thrive within and adjacent to both units in an area known as Azalea Hill (Stagecoach Hill), producing a wide variety of blooms varying in size, shape, and form. The western azalea is a characteristic species of the northern coastal scrub plant community. In this area, this community is often succeeded by Sitka spruce which are able to grow up through the scrub and eventually shade out competing vegetation. If the spectacular resources of Azalea Hill are to continue to exist, the area's vegetative resources will require active management to be protected.

Policy: The western azaleas of Stagecoach Hill are a valuable natural and genetic resource that shall be managed for their perpetuation. After proper and thorough research, a vegetation management program shall be developed to assure that the vigor of the azaleas be maintained. Competing vegetation shall be controlled through mechanical pruning, prescribed burning, or other means to protect the azalea resource.
Roosevelt Elk

Roosevelt elk have historically occurred in the vicinity of Stone Lagoon. Elk herds currently exist at Prairie Creek Redwoods State Park and in Harry A. Merlo SRA. The Stone Lagoon peninsula in Dry Lagoon State Park is undeveloped, includes typical elk habitat, and may be of sufficient size to support a herd of Roosevelt elk.

Policy: A feasibility study should be conducted to evaluate the suitability of the Stone Lagoon peninsula in Dry Lagoon State Park as a site for establishing a herd of Roosevelt elk. If feasible, a herd should be established.

Policy: A study of the ecology of the Roosevelt elk in Harry A. Merlo SRA should be conducted. The habitat requirements, present health of the herd, and future management needs shall be determined. An elk management plan should be developed and implemented to ensure the perpetuation of the elk herd.

Policy: No development shall occur and no visitor use shall be allowed in Harry A. Merlo SRA that has a significant detrimental affect on the elk or their habitat. The Big Lagoon Marsh and the Sitka spruce and deciduous forests southwest of the marsh are recognized as important elk habitat.

Policies for Dry Lagoon State Park Only

Waterfowl Hunting

Waterfowl hunting occurs on Big Lagoon and Stone Lagoon. Hunting may be permitted on State Park System property in a unit classified as a state recreation area, but is prohibited in a unit classified as a state park. Harry A. Merlo SRA was classified with the specific intention of allowing waterfowl hunting there to continue. Waterfowl hunting at Big Lagoon is permitted from the water surface, but is prohibited from the barrier beach within Dry Lagoon State Park. Hunting at Stone Lagoon is permitted only from the water surface because of the state park classification of the surrounding land. (The portion of the shoreline not within the park is private land not readily accessible to hunters.) There is much more hunting on Big Lagoon than Stone Lagoon because Big Lagoon is larger, more productive, and accessible to hunters without boats. Waterfowl hunting occurs on both lagoons between November and January, when other activities are less frequent.

The large size of Big Lagoon and the seasonal nature of its various recreation activities reduces the potential for conflicts between hunting and other activities. At Stone Lagoon, the potential for conflict is greater due to the lagoon's small size. Current activities on the lagoon are not in conflict due to low use and their dispersed nature. Increased visitor use on Stone Lagoon and/or within Dry Lagoon State Park could create conflicts between hunting and other activities (such as nature study, hiking, picnicking, or camping). If conflicts occur, one option would be for the department to eventually gain
Big Lagoon (looking from Big Lagoon Marsh)

Truttman Sink (alignment of Highway 101, abandoned in 1972)

Barn near southeast shoreline of Stone Lagoon
Looking upcoast -- Dry Lagoon, Stone Lagoon peninsula (with sharp point), and Stone Lagoon. (Highway 101 runs along bottom half of photo.)
jurisdiction over Stone Lagoon from the State Lands Commission and give the lagoon protection as a state park. This action would eliminate waterfowl hunting and allow the department to manage the lagoon and adjacent lands as an ecological unit.

Policy: The department shall monitor recreation activity on Stone Lagoon and in Dry Lagoon State Park. Traditional state park activities should take precedence over waterfowl hunting on the lagoon. If conflicts develop between these uses, the department shall work to resolve such conflicts.

Stone Lagoon Fishery

McDonald Creek, the principal tributary of Stone Lagoon, provides spawning habitat for silver salmon, steelhead, and cutthroat trout. The stream's spawning gravels have been damaged by land disturbances on the watershed, which have increased stream sedimentation, and by livestock grazing in and near the creek, which have polluted the creek and disturbed the stream bed. Deposition of sediment at the mouth of the creek within Dry Lagoon State Park has dispersed stream flows, making it difficult for fish to enter the stream. Private landowners, in cooperation with the Coastal Conservancy, have attempted to improve the stream for spawning.

Policy: The department shall cooperate with efforts to enhance the McDonald Creek-Stone Lagoon fishery. Monitoring of the fishery resource and efforts to improve the fishery based on sound scientific knowledge should be undertaken on both state park and private lands.

Livestock Grazing

Livestock grazing occurs at Dry Lagoon State Park through life tenancy and lease agreements. Grazing disrupts natural processes and therefore conflicts with the department's goal of maintaining this park in a natural condition. Its benefits are primarily economic to the detriment of natural values.

Specifically, livestock grazing has a large impact on riparian habitats, pollutes surface waters, detracts from park scenery, and limits foraging by Roosevelt elk.

If grazing were eliminated, red alder or other woody species might quickly invade the now-open areas. However, under more natural conditions, similar forest openings can be maintained through wildlife browsing, natural fires, or controlled burns. Natural processes favor the growth of perennial native grasses and forbs, while grazing favors naturalized alien annual grasses and introduced weed species, including thistle, plantain, and dandelion.

Policy: The department shall manage lands currently used for livestock grazing in order to maintain scenic vistas and provide wildlife habitat diversity. Livestock grazing can continue, but alternative management strategies shall be considered to maintain the area in a more natural condition.
Special Plant Life Protection

Special plant associations, including those in the marsh habitats, seasonal swamp habitat, and the prairie balds habitat require careful management and protection for their perpetuation.

Policy: Natural ecosystems shall be perpetuated in dynamic successional states as determined by proper ecological research, including baseline studies, resource monitoring, fire history, land use history, etc. The pristine state of the vegetation shall be determined by soil and plant opal studies, or other appropriate means. Once the pristine patterns of vegetation have been determined, an ecological management program shall be formulated to restore these patterns.

Lagoon Breaching

The natural hydrologic processes that control the water levels of Big Lagoon and Stone Lagoon are dynamic and unpredictable. Most of the lagoon and estuarine environments of California have been artificially manipulated. In contrast, Big Lagoon and Stone Lagoon have a pristine character. The annual breaching of their barrier beaches are vital parts of their pristine nature. Even though the water surfaces of Big Lagoon and Stone Lagoon are not in state park ownership, they are the principal natural resource in the area for public recreation.

Policy: The natural hydrologic processes at Big Lagoon and Stone Lagoon are important natural features of the region. The natural process shall not be humanly manipulated or controlled. No developments shall take place in the lagoons or on the barrier beaches that will disrupt this natural process. The department will oppose any development or activity that threatens this process.

Barrier Beaches

The barrier beaches separating Big Lagoon, Stone Lagoon, and Dry Lagoon Marsh from the Pacific Ocean provide important coastal strand habitat for plants and animals. These barrier beaches are composed of low dunes, which the forces of wind, rain, and sea are constantly changing. Vegetation, including the beach pea, dune tansey, and sand strawberry, are specially adapted to this environment. The snowy plover utilizes this environment as a nest and roost site.

Pristine coastal strand habitat is rare in California due to ever-increasing pressures for development in coastal areas. Protection of this type of habitat is necessary for the survival of a variety of plants and animals.

Policy: No development shall occur on the coastal strands at Dry Lagoon State Park. Activities in these areas shall be passive and pedestrian-oriented only. No motorized vehicles shall be permitted on the strands. Existing vehicle use on Stone Lagoon barrier beach shall be eliminated. The existing Dry Lagoon day-use parking area and the Stone Lagoon primitive campground, both located on the strand, may remain but shall not be enlarged.
Lagoon Monitoring

The surface elevations of Stone Lagoon and Big Lagoon vary depending on the quantity of input from the tributary streams, direct rainfall, the condition of the barrier beaches, and evaporation rates. No regular monitoring of lagoon levels now occurs. Knowledge of variations in lagoon levels would be valuable in assessing the dynamics of the lagoons for scientific, interpretive, and operational purposes.

Policy: The department shall establish a regular program of monitoring lagoon elevations. The elevation record shall be related to known elevation monuments, and a permanent record-keeping system shall be established.

Policies For Harry A. Merlo SRA Only

Forest Protection

The old-growth forest in this unit is an important natural resource. Individual trees and the ecosystem in which they developed require careful protection and management to assure perpetuation.

Policy: The department shall manage the forest in Harry A. Merlo SRA to perpetuate and restore natural processes and to maintain the ecosystem as it existed in its pristine state.

Developments and public use within old-growth forests often damage trees, adversely affect soil conditions, and expose park visitors to danger of injury or property damage from falling branches.

Policy: Generally, no development shall occur in the old-growth forest in Harry A. Merlo SRA. Appropriate trails may be developed only if it is determined that they will have no significant detrimental impact on the forest resource.

Highway 101 bisects Harry A. Merlo SRA, producing negative visual and noise impacts on the unit. Road vibrations may promote geologic instability and thereby threaten the forest. If the highway were to be widened along its present alignment, it would have a devastating effect on the forest.

Policy: The department supports the Caltrans Master Plan to reroute the highway inland from Harry A. Merlo SRA. The department opposes major widening of the highway along its present alignment through the unit.

Waterfowl Hunting

The principal reason that Harry A. Merlo SRA was classified as a SRA was to allow waterfowl hunting to continue. Waterfowl hunting occurred on this land before Department of Parks and Recreation acquisition. Waterfowl hunting also occurs on adjacent land and water within the Big Lagoon Wildlife Area administered by the Department of Fish and Game.
Policy: Waterfowl hunting shall be allowed within Harry A. Merlo SRA on land and water at or below an elevation of 6 meters (20 feet). Waterfowl hunting within this SRA shall be subject to all appropriate laws, rules, and regulations of the Department of Fish and Game. All wildlife resources, other than waterfowl species, shall be fully protected from hunting within the SRA.

Cultural Resource Management Policies

The management of cultural resources at Dry Lagoon State Park is governed by state statutes and departmental policies and directives. The following portions of the Public Resources Code pertain to the management of cultural resources: Chapter 1, Section 5019.74 (if a cultural preserve is designated); Chapter 1.7, Section 5097.5 and Chapter 1.75, Section 5097.9.

The following Resource Management Directives are relevant to the cultural resources of both Dry Lagoon State Park and Harry A. Merlo SRA: 3, 24, 25, 50-61, 69, 70-72.

The following cultural resource management policies have been prepared to comply with the regulations listed above.

The possibility of additional cultural sites exists because of the incompleteness of the survey, primarily due to vegetative cover and a limitation on available survey time.

Policy: Any archeological, anthropological, or historical resources that may be discovered by department employees should be reported to the Resource Protection Division which is responsible for maintaining a statewide inventory of cultural resources in the State Park System. Any discoveries of physical features should be protected in situ if at all possible until they can be professionally described and evaluated.

Native American Resource Policies - Dry Lagoon State Park

At archeological site Hum-129, known as Tshapekw, there is some instability and a potential for serious erosion of the midden deposit on the northeast border of the site in area "A" (facing Stone Lagoon) and on the southern (uphill) border of the site in area "B" (facing the ocean). (A site map of Hum-129 is included in the Inventory of Features which is on file with the Department of Parks and Recreation.) The southern edge of the site is bounded by an abrupt, deep gully, into which the cultural deposit has been gradually sloughing off. Midden on the northeastern border of the site has been gradually eroding onto the beach below the high water mark of the lagoon.

Policy: The department shall implement a project to stabilize the cultural deposit on the northeast and southern borders of Hum-129. This may require archeological excavations and terracing of the threatened midden area.
Policy: The department shall monitor soil stability and erosion hazards at the site of Hum-129. If natural forces are found to threaten archeological values through further erosion then the department shall implement a resource management project to stabilize the midden deposit, to salvage and preserve archeological values, or both.

Of the three historic structures of the Johnny Skirts family found at Tsahepek, two are in ruins and one -- the most recent -- is a badly deteriorated wood frame cabin-skeleton. These features form a temporal series which reflects acculturation of traditional Yurok architecture and adaptation to twentieth century American construction materials and techniques during the period of recent occupation (after 1860 to the late 1930s or early 1940s).

Policy: Historical features at Hum-129 including the remains of Johnny Skirt's cabin shall be protected from adverse developments. These features should not be removed, nor should they be restored or reconstructed.

To restore the Stone Lagoon Peninsula including the sites of Tsahepek and Tsotskwi to a natural condition, development of recreational resources will be limited to those that are consistent with the perpetuation of park resources.

Policy: No developments, including trail construction, shall occur on archeological sites Hum-120 and Hum-129.

The two large depressions that are evident at archeological site Hum-120 are a damaging and degrading influence that exposes the midden to further vandalism.

Policy: The site of Tsotskwi village, recorded as site Hum-120, shall be restored to a natural appearance so that the midden deposit is better protected from vandalism.

Policy: Decisions on the management and protection of archeological values at sites Hum-120 and Hum-129 shall be made by employees of the department whose professional competence in cultural resource management has been recognized by the director. The department shall seek participation of the Coast Yurok in the management of Tsotskwi and Tsahepek village sites.

Euroamerican Resource Policies - Dry Lagoon State Park

There are a number of archeological sites related to the period before state ownership which are part of the agricultural use of the area now known as Dry Lagoon State Park. These sites, which have been difficult to locate due to efforts to eradicate them, have little historical value. In addition, there are mining sites where placer mining took place. Because of the constant movement of the barrier beaches, these sites are impossible to locate except in broad terms. Several small wood-frame structures, badly deteriorated, were located south of Stone Lagoon peninsula at what was probably "Stone Lagoon
Ranch." On the east side of Stone Lagoon there exist the remains of a farm, and a motor court, i.e., store, restaurant, and living quarters, plus several additional cabins.

Policy: Interpretation shall play a key role in enhancing understanding and enjoyment of the Euroamerican story of Dry Lagoon State Park.

Policy: Farm or residential sites, when discovered, should be recorded and their locations marked on a map. This procedure will further aid in determining settlement patterns during the period 1870 to 1930.

Policy: The main building of the "Little Red Hen" motor court shall be used as a visitor center and adapted accordingly. Other structures associated with the motor court may be removed as needed, but should be recorded in accordance with existing department policy.

Policy: The barn opposite the "Little Red Hen" area shall be protected from public access and will remain for its esthetic aspects. Modification of the interior to allow adaptive use shall be permitted.

Policy: Wood-framed structures associated with the agricultural period prior to department ownership shall be kept as part of the esthetic values of the unit. If these structures present a nuisance or endanger the safety of visitors to the unit, they may be removed.

Native American Resource Policies - Harry A. Merlo SRA

The depressions that are evident at archeological site Hum-126 are a damaging and degrading influence on the midden deposit which has left artifacts exposed inviting further vandalism and erosion.

Policies: The site of Ke'ixkem village, recorded as site Hum-126, shall be restored to a natural appearance so that the midden deposit is stabilized and better protected from vandalism. Decisions on the management and protection of archeological values at this site shall be made by employees of the department whose professional competence in cultural resource management has been recognized by the director. The department shall seek participation of the Coast Yurok in the management of the Ke'ixkem village site.

Euroamerican Resource Policies - Harry A. Merlo SRA

Physical evidence of Euroamerican settlement is scarce. However, through literary accounts, legal records, and local oral traditions, the story of that settlement around the shores of Big Lagoon may be recreated. In particular, even though historical accounts are not precise concerning the location of the Yurok-Euroamerican ambush of April 1850, nevertheless, these accounts and Yurok oral traditions agree that a native village on Big Lagoon was attacked.
The Inventory of Features also identifies a number of themes which capture the essences of Euroamerican settlement and their exploitation of natural resources both for commercial and recreational gains.

Policy: Interpretation shall play a key role in enhancing the understanding and enjoyment of the story of Euroamerican settlement of the area now part of Harry A. Merlo SRA.

Policy: Sites of early Euroamerican settlement associated with farming or speculation in lumber futures which have not yet been located along the eastern shore of Big Lagoon shall be mapped and recorded by staff. Reports of such discoveries shall be forwarded to the Resource Protection Division for inclusion into the Inventory of Features.

Allowable Use Intensity

California state law (Section 5019.5, Public Resources Code) requires that a "land-carrying capacity survey" be made before any park or recreational area development plan is prepared. To determine carrying capacity, the department determines allowable use intensities for the various parts of the unit. This evaluation serves as a general guide, indicating areas in which natural or cultural resource sensitivity will affect development planning.

Allowable use intensity is determined by the analysis of three components: 1) management objectives; 2) visitor perceptions and attitudes; and 3) the impact of any development and use on natural and cultural resources.

The management objectives for Dry Lagoon State Park and Harry A. Merlo SRA are set forth in the statutes defining a state park and state recreation area.

The second component, visitor perceptions and attitudes, involves assessing the social objectives of the department, what recreationists perceive as an acceptable recreational environment, what degree of isolation or crowding is acceptable, and other perceptions and attitudes pertaining to the quality of the visitor's recreation experience. Although these factors are very difficult to quantify, this component's influence is extremely important. State park planners must take a leading role in increasing the public's awareness and appreciation of a high-quality recreation experience.

The third and most important component in determining allowable use intensity involves an analysis of natural and cultural resources to determine the area's physical limits for facility development, and the ecosystem's ability to withstand human impact (ecological sensitivity). This analysis is based on a number of considerations including: cultural resources sensitivity; soils and their erodability and compaction potential; geological factors, such as slope stability and relief; hydrological considerations, including potential for pollution of surface waters, flooding, and for depleting surface and groundwater through water use; vegetation characteristics, such as durability, fragility, and regeneration rates; occurrence of paleontological strata; and wildlife considerations, such as population levels, tolerance to human activity, and stability. Additional considerations in determining ecological
sensitivity are: rare and/or endangered plants and animals, unique botanical features or ecosystems, or examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

Based on the preceding factors, allowable use intensities for lands in Dry Lagoon State Park and Harry A. Merlo SRA were determined and are shown on the Allowable Use Intensity Map. Intensity classes, ranging from very low to high, are indicated. Included is a general description of the types of activities or uses which may be appropriate in each class. Acceptable intensities of some uses, often regulated by the density of facilities, are also given.

Other considerations, such as esthetic, visual, socioeconomic, and design factors, may indicate that a higher or lower use intensity is desirable in particular areas. If appropriate mitigations are incorporated into the planning, higher use levels may be acceptable.
LAND USE AND
FACILITIES ELEMENT
LAND USE AND FACILITIES ELEMENT

Existing Land Use -- Dry Lagoon State Park*

Of the two park units dealt with in this document, Dry Lagoon State Park is perhaps the most varied in character. It includes Stone Lagoon barrier beach, pastureland near Stone Lagoon, Dry Lagoon and swampy lands nearby, Stone Lagoon Peninsula, and Big Lagoon barrier beach to the south.

Dry Lagoon State Park has been part of the State Park System since 1931. Only two areas in the unit have been developed by the department for public use: a day-use parking lot adjacent to Dry Lagoon, six boat-in campsites near Ryan's Cove, and a primitive campground on the northern end of Stone Lagoon barrier beach. Overall, however, the park unit retains a natural undeveloped character.

Stone Lagoon primitive campground is a single loop, dusty parking area at the north end of the barrier beach. The 2.5-acre site provides parking for many recreational vehicle campers throughout the summer, a devoted band who return to this spot each year. Officially, the area provides about 20 campsites, but through random parking patterns, the campground has been known to accommodate up to 30 recreation vehicles. There are two pit toilets provided. Off-road vehicles are currently allowed onto Stone Lagoon barrier beach, but are limited to the wave slope in order to protect the dunes. However, this limitation is not strictly followed.

On the eastern shore of Stone Lagoon, the Little Red Hen motor court was constructed in 1928. As recently as 1980, its restaurant-lounge was in operation. The remaining buildings are the restaurant building (with an addition providing garage space and living quarters) and two small cabins. The cabins are currently being used to house state park employees. The paved area north of the restaurant building is used by some travelers as an overlook point. Adjacent to the paved area is a primitive boat launch site, providing access to Stone Lagoon.

Across from the Little Red Hen, on the east side of Highway 101, is Stone Lagoon pastureland, a grazed field of about six acres. An old barn in the pastureland has high esthetic value for those traveling the highway. No public use occurs here.

East of Dry Lagoon and south of Stone Lagoon, the McDonald Creek pastureland covers 147 acres, of which 38 acres on the western and northern edges of the field lie within the park. The pastureland consists of prime agricultural soils and is used predominantly for grazing. A life-tenant lives in a mobile home on a five-acre parcel of state land near the access road to Dry Lagoon.

The day-use parking area at the southern end of Dry Lagoon beach is popular because it provides easy vehicle access for a coastal view at beach level. About 35 vehicles can be parked here in a random fashion. Adjacent to the parking lot are redwood picnic tables and two old-model pit toilets.

*Use the Existing Conditions Map as a reference.
This area retains a very natural character because it is a mile from Highway 101 and lacks any other development. Even the parking lot doesn't seem obstructive for two reasons. First, the lot is bounded by very large pieces of driftwood. Second, the visitor's view is usually directed away from the parking area, either out over the Pacific, up the coastline towards dramatic Sharp Point, or out across the Dry Lagoon toward Stone Lagoon Peninsula. On the south side of the parking area is a spruce forest which gently slopes up to remnants of Old Highway 101.

The swamp on the inland side of Dry Lagoon is an unusual occurrence in California. Lack of access discourages public use of this area.

Immediately north of Dry Lagoon, Stone Lagoon peninsula rises to 406 feet above sea level. Vegetation covering its 500 acres ranges from open meadows (which provide pleasant views of the surrounding area) to alder groves and spruce forests. At least half the peninsula is impenetrable on foot due to thick, tangled brush. At one time most of the land was open and used as farmland, but natural succession has reclaimed much of that. There is little, if any, public use on the peninsula.

Further south, the barrier beach separating Big Lagoon from the ocean is 3.2 miles long and up to 250 yards wide. This primitive beach can be reached by land from Big Lagoon County Park at the lagoon's southern end, from the old highway spur at the northern end, and by boat over Big Lagoon. Because of its size and difficult access, this beach is one of the most secluded in the vicinity. Access by off-highway vehicles through the county park is prohibited.

Adjacent Land Use -- Dry Lagoon State Park

As is the case at Harry A. Merlo SRA, Highway 101 runs through Dry Lagoon State Park. However, some of this unit is unaffected by noise levels. Stone Lagoon primitive campground, parts of Stone Lagoon peninsula, and Dry Lagoon remain relatively quiet.

Redwood Trails

Besides Highway 101, the most significant land use adjacent to Dry Lagoon State Park is Redwood Trails, a private family campground for members only. The facility includes 111 campsites and a large dining/multipurpose room (a converted barn). A general store and a historic schoolhouse (containing mostly gift items) are both open to the public. The management at Redwood Trails anticipates developing a restaurant and additional campsites in the future. The beach at Dry Lagoon is popular with visitors at Redwoods Trails.

The pastures surrounding the Redwood Trails campground are on prime agricultural soils and will likely remain open space.

Most other property surrounding Dry Lagoon State Park remains undeveloped. The major owner of this property is the Louisiana Pacific Corporation, a lumber company.
Big Lagoon is managed by the State Department of Fish and Game while complete jurisdiction of Stone Lagoon is in the hands of the State Lands Commission. Public use on Stone Lagoon includes fishing, canoeing, and limited waterfowl hunting.

Redwood National Park

Redwood National Park shares a boundary with Dry Lagoon State Park at the extreme northern end of the state park near Stone Lagoon primitive campground. North of the Gyon Bluffs from Stone Lagoon primitive campground is a popular beach fronting Freshwater Lagoon. The area on the ocean side of Highway 101 has been known to accommodate up to 400 recreation vehicles. However, this figure was reached before the gas crunch of the Seventies.

Redwood National Park currently provides shuttle service and trail access to the Tall Trees Grove in the Redwood Creek watershed. (The world's tallest tree, 367 feet, grows in this grove.) In addition, there is a small visitor information office in Orick.

The National Park Service has the following plans for the southern portion of Redwood National Park. First, Freshwater Spit will be redeveloped to provide comfort stations and designated campsites. Second, a 4,200 sq. ft. visitor orientation center is proposed near the mouth of Redwood Creek. The center's main purpose will be to inform visitors of the location and type of facilities and features (both public and private) available on the far northern California coast. The content of the center will be the responsibility of a number of participants including the National Park Service, the State Department of Parks and Recreation, and the Orick Chamber of Commerce. The center will replace a smaller facility in Orick.

Thirdly, Redwood National Park is also expecting to begin an extensive reforestation project throughout the Redwood Creek basin. As this is completed, a network of equestrian trails will run throughout the western half of the watershed.

Big Lagoon County Park

Big Lagoon County Park at the southern end of Big Lagoon barrier beach provides both day use and camping. The campground is busy throughout the summer. Eleven tent campsites lie beneath a dense canopy of spruce trees on the eastern half of the park. Six to eight recreation vehicles can use an overflow parking area.

The park is most popular for day-use activities. A 16-space parking area and a comfort station have been developed. Potable water is only available at the day-use parking area. A concrete boat launch provides access to Big Lagoon for sailing, rowing, and fishing. Sailing access from this point can be difficult because the channel which leads to the main body of water is narrow. When winds are contrary, tacking is required.
Existing Land Use -- Harry A. Merlo State Recreation Area

A recent addition to the State Park System, Harry A. Merlo SRA has no public use areas developed by the department. However, there are some existing patterns of recreational use within this unit's borders.

Big Lagoon Marsh, on the unit's southern end, is regionally significant for waterfowl hunting. Duck hunting also occurs along the eastern shoreline of Big Lagoon, though to a lesser degree. The number of hunters in the area at any given time is low; 10 would be considered a lot.

Hunters park their cars indiscriminately throughout the unit. Parking locations include Caltrans right-of-way along the inland side of Highway 101 (at the south end of the causeway and north of the Louisiana Pacific access road), and a dirt road running along the Big Lagoon shoreline north of Tom Creek.

The unit is an access point to Big Lagoon for fishermen. In 1972, Highway 101 was rerouted at the northern portion of what is now Harry A. Merlo SRA because of the Truttman Sink, a 1/3-mile long stretch of active geologic material which caused continual sinking of the highway. As a result of rerouting, a half-mile spur of the old highway remains intact, intersecting Highway 101 a few hundred feet north of Kane Road. Fishermen make the greatest use of this spur road, parking at the northern end and hiking, slipping, and sliding down unstable slopes to fish Big Lagoon. This access point becomes most popular when the lagoon breaches the barrier beach and steelhead trout make their run into the lagoon. A few small portions of the spur road are still being undermined by geologic movement associated with the Truttman Sink.

Regular public use occurs at the boat launching facilities used by the Humboldt Yacht Club since 1950. Each year, the yacht club has held its annual sailboat regatta at this site, on the eastern shore of Big Lagoon. The picnic tables, boat shed, and restrooms are now in a state of extreme disrepair. The boat launch south of the meadow is primitive, merely an asphalt ramp which runs down into the lagoon. The general public also uses the boat club site, though on a limited basis. Because the dirt access road down to the meadow is gated, parking occurs only on the Caltrans right-of-way along Highway 101.

On the eastern side of Highway 101, opposite the spur road, is an area known as Azalea Hill or Stagecoach Hill. This sunny, west-facing slope is rich in varieties of California azalea (Rhododendron occidentalis). However, the habitat is in the process of succession and will soon be crowded with alder and spruce trees unless steps are taken to maintain its open character. Only a small portion of the habitat lies within the park unit. Public visitation is very small.

There is little hiking in the unit. Much of Harry A. Merlo SRA lies under the shadow of old-growth redwood trees. There are few trails since much of the undergrowth is thick and impenetrable.
Big Lagoon Marsh is also significant as the habitat of a healthy herd of Roosevelt elk. Travelers driving along Highway 101, in their attempt to view the elk, sometimes park their cars along the highway at the southern end of the causeway or at the entrance to the Louisiana Pacific Mill, which can wreak havoc with the many logging trucks going in and out of the mill.

Adjacent Land Use -- Harry A. Merlo State Recreation Area

The most prominent adjacent land use is Highway 101, which runs the length of the park unit, cutting it into two narrow land strips. The noise generated from highway traffic permeates most of the park unit. The only areas saved from this intrusion are parts of Azalea Hill, the northern end of the old highway spur road, and the spruce forest south of Big Lagoon Marsh. Highway 101 will be discussed in greater detail in the Transportation Section.

Nearly all the other property adjacent to Harry A. Merlo SRA is owned by the Louisiana Pacific Corporation. The lumber mill complex, located on the eastern end of Big Lagoon Marsh, is the only Louisiana Pacific development adjacent to the unit. The mill complex is almost a community in its own right. Besides the mill and numerous support buildings, there are many permanent residences and mobile homes. The mill complex has little visual impact on the unit. Most visible is the mill's smokestack which is a prominent feature when looking across the marsh from the causeway. Also part of the mill complex is a 74-acre mill pond, which is no longer in use.

The remainder of adjacent Louisiana Pacific property consists of spruce forest to the south and a heavily logged hillside along the entire eastern length of the unit. The denuded land is a highly visible scar on the landscape, but reforestation is underway. Unfortunately, pampas grass (Cortaderia selloana) was used for interim slope stabilization. This exotic plant species, which is highly invasive and difficult to eradicate, has already begun establishing itself in the unit.

At its northern end, the unit shares some of its boundary with private landowners on Azalea Hill. Improved parcels vary in size. Some of the larger parcels are used for grazing. These developments on Azalea Hill have little effect on the unit, but their presence may be having an adverse impact on the azalea habitat.

On the southern shore of Big Lagoon is a federal Indian reservation, which is the site of Big Lagoon Rancheria, a nine-acre complex of wood structures and mobile homes housing six Yurok families.

Although fishing appears to be sporadically popular at Big Lagoon, it is not extremely productive. The State Department of Fish and Game only occasionally stocks Big Lagoon (an average of once every six years). In recent years, the lagoon has been planted with steelhead from the Mad River fishery.

Diving is also a regular recreational activity in Big Lagoon. Both its calm waters and easy access make it a good training area. However, the lagoon provides a relatively boring experience in comparison to the ocean. About 90 people per month dive at Big Lagoon throughout the year.
Other uses of Big Lagoon include sailing, windsurfing, team rowing, and limited amounts of waterskiing.

Public Use and Concerns

Visitation

As a new unit of the State Park System, Harry A. Merlo SRA has no official record of public visitation. Hunting is not extensive and group use at the Big Lagoon boat club site is sporadic.

Nearly 70% of public use at Dry Lagoon State Park occurs between May and September. Visitation to Dry Lagoon State Park has been recorded at the two major public use locations. In the 1980-81 fiscal year, about 62,900 people visited the day-use parking lot while about 5,520 people camped overnight at the Stone Lagoon primitive campground. This reflects a 28% increase in day use and a 128% increase in overnight use over the previous fiscal year.

While annual attendance is currently increasing, the pattern of annual attendance has been erratic over the past decade. This is due primarily to the "gas crunches" of 1974 and 1979. Visitation to the entire north coast area plummeted as gasoline prices skyrocketed.

If a sharp rise in traveling expenses doesn't occur, visitation will most likely continue to increase. However, it is difficult to ascertain what future effects a gasoline shortage may have on visitation to Dry Lagoon State Park and Harry A. Merlo SRA. Answers to one of the questions in a questionnaire distributed during the public involvement program may give some indication. When asked, "Would you continue to use the parks in the area if gasoline prices sharply rise to $2.00/gallon?", 62% of visitors from outside the area said yes, 14% said no, and 24% were not sure. Local visitors responded 81% yes, 3% no, and 16% not sure. Since most day use at Dry Lagoon State Park originates locally (see next section), this response would indicate that the level of day use would remain relatively unaffected by a gasoline shortage. (Note: At the time of questionnaire distribution, the price of regular gasoline on the north coast was approximately $1.20/gallon.)

Visitor Origin

Figures on visitor origin are only available for day use at the Dry Lagoon parking area.

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco Bay Area</td>
<td>11%</td>
</tr>
<tr>
<td>Sacramento Vicinity</td>
<td>11%</td>
</tr>
<tr>
<td>Other Northern California</td>
<td>56%</td>
</tr>
<tr>
<td>(including local area)</td>
<td></td>
</tr>
<tr>
<td>Los Angeles Area</td>
<td>11%</td>
</tr>
<tr>
<td>(Southern California)</td>
<td></td>
</tr>
<tr>
<td>Other California</td>
<td>11%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>
Public Involvement Program

To learn the scope of public concern for the future of these park units, an extensive program of questionnaires and public meetings was developed. This public involvement program also provided public input for the Patrick's Point State Park General Plan. A chronological summary of the program follows.

Initial Questionnaire -- May 18, 1982

This was distributed to both local and touring visitors. Through its results, the planning staff learned how visitors use the park units and began to see that the public (both local and touring) are most concerned about retaining the units' natural scenic character. A copy of this questionnaire, with the results (from 190 responses), can be found in the Appendix.

Student Meeting -- May 19, 1982

Because Humboldt State University was between sessions at the time of the first public meeting, this meeting was held so that students could participate in the planning process. (About 30 participants)

Campfire Program -- June 15, 1982

The planning staff led a campfire program at Patrick's Point State Park to generate dialogue with campers. Generally, in a general plan process, discussion is available only with local residents. This campfire program allowed the planning staff to discuss the creation of the plan with touring visitors as well. Campers expressed the desire that the vicinity should not be greatly changed. (About 50 participants)

First Public Meeting -- June 16, 1982

This was the first in a series of three local public meetings intended to gain local input to the project. The most prominent concern was voiced by some private landowners who live near state park property. They were strongly opposed to any additional acquisition by the state, particularly in the area of the community of Big Lagoon. Controversial issues included the preservation of Azalea Hill and the need for additional visitor-serving facilities. (Some 75 participants)

Summary of Suggestions -- July 23, 1982

A compilation of the comments and recommendations received through the initial questionnaire, student meeting, campfire program, and first public meeting was distributed to the public. This provided a means to inform the public of comments the planning staff had been hearing. In addition, people were able to rank the importance of each comment. The returned response sheets gave the planning staff a more precise survey of public opinion. A copy of the response sheet and its results are in the Appendix. (115 responses)
Native American Questionnaire -- August 19, 1982

There have been several proposals since at least 1963 for reconstructing a Native American village somewhere in the vicinity of Dry Lagoon State Park and Patrick's Point State Park. This questionnaire was distributed to Native Americans throughout the area to help specify the scope of such a proposal. A copy of the questionnaire and its results can be found in the Appendix. (73 responses)

Second Public Meeting -- October 5, 1982

The planning staff presented to local residents land use options for development at Dry Lagoon State Park and Harry A. Merlo SRA. These were based both on previously expressed public concerns and other guiding factors. Participants evaluated the options and expressed their preferences. No strong opposition was expressed toward any option. (About 70 participants)

Native American Meeting -- November 5, 1982

One land use option is the reconstruction of a Native American village at Patrick's Point State Park. The planning staff met at the park with interested Native Americans to review the feasibility of such a proposal. Those in attendance expressed unanimous support for the project and its location at Patrick's Point State Park. They also provided valuable direction for project implementation. (12 participants)

Third Public Meeting -- January 5, 1983

The planning staff presented to local residents the key proposals found in this plan. No major opposition was voiced. (Some 50 participants)

Proposed Land Use

Land Use Concept

Because of their close proximity, Dry Lagoon State Park, Harry A. Merlo State Recreation Area, and Patrick's Point State Park have been looked at, through the general plan process, in a comprehensive way. A general plan has been prepared for Patrick's Point State Park in conjunction with this document.

Patrick's Point State Park is extensively developed for public use. The park will continue to be the major provider of intensive recreational development in the immediate area. Existing and future facilities include traditional vehicular campgrounds, comfort stations with showers, group campgrounds accessible by auto, a reconstructed Indian village, and a park visitor service center. In general, Patrick's Point State Park will continue to provide opportunities for visitor appreciation of the park's natural and cultural resources in an easily accessible, comfortable way.
Dry Lagoon State Park and Harry A. Merlo SRA, on the other hand, will provide opportunities for a more primitive experience. Throughout the general plan process, the scenic value of the lagoons area has been highly stressed. While opportunities for additional public use are needed in the area, these will be located and designed so as to do little to alter the natural character of these units. Any proposed development will only occur in areas where the natural scene is already affected by development, or where new development would have little or no impact on the natural scene.

**Proposed Facilities**

In this section, facility proposals are reviewed in an approximate north-to-south progression, starting with Dry Lagoon State Park and continuing through Harry A. Merlo SRA.

This section identifies only those places where new facilities or changes are recommended. If an area is not mentioned, no alterations are proposed.

**Stone Lagoon Primitive Campground**

The future of Stone Lagoon primitive campground in Dry Lagoon State Park depends somewhat on what happens at nearby Freshwater Spit, operated by the National Park Service. Both areas currently provide similar overnight accommodations for recreation vehicles (though Stone Lagoon primitive campground is more remote). Redwood National Park plans to continue, but not expand, regular overnight use at Freshwater Spit. Therefore, although camping demand at Stone Lagoon primitive campground probably will increase, it will not increase much above current levels because of continued availability of camping at Freshwater spit.

The following proposals reflect the need for an overall rehabilitation of the campground.

- Stone Lagoon primitive campground should not be expanded beyond its present boundaries. However, since it is popular and use is increasing, accommodations for about 10 additional camping vehicles are necessary and can be made by widening the coast leg and northeast leg of the loop road into the central meadow area. The approximate capacity of the campground would then be 40 recreation vehicles. The dunes at Stone Lagoon barrier beach are a sensitive natural resource and will not be affected by campground improvements.

- The central meadow area used by tent campers should be regraded to make it more level.

- Comfort stations will be upgraded and more centrally located. In addition, picnic tables and fire rings will be added.

- Because the campground is remote, emergency telephone service will be provided.
The access road to the campground is only one lane wide. It will be widened at several spots to allow incoming and outgoing vehicles to pass. Repaving is also needed. In addition, some intersection improvement will be made at Highway 101, (see Transportation section).

Off-highway vehicles have been allowed on the wave slope of Stone Lagoon barrier beach, but are restricted from the dunes area. This limitation has been difficult to enforce. Therefore, OHVs will be entirely eliminated from the beach, except for holders of special use permits (e.g., scientific study) and in emergency or administrative situations. Stone Lagoon primitive campground shall be designed to keep vehicles off the beach.

Stone Lagoon Overlook

A pull-off area is needed along Highway 101 so that visitors can see the point where Stone Lagoon barrier beach is seasonally breached. The hydrological story of the lagoons can be explained there through an interpretive panel.

The site was selected as an overlook for several reasons: this is one of the first places where southbound travelers can see the lagoon; it will require only a limited amount of tree removal to improve and maintain the view; the site is one of few available for such a facility within Caltrans right-of-way; and there is adequate visibility for southbound drivers.

Since the site is narrow, it will be limited to about five vehicles. Prolonged visits to the overlook area will not be encouraged. There will not be a comfort station, picnic tables, or trail to the lagoon.

Since the facility will be entirely within Caltrans right-of-way, the project will be a cooperative effort between the Department of Transportation and the Department of Parks and Recreation. Before implementation, the department and the adjacent landowner should discuss retention of the open view of the lagoon.

Highway signing will be important. Access to the pull-off area is safe for southbound traffic, but hazardous for northbound traffic. Therefore, access for northbound traffic will be discouraged.

To further improve the view, utility lines will be placed underground or relocated.

Stone Lagoon Day-Use Area

The Stone Lagoon day-use area will be the center for public use in the Stone Lagoon area. The site of the Little Red Hen restaurant and motor court is the best place for day-use access to Stone Lagoon. Access for the general public (from the highway and to the lagoon) will be convenient. The site has already gone through extensive modification from its natural conditions. By redesigning this area, the department will be enhancing rather than detracting from the natural scene.
Most existing structures will either be razed or relocated, except the restaurant structure and the old barn. A portion of the restaurant structure will be remodeled to serve as a visitors center, interpreting both natural features (the lagoons, azaleas, plant succession, wildlife) and cultural themes (Yurok history and early settlers). It will also serve as a secondary park office. (A detailed description of center functions is found in the Interpretive Element.) If it is not financially feasible to remodel the restaurant building, a new building should then be built at the Stone Lagoon day-use area. This new structure should be sited so as to maintain as much as possible of the natural view of, and from, the lagoon.

The barn, on the east side of Highway 101, is in disrepair and has only limited historical value. However, it has esthetic value and will remain. The department should not spend funds to prevent further deterioration of the structure, but should take needed protective safety measures to prohibit the public from entering it.

A 40-vehicle parking lot will be constructed south of the visitor center. The parking area will serve: 1) the visitors center, 2) recreational users of Stone Lagoon, 3) picnickers, 4) 10 boat-in campsites on Stone Lagoon Peninsula, and 5) users of the Coastal Trail, a trail to the Tall Trees Grove in Redwood National Park, and an interpretive trail to the Stone Lagoon Marsh. A small entrance station should be constructed to allow collection of fees during peak visitation periods.

To lessen the visual impacts, utility lines in the area will be placed underground.

The view of Stone Lagoon from Highway 101 is important, but the retention of natural views from Stone Lagoon and Stone Lagoon peninsula is an even higher priority. The site for the proposed parking lot allows the implementation of vegetative screening to protect the view from Stone Lagoon. In addition, the site allows construction of the parking lot at a level lower than the highway, thereby minimizing the visual impact on the highway. South of the parking lot, a narrow view corridor, from the highway to the lagoon, should be maintained.

The existing paved area north of the restaurant building will temporarily provide parking for the visitor center and other recreation activities, until funds become available to construct the new parking lot. With construction of the new parking lot, the paving will be removed and the site will be regraded to a more natural slope. The view from the highway will be further enhanced by maintaining the site as open space, without any tall vegetative cover. This site may be used for picnicking or interpretive demonstrations such as the construction of redwood dugout canoes.

The existing boat ramp north of the restaurant structure shall be taken out, and a new ramp constructed in association with the proposed 40-car parking lot. (The existing boat ramp will remain until funds become available for construction of the new parking lot and boat ramp.) Care should be taken in
the siting of the ramp to assure that it can be designed with an adequate slope and sufficient water depth. If these requirements cannot be met in the immediate vicinity of the new parking lot, a spur road will be constructed up the shoreline to a point where a boat ramp with adequate slope and depth can be built.

Picnic sites will be developed along the shoreline except for the area south of the proposed parking lot. Through the summer season, an algae bloom emits a foul odor which is predominant along the southern shoreline.

On the east side of Highway 101, a trail will be constructed to the Tall Trees Grove in Redwood National Park. Construction of this trail should be coordinated with the National Park Service Trail Plan for the Redwood Creek watershed. The trail will switch back up the steep slope to the boundary of Redwood National Park. Numerous rest stops should be constructed along the way to take advantage of spectacular views of the Pacific Ocean. This trail will prove to be a popular recreation resource both for those who want to hike into Redwood National Park and for walkers who simply want to enjoy the view. A crosswalk and highway signage will be necessary to provide safe access for hikers and picnickers from the parking lot across Highway 101. Approval by the Department of Transportation is required for such a crosswalk. No crosswalk will be allowed unless the need is demonstrated. Therefore, some temporary informal parking may be needed on the east side of Highway 101 for pedestrian use of the trail. Permanent parking there could cause operational problems, produce a visual impact on the bucolic scene, and duplicate parking available elsewhere.

Redwood National Park is planning to implement an extensive network of equestrian trails along the western slope of the Redwood Creek watershed. The trail leading from the Stone Lagoon day-use area should be designed for equestrian use but would not be opened until parking is provided. Parking for equestrian use should not occur at the Stone Lagoon day-use parking lot. Instead, parking may best be provided by Redwood Trails Campground, near their existing building complex on the inland side of Highway 101. A trail could connect such a facility with the trail to Redwood National Park. (A detailed discussion of the network of trails throughout Dry Lagoon State Park and Harry A. Merlo SRA is found in the Trails section.)

The Stone Lagoon day-use area will be the operations center for the lagoons area, as well as the recreation center. Two permanent residences for department staff will be sited on the margin of the open field east of the highway. (If the two existing cabins on the lagoon side of the highway, once part of the Little Red Hen Motor Court, are structurally sound and habitable, they could be relocated to serve as staff residences. One of the cabins may need to be expanded to accommodate a family.) A small maintenance area will be constructed in association with the staff housing. This operation complex will be sited, painted, and screened to minimize the impact on the view from the lagoon and on the bucolic scene at the old barn.

Redwood National Park staff was concerned that the trail into the national park would provide uncontrolled access into this sensitive habitat. However, this operations center near the trailhead should help make it a controlled access point into Redwood National Park.
Public meeting #1 at the Big Lagoon Elementary School

Stone Lagoon primitive campground
View of Stone Lagoon breach point from Highway 101.

Panorama of Stone Lagoon and Stone Lagoon peninsula with the old Little Red Hen motorcourt in the foreground.
Boat club site on the eastern shore of Big Lagoon
MacDonald Creek Pastureland

The 38-acre state-owned pastureland will remain undeveloped. When the mobile home at the southwestern end of the pastureland is vacated, it will be removed.

Stone Lagoon Peninsula

The peninsula is one of the few land masses in the lagoons area that retain a primitive character. Though it was once extensively cleared for agricultural use, it now has a rich diversity of settings: open prairies, alder forests, dark spruce forests, and moist, fern-covered gullies. The noise and visible impacts of Highway 101 permeate much of the lagoons area, but not here. A traditional loop-spur campground was once proposed for the peninsula, but since this is one of the few large, secluded places in the lagoons area, such a proposal no longer seems appropriate. This area will be kept primitive to be enjoyed by visitors for its undeveloped scenic qualities and to protect its natural resources.

- The trail system through the peninsula should not be extensive. Two or three loop trails will leave large areas of the peninsula preserved for wildlife habitat. The trails will be aligned to avoid archeological sites and geological hazards. The Coastal Trail will pass through the peninsula. (For a detailed discussion of the proposed trail network throughout Dry Lagoon State Park and Harry A. Merlo SRA, see the Trails section.)

- Ten boat-in campsites will be developed near Ryan's Cove, clustered on the ridge to the north. Toilets will be centrally located. The boat landing site will not have any construction, such as a wood dock. The mouth of the cove is a bird habitat. All precautions should be taken to minimize boating impact on the cove.

- Five to 10 hike-in campsites will be scattered throughout the peninsula, in conformance with the Allowable Use Intensities Map. Each campsite shall have access to the Coastal Trail. A limited number of toilets will be available at inconspicuous locations. Both the hike-in and boat-in campsites will be reserved through local park staff or eventually through a statewide reservation system.

(Because of their remoteness, these types of facilities demand additional staff time. This problem is addressed in the Operations Element.)

Dry Lagoon Area

- An entrance station will be constructed along the park road. During periods of high visitation, this facility will control public use of this area.

- The existing parking lot adjacent to Dry Lagoon Beach will essentially remain as it is. Toilet facilities will be upgraded, picnic tables will be added, and a small portion of the entrance road will be reconstructed to eliminate a flooding problem. The lot is popular as an easy access to the ocean and is not causing measurable resource damage. To assure
continued protection of the resources, there will be no expansion. The lot will serve general beach recreation, the hike-in campsites on Stone Lagoon Peninsula, 10 new walk-in campsites nearby (see below), and the Pacific Coastal Trail.

- In the spruce forest on the hill behind the parking lot, 10 walk-in campsites will be developed. The sites will be spaced to provide a secluded setting, but will be close enough to the parking lot (between 400 feet and 700 feet) to allow easy access to the sites and a short walk to the upgraded toilet facilities. Showers will not be available.

Because public use at the Dry Lagoon parking lot will likely continue to increase, there may be times when the lot reaches capacity and visitors are either turned away or park their cars unsafely along the narrow entrance road. Since the existing lot will not be expanded, overflow parking should be provided.

- Less than one-half mile inland of the existing parking lot, about 20 parking spurs will be created along both sides of the entrance road. These spaces will be along the edge of a popular berry patch containing blackberries, huckleberries, and salmonberries. The spurs will be arranged in small groups, with one or two picnic sites developed at each set. This berry patch parking area may prove to be popular on windy days since it has some screening from ocean breezes.

In addition, this site will be used for en route camping. Currently, the department provides hundreds of parking spaces statewide for travelers with self-contained vehicles who need only an overnight accommodation with minimal facilities. The department has identified the need for additional en route camping in the lagoons area.

- Dry Lagoon is actually a freshwater marsh. At the inland end of this marsh is a swamp. An interpretive trail will lead through this unusual natural resource from the berry patch parking area.

**Big Lagoon Overlook**

Most of the one-half mile spur of the old highway is stable and open to public use. Fishermen park at the northern end of the road, then go down the hill to fish for steelhead at the breach point of Big Lagoon. This predominantly local use will continue to be allowed seasonally. However, signs will be installed to inform visitors of another, more stable, lagoon access trail, which will be constructed at the southern end of the spur.

At the bottom of this new trail, a few picnic sites will be developed along the Big Lagoon shoreline. Unfortunately, due to erosion of this section of shoreline, it will usually be impossible to travel from this picnic area to the breach point. Consequently, fishermen will continue to use existing routes from the north end of the spur down the hill to the breach point.
The area at the intersection of Highway 101 and the spur road will be redesigned to provide a day-use parking lot of about 20 spaces. This lot will primarily serve as an observation point overlooking Big Lagoon. It will also be the trailhead for the lagoon access trail. Picnic sites will be developed near the parking area.

The new overlook point will mitigate an existing safety hazard. Southbound drivers are confronted by a spectacular view of Big Lagoon, with no convenient pull-off available. They travel at high speeds on a four-lane highway, then suddenly come to a winding route down Big Lagoon’s eastern shoreline. The conflict between the view and the winding road can lead to serious accidents. Highway directional signing will be important to inform drivers of the overlook.

A short trail will lead south from the parking area to the overlook. A platform may be needed. Tree removal and continued management of the vegetation will be required to maintain the view.

Azalea Hill

A small portion of what is termed Azalea Hill lies within Harry A. Merlo SRA. There will be no development for public use in this sensitive habitat other than some informal trails for nature observation. In addition, much of the topography does not lend itself well to the development of public use facilities. However, if adjacent lands added to park ownership are more capable of being developed for public use facilities, a small day-use parking lot may be appropriate.

Big Lagoon Group Use Area

The old boat club site will be primarily available for group day-use and group overnight use. Day use by the general public will be allowed only when the area is not reserved for group use and as long as the capacity of the proposed parking lot is not exceeded.

This is a small area with sensitive natural resources. It warrants controlled use through reservations. Group size should not exceed 50. (Group use areas with larger capacities will be available at Patrick’s Point State Park). In those periods of general public use, parking lot size will limit the number of people using the area. There may be periods when the area should be closed to general public use for the sake of resource protection. Such determinations will be made by local department staff.

- A 15-space parking lot will be developed halfway between the meadow area and the highway. The lot will be sited so as to avoid any impact on the old trees in the area.

- A small group picnic area, cooking shelter, and comfort station (with water) will be constructed on the margins of the meadow. All existing structures shall be removed. In addition, a few walk-in campsites will be developed in the spruce forest north of the meadow. Vegetation will be managed to maintain the meadow. All utility lines in the area will be placed underground.
The proposed group use area has been used by the Humboldt Yacht Club for its annual regatta since 1950. This use will be allowed to continue. The primitive boat launch will be lengthened to allow launching during low water periods. Since a formal boat launch is available at Big Lagoon County Park, this boat launch will be available for general public use only with prior notice to park staff. The dirt road which leads to the boat launch will remain unpaved, but some maintenance, such as occasional regrading, may be required. The road will be gated and boat launching will be available only by special permit.

There will not be any entrance station since most public use will be by reservation.

Major highway intersection improvement will be required for this facility. (See the Transportation section for a detailed discussion of this and other traffic requirements for Dry Lagoon State Park and Harry A. Merlo SRA.)

Big Lagoon Marsh Day-Use Area

Big Lagoon Marsh is a special natural resource, one of the largest freshwater marshes in the region. The marsh is popular for both waterfowl hunting and birdwatching. In addition, it provides habitat for a large herd of Roosevelt elk. Public parking in the area takes place indiscriminately, on the wide shoulders along the highway both north and south of the marsh, which promotes a hazard, and along the entrance road to the Louisiana Pacific Lumber Mill, which causes problems with logging trucks.

- A 20-vehicle parking area will be developed near the highway, immediately north of the lumber mill access road. This parking area will serve 1) waterfowl hunting on the marsh, 2) nature observation, and 3) the Coastal Trail. Some removal of young alders will be required for construction. Toilet facilities (without water) will be available. The parking lot should be sited and designed to prevent public access to land to the east. This land is wet and poorly drained most of the year and the spruce forest, further east, is part of the Roosevelt elk’s habitat.

- A crosswalk will be designated across the mill entrance road. A trail will lead from the parking lot and run along the causeway. The trail will be cut into the inland slope of the causeway at a minimum of seven feet below the causeway roadbed. At the causeway bridge, the trail will likely need to be suspended or cantilevered off the bridge. (Details and approval of this aspect will have to be worked out with the Department of Transportation.) This trail will provide access to the marsh for hunting and nature observation. It will also be part of the Pacific Coastal Trail, which is discussed in more detail in the following Trails section.

The forest south of the marsh will be left undeveloped, primarily because it is a significant part of the elk habitat.
Trails

The backbone of the trail system in the two units will be a 9-mile segment of the Pacific Coastal Trail, which is being planned by the State Department of Parks and Recreation, the National Park Service, and various counties to run along the northern California coastline. The California Recreation and Trails Plan (1978) recommends a Pacific Coast trail corridor "...from Oregon to Mexico, within the sights and sounds of the Pacific Ocean."

It is anticipated that the trail will be used for both backpack trips and short day hikes. Backpackers will be able to use the proposed hike-in and walk-in campsites in the vicinity of Dry Lagoon and Stone Lagoon peninsula. However, to adequately supervise use, these facilities should be available by reservation only.

As much as possible, the route of the Pacific Coastal Trail through these units should be laid out to take advantage of the variety of environmental settings, including Stone Lagoon barrier beach, the meadows, ravines, alder and spruce forests of Stone Lagoon peninsula, Dry Lagoon, Truttman Sink, the old-growth redwood forest, and Big Lagoon Marsh. A potential route for the coastal trail is identified on the Proposed Land Use and Facilities map, though this is subject to revision depending on actual site conditions.

In the vicinity of Stone Lagoon, the Pacific Coastal Trail will branch off onto three alternative routes. One will be a route over Stone Lagoon Peninsula and Stone Lagoon barrier beach. This branch will need to be closed through much of the winter season because of the breaching point at the southern end of the beach. The second route will travel along the inland side of Stone Lagoon, through the Stone Lagoon Day-Use Area. At the day-use area, a third route will provide hiking access into Redwood National Park and the Tall Trees Grove. Construction of this trail should be coordinated with the National Park Service Trail Plan for the Redwood Creek basin.

At Big Lagoon Marsh, it would be preferable to develop the coastal trail on the inland side of the causeway to give its users views of the marsh and better access from the nearby proposed parking area and facilities. However, this route would require two crosswalks over Highway 101 at points somewhere north and south of the causeway. If this cannot be safely accomplished, then the route should run along the coastal side of the causeway, while a trail from the proposed parking area would run along the inland side. To develop a trail along the side of the causeway, approval must first be gained from the Department of Transportation.

Up to three crosswalks may be required to complete the trail network in the units, near Big Lagoon Marsh and at the Stone Lagoon day-use area. However, the Department of Transportation discourages crosswalks over Highway 101. No crosswalk will be allowed unless the need is demonstrated. Approvals by the Department of Transportation will be handled on a site-by-site basis. The highest priority is the crosswalk at the Stone Lagoon day-use area. Some temporary informal parking may be needed on the east side of Highway 101 for use of the trail into Redwood National Park.
Short loop trails will be integrated into the Pacific Coastal Trail for day use. Such trails will primarily occur in the vicinity north and south of the Dry Lagoon area.

Except for the trail from the Stone Lagoon day-use area into Redwood National Park, the trails will be designed for pedestrian use only. Equestrian use would require more extensive trail development and may cause damage along Stone Lagoon barrier beach and the beach at Dry Lagoon. The presence of horses might also disturb wildlife. (Redwood National Park is planning to implement an extensive network of equestrian trails along the western slope of the Redwood Creek watershed which will adequately serve equestrians.)

All trails will be aligned to avoid any archeological sites. If it is necessary to construct a trail near an archeological site, appropriate mitigating measures will be taken to mitigate any impact.

Overnight parking and access to the Pacific Coastal Trail will be at the Stone Lagoon day-use area and the Dry Lagoon area. Day-use access will also be available from the Big Lagoon overlook and Big Lagoon Marsh parking lots. (Parking for overnight trail users at Big Lagoon overlook and Big Lagoon Marsh is not recommended because of the potential for car thefts and vandalism.)

All-Access Program

Statewide, the Department of Parks and Recreation is working to provide access to facilities and resources that have previously been inaccessible to many people who are physically or developmentally disabled. At Dry Lagoon State Park and Harry A. Merlo SRA, facilities will be fully accessible as long as the natural character of the landscape is not severely altered. Areas with facilities allowing full access to all people will include (but not be limited to): the Big Lagoon group use area, Stone Lagoon day-use area, the Stone Lagoon primitive campground, and the Dry Lagoon area.

Underwater Recreation Area

The marine and freshwater areas of California contain important resources with significant natural, cultural, and recreational values. To ensure that representative examples of these values are preserved and that their recreational potential is realized, the Department of Parks and Recreation has established an underwater parks program. The department's program consists of acquiring underwater lands from the State Lands Commission, developing them if necessary, and thereafter managing them as underwater parks, reserves, or recreational areas. A major emphasis of the program is in preserving the best representative examples of natural resources found in coastal and inland waters.

The State Advisory Board for Underwater Parks and Reserves has recommended that Big Lagoon become an underwater state recreation area. This plan recommends proceeding toward the establishment of such a unit. Actual establishment is contingent on negotiations with the State Lands Commission and the State Department of Fish and Game.
No major facilities are proposed in this new unit. Most scuba divers currently gain access to the lagoon from Big Lagoon County Park, and that is expected to continue.

Utilities

Utility requirements for the proposed facilities can be grouped in four categories: sewage disposal, electricity, water, and telephone. The following is a summary of which utilities will be needed at each proposed use area. A detailed analysis of utility availability, made at the time of project implementation, may prove that certain utilities are more readily available than previously thought, while others identified here may be found to be impractical, not cost-effective, or unavailable.)

Stone Lagoon Primitive Campground - Sewage disposal on either chemical, pump-out, or self-composting system. Telephone.

Stone Lagoon Overlook - No utilities needed.

Stone Lagoon Day-Use Area - Sewage disposal on septic tank/leach system. Electrical connection, water, and telephone.

Stone Lagoon Peninsula - Sewage disposal on either chemical, pump-out, or self-composting system. Water (if available).

Dry Lagoon Area - Sewage disposal on either chemical, pump-out, or self-composting system. Water (if available). Electrical hook-up and telephone at entrance station.

Big Lagoon Overlook - Sewage disposal on either chemical, pump-out, or self-composting system.

Big Lagoon Group Use Area - Sewage disposal on septic tank/leach system. Electrical hook-up. Water.

Big Lagoon Marsh Day-Use Area - Sewage disposal on chemical, pump-out, or self-composting system.

Where feasible, solar energy should be used to the fullest in the design of comfort stations.

Transportation

Highway 101 plays a significant part in the future plans for these units. It acts as the vehicular link between the proposed areas of public use while serving as the major highway along the northern California coast. This dual use of the highway could pose some safety problems should the proposed public use facilities generate extensive traffic. However, the new development proposed for these units is low-key and will likely not pose a major traffic problem. Even though peak periods of public recreation may cause some slowing, it will not be a major problem for traffic capacity along this part of the highway since present traffic volume is relatively low.
Some intersections with the highway may need to be improved as public use areas are developed. Projects that will likely require minor intersection improvements include Stone Lagoon primitive campground, Stone Lagoon overlook, Stone Lagoon day-use area, Big Lagoon overlook, Big Lagoon group use area, and Big Lagoon Marsh day-use area.

The Caltrans five-year plan shows no new development in the vicinity of the lagoons. However, a project to straighten some of the curves east of Big Lagoon may be included in the five-year plan in the near future.

Some 12 years ago, preliminary studies were made on rerouting Highway 101 higher up the slope east of Big Lagoon. The project was dropped because it required expensive construction methods to deal with the unstable soil and geologic conditions. Should Caltrans once again pursue such a project, the facilities proposed for the east shore of Big Lagoon should be reevaluated. The rerouting of Highway 101 would minimize the conflict between traffic and public use facilities and would dramatically change the character of the Harry A. Merlo SRA redwood grove to a more natural area.

The private vehicle is, by far, the most popular mode of transportation to the two units. However, alternative transportation methods are available. The Bicentennial Bicycle Route runs down Highway 101. This route is becoming increasingly popular. Facilities, such as the proposed walk-in campground at the Dry Lagoon area, should serve these bicyclists well. In addition, a bicycle rack will be provided near the Visitor Center at the Stone Lagoon day-use area.

The Humboldt Transit Authority's Redwood Transit System currently provides service twice daily to and from Orick, on weekdays only. With the development of the facilities proposed in this general plan, public demand for bus service may increase. The transit authority should then be encouraged to provide more frequent service, including weekends. A flag stop at the Stone Lagoon day-use area would be appropriate. In addition, Greyhound bus service may also increase with the implementation of facilities proposed in this general plan.

Proposed facilities at the Stone Lagoon day-use area may prove to be popular with school groups. Parking at this area will be designed to accommodate school buses.

With the completion of the Pacific Coast Trail, a number of people will be reaching the units by foot. The proposed walk-in and hike-in campsites will serve these people.

**Capacity of Facilities**

The existing facilities at Dry Lagoon State Park and Harry A. Merlo SRA currently accommodate up to 280 visitors at any one time.

If all the proposed public use facilities were developed, the capacity of the two units would increase to a maximum of 841 visitors (both day and overnight use) at any one time (instantaneous capacity). In general, instantaneous capacity would occur rarely, since most visitor use is distributed throughout
the day. Overnight capacity of Dry Lagoon State Park would be about 361 campers. On busy days, day-use facilities could experience a visitor turnover of approximately 2.0. This means that a total of 1,120 day-use visitors could be accommodated at the units on a peak day.

The allowable use intensity analysis contained in the Resource Element provided guidelines to determine type, location, and intensity of developments. Before specific proposals were determined, classification limitations, user needs and recreation deficiencies, and operational requirements were considered, along with the allowable use intensity specified for each area.

**Recommended Sequence of Implementation**

Since priorities can change, the following list should be considered merely as a guideline, not a firm direction.

**First Level of Priority**
- Stone Lagoon Day-Use Area

**Second Level of Priority**
- Dry Lagoon Area
- Big Lagoon Marsh Day-Use Area
- Trails
- Stone Lagoon Primitive Campground

**Third Level of Priority**
- Stone Lagoon Peninsula
- Big Lagoon Group Use Area

**Fourth Level of Priority**
- Big Lagoon Overlook
- Stone Lagoon Overlook

**Future Coordination With Government Agencies**

The department will need to continue to interact with various government agencies in the implementation of this plan. These agencies and associated concerns include, but are not limited to, the following:

**Humboldt County Parks**
- Interpretation panel for the proposed Big Lagoon Underwater State Recreation Area
- Coastal Trail connection
Humboldt County Planning Department

- LCP permits for each development
- Jurisdiction over Stone Lagoon (only if determined appropriate)

State Lands Commission

- Jurisdiction over wave slope at Big, Dry, and Stone Lagoon beaches
- Jurisdiction over Stone Lagoon (only if determined appropriate)
- Designation of Big Lagoon Underwater State Recreation Area

State Department of Fish and Game

- Enforcement of hunting and fishing regulations
- Jurisdiction over Stone Lagoon (only if determined appropriate)
- Fisheries restoration
- Designation of Big Lagoon Underwater State Recreation Area

Redwood National Park

- Trail connections

State Department of Transportation (Caltrans)

- Intersection improvements
- Crosswalks over Highway 101
- Trail along Big Lagoon Marsh causeway
- Stone Lagoon overlook
- Relocation and/or widening of Highway 101 near Big Lagoon

State Coastal Conservancy

- Fisheries restoration on McDonald Creek

California Coastal Commission

- Consistency with the Coastal Act

Conformance to Local Coastal Plan

Throughout the planning process, department staff have been in close coordination with the Humboldt County planning staff. As a reflection of this continued interaction, the proposals in the general plan conform to the following existing policies of the Humboldt County Local Coastal Plan (LCP):
The state shall not develop facilities that would compete with private commercial facilities.

Off-highway vehicle use on beaches fronting Big Lagoon, Dry Lagoon, and Stone Lagoon shall be prohibited.

Continuation of hunting at Stone Lagoon and Big Lagoon may be allowed.

The Northcoast Area Plan of the Humboldt County LCP contains the following proposed amendments which relate to the development and management of Dry Lagoon State Park and Harry A. Merlo SRA. These amendments are scheduled to be reviewed for approval by the State Coastal Commission in the spring of 1983.

The Stone Lagoon primitive campground shall not be expanded beyond its present boundaries, but the existing area may be modified to provide for additional camping.

A highway pull-off should be developed on the east side of Stone Lagoon.

Development of the 'Little Red Hen' area should include:
- Facilities to improve shoreline access opportunities
- General clean-up of the site
- Mitigation for loss of housing
- Visitors center
- Maintenance of barn

Existing type and densities of agricultural use on state park property (primarily grazing) shall continue.

A trail from Dry Lagoon State Park to the Tall Trees Grove in Redwood National Park should be developed.

Hike-in and boat-in campsites should be developed on the Stone Lagoon peninsula.

Day-use facilities should be upgraded at Dry Lagoon Beach.

Walk-in and en route campsites should be provided near Dry Lagoon Beach.

Seasonal fishing near the Truttman Sink, above the north end of Big Lagoon, should be allowed to continue.

The 'boat club site' on the east shore of Big Lagoon should continue to allow overnight use and boat launching for regattas.

Future park acquisition shall be from willing sellers only and shall not extend beyond the limits shown in the Local Coastal Plan.
In general, the Department of Parks and Recreation shall make improvements to augment and enhance coastal access.

A coastal trail shall be developed through Dry Lagoon State Park and Harry A. Merlo SRA.

Equestrian use will be regulated by State Park System staff.

The proposed land uses and facilities of this general plan conform to the above policies and proposed amendments found in the Local Coastal Plan.

Appropriate Future Land Acquisition

All discussions regarding land acquisition are intended for long-range planning purposes only, and are not a commitment for acquisition. Any future additions to these park units should be from willing sellers only.

All of Harry A. Merlo SRA and a substantial portion of Dry Lagoon State Park were purchased between 1979 and 1982 as part of the department's Humboldt Lagoon's acquisition project. Two key areas identified in that project have not been acquired: the northeast shoreline of Stone Lagoon and the southern shoreline of Big Lagoon. It would be advantageous for these properties to be under state ownership. Such acquisition would protect nearly the entire shoreline of Stone Lagoon and Big Lagoon from development that would have an adverse effect on the natural scene.

Azalea Hill is a significant natural resource. The Humboldt County LCP also recognizes this resource as significant and needing protection. The department will endeavor to restore and protect this excellent habitat for the western azalea. However, most of the hill lies outside state ownership. Acquisition may be necessary to manage the habitat. The department should consider acquiring appropriate properties that become available for sale on Azalea Hill. Property contiguous to state land should have highest priority.

At one time, Humboldt County expressed interest in transferring Big Lagoon County Park to the State Park System, but that is not their current desire. If, in the future Humboldt County becomes interested in transferring ownership and operation of Big Lagoon County Park to the state, the department should consider accepting ownership and the responsibility of operating the facility. This would give the department management responsibility at both ends of Big Lagoon barrier beach. In addition, there is the advantage of having one government agency manage public access to Big Lagoon. However, the department has no objections with the way the county currently manages the county park.
OPERATIONS ELEMENT

This section discusses the operational requirements that will be needed as proposed facilities, resource management guidelines, and the interpretive program are realized. It also identifies future management guidelines placed on certain existing land uses.

Operational Requirements

While most public use facilities in the two units will be low-key, (such as hike-in campsites), the staffing to operate them will be as great as, or greater than, that needed for intensively developed facilities (like those at Patrick's Point State Park). This is due to the remoteness of the facilities. While the facilities themselves require less maintenance, the staff-time needed to get to the remote facilities will be substantial. As these facilities are put in place, staffing should be increased so that adequate levels of supervision and service can continue to be provided.

To help generate revenue, which indirectly maintains adequate levels of service, user fees will be charged wherever feasible.

Local department staff will be responsible for monitoring general public use at the proposed Big Lagoon group use area. When it is not reserved for group use, the area will be open for general public use, with numbers of visitors limited by parking lot size. (See the Proposed Facilities section for a more detailed discussion of the management required for this facility.)

Facilities will be designed and staffed to allow staff to respond to most possible emergencies. While the department does not have legal jurisdiction over Big Lagoon and Stone Lagoon, one or more boats should be available for department use on both lagoons. In addition, all three beaches (Stone Lagoon, Dry Lagoon, and Big Lagoon) shall be accessible to staff vehicles for emergencies and administrative access.

Land Use Management

Beach Use

Off-highway vehicles are currently allowed on the wave slope at Stone Lagoon barrier beach. Resource damage is minimal if the vehicles are limited to the wave slope. However, once they are on the wave slope, it is difficult to prevent OHV use on the sensitive dunes, which are subject to extensive damage.

To prevent potential damage to the dunes and eliminate the visual and audible impacts on the natural scene, OHV use will be prohibited on Stone Lagoon barrier beach, Dry Lagoon Beach, and Big Lagoon barrier beach (except for ranger patrol, by special permit -- e.g., for scientific study, and in emergencies). To enforce this prohibition, the department must enter into an agreement with the State Lands Commission to gain jurisdiction over the wave slope. (Redwood National Park plans to continue to allow OHV use on Freshwater Lagoon Beach north to Redwood Creek.)
A small amount of equestrian use has occurred on Big Lagoon barrier beach. The department reserves the right to discontinue this use because of the potential for resource damage.

Use of the Lagoons

Since most of the shoreline around both Big Lagoon and Stone Lagoon is within state park ownership, the department is vitally concerned with public use on the lagoons.

The Harry A. Merlo project was classified a SRA to specifically allow waterfowl hunting to continue on state park property within Big Lagoon Marsh and from the shoreline of Big Lagoon. If the State Park and Recreation Commission approves the policy regarding waterfowl hunting (see Resource Element), this use will be subject to appropriate regulations of the State Department of Fish and Game, which manages the surface waters of Big Lagoon. However, hunting should be discouraged from the immediate vicinity of the proposed Big Lagoon group use area.

Operations staff should give high priority to protecting the Roosevelt elk herd. Anti-poaching measures should include frequent monitoring of the herd.

The State Lands Commission, which has jurisdiction over Stone Lagoon, allows waterfowl hunting there. This use should be regularly evaluated to determine if there are any conflicts with general public use on the lagoon. Should either hunting or general use increase to where conflicts and safety hazards occur, the department should work to resolve these problems.

It is important to retain Stone Lagoon's natural atmosphere, with its passive recreation of fishing and canoeing. The department should monitor recreational use to determine if this natural atmosphere is being compromised. If it is determined that boating speed limits should be enforced to protect the natural character, the department and the State Lands Commission will discuss the means of enforcement.

With improved public access as proposed in this plan, sport-fishing on both lagoons should be increased by restoring natural fisheries. Local department staff should participate in rehabilitation programs currently managed by the California Coastal Conservancy.

Trails Management

Vegetation grows quickly along the rainy coast of northern California. The trails throughout the two units will require regular maintenance to keep them passable.

The trail along Stone Lagoon barrier beach and Big Lagoon barrier beach will need to be periodically closed due to breaching of the beaches. Operations staff should frequently monitor wave action at the breach points to assure visitor safety. Staff may find that it would be best to discourage Coastal Trail use along Stone Lagoon barrier beach, Stone Lagoon peninsula, and Big Lagoon barrier beach during the winter season, and detour such use to the inland side of Stone Lagoon.
Operations staff should also monitor the proposed trail through the Truttman Sink area. This geologically unstable area could cause damage to the trail which would require either its repair or relocation.

Native American Sites

A number of archeological sites are located in the units. Local staff should be familiar with the locations of these sites and be on guard to protect against any vandalism or theft.

Traditional and ceremonial Native American uses at or near these sites may be allowed by permit, if they will not disturb subsurface cultural resources or natural resources.

Vegetative Management

Additional staff time will be needed to develop and implement a prescribed fire management program with the units.

Interpretation Needs

Department staff or volunteers can assist in the interpretation of a number of natural resources in the units through organized interpretive walks. Tours could interpret: 1) the variety of vegetation of Stone Lagoon peninsula, 2) Azalea Hill, 3) Truttman Sink and the Big Lagoon breaching point, 4) the old-growth redwood trees, and 5) Big Lagoon Marsh.
Many people simply drive by Dry Lagoon State Park and Harry A. Merlo SRA without ever leaving Highway 101. Others stop to enjoy the scenery, some picnic and play on the beach, or come to boat or hunt or fish. Because there is no interpretive program, many of these people do not fully understand what they are seeing. These units contain very beautiful, very important, and some very fragile cultural and natural resources. A good interpretive program here can attract people into the parks and enhance the visitors' understanding of the resources. Because understanding can lead to appreciation and respect, interpretation can also serve as a resource management tool. However, the interpretive program must not detract from the resources or become an attraction in itself.

Environmental Influences

There are a number of environmental influences that will affect interpretation at Dry Lagoon State Park and Harry A. Merlo SRA. Highway 101 runs through both parks and is immediately adjacent to the proposed Stone Lagoon Visitor Center. It contributes both noise and visual distractions to the area, most noticeably at the visitor center site. This would especially affect outdoor interpretive programs such as demonstrations.

All along the coast, sand, wind, salt air, and dampness are detrimental to outdoor interpretive facilities such as panels. Facilities must be designed and located to withstand these affects. Both Dry Lagoon State Park and Harry A. Merlo SRA have low visitation and remote areas in them. Under these conditions, vandalism can be a problem. This must be taken into account when outdoor interpretive facilities are designed and located.

The parks also contain hazards that will affect interpretation. A prominent geological feature in the area is the Franciscan melange complex known locally as the "blue goo" -- a gray-blue, sticky formation which is highly unstable when wet. Significant landslides of this material have occurred along the coastal bluffs. During the wet winter season, interpretive programs must avoid these areas. Outdoor interpretive facilities either must not be placed in these areas or be removed each winter.

During the wet season, interpretive programs must avoid the barrier beaches at Big Lagoon and Stone Lagoon, which breach at various times (see Resource Element). No interpretive facilities will be planned in these areas.

Interpretive Themes

Primary Theme: The Dynamic Lagoons: A Crossroads

The Humboldt Lagoons are part of California's vanishing coastal wetlands. To the unknowing these are worthless areas--neither land nor deep water--and they are often prime candidates for landfill and development. To the knowledgeable, coastal wetlands are biologically rich areas. They are dynamic
places: change is constant. The lagoons are a crossroads, a place of passage, a waystation for plants and animals. The lagoons are a transition between the beaches to the west and the hills to the east. As a result, there is great diversity of life here.

Interpretation of the lagoons and their surrounding marshes, barrier beaches, and stream deltas will focus on this concept of a dynamic environment. In an interpretive program, the concept of change can be graphically illustrated. Examples might include waterfowl migration, anadromous fishes, the exchange of saltwater and freshwater when the barrier beaches breach, and the resulting adaption of plants and animals to that condition.

Secondary Theme: Contrary World Views

The story of the Yurok inhabitants and Euroamerican settlers at the Humboldt Lagoons should be told in the context of these peoples' relationships to the lagoons' environment. This will not limit the kinds of information and stories that can be told, but it should focus them so that they relate to one common factor.

Generally, the Yurok traditionally had a more limited world view than EuroAmericans, in terms of distance. A Yurok girl, for instance, might live her whole life without traveling more than a few miles from where she was born. EuroAmericans in California, on the other hand, had arrived here by traveling great distances. Following another line of contrast, the basis of Yurok civilization was the efficient use of natural resources. They had adapted to their lagoons environment and had become self-sufficient as a result. The EuroAmericans, first of all, saw the area as an isolated place and did not settle there in any numbers until roads were completed. Once there, their economies tended toward those which extract resources from the environment—gold mining, farming, and logging.

Secondary Theme: Plant Succession

This theme should make visitors aware that nature is not static and that plant communities, for an example, are dynamic. While most visitors are probably aware that human activities such as logging, fire, and agriculture alter nature, they may not realize that there is a tendency afterwards for nature to repair itself and return to an orderly progress.

The orderly and progressive replacement of one plant community by another until a stable community is established is called plant succession. Communities often evolve from grass (pioneer community) to scrub to forest (climax community). The change is gradual and involves the continuous replacement of one kind of plant by another until the entire community has been replaced by one that is more complex.

Visitor Activities

Personal contact between park staff and visitors is often the most rewarding and memorable part of an interpretive program for the visitors. Currently, few, if any, department-generated visitor activities take place in these
units. With the development of a visitors center at Stone Lagoon this will change. This facility will become a springboard for a variety of visitor activities.

Many of the visitors to the Stone Lagoon Visitors Center will be people traveling en route along Highway 101. Therefore, some activities should be designed to fit into a limited schedule. Appropriate activities for these visitors would be watching demonstrations, or joining in a hands-on experience in the outdoor area north of the visitor center, informal talks around the fireplace inside the visitor center, or staff-led walks along the edge of the marsh at the south end of Stone Lagoon.

Other users are north coast residents who may already know about and appreciate the resources. These people will be encouraged to use the units more through scheduled seasonal activities. Programs could be developed to interpret the spring and summer blooming of azaleas on Azalea Hill, the fall migratory waterfowl, summer marsh plants (perhaps focusing on Native American uses of edible plants), or summer berry picking. These programs could include both on-site walks and talks, and workshops or seminars on these subjects, either at the visitor center or at some other location.

The camper has different kinds of needs. These people will vary from the en route camper who is solely stopping to sleep, to the boat-in or hike-in or walk-in camper who may be seeking some sort of wilderness experience, to the fisherman who comes for several days in his recreational vehicle. None of these fit the model of a traditional camping experience consisting of a developed drive-in campground with a campfire center for interpretive programs. This does not preclude having less-formal and less-structured programs with campers (except en route campers) at Dry Lagoon State Park and Harry A. Merlo SRA. An experimental informal campfire program should be tried at Stone Lagoon primitive campground to improve contact between visitors and park staff. This might be the vehicle to sensitize people to some of the values of the park other than recreation. For boat-in campers, "boating hikes" around the lagoon and programs on boating and aquatic safety and boating techniques would be appropriate.

Interpretive Facilities

Interpretive facilities at Dry Lagoon State Park and Harry A. Merlo SRA will take the form of both on-site (out in the parks where the resources are) and off-site facilities (centralized in a particular location within the parks).

On-Site Facilities

Outdoor Panels

A number of interpretive facilities will be placed at the various land use facilities outlined in this plan, including the dramatic overlooks of both Stone Lagoon and Big Lagoon. This outdoor, on-site interpretation would best be limited to "low key" panels. They must be simple in design, subtle in color, and low in height so that they detract as little as possible from their surrounding environment. Such outdoor panels are most effective in
interpreting what the visitor can actually see or experience from that place rather than treating complicated processes or concepts. Topics might include: dunes environment; breaching of Stone and Big Lagoons; Dry Lagoon freshwater marsh; the swamp near Dry Lagoon; tides, currents and littoral drift, related to the driftwood at Dry Lagoon Beach; geological processes at the Truttman Sink; recreation on Big Lagoon; Roosevelt elk; Yurok massacre near Big Lagoon; and some safety principles related to hunting, boating and fishing, as well as the breaching of the lagoons.

Trails

A trail should be developed from the proposed visitor center on the east shore of Stone Lagoon, south along the shoreline toward the marsh at the mouth of McDonald Creek. This would be an especially good place to observe waterfowl. No panels or other interpretive facilities should be placed along this trail for esthetic reasons.

The Pacific Coastal Trail is planned to cross these units. While the primary purpose of the Coastal Trail is to move people up and down the coast, it should also double in function when it crosses state park as a trail for day-use visitors who may want to hike a short distance to see the area and return. No interpretive facilities are proposed on the trail itself. However, whenever the Coastal Trail is routed into or near a facility, such as a parking area, visitor center, campground or picnic area, trail signs should be installed explaining both the Coastal Trail route and a shorter day-use route. It is at these access points that users of the Coastal Trail can stop to enjoy interpretive facilities. In this way, the Coastal Trail serves double duty as a coastal hiking trail and as a day-use trail. Interpretive facilities, as well, will serve both audiences.

Dry Lagoon Marsh Trail

Plans call for the coastal trail to divide near Dry Lagoon, with one route following the beach, the other going around the east sides of Dry Lagoon and Stone Lagoon. If feasible, a segment of trail should be constructed between these two routes, going around the northeastern side of the Dry Lagoon marsh. This would create a loop trail around the marsh. It would have high interpretive value as well as being a good length for day users.

Stone Lagoon Peninsula Trails

Trails are planned across the Stone Lagoon Peninsula. No interpretive facilities are planned on the peninsula. Users of these trails will receive interpretive information at the Stone Lagoon Visitor Center and at the Dry Lagoon Area.

Off-Site Facilities

Visitors Center

A visitors center is recommended for development at Stone Lagoon. It should be located on the eastern shore of Stone Lagoon in the building which formerly
housed the Little Red Hen restaurant. This facility should serve both Dry Lagoon State Park and Harry A. Merlo SRA.

An important, but not primary function of this center will be to provide orientation to the immediate parks and, to a limited extent, to adjacent areas. Redwood National Park is developing a major information center along Highway 101 at Redwood Creek. It will provide orientation and information about the entire northwest coast area, including the state parks there. The visitors center should include an information counter where local park maps and brochures should be available, as well as a staff person with knowledge of the local area and parks.

The primary function of the visitors center will be interpretation. Interpretive facilities in the center should address two areas of need: interpretation of places that are for some reason too remote or inaccessible for many park visitors; and the interpretation of natural or cultural concepts which can more easily be treated by facilities available in a visitors center than on-site.

Large windows will be developed on the west end of the building to provide a full view of Stone Lagoon. In this same end of the building, exhibits should be installed that relate to what is in view. These are places which are fairly inaccessible to many of the park visitors--the Stone Lagoon peninsula, the barrier beach, and the marsh at the south end of the lagoon at the mouth of McDonald Creek.

An audio-visual program would be the most appropriate medium to interpret other stories at this park. Such programs make efficient use of space, and they also have the advantage of taking the visitor through time and space. This is an effective way to interpret seasons, processes, concepts, or remote geographical areas--situations all of which exist within the two park units. Concepts to be interpreted include the relationships of the various human inhabitants over time to the lagoons environment and how these groups differed from each other. Processes include plant succession on Stone Lagoon Peninsula and amongst the azaleas on Stagecoach Hill. An audio-visual program can also be used effectively to interpret parts of the park not easily accessible for one reason or another. Examples include the movement of the "blue goo" during the wet times of the year, the breaching of the barrier beaches, and the underwater world of the lagoons. Audio-visual techniques would also be very effective in interpreting the seasonality of the area--the migratory birds on the Great Pacific Flyway and the azaleas in bloom.

The center will also extend itself to the out-of-doors. The area immediately to the north of the facility will be available for outdoor interpretive programs.

Campfire Center

While it is suggested in this plan that informal campfire programs might occur at the Stone Lagoon primitive campground, it is not recommended that any formal or permanent facility be developed there to accommodate them.
CONCESSIONS ELEMENT

Existing Concession

A 263-acre portion of Dry Lagoon State Park is leased for grazing to the prior owner of the property. The present contract which expires on April 23, 1985 excludes public use of this parcel. A careful evaluation of whether to continue grazing on this parcel, and if necessary the formulation of specific terms under which grazing will be continued, will be done by the department upon expiration of the grazing lease.

Potential Concession Activities

Dry Lagoon State Park and Harry A. Merlo SRA are close to several small communities that currently provide park users with retail services. Improvements to the park sites, including increased camping facilities, should create a greater demand for these services. The Humboldt County Local Coastal Plan discourages the state from developing facilities which would compete with commercial facilities of the private sector.

Consideration should be given to small boat rental facilities and fishing supply sales operated seasonally at the Stone Lagoon day-use area.

Although not a concession, an interpretive bookstore could be operated by a nonprofit interpretive association in the proposed visitors center at the Stone Lagoon day-use area.

Concession Policies

Appropriate concession activities for Dry Lagoon State Park and Harry A. Merlo SRA are limited to: (1) those concession activities that do not directly compete with the retail services provided by the surrounding communities; (2) specifically small boat rentals and fishing supply sales seasonally operated at the Stone Lagoon day-use area; and (3) special event activities compatible with the parks' environment and approved by the area manager.
ENVIRONMENTAL IMPACT ELEMENT

Introduction

The Environmental Impact Element serves as the environmental impact report required by the California Environmental Quality Act and the State EIR Guidelines.

The Environmental Impact Element incorporates by reference the other elements of the general plan as the Project Description and Description of the Existing Environment. It should be recognized that the level of detail of the Environmental Impact Element is similar to that of the general plan. As specific site development plans are proposed, they will be subject to further environmental review and on-site checks, and the appropriate environmental documents will be prepared, if necessary.

Significant Environmental Effects

It is impractical to quantify any significant environmental effects for the general plan. A general plan lacks the detail necessary to make any accurate projection. Given the nature of the site and the proposed development -- no immediate large urban areas, good air quality, nonintensive development generally designed within geo-biological constraints or to protect historical or pre-historical resources -- impacts may be considered significant only in the view of the quality of the environment and the goal of the department to preserve and protect the resources.

1. Increased capacity will permit increased use. The indirect impacts are soil erosion, vegetation loss, disruption or disturbance of wildlife, vandalism, or accidental destruction of cultural resources.

2. Direct impacts of construction of the proposed facilities are noise generation from construction equipment, fuel consumption, air pollution generation, soil erosion, soil compaction, and loss of vegetation. Noise generation and air pollution from construction are temporary impacts. There are no sensitive facilities nearby, such as schools or hospitals.

3. The trail from the Stone Lagoon day-use area to the Redwood National Park will be located on steep slopes and highly erodible soils. Erosion could be severe.

4. The walk-in campsites near the Dry Lagoon Area will be located in an area of moderate slopes and erodible soils.

5. The Big Lagoon overlook will be located on steep slopes and erodible soils.

6. The Big Lagoon Marsh day-use area may disturb Roosevelt elk habitat and other fauna associated with the wetlands.
Unavoidable Environmental Effects

The more adverse effects of the proposed developments have been mitigated in the land use limitations or facilities' locations, or can be mitigated by site development plans.

1. The removal of vegetation and the creation of impervious surface areas will accelerate soil erosion.

2. The indirect impacts of increased use are unavoidable, although they may be reduced. Monitoring of sensitive or critical resources by staff and the implementation of resource protection programs may be adequate mitigation.

Mitigation Measures

1. All excavation will be reviewed by the department's Cultural Resource Management Unit. Excavations or ground disturbances in culturally sensitive areas will be monitored by a department archeologist or historian.

2. Utility lines will be placed underground where they are a visual intrusion. Parking areas, such as the one at the Stone Lagoon day-use area will be screened with vegetation.

3. Trails, roads, picnic sites, campsites, and building sites will be selected, designed, or aligned to reduce erosion. Capacity will be limited in some areas by erosion. The alignment of the trail from the Stone Lagoon day-use area to Redwood National Park will be on a steep slope and should be constructed with consideration given to erosion problems. OHV use will be prohibited on the Stone Lagoon barrier beach.

4. Facilities will be sited to reduce vegetation loss. Minimum development is proposed for the Stone Lagoon peninsula to protect the relatively primitive or wilderness character. Increased capacity of the Stone Lagoon campground will be within the limits of existing development.

5. Construction will generally be scheduled during the dry season which will reduce erosion from soil disturbance. Disturbed areas will be revegetated.

Alternatives

The "no project" alternative would leave development at its current level. Minor development would continue to maintain or upgrade existing facilities. Certain problems would continue: inadequate parking, dangerous access/egress with state highways, lack of public access to some areas, unsatisfied demand for camping and day-use facilities, and inadequate facilities for interpretation.
The alternatives of less or more development are not ruled out with the adoption of the general plan. The general plan is only a guideline for development. Additional or more intensive development may be possible to a minor degree within environmental constraints and general plan guidelines to meet increased recreational demands. Conversely, in the preparation of site development plans, previously unknown environmental constraints may require less intensive development.

**Relationship Between the Short-Term Uses and the Maintenance or Enhancement of the Long-Term Productivity**

The proposed long-term and short-term use is preservation and recreation. The resources will be protected and should another use prove more beneficial to the public than preservation, the resources will be available. There is no intent to enhance the potential productivity.

**Irreversible Environmental Changes**

No new land areas or natural resources will be irreversibly committed with implementation of the plan. Development proposals generally involve areas of previous impact, and the nature of the development is such that it could be removed and sites returned to a predevelopment condition. Only the building materials and the energy consumed in the construction, operation, and maintenance may be considered an irreversible commitment of resources.

**Growth-Inducing Impacts**

There will be a minor growth-inducing impact due to the increased recreational capacity and staffing. The increased recreational capacity may create a greater demand for support facilities such as service stations, grocery stores, restaurants, and sports equipment outlets. However, the impact is not projected to be significant. The potential increase in user capacity relative to existing regional capacity is small. The demands created by staff increases would be typical of residential needs -- schools, hospitals, etc. -- and be so minor as to be within the capacity of existing facilities.

**Effects Found Not Significant**

1. Proposed development will create new impervious surface areas which will alter the rate and timing of runoff. However, in comparison to the total watershed area, the increase is insignificant.

2. Air quality, noise, and traffic impacts were not considered significant.

There are no immediate sensitive facilities (schools, hospitals, residential areas) which would be affected. The capacity increase is not substantial and, therefore, will not generate substantial increases in noise, traffic, and air pollution.

3. Sewage and waste production, water consumption, and fuel consumption will rise only proportionally as use increases. Water supply and sewage treatment are provided by the units.
4. Water quality should not significantly deteriorate. Sediments from erosion may temporarily increase after construction, but will diminish with reestablishment of vegetation. The runoff carrying contaminants from impervious surface areas (roadways, parking areas, and buildings) will increase, but will be small in comparison to total watershed runoff. Water quality impacts from development and land management activities on other properties in the watershed could be significant and could cumulatively create problems for the lagoons and the wetlands.

5. No rare or endangered plants and animals, or unusual plant associations will be significantly affected by the proposed development. The three observed endangered bird species do not nest in the units, and proposed development and recreational use should not substantially depreciate the resource value for these species' use. The one endangered plant, Humboldt Bay owl's clover, is found in the salt marshes of Dry Lagoon State Park. No modification of these wetlands is planned. Preservation and interpretation are the only proposed uses.
SELECTED REFERENCES


_________, *Harry A. Merlo State Recreation Area, Inventory of Features*, 1982.

_________, *Patrick's Point State Park General Plan (Preliminary)*, 1983.


Humboldt County Planning Department, *Northcoast Area Plan/Local Coastal Plan*, 1983.

J-1293L
SUMMARY OF INITIAL PUBLIC INVOLVEMENT  
(What We’ve Heard So Far)

INTRODUCTION (READ THIS FIRST)

In preparing the General Plans for these two parks, we are nearing completion of the initial stages of public involvement. A questionnaire has been in distribution since May 20; an open discussion was held with students at H.S.U. on May 28; a campfire program was held at Patrick’s Point State Park on June 15; and a public meeting was held on June 18 at Big Lagoon Elementary School.

The purpose of this flyer is two-fold. First, we want to inform you of all the concerns, and suggestions we have been hearing. Second, we would like to hear your individual reaction to the suggestions that have been made. This will greatly help us as we begin to create land use options. (We expect to present those options to you in September, 1982, through both a local meeting and a mailout.)

PAGE ONE Summarizes the statistical results of the questionnaires. These findings are only preliminary since questionnaires continue to be returned.

PAGE TWO Summarizes the general suggestions made at the public discussions, and thru the questionnaires. Would you evaluate these and return page two via the postage return address? Thank you.

QUESTIONNAIRE RESULTS

The questionnaire results provide park planners with the range of user preference and concern. The questionnaire was not intended to be a statistical representation of park users.

A total of 133 questionnaires have been returned so far.

RESPONDANT PROFILE

In What City and State Do You Live?

<table>
<thead>
<tr>
<th>In Area</th>
<th>Out of Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcata</td>
<td>Central Valley</td>
</tr>
<tr>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>Eureka</td>
<td>Bay Area</td>
</tr>
<tr>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Trinidad</td>
<td>L.A. Area</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>McKinleyville</td>
<td>Other California</td>
</tr>
<tr>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>Orick</td>
<td>Out of State</td>
</tr>
<tr>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Other Local</td>
<td>Out of Country</td>
</tr>
<tr>
<td></td>
<td>2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td>48%</td>
<td>51%</td>
</tr>
</tbody>
</table>

AGE?

<table>
<thead>
<tr>
<th>In Area</th>
<th>16 to 25</th>
<th>26 to 35</th>
<th>36 to 55</th>
<th>56+</th>
<th><strong>TOTAL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>29%</td>
<td>23%</td>
<td>14%</td>
<td>17%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Out of Area</td>
<td>16 to 25</td>
<td>26 to 35</td>
<td>36 to 55</td>
<td>35%</td>
<td>17%</td>
</tr>
</tbody>
</table>

PATRICK'S POINT STATE PARK

DRY LAGOON STATE PARK
In the following results, the first percentage reflects the choice of people who live in the area, the second percentage reflects the choice of people who live outside the area. (The total percentage for each question does not always balance to "100" because: 1) on some questions it was appropriate to check more than one answer, and 2) some respondents did not answer each question.)

- How often do you visit the parks and scenic areas shown on the map to the right?
  (2%) (56%) This is first time (14%) (17%) Two to five times a year (57%) (50%) Over ten times a year
  (10%) (15%) Once a year (17%) (4%) Five to ten times a year (6%) (11%) Irregularly

- How many people are in your party?
  (16%) (6%) One (37%) (49%) Two (32%) (24%) Three to four (58%) (20%) Five to ten (5%) (11%) Over ten

- What is your mode of transportation in travelling through the area?
  (87%) (13%) Automobile (64%) (36%) Bus (10%) (0%) Bicycle (18%) (11%) Hiking (32%) (0%) Hike (39%) (0%) Other

- Would you continue to use the parks in this area if gasoline prices sharply rise to $2/gallon?
  (81%) (2%) Yes (2%) (15%) No (16%) (27%) Not sure

- Where did you stay overnight? (In the space provided, indicate the number of nights)
  (16%) Patrick’s Point SP (11%) Eureka (7%) Trinidad (1%) Klamath
  (8%) Prairie Creek Redwoods SP (14%) Arcata (1%) Orick (10%) Other

- What types of accommodations?
  (13%) Motel (21%) Tent (45%) Under stars (1%) Bed & breakfast (27%) R.V. (11%) Friend’s home

- What is your final destination on this trip?
  (49%) This area is (10%) San Francisco and further south
  (31%) Oregon and further north (4%) Central California and further east

- What attracts you to the parks along this part of the California coast?
  (81%) (96%) Scenery (22%) (20%) Aresia (54%) (56%) Beechwood (2%) (4%) Hunting (2%) (3%) Waterfailing
  (62%) (62%) Redwoods (73%) (70%) Beach (22%) (65%) Fishing (60%) (55%) Hiking (60%) (60%) Nature observation
  (70%) (74%) Quiet (22%) (17%) Cool temp. (52%) (66%) Camping (12%) (10%) Sailing (48%) (11%) It’s nearby
  (52%) (27%) Lagoons (66%) (64%) Relaxing (10%) (20%) Driving (17%) (6%) Bicycling (11%) (14%) Boating
  (30%) (13%) Friends (11%) (6%) Rain (2%) (6%) Surfing (1%) (7%) Schoolwork (33%) (27%) Birdwatching
  (Other attractions which were written in included: rock climbing, health, photography, isolation, excellent facilities, and off-road vehicle use)

- Which three items, of those you identified in No. 9, should the State Park planners be most careful to protect or encourage? Please underline each.
  [The top six underlined items were: scenery (22%) (49%), redwoods (24%) (41%), quiet (29%) (26%), nature observation (17%) (27%), beach (13%) (28%), and camping (9%) (16%)]

- What do you especially like about this area?
  (21%) (44%) Nothing (43%) (0%) Off-road vehicles (2%) (11%) Many areas inaccessible
  (13%) (11%) Weather (11%) (4%) Commercialism (3%) (10%) Too much government-owned land
  (16%) (10%) Litter (10%) (3%) Too crowded (15%) (4%) Too little government-owned land
  (3%) (0%) Traffic
  [Other problems written in included: too few campgrounds, vandalism, no horse riding, over-developed, narrow roads, dogs]

- As you visit the state parks in this area, do you need to be provided more background information on:
  (22%) (32%) Cultural features (Native American history, gold mining, etc.)
  (38%) (54%) Natural features (lagoons, redwoods, etc.)
  (17%) (31%) Recreational opportunities (other parks in the area, activities, etc.)
  (41%) (17%) No additional interpretation needed

- Are there visitor services/facilities which you think need to be increased or added?
  (16%) (23%) Boating facilities (11%) (16%) Restrooms (11%) (13%) Native American exhibits/programs
  (11%) (10%) Traditional campground (25%) (10%) Trail system (10%) (12%) Highway scenic overlooks
  (29%) (10%) Hike-in campground (13%) (19%) Beach access (24%) (19%) Visitor center to orient to parks in the area
  (6%) (13%) Group campground (11%) (11%) Hotel (17%) (16%) No additional services/facilities are needed
  (21%) (11%) Leave or return to nature (4%) (0%) Day use parking
  [A substantial percentage (8%) (20%) of the respondents failed to answer this question.]

- How familiar are you with Patrick’s Point State Park?
  (24%) (11%) I’ve camped there often (48%) (28%) I’ve visited during the day
  (21%) (37%) I’ve camped there once or twice (2%) (11%) Never been

- How familiar are you with Dry Lagoon State Park?
  (32%) (10%) Have walked through often (22%) (27%) Aware, have driven by
  (13%) (16%) Have walked through once or twice (5%) (25%) Never noticed
SUMMARY OF SUGGESTIONS

The following is a list of those written suggestions made thus far. Your reactions to these suggestions will give us a better indication of what issues are important to you. Thank you for your prompt response.

Please evaluate the following suggestions by placing the appropriate number to the left of the statement. Please rate each statement on the following basis:

1. Means you are strongly opposed.
2. Means you are mildly opposed.
3. Means you have mixed feelings OR do not understand OR it is not important to you.
4. Means you mildly agree.
5. Means you strongly agree.

Space is provided behind each statement for you to make an additional comment, justification or clarification.

The following are suggestions made on individual idea sheets during the public meeting at Big Lagoon Elementary School:

1. **AVERAGE SCORE**
   4. Minimum development, preserve the resources
   39. Leave the parks the way they are
   38. Provide recreation opportunities
   37. Maximum development while preserving the resources
   36. No development on meadows at Patrick's Point
   35. Develop Stone Lagoon as needed
   34. Develop Patrick's Point as needed
   33. Keep Lagoons undeveloped
   32. Only develop the bluff above Agate Beach
   31. Patrick's Point SP is at its peak of development
   30. Preserve the Anakale
   29. Don't open Aislea Hill to extensive public use
   28. Maintain the meadows at Patrick's Point
   27. Protect the agricultural lands
   26. Duck hunting should be continued on the lagoons
   25. No hunting of any kind
   24. No big game hunting
   23. Restore fisheries at McDonald Creek (Stone Lagoon)
   22. Stock Stone Lagoon and Big Lagoon with fish
   21. County should continue to manage Big Lagoon County Park
   20. State should acquire and operate county park
   19. State parks should be run by the county
   18. The county park should stay as it is
   17. The county park needs better enforcement
   16. Include Yurok Village and Cultural Center in final plan
   15. Do not make Indian Village tacky
   14. Indian Center should be at Ryan's Cove on Stone Lagoon
   13. For its protection, the Yurok Village should be at Patrick's Point
   12. Protect Native American sites
   11. Encourage pedestrian access only
   10. Beach and parks access to nonmotorized vehicles only
   9. Make facilities accessible to the handicapped
   8. Develop a 250 to 300 space day use parking lot, either park
   7. Add boat ramps, docks, and restrooms
   6. Remove little red hen buildings, replace with day use facilities
   5. Re-establish little red hen as a restaurant
   4. Upgrade boat launching at Yacht Club site on Big Lagoon
   3. Develop group campground at Yacht Club site
   2. No high-speed boats on Stone Lagoon or Big Lagoon
   1. No mooring areas on Stone Lagoon, limited H.P. on Big Lagoon
   0. No waterskiing on Big Lagoon
   - Improve control of water access points

THE LIST CONTINUES ON THE OTHER SIDE
AVERAGE SCORE

1. Horse trails are needed
2. Construct a horse trail at Patrick's Point SP
3. Trail to view Lagoon Beach
4. Include nature center somewhere
5. Education is important at State Parks
6. Include resource interpretive facilities at Big Lagoon
7. Improve and enlarge museum at Patrick's Point
8. Provide highway pull-offs with interpretation
9. No off-road vehicles allowed anywhere in park
10. Final plan should be manageable by park staff
11. Provide both traditional and primitive campgrounds
12. Provide additional primitive campgrounds
13. Upgrade the Stone Lagoon Campground
14. Convert Stone Lagoon campground to day use
15. Limited camping, mostly day use at Big Lagoon
16. Construct trails at Dry and Stone Lagoon
17. Develop a coastal trail
18. Increase staff
19. Keep parks safe from vandalism/robbery
20. Improve garbage pickup
21. Improve communication between rangers and visitors
22. No nude beaches
23. Should be free day use
24. Keep fees at a minimum
25. Increase user fees to bare costs of operation
26. No fees for locals
27. No additional acquisition
28. Acquire Agate Hill without displacing homes
29. Acquire Stone Lagoon shoreline
30. Too much governmental control

The following are additional suggestions gleaned from the returned questionnaires.

31. Rock climbing should continue at Patrick's Point SP
32. Better beach access at Patrick's Point SP
33. Widen access road to Dry Lagoon parking for
34. Provide camping facilities at Dry Lagoon
35. Remove some campers from Patrick's Point SP
36. Add campers at new property near Palmer's Point
37. Campsites should have opening for sun
38. Keep campers separate and secluded
39. Increase evening campfire programs
40. Reservations should be made with park, not Ticketron
41. Provide RV hookups and dump station at Patrick's Point

The following are additional suggestions made at the campfire program at Patrick's Point SP

42. Provide a separate bike trail at Patrick's Point SP
43. Foot traffic is a hazard at Patrick's Point SP
44. Let visitor see "Blue God" up close
45. Keep access to Agate Beach difficult
46. Improve orientation to area state parks for outside visitors
47. Construct handicapped/self-guided trail
48. Develop trails through Agate Hill
49. Provide turn-off for viewing site at Big Lagoon

The following are additional suggestions made at the student discussions at H.S.U.

50. Provide public transportation to parks
51. Keep present facilities clean
52. Restrict overnight use at hand/water junctions
53. More hike-in camps
54. More commercial facilities
55. Views of ocean should be cleaned and maintained
56. Provide bicycle rental
57. Provide Group use areas

Please Check One

☐ I live in the area (either full-time or part-time between Crescent City and Eureka)
☐ I live outside the area

NAME _______________________
ADDRESS ___________________
QUESTIONNAIRE FOR NATIVE AMERICANS ON IDEAS FOR RECONSTRUCTING A YUROK VILLAGE

There have been several proposals since at least 1963 for reconstructing a Yurok Village or an Indian cultural site somewhere on California’s north coast. Your assistance and involvement is needed to help plan and develop this program.

Nothing has been decided about the specific elements or siting of this facility. The final plan should meet three basic goals:

1. Provide a setting for interpreting Indian culture of northwestern California to visitors.
2. Provide a place for Indian people to continue traditional cultural activities.
3. Help to preserve important elements of Native American heritage that are unique to California’s north coast.

These are some of our working assumptions about this project:

1. If a reconstructed village/cultural site is to be successful, the active support and involvement of the local Native American community is needed.
2. Some arrangements are possible for exclusive use of certain areas at specific times or for the village itself at certain times. Access will be subject to regulation to provide security, visitor control, and resource protection.
3. It is possible that areas can be used for the sale of traditional arts and crafts on special days and/or through a sales outlet at the facility through a concessionaire or non-profit Native American organization.
4. The village is intended to provide a place for Indian people to speak for themselves about their traditional culture and history. Interpretation at the village could be done by the Native American community, by State Park Interpreters, or by a combination of the two.

The State Department of Parks and Recreation is currently formulating general plans for Patrick's Point State Park and Dry Lagoon State Park. Consultations with Native Americans will continue as part of this general plan process. Plans and alternatives will be discussed at public meetings. The final general plan for these parks is currently scheduled to be reviewed by the California State Park and Recreation Commission in June 1983. It will still be a few years before construction could begin.

### 1. What kinds of things should be part of this village/cultural site?

<table>
<thead>
<tr>
<th>Priority ranking based on question No. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Family houses 16 (1) Sales area</td>
</tr>
<tr>
<td>12 (b) Sweat houses 15 (b) Interpretive trails</td>
</tr>
<tr>
<td>9 (c) Ceremonial area 13 (c) Family camping area</td>
</tr>
<tr>
<td>9 (d) Museum 17 (d) Group camping area</td>
</tr>
<tr>
<td>(e) Indian interpreters 10 (e) Family picnic area</td>
</tr>
<tr>
<td>(f) Costume change area 18 (f) Storage building</td>
</tr>
<tr>
<td>(g) Indian demonstrations of crafts and lifeways</td>
</tr>
<tr>
<td>(h) Space for camper trucks, trailers, and other recreational vehicles</td>
</tr>
<tr>
<td>(i) Other</td>
</tr>
</tbody>
</table>

### 2. If development is limited or done in phases, which elements should have priority? (Please rank the items you checked above.)

<table>
<thead>
<tr>
<th>Purpose of Use</th>
<th>1ST</th>
<th>2ND</th>
<th>3RD</th>
<th>4TH</th>
<th>5TH</th>
<th>6TH</th>
<th>7TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceremonial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food preparations for celebrations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3. Will Indian people need to use natural resources within the park?

<table>
<thead>
<tr>
<th>How often do you think such a village might be used by Indian groups?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Once a year</td>
</tr>
<tr>
<td>37%</td>
</tr>
</tbody>
</table>

### 4. How many people would you expect to attend a big time celebration?

<table>
<thead>
<tr>
<th>How many people would you expect to attend a big time celebration?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Less than 100</td>
</tr>
<tr>
<td>44%</td>
</tr>
</tbody>
</table>

### 5. How close would a campground need to be?

<table>
<thead>
<tr>
<th>How close would a campground need to be?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Part of the village site</td>
</tr>
<tr>
<td>□ Within a short walk</td>
</tr>
<tr>
<td>□ Absolutely necessary</td>
</tr>
</tbody>
</table>

### 6. How important would a museum be as part of an interpretive program at this village?

<table>
<thead>
<tr>
<th>How important would a museum be as part of an interpretive program at this village?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Not necessary</td>
</tr>
</tbody>
</table>

SEE OTHER SIDE FOR ADDITIONAL QUESTIONS
BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 4890 SACRAMENTO, CALIF.

POSTAGE WILL BE PAID BY ADDRESSEE

CALIFORNIA STATE DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 2390
SACRAMENTO, CA 95811

ATTENTION: Clayton Phillips

9. What kind of setting is desirable for a village site?
   22% ☐ Along the coast  22% ☐ In the forest  4% ☐ Not important
   15% ☐ Along a lagoon  20% ☐ On a meadow  ☐ Other

9. How important is it to reconstruct on an actual village site?
   2% ☐ Don’t  12% ☐ Not important  52% ☐ Important  22% ☐ Imperative (co)

10. How should construction proceed if part of the soil has to be removed by archeologists?
    9% ☐ Stop project  70% ☐ Continue under Indian supervision  24% ☐ Proceed and keep Indians informed

11. Do you have any specific sites to suggest for study and consideration? (Please give specific locations)
    Patrick’s Point
    Dry Lagoon/Stone Lagoon/Big Lagoon
    ☐ Other

12. Do you see this as a Yurok project or as a cooperative project with other North Coast tribes?
    29% ☐ Yurok  71% ☐ Cooperative project

13. Do you have other concerns for the design or concept of a Yurok village at this time? (please describe)

14. Are there program areas for this village in which you would like to participate?
    7% ☐ Design  10% ☐ Construction  11% ☐ Maintenance  7% ☐ Interpretation
    13% ☐ Craft Demonstrations  16% ☐ Celebrations  11% ☐ Advisory  ☐ Other

The results of this questionnaire will be used in planning alternatives for these two state parks. These will be discussed at public meetings and by mail.

Optional: (If you want to continue your participation in the State Park planning process),
Name ________________________________
Address ________________________________
Phone ________________________________
Tribal Affiliation ________________________________

Once completed, please refold and staple (or tape) so that the postpaid return address is exposed (or return this to State Park staff). Thank you for your time and concerns.
This plan was prepared by:

Kenneth L. Gray
Clayton Phillips
James D. Woodward
George R. Stammerjohan
Lucinda Woodward
Robert G. Ueltzen

Associate State Park Resource Ecologist
Associate Landscape Architect
State Archeologist II
State Historian II
State Park Interpreter I
Park and Recreation Specialist

Under the supervision of:

Maurice Getty
H. Lee Warren
Keith L. Demetrak
Robert M. Acrea
Jack L. Hiehle
Francis A. Riddell
Paul E. Nesbitt
James M. Doyle
William Pritchard

Chief - Resource Protection Division
Acting Chief - Development Division
Chief - Office of Interpretive Services
Acting Supervising Landscape Architect
Supervisor, Natural Heritage Section
State Archeologist III
State Historian III
Staff Park and Recreation Specialist
State Park Interpreter III

With the assistance of:

Gary R. Cave
James K. Donaldson
Gary Caplener
Pat Couch

Senior Delineator
Drafting Aide II
Graphic Artist
Associate Civil Engineer

The plan was edited by:

Jeff Cohen

Research Writer

Special thanks go to the department's local area staff for their continued assistance throughout the creation of this general plan:

Carl Anderson
Matt Sugarman
Tom Reed
Alan Wilkinson
Gary Strachan

State Park Manager V
State Park Ranger II
State Park Ranger I
State Park Ranger I
State Park Ranger I